**International Journal of Commerce and Management Research**
**ISSN: 2455-1627, Impact Factor: RJIF 5.22**
**www.managejournal.com**
**Volume 3; Issue 6; June 2017; Page No. 36-40**

# Role of ICT in changing marketing strategy: Case of Indian banking industry

**Garima Jain**

Assistant Professor, SGTB Khalsa College, University of Delhi, New Delhi, India

**Abstract**
Introduction and advancements in information and communication technology has impacted the whole world. Numerous researches have been conducted to show the disruption caused by ICT on various sectors. The marketing department of companies operating in such technologically turbulent times are being kept on toes. Indian banking sector has not been left behind. The paper focuses on the services offered by the banking sector over the years and how the technological changes have changed the banks marketing strategies in order to survive and grow. Technology has created a customer base which is aware and has access to open sources of information and hence demands quality and efficiency. The bank marketers, thus, in order to satisfy the customers and to keep up with the world pace have to constantly evolve. The author chronologically studies the evolution of deployment of ICT adopted by Indian banks and also comments on the large untapped opportunities lying in the future.

**Keywords:** Indian banking industry, internet, ICT, marketing strategy, information and communication technology

## 1. Introduction
Development of Information and Communication Technologies (ICT) has revolutionized the contemporary business environment. The role of ICT as a catalyst for competitive positioning in businesses was recognized in the mid-1980s, at its onset. The slow adoption, however, can be attributed to a number of reasons.
Shanker (2008) [13] defines ICT as "ICT is a broad terminology referring to multiple communication technologies which range from simple and complex namely Cell Phone applications (SMS), Digital Cameras, Internet, Wireless (Wi-Fi and WiMAN), VOIP, GPS, GIS, Convergence (data, voice, media), Digital radio".
The adoption of IT in India has seen similar ups and down. In the last decade, however the growth in the usage of Internet and Smart phones has reached a new zenith. It has transformed the way business is conducted. The shift can be perceived in the way we purchase products and services, obtain information, and conduct our banking activities/operations. It has now become possible to quickly find product and price information and obtain advice from a wide variety of sellers. Online visitors can check product availability, place an order, check the status of an order, and pay electronically. The search cost for such information is negligent compared to the traditional approach. E-tailing increases competition by pitting local against national and international competitors. (Yannapoulos, 2011)
Almost all industries have been impacted by the deployment of technology in one way or the other. This paper is a conceptual one, where the works of several researchers has been reviewed to study the extent of changes brought about in the recent years by deployment of Information Technology. Although almost all industries have exhibited marked change, the paper focuses on Indian Banking Sector because the author believes that it has undergone significant disruptions due to technological innovations. Deployment of IT has positively affected this industry and has ushered a radical transformation in the marketing arena.

## 2. Objective of the Study
The study aims to analyze the impact of Information Technology in India on the marketing functions of Banking Industry as to how the deployment of technology has forced the marketers and bankers to change their services and the way they are offered.

## 3. Methodology
The paper is conceptual in nature. Various research papers and online articles have been reviewed in a chronological manner to form the timeline of changes occurred in the banking sector marketing.

## 4. The Impact
### 4.1 ATM technology
Kumar *et al*. (2011) [6] studied the diffusion of ATM technology which was introduced in India in around 1989. According to the author, the time lag between introduction and adoption of technology ranges from 10 to 90 years. The study found that the rapid adoption of ATM technology took place in 1998, nine years after the introduction.
Kumar *et al*. (2011) [6] identified various functionalities that the ATM technology was used for across different periods.

| | |
|---|---|
| 1988-1994 (the initial period) | Deposit of cash<br>Withdrawal of cash |
| 1995-1999 (early developments) | Mini statement<br>Balance enquiry |
| 2000-2001 (first extension) | Coupon dispensing |
| 2002-2004 (extended functionalities) | Fulfilling requests from customers (e.g. check book)<br>Account transfers<br>Touch screen menus/facilities |
| 2004-2006 (non-banking services) | Ticket booking – railway and airlines<br>Bill payments<br>Mobile recharges |
| Future | Check deposits with scanning<br>Customized ATMs<br>Ubiquitous multifunction ATMs<br>Biometric ATMs |

***Source*:** (Kumar, Malathy, & Ganesh, 2011) [6], p. 489

**Fig 1:** Uses of ATM Technology

### 4.2 Internet Banking

Internet Banking was introduced in the Indian banking industry during 1997 by ICICI (the second largest bank in India)(Malhotra & Singh, Determinants of Internet banking adoption by banks in India, 2007). The adoption process remained slow in India, but by the end of 2008 it seemed that Internet banking had gained wide acceptance. It most definitely increased the level of retail banking competition in the sector. In the initial phases, Internet was mostly used for informational purposes. Users required information regarding interest rates, account summary or computing loan eligibility, indicating that the technology was not being utilised to its full potential. With years, the technology gained acceptance and banks began offering transactional services such as online bill payments, transfer of funds and cash management services for corporate. Banks then realised that full deployment of technology can help them achieve higher efficiency, greater control on operations and most importantly cost reduction. Malhotra & Singh (2010) [8]

