

IMPACT OF E-COMMERCE ON BANKING SECTOR: A SPECIAL REFERENCE TO INDIAN BANKS

Mr. Anchit Jhamb

Assistant Professor, Punjab Institute of Technology, Rajpura

Ms. Shweta Wadhwa

Assistant Professor, Chandigarh School of Business, CGC Jhanjeri

Abstract

India has always been a growing economy which allows many other economies to rely on India for sale of its product and to generate revenues and with advent of smartphones and various other technologies. The E-commerce has a very big horizon and it is not limited one or two areas which has allowed many companies, manufacturers to reach every available country on this earth which supported by the easy viability of internet facilities and smartphones. The Indian banking sector has always been praised around the world due to its strict compliances and the protection to its customers. With the advent of E-commerce in Indian economy there has been many transformations in Indian banking and it has helped the banks to increase their services and revenues helped many banks to penetrate the international market as well. With the offline as well online services more and more customers are getting attached to banking system and it has eased the way of government for financial inclusion. E-commerce in one fashion or the other is affecting the banks or it is including the banks in its circuit of operation and bank of any sector Private, Public or Foreign sector bank each and every sector is in heavy competition and trying to improve their online or E-banking services. The paper also gives a view that how E-commerce has impacted the banking system and in return how this updated banking sector with facilities of E-banking is helping the government and society to develop their socio-economic horizon.

Keywords: E-commerce, E-banking, online shopping, Financial Technology, Mobile Banking, Payment gateway

1. Introduction

India has always been a growing economy which allows many other economies to rely on India for sale of its product and to generate revenues and with advent of smartphones and various other technologies. India has seen an explosive growth from past few years then in 2002 government took the initiative and IRCTC came with the online ticket booking portal which acted as boon for common man and reduced the time wastage by standing in lines and easy availability of tickets and from there on many companies with online payment portals started in India. India was one of the youngest nation at that time and with availability of smartphones, internet and online payment portals it attracted youth towards itself further the availability of companies like flipkart, amazon and other companies the youth was getting attracted towards online shopping and the retail stores who swam with the current and made themselves available online as well as offline they were seen flourishing. In the same manner the Banking sector also did not remained untouched the e-commerce had effect on banking sector and there were effects on the banking sector in 2 manner.

- a) **Introduction of e-banking-** The concept of e-commerce was termed as e-banking for the banking sector
- b) **Effect from online transactions-** There were many applications which used many payment applications which effected bank account directly like google pay and many applications effected bank account in indirect manner like Paytm

So it was not possible for the banks also to avoid the development and helping the banks to extend maximum services to the customers' offline as well as online. The following figure also suggest the same that there has been a prominent increase in the online shoppers in India and also there has been factors affecting the same but nothing could have been possible if the banking sector have not extended its help by getting online and transforming into E-banking services. There have been many factors which have increased the usage of banking services but increase in e-banking services have impacted majorly to the usage of the facilities.

2. Objectives of the Study

- 1) To study the impact of E-commerce on banking sector
- 2) To study the relationship between E-commerce and E-banking

3. Review of Literature

Gupta (2014) in her paper "E-Commerce: Role of e-commerce in today's business", presents a comprehensive definition of e-commerce while isolating it from e-business. The paper enlists the different ecommerce models i.e. B2B, B2C, B2G and C2C, narratively analyzing the nitty gritty of each. Rina (2016) also elaborates the different applications of e-commerce in "Challenges and Future Scope of Ecommerce in India", at the same time, defining the degree to which they are operational in the country. Gunasekaran, Marri, McGaughey, & Nebhwani (2002) give a broad outlook of electronic commerce within organisational systems in "E-commerce and its impact on operations management", defining it with reference to e-trading and elaborating- how it has permeated every field of business. The paper identifies the revolutionary role played by earlier internet applications like e-mail and electronic data interchange and details the revolutionary changes brought by the internet technologies in manufacturing, marketing, purchasing, design, production, selling and distribution, warehousing and human resource management. Internet based technologies have enabled businesses to shorten development, purchase and procurement cycles, maintain upto date product and market information, significantly increase the speed of communications and increase the quality of customer relationships by facilitating close contact and constant communication. The paper studies in depth, the significance of web based technologies in different business operations, thus, improving their efficiency through effective B2B e-commerce.

