

A Review on Strategies for growing E-commerce in India

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Abstract: The primary objective of this research is to discuss features, obstacles and strategies for development of E-commerce in India. In this paper we are also discuss about the motivator factors of shopping online. India is a development country. India has implemented a peculiar way of development in comparison of Asian economies. E- Commerce is growing day by day in our country. With advancements in technology, there have been changes in the methodology for business transactions. Increasing internet users have added to its growth. The main advantage of e-commerce over traditional commerce is the user can browse online shops, compare prices and in short period they can get more information at home on their PC.

Keywords: Introduction, classification, Scope and strategies

I. INTRODUCTION

Technology plays a vital role to bought revolution in society. Technology reduces the distance and differences to provide information .Now people get information any time without any intervention. This technology is known as internet technology. In business this technology plays a wonderful role. This technology provides a new infra structure for a business and it become e-business or e-commerce. The people can connect by internet and get online all kinds of information related to business, shopping, payments etc. Electronic commerce is also known as e-commerce. The effect of e-commerce all already in all areas of business and day by day it increase. The term e-commerce was originally formed to describe the process of conducting business transactions electronically using technology. Electronic commerce is sharing business information, maintaining business relationships, and conducting business transactions by way of telecommunications networks. These business transactions go on business-to-business, business-to-consumer, consumer-to-consumer or consumer-to-business and Business to employee. Electronic data interchange (EDI) was the next stage of e-commerce development.

History of E-commerce

1960s.	It all started with Electronic Data Interchange (EDI). This technology first provided standards for exchanging data via electronic means.
1979	Michael Eldrich, an English inventor and entrepreneur, invented online shopping, as known as teleshopping. Aldrich’s system connected a modified TV to a real-time processing computer via a domestic telephone line. However, the system did not become economically viable until the Internet.
1980 – 1990.	First implementation of b2b and b2c transactions with a great example of Nissan’s online customer credit checking.
1990	Tim Berners Lee created the first World Wide Web server and browser, successfully implementing a connection between HTTP client and server via the Internet. E-commerce is about to change completely, taking over the world.
1994	First third-party payment services for processing online credit card sales emerged; The appearance of SSL Encrypt.
1994 – 2004.	The great debuts: Yahoo, Google, Amazon, PayPal, Ebay, their stores and services. Consistent expansion of the Internet giants and e-commerce businesses.
2004	Payment Card Industry Data Security Standard (PCI DSS) was formed, in order to increase controls around cardholder data to reduce credit card fraud via its exposure. The standard covered major card schemes: Visa, Mastercard, American Express, Discover and JCB.
2004 – 2009	Another 5 years of e-commerce expansion, including mobile commerce (mcommerce) evolution.
2009	Bitcoin appears, allowing users to transact directly without needing an intermediary. Another

	significant step, not only for e-commerce, but for the global economy (e-economy?). The era of massive Bitcoin forking begins.
2011	Cryptonote Protocol. Inspired by the idea of the blockchain, a group of developers invented a non-Bitcoin technology that theoretically could eliminate the need of trusted webservers for processing transactions, by providing unbelievably strong cryptography through the distributed network.
2011 – 2015	Continuing growth of cryptocurrencies, including the boom of altcoins in 2013 (mostly Bitcoin-based) and their infrastructural projects. Bitcoin developers first implemented the Cryptonote protocol. Bitcoin endures a consecutive market adoption. [1]

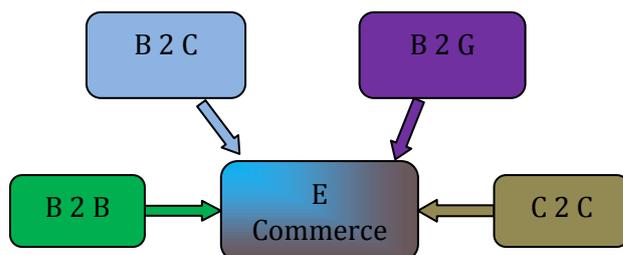
Definitions of E-commerce:

