



# E-Commerce: History and Impact on the Business and Consumers

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## Abstract:

E-commerce has been one of the significant factors that changed the business landscape. This paper focuses on the impact of E-commerce and how it was developed and evolved to change the way of doing transactions between consumers and business organizations. The advancements in Information Technology and the robust communication infrastructure worldwide, particularly the internet, have been instrumental in the promotion of E-commerce, and continuously establishing easier and efficient means of doing business, resulting to business profit and better customer satisfaction. Through E-commerce, new products have emerged and opportunities in business have expanded in such a way that business entities have already made consumers and customers much within the reach of the global market.

**Index Terms:** business, customer satisfaction, E-commerce, information technology internet

## I. INTRODUCTION

The history of E-commerce started forty years ago and, to the current day, continues to grow with new technologies, innovations, and thousands of companies coming into the web market every year. Electronic Data Interchanges and teleshopping in the 1970s paved the way for the modern day E-commerce store (MIVA, 2011). E-commerce was made possible by the development of electronic data interchange (EDI), the exchange of business documents from one computer to another in a standard format. EDI originated within the mid-1960s, once corporations in transportation and a few retail industries were trying to make “paperless” offices. In the mid-1970s, EDI was formalized by the authorized Standards Committee of trade representatives, and more varied companies began to adopt EDI through the 1970s and 1980s. As the initial generation of E-commerce, EDI allowed companies to exchange information, place orders, and conduct electronic funds transfer through computers. However, the diffusion of EDI was slow. By the late Nineties, but one-hundredth of corporations in Europe and within the us had adopted EDI. The huge expense for getting connected to an EDI network and some technical problems limited the diffusion of EDI (Tian and Stewart, 2008). During this time, business-to-business (B2B) transactions became more common primarily, as the means for mass communication facilities were not yet available for consumers. The introduction of personal computers during the 1980’s has fueled speculations of the major improvements in the way of doing business transactions. Research universities were still the first house owners of computers. However, those that had access to computers may send emails and share documents through networks like BITNET and USENET. For home computer users, CompuServe was the key service supplier of message boards, chat rooms and more. CompuServe introduced the Electronic Mall in 1984, that allowed users to buy from quite one hundred online retailers. The service wasn’t a big success, but it was one of the first examples of online retail (Hussung, 2016).

Other technologies such as telephone banking, automated teller machines (ATM) and credit cards roamed throughout the 1980s, which contributed to the further development of E-commerce concepts. Over the next few years, several more key inventions made the real boom of E-commerce possible. Data mining and warehousing were essential to the process, but even more important was a little invention called the World Wide Web – an Internet browser. Invented in 1990 by Tim Berners-Lee, this system made the Internet accessible to the average person, not just the academicians. In 1991, E-commerce became possible over the web, but didn’t truly gain popularity until many of the security issues and modem speeds significantly improved. Other features that followed include instant package tracking, access to product reviews and integrated customer service (Inci, 2009). Aside from being accessible to most of the citizens, the introduction of dotcom websites enabled the consumers and business alike to research the products and services being provided by E-commerce suppliers, prior to selection and purchasing., thus, resulting to more trust and confidence in the selection of items being bought from the global online market. During this time, different types of E-commerce became common such as Consumer-to-Consumer (C2C), Business-to-Consumer (B2C), Business-to-Business (B2B) and Consumer-to-Business (B2C). The inception of Social Media and Networking from the start of 2000’s provided an even more broadened scope for both businesses and consumers in the E-commerce arena, further increasing sales channels that can reach majority of the people through online social influence. Social sites such as Facebook, Twitter, LinkedIn, Instagram and YouTube have become available for the public and paved the way for Social Media Networking. Social Media selling is the latest trend that evolved since online communication have become available. It is a form of internet marketing that uses various social media platforms to achieve marketing and advertising objectives. Social media selling essentially involves sharing of content, videos, and images for advertising reasons. The various selling techniques adopted by business is

