

OVERVIEW OF E-COMMERCE

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Abstract. *E-Commerce has evolved over the years and shaped businesses, economies and cultures globally. E-Commerce is not in the early stage anymore. In the last twenty years, e-commerce has entirely revolutionized retail businesses. It went from being an essentially non-existent business model to a potential threat to the traditional brick and mortar businesses as we know it. Jeff Bezos shipped the Amazon's first ever online book sale in 1995, and the consumers never had to look back since then. As the Data was released in last February by the U.S. Commerce Department, it has been indicated that Americans spent \$304.91 billion online in 2014 alone. This tells, how big E-commerce has become now a days.*

Keywords: E-commerce, transaction commerce, business to business

1 INTRODUCTION

In true modern-industry fashion, e-commerce hasn't just grown exponentially over the night. It has evolved and transformed over time by meeting the needs of a modern consumer. Unlike the early days of E-commerce when the consumers were bound to buy the products off the shelf only, now the trends have changed to mass customization. Today, not only can you customize a product online and have it made to order (for example, NikeID where a customer can design a Nike shoe with the preferences of his/her own) and then sell it without having to lift a finger. (Olenski, 2016). As the social network has evolved and made consumers more proactive, they have emerged as the driver of E-commerce.

In this exciting time of E-commerce, businesses are either converted to fully E-commerce based system or have an E-commerce element in their business. E-commerce evolution has moved on to the F-commerce stage where millions of businesses are running their businesses on Facebook. Using social media has unveiled enormous opportunities in E-commerce. Therefore, this is an important topic to discuss about. This assignment provides a broad overview of E-commerce, what are the main elements of E-commerce and how it has evolved over the years. The assignment provides a genuine verdict of different stages and concludes at the current stage in which we are living and breathing.

2 REVIEW DIMENSIONS OF E-COMMERCE

As Clarke (2016) defined, Electronic commerce is the conduct of commerce in goods and services, with the assistance of telecommunications and telecommunications-based tools. However, this definition provides the very basic for of Electronic Commerce. Schuessler (2012) defined E-Commerce as the process of buying, selling, or exchanging products, services, or information via computer. The bigger aspect of E-Commerce is that it includes not just the

buying and selling of goods and services, but also servicing customers, collaborating with business partners, and conducting electronic transactions within an organization.

Brick and Mortar Business: The traditional business where physical presence builds the backbone of the business. The term brick-and-mortar in business refers to a company that possesses buildings, production facilities, or store for operations. Therefore, this is the typical form of business in which the products are present in a physical or retail environment, from where customers purchase and also receive the service from the retail environment. Now-a-days, a fully Brick and Mortar Business is hard to find. A classic example will be the retail super shop where customers come, choose their groceries and other household products, pay and carry them by themselves. In case of an after sales service or return, customers contact the company by phone or online and sometimes, they have the facilities to receive the after sales services from home. These are the ways that Brick and Mortar businesses are using electronic methods in their operations. That takes us to the next type of businesses.

Click and Mortar Business: Click and Mortar is a type of business model that includes both online and offline operations, which typically include a website and a physical store. A click-and-mortar company can offer customers the benefits of fast online transactions or traditional face-to-face service. Click and Mortar businesses injects the electronic commerce into the businesses such a way that bring conveniences to the customers. A customer can be benefitted from options of paying online and get the product delivered at home; paying online and pick the product from the physical store itself or pay and take the product from physical store. A classic example will be any high street store; i.e Nike, Adidas, H&M and more.

Virtual Business: Finally, there are pure E-commerce businesses that run their operations fully online and they are called Virtual Business. A classic example of a Virtual Business is Amazon. Started in a

garage by Jeff Bezos in 1995, it has since grown to become the largest Internet retailer, with the highest levels of customer satisfaction, the fastest revenue growth rates, and finally, after nine years, profitable. One of the Internet “Big Four” companies, along with Yahoo, eBay and Google, few would have thought it possible when Amazon first opened for business that an online bookstore would become one of the premiere general retailers in the world (Pearsonhighered, n.d). When the company started, they were selling only books and the complete purchase was done online and books used to be delivered from their distribution centre. It was only 1998, when they added more product lines to books. However, it started and always remained as a virtual business till now. Recently, they opened its first brick and mortar extension – a bookstore in Seattle’s University Village (Walsh, 2016). This is a new trend in amongst the virtual businesses and will be something described at the last section of this assignment.

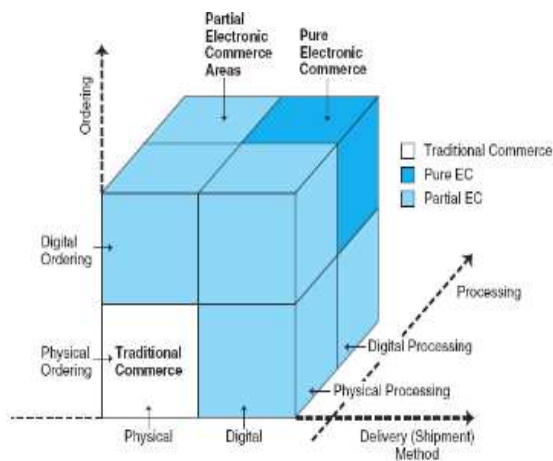


Fig. 1 Dimensions of E-Commerce (Schuessler, 2012)

From the figure (Fig. 1) above, different dimensions of E-commerce businesses can be referred to. By putting delivery across ordering and processing, different types of businesses (as it has been discussed above) can be placed. A pure E-Commerce business is the dark blue box where the ordering, processing and delivery, all are done online. Partial E-commerce are the businesses, where at least one of the three components – ordering, processing and delivery are done physically or manually. For example, a small business on ebay; where the ordering and processing is done online but the seller manages the delivery physically / manually by his own. The traditional business is the white box where all of the three elements are done physically.