(Chanana&Goele, 2012). The recent surge in the number of online vendors, big as well as small, favourable demographics (currently, 75% of the internet users are in the age group of 15 to 34 years and thus, are more integrated to ecommerce), launch of 4G services and decline in the tariffs of data plans and prices of data cards/USB dongles, availability of low cost smart phones and the extension of internet and broadband to the remotest corners of the country, together herald innumerable prospects for the development of e-commerce in India. The purpose of this project work is, to review the literature on e-commerce and thus, trace its development and also to find out trends that shall propel the growth of e-commerce in future, in India. The project contains an introduction to ecommerce and the lack of a universally accepted definition, its categorization into different applications and the prospects for the robust development of e-commerce in India. The introduction is followed by a review of literature available on different aspects of e-commerce which is analyzed in the later segment with a view to find out factors that shall drive the growth in future.

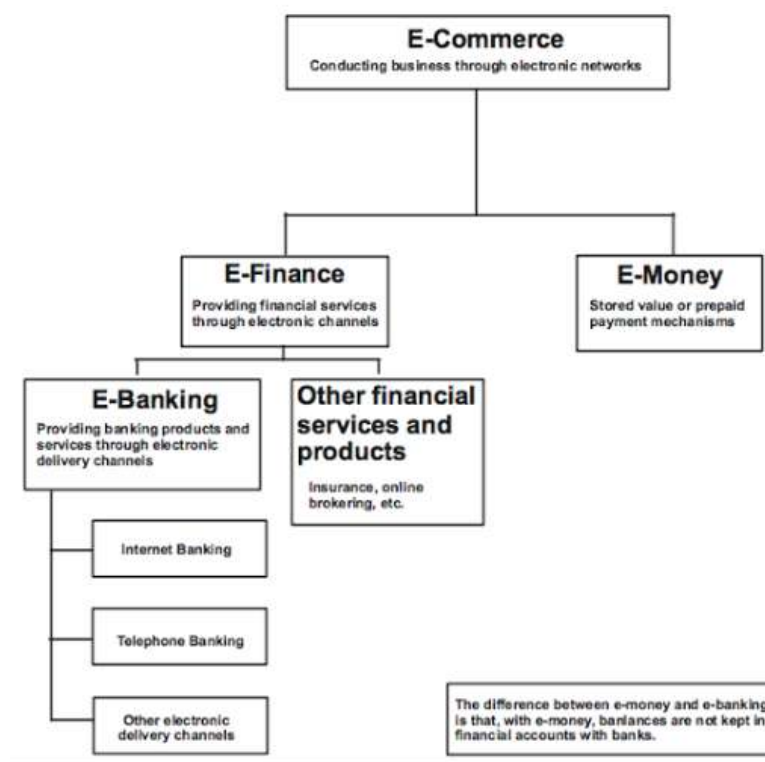
Mishra & Kotkar (2015) trace the timeline and development of B2C e-commerce in "A Study on Current Status of E-Commerce in India: A Comparative Analysis of Flipkart and Amazon" with its inception in the mid 1990s through the advent of matrimonial and job portals. However, due to limited internet accessibility, weak online payment systems and lack of awareness, the progress was very slow. The Indian B2C e-commerce industry got a major boost in mid 2000s with the expansion of online services to travel and hotel bookings which continue to be major contributors even today. Das & Ara (2015) observe in "Growth of E-Commerce in India" that though online travel and hotel bookings still control the lion's share of e-commerce market, their share has comparatively fallen over the years due to the recent augmentation and consequent rise of e-tailoring services. There has been a tremendous surge in the volume of investment in this sector. With the e-commerce markets in the west reaching their saturation, investors see tremendous potential in the Indian market, in the light of which, many startups have received funding from venture capitalists and private equity firms.