targeted on getting the correct audience, shopper connected activities, and word of mouth. As a large population uses one or the other social networking site, it has become very convenient for companies to reach their consumers through these sites (Singh and Singh, 2018). Through these technologically-advanced social media platforms, businesses were left to follow the belief that everyone can be reached and offered goods and services electronically, while attempting to persuade consumers that products that they offer are worth of their money. Today, E-commerce has further improved thanks to the introduction of mobile and smart phones, and further expand the boundaries and limitations of doing business transactions, efficiently and at a much faster pace. Due to the availability of internet to smartphones through mobile data connections, businesses and consumers can transact at any time and any place most convenient to both. New business platforms have been introduced such as mobile banking and M-Commerce. Through smartphones, consumers were able to transact their orders and required services without having a personal computer, thus, resulting to a more flexible business transaction environment.

## II. RESULTS

Nuray Terzi (2011) classified E-commerce on economy into three groups: firms, prices, productivity. A combination of technological and market forces has compelled companies to examine and reinvent their supply chain strategies. To stay competitive, firms have searched for greater coordination and collaboration among supply chain partners to wring out the inefficiencies that might exist within firm transactions. Many of the transactions may be done outwardly, via electronic markets. The Internet and its applications have so served to reinforce the method to extend efficiencies in offer chain management. Moreover, ICTs permits companies to spot the marketplace for the inputs they have in production and well reduces the value of gathering and process info concerning the costs and input characteristics of different goods and services. In addition, information and communication technologies make it easier to integrate and control remote operations without incurring prohibitive costs. Better ICTs modify optimized operations to be established in low price domestic locations and countries wherever comparative advantage is gift for the outsourced task. E-commerce thus facilitates the efforts of companies to separate and spin out every conceivable activity in the production process to entities outside the firm. E-commerce can influence demand patterns of the global economy. Christopher, Jr (2011) found out that E-commerce and globalization become more intertwined, buyers and sellers are increasing their connectivity and the speed with which they conduct sales transactions. Aside from the E-commerce influence on the demand aspect, behavioral changes of consumers have been noticed. Christopher, Jr. stated as well that the changes that B2C E-commerce had a more significant impact on the economy and on buyers' behavior than has B2B E-commerce. In the past, once customers wished to form purchases they had to read catalogs sent to them by mail-order houses. Today, many consumers can simply use their computers—and now smart phones or other portable electronic devices—to shop online. Buyers and sellers that interact in E-commerce retail trade are not any longer restricted by store hours, geographic promoting areas, or catalog mailing lists. With several easy clicks, they will gain access to a spread of products twenty four hours daily, seven days per week. The characteristics of

retail E-commerce merchandise even have modified considerably over the past decade. Today, the variability of merchandise is very numerous, and shoppers can buy almost anything online. The growth of E-commerce retail sales has reduced consumers' search price, placed downward pressure on several client costs, and reduced price dispersion for many consumer goods, Scott-Briggs (2017) stated that E-commerce has affected businesses positively and negatively. On the one side, E-commerce makes it easier for businesses to reach a much wider audience at less expense than would be required if the traditional retail method was to be applied. With E-commerce, there is no requirement to acquire expensive shops in high streets. You can turn out or store your product at an overseas interior location and still advertise and sell them worldwide. While the price of developing an honest website could also be substantial, it is much cheaper than letting expensive high street storefronts. On the opposite hand, established enterprises, most of which are vertically integrated are finding it harder than before to retain their market share. More versatile competitors are getting into the market historically dominated by these established corporations, making competition fiercer than ever. Blockbuster, a number one video rental and franchise within the world had enjoyed a few years of success. However, Netflix, an E-commerce based firm entered the market and took away a considerable market share from Blockbuster which was forced to readopt its business model to offer E-commerce services. Another good example of how E-commerce is changing the business landscape is Amazon.com which grabbed a substantial market share from traditional booksellers forcing them to start selling online as well. E-commerce has become an important factor, not only for the businesses, but for the consumers daily life as well. Kumar (2018) has defined the importance of E-commerce with respect to both businesses' and consumers' perspective and described each importance, as shown below:

### 1. Wide variety of products

In small cities or villages, people have to compromise due the small shops and limited variety of products and services available locally. Traditional brick and mortar shops and conventional commerce is not able to satisfy customers in terms of variety. Normally people have to visit 5 to 6 shoe stores in 1 market to buy 1 pair of shoes due to size, color, price or design problem and it's tough for retailers to provide all the variations. That's why E-commerce is important, it brings in more variety by expanding the boundaries of traditional commerce.

### 2. Lower cost than traditional shopping and selling

Selling products and services online is less costly than traditional methods. There are various high overhead costs that are included in offline commerce. Recurring expenses such as store management cost, counter cost, inventory cost, security cost, transportation cost, Shop rent and salary etc. So, the retailers cannot afford to sell the products at low cost. That's why E-commerce is important, because it reduces the fixed cost and variable cost and people get the products and services in low cost.

### 3. Less time consuming and faster consumer consumption

If we talk about educational E-commerce, then it really changed the way people consume the products and services. For example, traditionally it takes minimum 6 months course offline to learn graphics designing. People have to visit the study center each

day for 2-3 hours for a 6 month period. It's not providing flexibility, freedom for the learners to choose their own hours, mood, and best focused time of the day. Nor are the teachers available all the time in the offline classroom. As a result, it takes lots of time to build and improve the skills for the faster employment.

**4. Exciting offers and shopping deals notifications:** Today customers can find the best shopping deals within a second by visiting a link on their mobile. Now the same branded jeans worn by trendy people in Mumbai and also worn by a fashionable Darlaghat village person. Similarly, students from Shimla can join the same career courses as students from California are studying. It means E-commerce has connected people, E-commerce has equalized the appearances, E-commerce removed the gap between metro student or village student. E-commerce has levelled the playing field, shrinking physical boundaries in the world. That's why I think E-commerce was a great internet development. And it keeps going.

**5. Transparent business system:** Commercial transparency E-commerce is playing a responsible role in explaining buyer's and seller's debit, credit and bank account details. It enables banks / government to check where they spend, where from they earn and how they earn and transfer, everything is accounted for.

**6. Faster business expansion:** E-commerce is a boon for such visionaries who strive for business expansion. One E-commerce website or online store is doing the job for small scale business, companies, and retailers with 30 to 50000 monthly operational cost. Not only are they able to expand rapidly, they are also making higher profit with lesser hassles.

#### **7. More employment opportunities**

Traditional commerce was known as a job provider for people living in the metros and bigger cities. 30 years ago metros, cities were the biggest source for work and money for people. Villages were known for poverty, less skilled workforce and poor living standards when compared to the metros based on economics. But today, whole economics has changed due to the development of E-commerce. Today, people living in the metros are more stretched for money, more worried, more populated, and morbid with various things than village or small city people.

#### **8. Enhancement in digital products and services production**

E-commerce enhanced the creativity of people to create new and innovative products and services. Online courses, on demand expert services, books, gifts and various other e solutions are increasing the speed of development. Today any expert can write an ebook and is able to sell online. Any teacher can create tutorials and educate people online by launching online courses. Most of the things are possible by the use of internet.

#### **9. Low maintenance cost**

E-commerce is an important profit driver for business. Most of the things in online store are automatic. Costs incurred in everything from inventory, customer details, payment details to product selection and management of customers interests are lower than traditional commerce expenses.

#### **10. Multiple selling and marketing options**

Buyers and sellers are free to choose any marketplace for selling and buying their goods and services. There is an almost perfect

competition in E-commerce. There is always more than 1 company selling something to a person. Market rules and opportunities are equal for everyone. Small Business owners can market their products and services on social media, search engines for free. In fact, even the consumers buy services and goods after seeing the posts on social media. E-commerce platforms provided the way for business owners to maximize their business reach.