Definition	Author
"E-commerce is the production, distribution, marketing, sales or delivery of goods and services by electronic means."	World Trade Organization
Either purchasing or selling activities that were conducted over the internet.	Yellow Pages,2002
E-Commerce - buying and selling goods and products over internet	Frederick J. Riggins and Hyeun-Suk Rhee, a recent pilot survey
'Electronic commerce is sharing business information, maintaining business relationships and conducting business transactions by means of telecommunications networks'.	According to the editor-in-chief of International Journal of Electronic Commerce, Vladimir Zwass
e-business is all about time cycle, speed, globalization, enhanced productivity, reaching new customers, and sharing knowledge across institutions for competitive advantage.	According to Lou Gerstner, IBM's CEO

II. CLASSIFICATION

E-commerce divided into mainly four parts.

1. Business to Business (B2B)
2. Business to Consumer (B2C)
3. Business-to-Government(B2G)
4. Consumer-to-Consumer (C2C)



1. Business to Business (B2B):

In a Business-to-Business companies sell their online goods to other companies without any intervention of consumers. This type of transaction is between a company and its trading partner's i.e. suppliers, collaborators, subsidiaries, and large institutional customers. B2C is the type of commerce transaction in which businesses sell products or services to consumers. In this type of transaction companies sell their online goods to consumers who are the end users of their products or services. In this type the consumer easily contact to the organization.

B 2 B

An example of B2B market is www.agriwatch.com is an Indian agriculture e-marketplace; authorized users can participate in the buying and selling of agricultural commodities. Bids and offers are accepted from domestic and international markets. The site also offers information including research reports, market updates and directory services In India there are number of companies which uses B2B strategies of e-commerce some are: Citrus payments, India mart, CCavenue, Pinelabs, PayU, Roadrunnr, Tracxn, Practo(SaaS), Freshdesk, Exotel, Capillary, Capitalfloat, Knowlarity, Quick heal, Inmobi, Shadowfax

2. Business to consumer(B2C):

In business-to-consumer, the transaction in which businesses sell products or services to consumers. Traditionally, this could refer to individuals shopping for grocery, gift items and clothes at the mall, diners eating in a restaurant, recharges of phone, and mobiles from authorized shops. But in this time all these types of shopping are replaced by B2C. Now we can purchase the product online, we can pay bills, recharge, and reservation of tickets online. B2C is beneficial for consumers because it gives them access to a world of stores instead of the local stores and save time. In India there are number of companies which uses B2B strategies of e-commerce some are:

B 2 C

Ebay.in, IndiaTimes, RediffShopping, Bigbaza, Homeshop18.com, Shop.zapak.com, Shop.in.com, Tradeus.in, Indiaplaza.in, Egully.com, 20north.com, Tintara.com, YepmeShopping.com, Bigadda.com, BrandsKnot.com, Beshop.com, OnlineBuy99.com, FutureBazaar.com, DiscountBox.in, Mallxs.com, Shopclues.com, Buytheprice.com, Ezmaal.com, Goodlife.com, Jabong.com, Junglee.com, Pepperfry.com, Seventymm.com, <http://www.onlinebuy99.com>, <http://www.futurebazaar.com>, <http://www.shopping.indiatimes.com>,

3. Business to Government (B2G):

In Business-to-government type of e-commerce in which businesses selling products, services or information to governments .It provide a way for businesses to tender on government projects or products to that government. The government purchase these projects and products for their organizations. This can encompass public sector organizations that propose the bids. B2G activities are increasingly day by day with the help Internet through real-time bidding. It is also referred to as public sector marketing.

B 2 G

For an example it includes the rental of online applications and databases designed especially for use by government agencies. The following examples for B2G are: Government Agencies and Laboratories, Business Transaction and Personal Business Software, Business Consulting Services, Specialty Business, Business Intelligence Software , Business Insurance Services, Business Process Management Software, Electronic Data Interchange Software, Enterprise Resource Planning Software (ERP) ,Customer Relationship Management Software (CRM).(http://www.globalspec.com/industrial-directory/business_to_government_%28b2g%29)

4. Consumer to Consumer(C2C):

In consumer-to-consumer type of E-Commerce involves electronically-facilitated transactions between individuals, often through a third party or in other words we can say that it is a business model that facilitates the business deal of products or services between customers. The main objective of a C2C is to make possible

this relationship, helping buyers and sellers locate each other. Customers can find variety of products at the same time without locating anywhere in short period of time. For example of C2C is example is online OLX, eBay, Alibaba, amazon and half.com auctions, such as Ebay, where an individual can list an item for sale and other individuals can bid to purchase it.