Joseph and Stone (2003) investigated the customer perception of the impact of technology on service delivery in the banking sector. According to the findings of this research, high scores on the ability to deliver service via technology appear to be correlated with high satisfaction with services deemed most important to customers. Hence, availability of internet banking services appears to be very important for banks for customer satisfaction and retention. However, availability of internet banking services itself is not a sufficient factor to increase customer satisfaction. User friendliness of the internet banking services appears to be an important factor for customers to use these services.

Rangan, V. Kasturi and Lee, Katharine L., (2012), “Mobile Banking for the Unbanked “, The case describes in detail the workings of two mobile banking operators in Africa WIZZIT in South Africa and M-PESA in Kenya. It explores the dimensions of strategy that make for success in the market for the unbanked. It raises questions regarding the portability of the model to other countries and settings.

V. Raja, Joe A. (2012), “Global e-banking scenario and challenges in banking system”, This paper is an attempt to explore the various levels of internet banking services provided by banks using the secondary data. It also compares the traditional banking systems with net banking. It lists out the various advantages of internet banking and the successful security measures adopted by different banks for secured banking transactions. It also analyzes how E-banking can be useful for banking industry during this global financial meltdown.

Figure-1 Inter-relation between e-commerce and e-banking

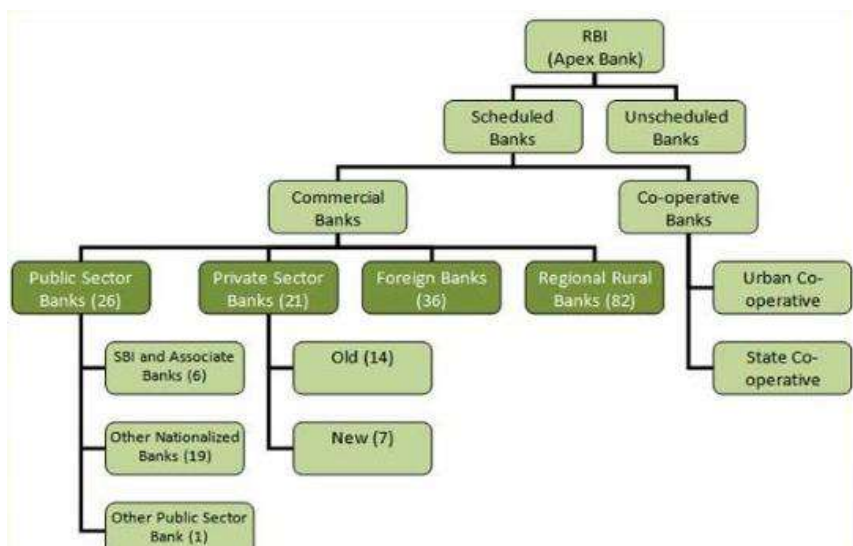


The above figure also depicts the relationship between E-commerce and E-banking and also the different services given by the banks in their E-banking services and it also depicts the dependency of the both things on each other. If there is E-commerce and ease the facilities and economy should try to improve their E-banking services and on the other hand if there is an improved channel of E-banking then it a very smooth functioning area for E-commerce.