#### **11. More customer retention than traditional shopping**

When someone buys goods and services online, their identity and preferences remain saved in the database of sellers. Later the business or E-commerce owners use that data to attract and retain customers with new products and services updates. It's not possible in traditional market where sellers don't know much about the buyers and they can't retain them without providing quality and higher satisfaction. E-commerce increases cold calling, promotional messages so that consumers keep noticing the development behind the products and services they are using.

#### **12. Quality compulsion for sellers**

Due to high competition and more quality expectations from consumers, quality in E-commerce has become the biggest compulsion for online marketers and sellers if they want to survive. This is because if customers are not satisfied with the products or services they can give feedback, bad reviews, comments about the products and they can ruin the product or brand equity and image. That's why E-commerce matters, because it protects users interests and opinions so highly than traditional commerce.

#### **13. More contribution of customers in brand success**

E-commerce platforms enable buyers to contribute in brand building. 5 star feedback, positive comments and reviews about the products increases the brand awareness and credibility among prospective consumers.

#### **14. Personalized customer experiences**

Every single interaction on an E-commerce website or any other website generates data that is used by companies to deliver personalized experience of each customer so that the right customer can get right product or services.

#### **15. Speeding up the national economic development**

Trillions of transactions per day increases the cash flow in banks. As more and more people use E-commerce day by day it will increase the use of digital banking. So, not only it reduce the cost of cash management infrastructure but also provides auto scaling deposits for banks.

#### **16. Enhancing technology development in villages**

The increased use of internet, mobile and computers is enhancing the capabilities of online commercial activities by less privileged village people. For example, a farmer can market and sell his crops online direct to customers without involvement of Mandi or marketplaces.

Different models were also introduced in terms of parties involved in an E-commerce transaction. Shahjee (2015) has concluded that creating an E-commerce solution mainly involves creating and deploying an E-commerce site. The first step in the development of an E-commerce site is to identify the E-

commerce model. He classified E-commerce into main 4 models, as shown below:

### **1. Business-to-Business (B2B) Model**

This is said to be the fastest growing sector of E-commerce. The B2B model is predicted to become the largest value sector of the industry within a few years. The B2B model involves electronic transactions for ordering, purchasing, as well as other administrative tasks between houses. It includes trading goods, such as business subscriptions, professional services, manufacturing, and wholesale dealings. Sometimes in the B2B model, business may exist between virtual companies, neither of which may have any physical existence. In such cases, business is conducted only through the Internet. The main two advantages of the B2B model such as it can efficiently maintain the movement of the supply chain and the manufacturing and procuring processes, and it can automate corporate processes to deliver the right products and services quickly and cost-effectively.

### **2. Business-to-Consumer (B2C) Model**

The B2C model involves transactions between business organizations and consumers. It applies to any business organization that sells its products or services to consumers over the Internet. These sites display product information in an online catalog and store it in a database. The B2C model also includes services online banking, travel services, and health information. The B2C model of E-commerce is more prone to the security threats because individual consumers provide their credit card and personal information on the site of a business organization. In addition, the consumer might doubt that his information is secured and used effectively by the business organization. This is the main reason the B2C model is not very widely accepted. Therefore, it becomes very essential for the business organizations to provide security mechanisms that can guarantee a consumer for securing business information.

### **3. Consumer-to-Consumer (C2C) Model**

The C2C model involves transaction between consumers. Here, a consumer sells directly to another consumer. Online auction Web sites that provide a consumer to advertise and sell their products online to another consumer. However, it is essential that both the seller and the buyer must register with the auction site. While the seller needs to pay a fixed fee to the online auction house to sell their products, the buyer can bid without paying any fee. The site brings the buyer and seller together to conduct deals. Any buyer can now browse the site of [www.ebay.com](http://www.ebay.com) to search for the product he interested in. If the buyer comes across such a product, he places an order for the same on the Web site of eBay. E-Bay now purchase the product from the seller and then, sells it to the buyer. In this way, though the transaction is between two customers, an organization acts as an interface between the two organizations.