Some examples of C2C include eBay, an online auction site, and Amazon, which acts as both a B2C and a C2C marketplace. eBay has been successful since its launch in 1995, and it has always been a C2C. Anybody can sign up and begin selling or buying, giving an early voice to consumers in the e-commerce revolution. Sites like eBay and Amazon use PayPal to mitigate any payment processing risks

III. SCOPE OF E- COMMERCE

In Electronic Commerce we can buy and sell products online. The entire online process includes marketing, selling, delivering, servicing and paying for products and services. India has shown terrific growth in the E-commerce sector. With an internet user base of over 300 million, India has third largest internet population after US & China

The ecommerce industry of India is one of the fastest growing segment in the Asia Pacific region. With a staggering CAGR of 34.58% from 2009 to 2012, the Industry has expanded from INR 19249 Crore (USD 3.49 bn) to INR 47,349 Crore (USD 8.60 bn) in a matter of 3 years. This expansion can be mainly attributed to the decrease in the price of personal computers, growth in the number of active internet users and the extremely competitive Internet Service Provider (ISP) market.[2]

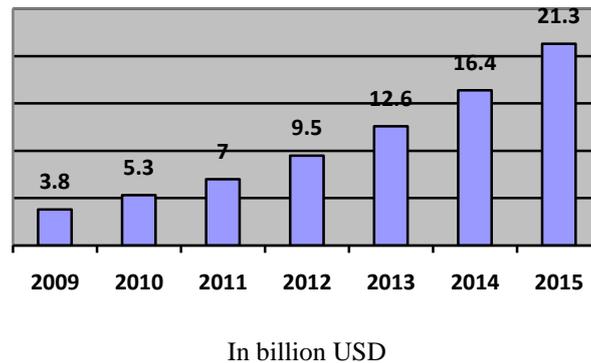
As per the published report of Internet and Mobile Association of India (IAMAI) on E-commerce sector in India, a rapid growth of around 50% is expected in the next 5 years. According to a statement released by the Internet and mobile Association of India (IAMAI), the whole E-commerce market stood at Rs 46,520 crore in 2011.[4]

In India, IRCTC is the first organization who interacts with the online E-Commerce. The government of India implements this strategy for convenient booking of train tickets. Online Passenger Reservation System, which used for the first time online ticket booking from anywhere at any time. This technology eliminates to wait for long in line and wastage of a time for common public. The advancements in the technology as the years passed on have been also seen in the IRCTC Online system as now one can book tickets (tatkal, normal, etc.) on one go, easy payments, can check the status of the ticket and availability of the train as well. This is a big achievement in the history of India in the field of online E-Commerce.

After the unpredicted success of the IRCTC, the online ticket booking system was followed by the airlines. The acceptance of the ecommerce on a large scale by the Indian people influenced other business players also to try this technique for their E-businesses and gain high profits. Though online shopping has been present since the 2000 but it gained popularity only with deep discount model of Flipkart. In a way it re-launched online shopping in India. Soon other portals like Amazon, Flipkart, Jabong, etc. started hunting India for their businesses.

Growth rate of E-commerce in India

The e-commerce industry in India is estimated to be worth USD 38 billion by 2016, a 67 per cent jump over the USD 23 billion revenues for 2015, as per industry body Assoc ham. “India’s e-commerce market was worth about USD 3.8 billion in 2009, it went up to USD 16.4 billion in 2014 and to USD 21.3 billion in 2015 and is expected to touch whopping USD 38 billion mark by 2016,” Assoc ham said in a statement.

Growth rate of E commerce in India

The inclination of online shopping is going high in upcoming years, because of India's rising internet population.