The Indian banking sector also is developed from various banking sectors like Private sector banks, Public sector banks and foreign sector banks and the Indian Banking System is governed by Reserve Bank of India which is an apex authority to frame policies and guide the banks of India from any sector. But all these policies and RBI

being the apex bank has made banking sector much complex and this complexity has saved Indian economy many times even at the time world economic slowdown and also this complexity ensures the protection of Indian customers

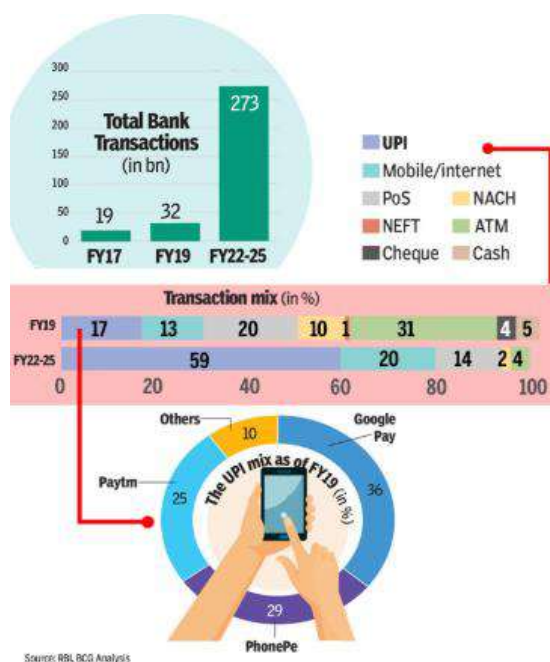
Figure-2 Indian Banking System



The above figure indicates the complete Indian banking sector that how well and Apex body by the name of RBI has controlled and monitored each and everything by its guiding policies and framework.

With banking sector introduced to E-banking and E-commerce it has increased the responsibility of RBI that it should check and guide each and everything so that banks can enjoy the benefits of being developed and customers do not face any problems or issues with these online services offered by the banks and the following figure also tells the same store that there has been an increase in the use of E-banking services by the Indian customers

Figure-3 Use of E-banking services



It can be analyzed from Figure-3 that there has been more and more use of E-banking services in India and it is also indicated that it will increase in future. No matter for what these customers have shopped online or even in the payment of utility bills more of E-banking has been used which further can be analyzed that this must have increased the market share of the banks and banks also try to deliver their services in well-developed manner.

And with the increase in number of E-banking users and also from figure-4 it can be analyzed that there has been a significant increase in number of online shoppers in India and which is expected to increase in coming years.

Figure-4 Number of online shoppers in India



Public welfare growth and development has always been the area of government concern and second dimension is financial inclusion and government has tried each and every possible way of doing the same and e-commerce played an important part for the same it gave of wave of financial technology to the Indian economy.

4. A step by step process of online payment and involvement of banks in the same

- Buyer - party making the online payment
- Seller - party accepting the online payment
- Issuing Bank - buyer's bank account
- Acquiring Bank - seller's bank account
- Payment Gateway - the payment processor
- Interchange Network - payment authentication party

Figure-5 Role of E-Commerce in banking sector



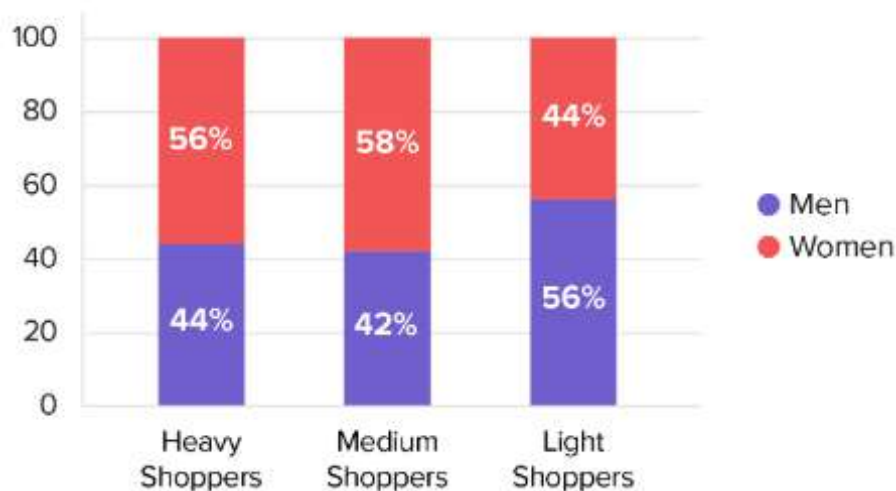
From analysis of Figure-5 it very much clear that e-commerce impacts the banking sector and keeping the same view Indian government under the leadership of Prime Minister Sh. Narender Modi launched an

initiative by the name of “Digital India”. Following are the points which describes the impact of “Digital India”