### **4. Consumer-to-Business (C2B) Model**

The C2B model involves a transaction that is conducted between a consumer and a business organization. It is similar to the B2C model; however, the difference is that in this case the consumer is the seller and the business organization is the buyer. In this kind of a transaction, the consumers decide the price of a particular product rather than the supplier. This category

includes individuals who sell products and services to organizations. In addition to the models discussed so far, five new models are being worked on that involves transactions between the government and other entities, such as consumer, business organizations, and other governments. All these transactions that involve government as one entity are called e-governance.

### **Websites as E-commerce Gateways**

P. Jain (2016), K. Jain, (2016), and P. K. Jain (2016) stated that websites are effective in acts of business corporations for active promotion. Websites are very good to promote business brands, products, and services of manufacturers. A company that doesn't care concerning its websites ultimately are going to become bankrupt. Therefore, firms ought to have a robust back ground and actual aiming to update their web site frequently to boost their business strategy. For many users, the site of search (search engine) is the entry point of the users to the internet as well as a gateway for entering the world of E-commerce. For many changes within the world, each organization or agency should coordinate itself with the changes and enhance its work efficiency. Internet particularly websites will be an acceptable means that to attain this goal. For instance, websites can be used up to extend markets by facilitating the presentation and relegation of existing products into new business centers. The website also can be a tool to facilitate merchandise development, for which the customers would be able to browse new and exciting products that they can avail immediately, electronically.

### **The Effects of E-commerce in Marketing**

According to Dr. Kiran S. Nair (2017), when regular business transaction occurs in online platform, organizations should consider the main differences of customers from a brick store to an online site. The way marketing organization adopt the changes as per the requirements of its customers will be the main determinant for success of online marketing campaigns. Organizations should adopt marketing tools and techniques by understanding the nature and behavior of customers; hence various digital marketing techniques are now used to reach to the audience. These include, email blasts, web advertising, social media marketing and mobile marketing. There are situations where the same customers can be online customer as well as offline. Hence, according to Nair, the marketing strategies should be implemented considering both online and offline customers.

**Product & service promotion:** E-commerce helps organization to reach directly its customers with large data of information and a two way interaction with them where in feedback is available instantly.

**Direct saving:** The cost of delivering information to customers over the internet results in substantial savings to senders.

**After Sales and Customer Service:** with customers having direct access to organizations, it enables them to find detailed information, reverse logistics procedures, and troubleshoot and feedback online itself.

**Brand awareness and product Image:** Organizations can create great level of brand awareness and product image with customers at low cost of investment.

**Advertising and Public Relation:** with the advantage of two way communication online, organizations get immediate feedback and responses to companies' various advertisement campaigns compared to traditional advertising which is mostly one sided.

**Personalization and Customization:** As customers can communicate to brands directly, this will help organizations to custom make products and services as per each customer's likes.

**Order Process:** Electronic order generation is faster, accurate and cost effective, both buyer and seller received order confirmation and status update regularly by email.

**Customer Value Creation:** While traditional marketing focus on transaction value creation, E-commerce marketing target customer value and relationship creation which is long run. E-commerce has provided businesses with a new set of principles that should be considered to achieve fast, efficient, and reliable delivery of goods and services to provide customers the satisfaction that they need, as well as minimizing costs.

### III. SUMMARY

E-commerce has been one of the useful tools that have been available for use by the businesses and consumers to transact efficiently. Through the internet and various information technologies, it transformed from its simplest form a few decades ago into a technologically-advanced mechanism that changed the way business transactions have been conducted worldwide and caused significant impact in the behavior of consumers, customers, and business organizations.

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