Today, In India E-commerce has become the most terrific sector. As the number of rural and urban areas is connected through internet and it raises the scope of online selling. The concept of e-commerce comes in India in early 2000 through Domestic players like Rediff Shopping, Yahoo! Shopping, India times Shopping, Sify Shopping and HomeShop18. In India's E-Commerce market is expected to see vast growth over the next four to five year. According to Goldman Sachs, India's ecommerce market will account for 2.5% of India's GDP by 2030 and expected to touch \$300 billion.[3]

Statistics suggest the future of internet lies in mobiles. Experts say more than 580 million people in India will use the Internet by 2018, and 70-80% of them will access the Web on mobile phones.[5]

IV. STRATEGIES FOR GROWING E-COMMERCE

Before to start about Strategies for growing E-commerce we should know about the meaning of strategy. "Strategy is a high level plan to accomplish one or more goals under conditions of ambiguity". In Business form "A business strategy is the means by which it sets out to achieve its desired ends (objectives). It can simply be described as a long-term business planning".

Without proper planning and knowledge we can't make good strategies for a business.

It can be done by information. Effective information and records management can help any organization to move forward in this challenging environment through achieving cost and efficiency savings. It makes best use of information assets and taking advantage of the opportunities offered by new technologies.

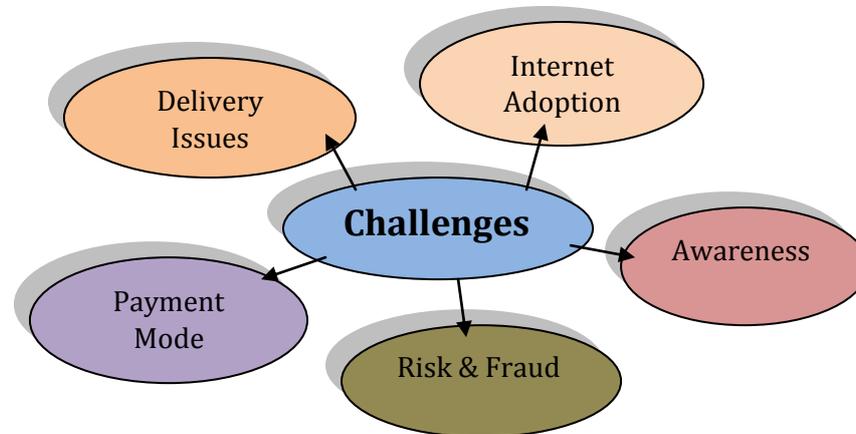
Strategies can be fruitful if resolve the drawbacks. In India e-commerce industry is growing due to internet and electronic devices. But after using this technology we are still behind other developed countries. **There are number of reasons which create tribulations in growth of e-commerce.**

1. Internet adoption
2. Awareness
3. Risk & Fraud
4. Payment Mode
5. Delivery Issues

1. Internet adoption

When we come to know ratio of internet consumers, scenario is not so commendable. Mass of Indian rural population are unconscious of internet and it uses. Unexpectedly, most of internet savvies or urban population is also suffering from poor knowledge on online business and its functionalities. Very few people are aware of the online corruption and fraud. A reliable survey reveals that 50% of Indian online users are unaware of the solution of online security. With around 1.25 billion populations out of which internet penetration is only 19% India has enormous opportunities for commerce.

India has poor reach of personal computer (PC) which is very low as 3.5/1000 of the population, compared to Five Hundred/1000 US cause of digital illiteracy. The internet is still accessible by half of the internet user population through PCs with the help of telephone lines. Given the penetration of telephone only 2.1 per cent of the population, e-commerce remains far away from the common man. It is difficult for e-commerce to reach to 1,000 million populations spread over 37 million households in 6, 04,374 odd villages and 5,000 towns and cities. Besides, both cost of PCs and internet access in India are quite high.



2. Awareness

Awareness is a big issue in e-commerce development. In India, especially those in smaller cities, they are afraid to go online. Mostly people are very conscious about value and returns. They follow traditional ways because they don't know about the new technology and are saddled from the 'Not-for-me' syndrome, and that the Internet is only meant for big brands or firms.

3. Risk & Fraud

Risk and fraud are one of the most severe threats for E-commerce. According to The US Department of Justice, identity theft and fraud are terms used to refer to all types of crime in which someone wrongfully obtains and uses another person's personal data in some way that involves fraud or deception, typically for economic gain. The past few years have seen a brisk expansion of differing methods coming to market. For growing more E-commerce it is must to reduce the risk of fraud in business or other fields. Some Common Types of Online Fraud are online intellectual property theft Identity theft, Phishing; Page jacking, Fake money orders etc.