5. Impacts of Digital India

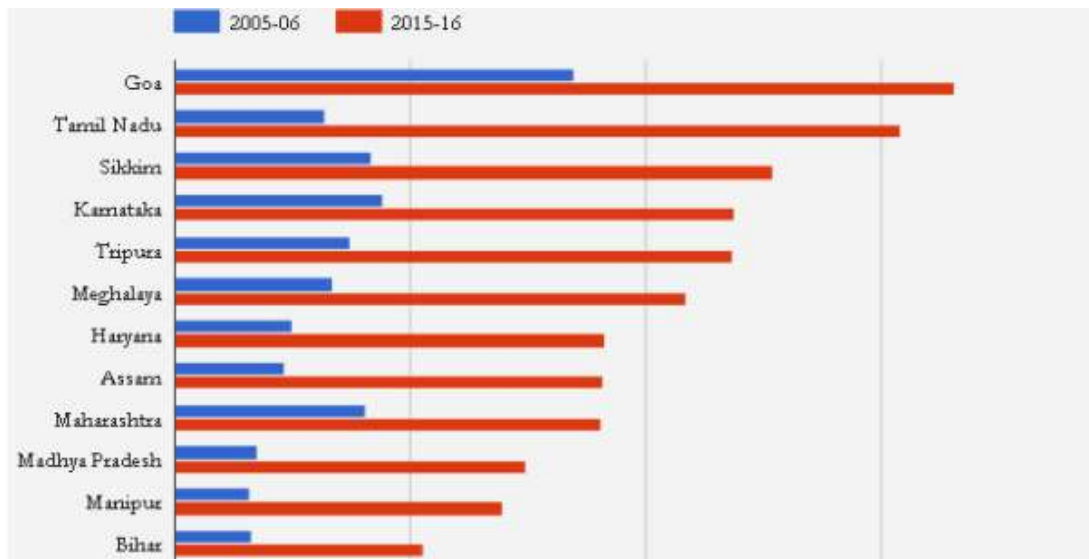
- An investment of USD18.4 billion to provide last mile internet connectivity, better access to government services, and development of IT skills
- Setting up of a pan India fibre-optic network by June 2016
- Provision of Wi-Fi services in cities with a population of more than one million, as well as major tourist centres
- Provision of broadband internet access to 250,000 village clusters by 2019 at a cost of about USD5.9 billion
- Availability of ‘digital lockers’ to each citizen, allowing them to store all their original identification documents and records
- Development of 100 smart cities in India, for which USD1.2 billion has been allocated • Universal phone connectivity
- Setting up of 400,000 internet access points
- Digital inclusion targeting job creation for nearly 1.7 crore people trained in IT, telecom and electronics • Creation of at least 8.5 crore indirect jobs related to IT
- Focus on moving towards automation in delivery of government services
- Achievement of a leadership position in IT towards betterment of health, education and banking services
- Widened internet access and an enabled use of shareable private space on a public cloud model in order to empower citizens digitally

Figure-6 Gender Distribution in online shopping



The online shopping or E-commerce have not only initiated the financial inclusion but have also increased the women inclusion and empowerment which is evident from figure-6 that women are ranged between medium to high shoppers and also the share is more than 50% .

Figure-7 Female bank account holders



And with the increase in female online shoppers either the women will require her own bank account or will operate through bank account from any other family member but the figure-7 states that women have preferred to use their own bank accounts which is a big resultant in the increase in account opening of females, and it can also be presumed that E-commerce has not only included women in main stream but also included them financially.