Malhotra & Singh (2010) [8] conducted a study in 2008 to present the status of Internet banking in India at that time. For the purpose of study the authors identified a list of 30 Internet banking services that banks were offering in 2008. These services were categorized into view-only functions, account control functions, applications for new banking services and more advanced transactions. The study found that new private and foreign banks had the largest ambit of Internet offerings. Public sector offered limited services including online tax payment, online ticket booking and bill payments. IT benefits were still untapped in Indian banking industry but the competition from foreign and new private banks was leading other banks especially the public sector to increase their ambit of usage of IT enabled banking services, since everyone was recognizing the benefits in terms of increased customer base and satisfaction and operational efficiency.

**Table 1:** Internet banking services offered in 2008

| **View Only Functions** | **Account control functions** |
|---|---|
| Balance enquiry<br>Monthly statement by e-mail<br>Interest rates updates<br>Foreign exchange rates updates<br>Market watch<br>One view account<br>Demonstration of I-banking | Funds transfer (self-account)<br>Third party funds transfer<br>Bills payment<br>Requests/standing instructions<br>Cheque/enquiry status<br>Receive alerts<br>TDS enquiry<br>Customer correspondence<br>Change password and user profile |
| **Applications for new banking services** | **More advanced transactions** |
| Account opening application<br>Loan applications<br>Deposit applications | Insurance<br>Demat holdings<br>Brokerage<br>Investments<br>Credit card operations/payments<br>Trading online<br>Online shopping<br>Charity online<br>Online tax payment |

Computed from (Malhotra & Singh, 2010, p. 95) [8]

### 4.3 Mobile Banking

Mobile banking is a service provided by a bank or other financial institution that allows its customers to conduct a range of financial transactions remotely using a mobile device with the software installed, usually called an app, provided by the financial institution for the purpose. From the bank's point

of view, mobile banking reduces the cost of handling transactions by reducing the need for customers to visit a bank branch for non-cash withdrawal and deposit transactions. Various banking services can be availed using a mobile device such as money transfers, account checking, receiving communications and service promotions from banks etc. Traditional phone banking services were performed via SMS or mobile web which had limited function. With the advancement in web technologies, the operating system used in the mobile phones allowed the use of special client programs, called apps, downloaded to the mobile device.

Indian banking regulator, Reserve Bank of India developed and issued directives and guidelines for m-banking during 2008. To further protect the m-banking users against fraudulent practices a common-banking platform was created by the National Payments Corporation of India under the guidance of RBI. (Deb & David, 2014)The transaction limit, of ₹ 50,000 per customer per day on mobile banking transactions set in 2009 was lifted in 2011. Banks are now free to set their own transaction limits based on their own risk perception with prior approval from the Board. (Hans, 2012)The other highlights of the guidelines were:

- Only Indian Rupee based domestic services permissible
- Only banks with core banking solutions would be permitted to provide mobile banking services
- Transaction limit was placed with a daily cap of ₹ 5000/- per customer for funds transfer (Namburi, 2011)which was doubled to ₹ 10,000 in 2011 with a view to facilitating transfers to people without bank accounts(Hans, 2012).

The guarded collaboration between banks and mobile phone operators was expected to boost the mobile payments while contributing to financial inclusion. (Mohan, 2012)

A study was conducted by Deb & David (2014) [2] to examine the factors responsible for customers' adoption of m-banking in India. The findings indicated a positive relationship between attitude towards m-banking and society influence, perceived usefulness, perceived ease of use and communication. Device unsuitability and complexity acted as major barriers in the formation of positive attitude towards banking. The relationship between benevolence, privacy and security on attitude towards m-banking was also found to be negative. The study had practical implications for managers. It suggested that m-banking adoption can be increased by improving the customer's perception of benevolence, privacy and security issues.

### 4.4 Payment Wallets

2004-2005 was the turnaround period for electronic payments, as the NEFT (National Electronic Funds Transfer) system was introduced. NEFT is a nation-wide payment system facilitating one-to-one funds transfer. (NEFT, n.d.)The Mobile revolution was already in its acceleration mode with over 90% of the over 700 million mobile connections operating on a prepaid platform. The RBI had issued guidelines for the issuance and operation of prepaid cards in April 2009 which was amended in 2010 to permit banks to issue & reload semi-closed PPIs (Prepaid Instruments) through external agents other than business correspondents. On the aspect of co-branding, the RBI has indicated that both banks and non-banks may issue co-branded prepaid cards with corporate and government entities. (Namburi, 2011)Evolution of Mobile Wallets worldwide took place in phases.