Some of the most common complaints involve:

- buyers getting goods late, or not at all
- sellers not receiving payment
- buyers receiving goods that are either less expensive than those advertised or appreciably different from the original description
- Failure to reveal relevant information about a product or the terms of sale.

4. Payment Mode

Electronic payments include debit card, credit card, smart card, e wallet, e-cash, electronic cheques etc. In electronic payment there is a big problem of misuse and low reliability. Potential customers often mention this risk as the key reason why they do not trust a payment services and therefore do not make internet purchases (Lietaer, 2002). For example e-cash is that it is not universally accepted because it is necessary that the commercial establishment accept it as payment method. Making online payment is not an easy task. Even educated people also face problems in making online payments. Therefore, they always have a preference for the traditional way of shopping instead of online shopping and a one important reason is In India population of rural areas is not very literate and they are also not able to operate computers. So they are not interested in online payments. Online payment is not feasible for villagers.

5. Delivery Issues

In a traditional shop, customers have the option to take purchases home immediately. When shopping online, customers have to wait until the purchases are delivered. Low credit card penetration and low trust in online

transactions has led to cash on delivery being the preferred payment option in India. Unlike electronic payments, manual cash collection is laborious, risky, and expensive. Ecommerce companies using Indian payment gateways are losing out on business, as several customers do not reattempt payment after a transaction fails. The quality of connectivity is poor in several regions so that Internet penetration is low. Metropolitan cities and other major urban centers have a fairly robust logistics infrastructure but there are thousands of towns that are not easily accessible. There are the reasons which are the hindrances in the growth of E-commerce.

There are some effective Strategies to overcome the problems for growth of E-commerce

E-Commerce is one of the most stirring spaces for today's global online community, and India's young startup economy is along for the ride. With the high access of phones in India and with improving Internet connectivity, e-commerce firms are expected to reach millions of new users in the coming years.

A survey by e portal in 2011 indicated that metros contributed 51 per cent of all e-commerce transactions, while Tier 2 and 3 cities contributed about 40 per cent and rural India 9 per cent [6].

1. User Experience
2. Localization of Internet content
3. Computer/Internet literacy and effective reach
4. Development in cities beyond metros
5. Enlargement of mobile commerce
6. Increasing usage of debit cards for cashless transaction
7. Tax norms and compliances

1. User experience:

The primary driver for e-commerce anywhere is the user experience. Customers prefer a trusted relationship with an e-commerce brand. The number of e-commerce companies has grown, companies have started to place more emphasis on investing in the user experience.

2. Localization of Internet content:

The absence of localization across different internet based services and platforms have created a barrier which the players are trying to overcome for the next wave of customers. Localization of services will be instrumental in the next round of customer acquisition targeted at Tier-II and III cities. According to an IMRB report from 2013, around 45-million internet users in India browse in local languages. "The adoption of local languages increases the consumer base for a business by up to six times [7].

3. Computer/Internet literacy and effective reach:

Computer literacy is correlated with the knowledge of user and capability to understand and operate computer and other technologies with range of skills covering. (US Congress of Technology Assessment, 1984), furthermore the computer literacy also related to someone comfort level's using computer application or program. India has poor reach of personal computer (PC) which is very low as 3.5/1000 of the population, compared to Five Hundred/1000 US cause of digital illiteracy. The internet is still accessible by half of the internet user population through PCs with the help of telephone lines. Given the penetration of telephone only 2.1 per cent of the population, e-commerce remains far away from the common man. It is difficult for e-commerce to reach to 1,000 million populations spread over 37 million households in 6, 04,374 odd villages and 5,000 towns and cities. Besides, both cost of PCs and internet access in India are quite high.

4. Development in cities beyond metros

E-commerce is growing in India. The scope is much larger in non-metro cities, which are slowly becoming exposed to it. So it is very essential to development of non metro cities of India. Interestingly, out of the 4,306 e-commerce hubs in India, majority being in Andhra Pradesh, Tamil Nadu, Maharashtra and UP (in that order), 3,281 are 'Bharat' or non metro hubs like Surat and Coimbatore, among others [8].