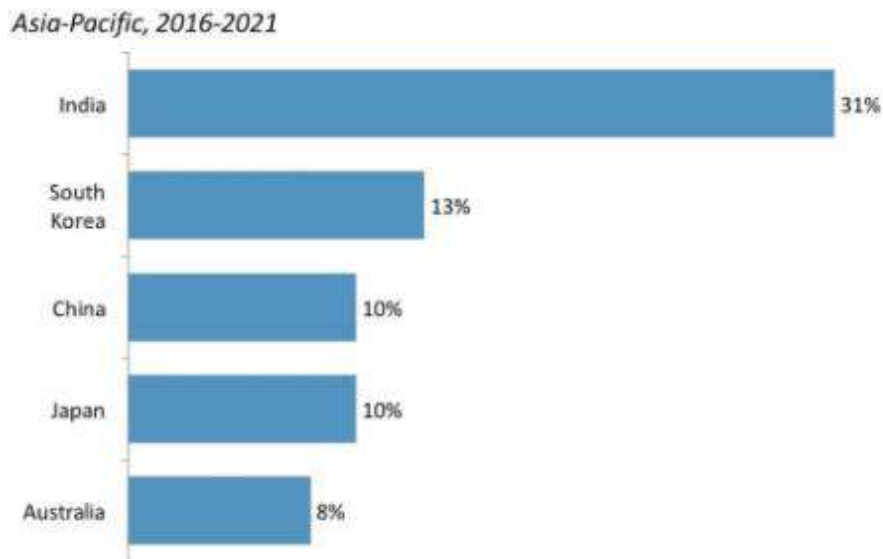
Figure-8 Products bought and sold by online shoppers in India



As it is an easy availability of gift articles online which promotes the online shoppers in India to go online with the price difference available in the online market and offline market and many companies have made them easily available to the customers by going online, so that is again a big reason for the shoppers to go online.

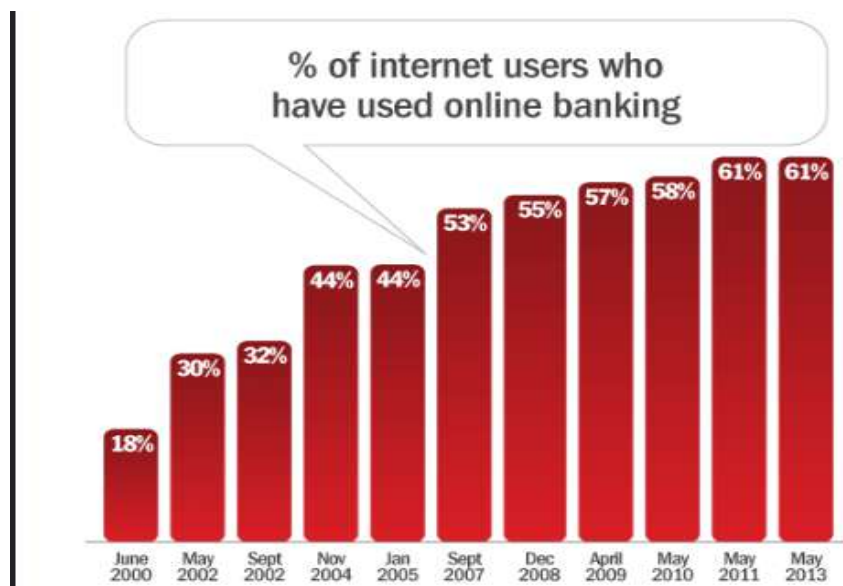
That has affected the Indian economy in best of the manner by making India to reach at position number 1 in Asia pacific for its e-commerce sales

Figure-9 Asia Pacific and E-commerce sales



The significant increase in online shoppers in India and Figure-10 also stating the rise in Percentage of internet users who have used online banking implies a fact that e-commerce have made the internet users aware of available online banking services and how to use these services but the major task of financial awareness, financial inclusion is on the right path straight away.