**Phase I: Ideation (Before 2010)**

The idea of mobile wallets wasn't received with much enthusiasm. From a consumer perspective purchase options were limited to a few major retailers and manual operation became a barrier.

**Phase II: Exploration (2010-12)**

Numerous start-ups and large companies jumped into the market, testing combinations of enabling technology, loading options and product strategies to drive customer adoption.
But adoption was still in the stage of infancy.

**Phase III: Early acceptance (2012 onwards)**

Mobile wallets became popular in Silicon Valley and New York as the competition increased. With the launch of Google wallet, ISIS and PayPal, the m-wallet market seemed to be achieving its much needed attention. Many retailers and merchants launched their own MCX wallet as well. (Amit, 2013)

Since m-wallets were introduced by independent players, they owned majority of the market share. Banks started to realize that if they did not participate in this mobile wallet era, they ran the risk of losing out to these competitors and their role would be reduced to that of a commodity transaction service provider. Banks had an upper hand in the game because of their already established large customer base, their ability to enable multiple payment integration options tied to a wallet and by the opportunity of combining the ocean of customer transaction data typically available to a bank; through collaboration with external organizations in the ecosystem and access to external data sources. Additionally, the trust factor with banks is definitely higher than what a consumer places with the unknown independent companies. (Kumar & Seri, 2014)

Banks were required to form strategies on the following fronts:

- Partnership: Banks could go solo in their mobile wallet undertaking or could partner with other mobile wallet ecosystem players such as merchants, mobile network operator, payment processors, payment service providers, handset manufacturers, card issuers, technology service and solution provider, and other value added service providers.
- Transformation of core system: Core systems had to be replaced with flexible systems that would support service-oriented architecture (SOA) and other modern technology platforms since that pave the way for the future.
- Analytics: Use of technology generates large volumes of data. Data analysis is crucial for deriving meaning from it and using it to determine changing consumer behaviour in order to serve them better. An analytics-powered mobile wallet will be a game-changing competitive differentiator for banks. By including purchase history, financial habits and location-based intelligence, banks can provide their customers with compelling and personalized services and offers. (Kumar & Seri, 2014)

### 4.5 Payment Banks

In September 2013, the Committee on Comprehensive Financial Services for Small Businesses and Low Income Households formed by the RBI and headed by Nachiket Mor, submitted its final report in early 2014. Among its various recommendations, a significant one was the formation of a new category of banks called payments bank. In July 2014, the RBI

released the draft guidelines for payment banks, seeking comments from interested entities and the general public and released the final guidelines for payment banks in November 2014. (Payments bank, n.d.)According to the draft guidelines, the banks would be licensed as payments banks under Section 22 of the Banking Regulation Act, 1949 and would be registered as public limited company under the Companies Act, 2013. 41 firms and individual owners applied for the license and the Reserve Bank of India (RBI) approved in-principle licenses for 11 applicants on 19th of August, 2015 for payment banks. Such banks can accept deposits (of up to Rs 1, 00,000), provide payments and remittances services, and distribute third-party financial products, provide debit cards and Internet banking facilities but are prohibited from issuing credit cards. (Karnik, 2015)

The problem visualised in the foreseeable future is the fact that this might be a bubble in the making. The unrealistic discounts and coupons offered by the independent players to attract and retain their market share might not sustain in the future. These are backed by VC funds, in case of start-ups, in addition to the huge investment flowing in this new lucrative sector. This made the author question the loyalty of the customers. Once the cash burning strategy ends, customers might start looking for alternatives. The businesses might never be able to make the transformation from push to pull strategy. Banks therefore need to differentiate their marketing strategy from the non-bank competitors in such a way as to avoid this future potential trap. (Singh, 2016)

### 4.6 Unified Payment Interface

The current prevailing system of online/mobile fund transfers requires the receiver to share a lot of personal information with the sender. Moreover, a bank's mobile app does not transact with other bank's apps. Addressing these shortcomings, RBI governor Raghuram Rajan and Infosys co-founder Nandan Nilekani, adviser to the National Payments Corporation of India, launched the much-awaited Unified Payments Interface (UPI) a few days back. (Unified Payments Interface: All you need to know, 2016)This technologically-driven payment solution is expected to revolutionize the retail payments industry.

"UPI is a single interface across all National Payment Corporation Systems (NPCI), allowing customer to instantaneously transfer funds across different banks with the use of single identification and password. Users account link multiple bank accounts to a single mobile application. Money can both be requested and received through the same interface"(Unified Payments Interface: All you need to know, 2016).