The following table shows the comparison of percentage of total orders between metro and Non Metro cities.

Order Rate of Metro Vs Non Metro

City	State	% of total orders
Bangalore	Karnataka	14.12%
Delhi	Delhi	11.65%
Mumbai	Maharashtra	6.98%
Hyderabad	Andhra Pradesh	5.73%
Chennai	Tamil Nadu	4.12%
Ahmedabad	Gujarat	1.63%
Jaipur	Rajasthan	1.28%
Ghaziabad	Uttar Pradesh	1.52%

5. Enlargement of mobile commerce:

M-Commerce is a very important part of E-commerce which allows people to do the transaction through mobile devices. Smart phones and software application play an important role in, creating close relationship between consumers, retailers through features, to get the success in both earning high profit and providing enormous mobile shopping experience. Smart phones play a significant role for growth of e-commerce. While people in developed countries got connected with the Internet initially through personal computers and many years later switched to smart phones. According to Internet and Mobile Association of India, the number of mobile internet users in the country stood at 173 million in December 2014. It is **necessary more and more people use smart phone and do transactions from their mobile**. But this application can be applied when Indian people get good salary, education and internet benefits.

6. Increasing usage of debit cards for cashless transaction

During the starting of ecommerce industry in India, people were not comfortable using their credit/debit card data online for payments and not comfortable on purchasing online. Because they afraid from fraud and less faith. However, with better security measures and multiple online payment channels today, cashless transactions have seen an ultimate leap surpassing the paper-based transactions in India in FY 2015. The main concept of behind this spike in cashless transactions is the growth of eCommerce industry in India. As reported by The Economic Times, paper-based transactions cleared through cheques in FY 2015 (April 2014 – March 2015) summed up to INR 85 lakh crore (US\$1.33 Trillion) whereas cashless transactions through credit card, debit card, NEFT, and online wallets comprised of INR 92 lakh crore (US\$1.43 Trillion). The total transaction amount in India – exclusive of cash transactions – reached \$2.76 Trillion in FY15[9]. Paperless transaction can be play great role in growth of e-commerce. The government has already issued over 110 million RuPay cards. A RuPay card is a debit or credit card launched by the National Payments Corporation of India. Most major public sector banks are issuing these cards. India are still in cash. According to a news someone recently paid Rs.32,000 in cash for a u surgery in Bareilly, a city in Uttar Pradesh, known as actor Priyanka Chopra's hometown. The eye clinic did not accept cards. In the same town, a consumer was turned away at a jewellery shop when she tried to purchase a Rs.60,000 gold chain by card. She was politely told to withdraw the money from an ATM[10]. So it is very important for people to use paperless transactions without any crisis it provide Smooth, simple and secure payment processes that will help bring about behavioral changes and faster adoption of digital payments and banking among un-banked segments

7. Tax norms and compliance.

In E-commerce mostly transactions are conducted worldwide—between parties residing in different states as well as countries. Because of technically feature in online transactions creates different problems for the taxing authorities. Like in establishing audit trails, verifying Parties involved in transactions, fixing convenient taxing points and obtaining documents. In this context there are most effective and valuable points be considering the

exclusive characteristics of the medium, consent is necessary at an international level if countries are to ensure the effective application of taxes, direct and indirect, to e-commerce that Protects tax revenue generally, Does not increase the prospect for avoidance or fraud, Minimize the cost of compliance for business, Does not obstruct the development of electronic trade. These points are future challenges. One problem is Double taxation of companies involved in such transactions. The Government World over tries to avoid such double taxation by entering in to DTAAS.

V. CONCLUSION

According to this review paper Future of E-commerce difficult to predict but there are various segments that would grow in the future like: emerging new technologies, education, awareness regarding new technology and frauds, Reduced search and transaction cost, Reduced process lead-time and faster time to market, Increased customer service, Improved convenience and shopping experience, Increased information transparency, Knowledge generation, Novel products and services. Growth of e-commerce would also depend to a great extent on effective IT security systems for which necessary technological and legal provisions need to be put in place and strengthened constantly.

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