Figure-10 Percentage of internet users who have used online banking



And not only the online users but India is standing tall across the world as the number 4 economy in the world where the mobile banking is in fashion, the same is evident from figure-11 that India has one the maximum mobile banking users in the world this is again a best sign that the financial inclusion is there and e-banking is also playing it's role.

Figure-11 Mobile Banking in India



It can be signified that with the introduction of E-commerce it has given a wider lens of development to the Indian customers and citizens with the increased awareness of E-banking or online banking services and hence making Indian customers more and more developed and aware about the financial services hence helping the government of India in making financial awareness and financial inclusion for its citizens.

6. Conclusion

Today's world is one with increasing online access to services. One a part of this which is growing rapidly is online banking. Combined with online retailers there's tons of cash changing hands, directed only by communication over the web. This is often very convenient and the ready access to the web altogether first-world countries, including the value savings from closing bank branches, is driving the deployment and adoption of those services. Purely online transactions, however, cause increased risk. None of the traditional safeguards of realworld transactions are present. Conversely, risk to the criminals may be a lot lower (the attacker can be during a completely separate jurisdiction from all the opposite parties within the transaction) and the retailer sees nothing but a faceless, nameless connection providing card details. Banks have traditionally been within the forefront of harnessing technology to enhance their products, services and efficiency. They have, over an extended time, been using electronic and telecommunication networks for delivering a good range useful added products and services. Penalty thanks to non-payment of bill isn't new anyone folks. And quite obviously, who likes the long procedure of writing a cheque, standing during a long queue then ensuring that the actual amount is out there in your bank account? Indian banks try to form our life easier. Not just bill payment, we will make investments, shop or buy tickets and plan a holiday at your fingertips. This paper gives a view that there has been increase in e-commerce in India which is only because the youngsters are very much attracted towards e-commerce but then the easy availability of various banking and financial services has increased financial awareness, financial literacy and financial inclusion in India. With the increase of e-commerce the requirement of banking services has also increased and banks have also developed themselves with e-banking services and all these things gave a rise to financial technology in India which led to a revolution by the name of "Digital India" leaving a positive impact on the Indian economy. The following figure also shows an inter-relationship between e-commerce and e-banking. The also paper provides insight into the evolution of e-commerce in India, while understanding the nitty gritty of its different aspects, with special emphasis on B2C e-commerce: which has shown tremendous growth in the recent years thanks to increased consumer awareness, investor trust and technological proliferation. The objective was to review the literature available on e-commerce, so on trace its development within the Indian Economy while isolating its relevant advantages and limitations. The study has also produced certain trends and factors which shall propel further growth within the e-commerce market in India. A sustainable business practice would be to market e-commerce and m-commerce as complements instead of substitutes to traditional business. The synergies between offline and online businesses will enhance efficiency and end in a more stable existence. The

longer term also entails a scenario which shall witness an increase in niche businesses, also as, mergers and acquisitions to enable firms to grow inorganically. Firms got to commit themselves to the provision of services and application of internet marketing, to get and retain larger audience. Through mobile penetration, opportunities are emerging within the rural markets which, can't be tapped unless followed by a network proliferation, better mobile app infrastructure, content development in local languages and walk connectivity. Also, within the aftermath of demonetization, the share of digital payments is predicted to rise, to sustain which, firms got to develop safer payments infrastructure.

And atlast there are few points of discussion to give a view that there is impact of e-commerce on banking sector

- 1) Maximum use of online shopping to buy gift articles and then for the services like banking services or ticket booking services.
- 2) Figure-10 stating that e-banking is part of e-commerce
- 3) Figure-3 showing the process of payment in case of online shopping which involves bank in it
- 4) Figure-11 shows the increase in payments through mPOS in comparision to digital commerce hence involving banking sector directly or indirectly but an increase shows that the involvement of banking sector is a huge

Appendix

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