Some experts believe that UPI is going to give payment wallets like Paytm and Mobikwik a run for their money challenging their very business model if it received wide acceptance. However to ensure their business is not rendered superfluous by this new platform, they aim to integrate their services with UPI. For instance, Flipkart recently acquired UPI-based payments company Phone Pe sensing the impending turbulence. (Unified Payments Interface: All you need to know, 2016)Bhalla (2016) also foresees the extinction of mobile wallet industry. That said it will be interesting to see how start-ups leverage the power of this platform given this sudden boost of technology

## 5. Conclusion

Since the introduction of ATMs in late 1980s to a time where funds can be transferred by a touch of screen through BHIM app, Indian banking sector sure has come a long way. In this technologically turbulent market no bank can survive by offering just traditional services. The most important revolution in the banking sector has been in the digital payments area. In India at present, mobile payments form a minuscule part of the overall digital payments industry. However, the contribution from phones and tablets is expected to increase to 30 per cent by 2020. Value and volume of mobile transactions is increasing monthly but number of bank accounts and mobile subscribers is very high. This indicates that banks are yet to fully exploit this channel even for their existing customers. Before India, many countries have experimented with mobile-based remittance services for reaching the unbanked population. The examples include M-Pesa in Kenya, Tigo Cash in Paraguay, Pago Movi in Peru, Nipper in Mexico and Oi in Brazil(Mohan, 2012). Further, given the past trends, remittance in developing countries is expected to grow by 5 per cent. These are clear indications that the mobile wallets market is definitely a lucrative one, with investors ready to pump in money. (Singh, 2016) With people running short on time and high on transactions volume, we can be sure of even more technological advancements happening in the banking sector to make our lives easy.

## 6. References


1. Amit. Mobile wallet analysis: Evolution, Challenges and the Way Ahead. 2013. Retrieved March 29, 2016, from LTP: http://letstalkpayments.com/mobile-wallet-analysis-evolution-challenges-way-ahead/
2. Deb M, Lomo-David E. An empirical examination of customers' adoption of m-banking in India. Marketing Intelligence & Planning. 2014; 32(4):475-494.
3. Hans PP. Fat Mobile Wallets. 2012. Retrieved April 1, 2016, from Business Today: http://www.businesstoday.in/moneytoday/perspective/rbi-mobile-banking-transaction-rs-fifty-thousand-a-day/story/21994.html
4. Karnik M. Everything you need to know about India's brand new payments banks. 2015. Retrieved April 2, 2016, from Qaurtz India: http://qz.com/483059/everything-you-need-to-know-about-indias-brand-new-payments-banks/
5. Kumar A, Seri SP. Banking on the Mobile Wallet. 2014. Retrieved April 1, 2016, from Infosys: https://www.infosys.com/industries/financial-services/white-papers/Documents/banking-mobile-wallet.pdf
6. Kumar L, Malathy D, Ganesh L. The diffusion of ATM technology in Indian banking. Journal of Economic Studies. 2011; 38(4):483-500.
7. Malhotra P, Singh B. Determinants of Internet banking adoption by banks in India. Internet Research. 2007; 17(3):323-339.
8. Malhotra P, Singh B. An analysis of Internet banking offerings and its determinants in India. Internet Research. 2010; 20(1):87-106.
9. Mohan BK. Evolution of mobile payment. 2012. Retrieved March 29, 2016, from Financial Chronicle: http://www.mydigitalfc.com/banking/evolution-mobile-payment-065#

10. Namburi U. Electronic Payments in India Looking Back &Surging Forward. 2011. Retrieved April 1, 2016, from PYMNTS: http://www.pymnts.com/assets/Uploads/ElectronicPayments-India-2011-Upendra-Namburi.pdf
11. NEFT. (n.d.). Retrieved April 8, 2016, from ICICI Bank: http://www.icicibank.com/Personal-Banking/onlineservice/online-services/FundsTransfer/neft.page
12. Payments bank. (n.d.). Retrieved April 5, 2016, from Wikipedia: https://en.wikipedia.org/wiki/Payments_bank
13. Shanker D. ICT and Tourism: Challenges and Opportunities. Conference on Tourism in India-Challenges Ahead. IIMK. 2008, 50-58.
14. Singh A. The future of mobile wallets in India. 2016. Retrieved April 3, 2016, from The Hindu:http://www.thehindubusinessline.com/catalyst/the-future-of-mobile-wallets-in-india/article8332085.ece
15. Unified Payments Interface: All you need to know. 2016. April 11). Retrieved April 15, 2016, from The Times Of India: http://timesofindia.indiatimes.com/tech/How-to/United-Payments-Interface-All-you-need-to-know/listshow/51775203.cms
16. Yannapoulos DP. Impact of the Internet on Marketing Strategy Formulation. International Journal of Business and Social Science. 2011, 1-7.