An ideal Electronic Commerce Framework is structured with the 5 basic elements below (Fig. 02):

- People.
- Public policy.
- Marketing and Advertising.
- Support services.
- Business partnerships.

People included the buyers, sellers, management, Internet System team and the intermediaries. The second element – Public Policy includes taxes, legal requirements, privacy issues and technical standard. In an E-commerce business, a company has to deal with a large amount of public information and therefore, the public policies are required to deal with those. Marketing and Advertising are an important element; market research provides insights about the consumers, products and competition; promotion familiarizes the business in the market space and web contents help create better experience online.

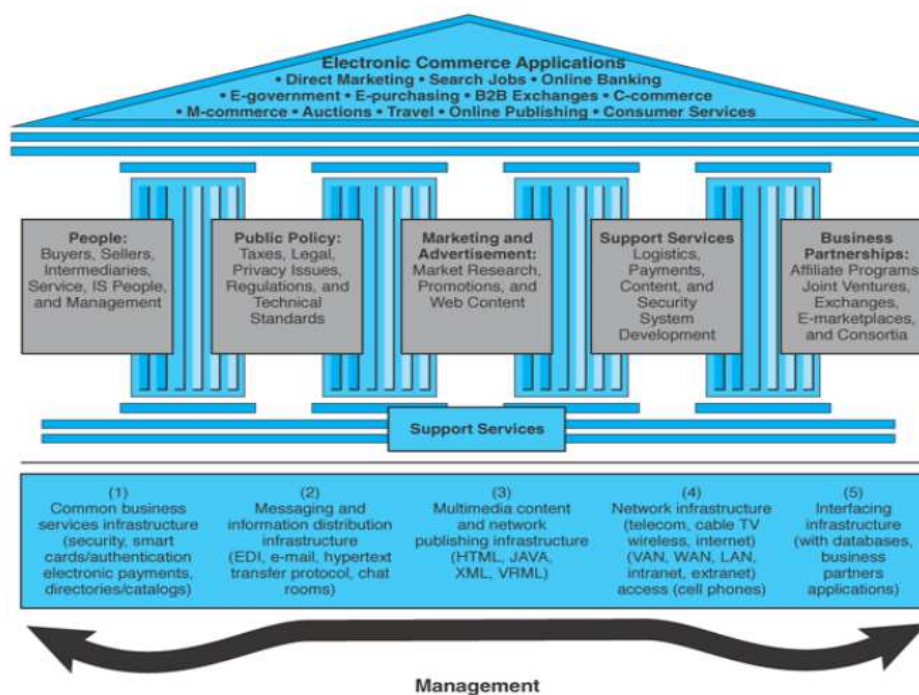


Fig. 2 Framework of E-Commerce

Support services include logistics, payments, security system development etc. Finally, there is Business Partnerships that include Affiliate Programs, Joint Ventures, Exchanges, E-marketplaces and Consortiums. Business partnerships help grow businesses by associating with other businesses and organizations.

3 DIFFERENT TYPES OF TRANSACTIONS IN E-COMMERCE

The transactions shape how different E-commerce businesses are formed. There are 6 basic types of e-commerce that will be discussed in the following section:

- Business to Business (B2B).
- Business to Consumer (B2C).
- Consumer to Consumer (C2C).
- Consumer to Business (C2B).
- Business to Administration (B2A).
- Consumer to Administration (C2A).

From the figure (Figure 03) below, the different formations of E-commerce business are illustrated. Following the figure, all the different types of E-commerce businesses are described.

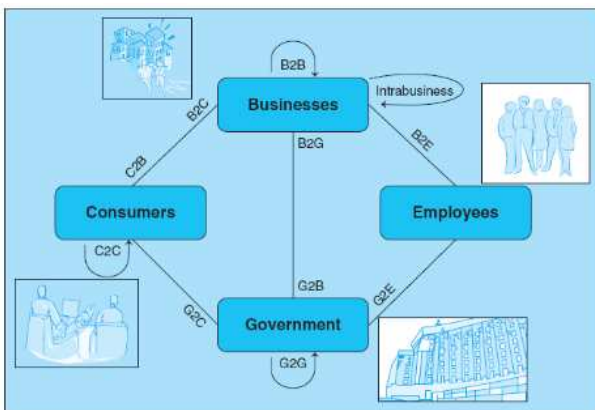


Fig. 3 Formations of E-commerce business

1. Business-to-Business (B2B): Business-to-Business (B2B) is the type of E-commerce that includes all electronic transactions of goods or services conducted between the organizations. Producers and traditional commerce wholesalers typically operate with this type of electronic commerce. For example: DDL the world's most renowned logistics company has business solutions. Small to large businesses will be able to use this service. The full operation is done online where the businesses will be able to use their own login to get into their account, order their required services and get it delivered. This is a good example of classic B2B E-commerce solution.

2. Business-to-Consumer (B2C): This type of E-commerce takes place when the transaction happened between a business and a consumer. It corresponds to

the retail section of e-commerce, where traditional retail trade normally operates. In a B2C format, the buyer – seller relationship can dynamic and different than a B2B set up. This type of commerce has developed greatly, due to the beginning of the web, and there are already many virtual that trade all kinds of consumer goods, such as computers, software, books, shoes, cars, food, financial products, digital publications, etc. A classic example of B2C will be Amazon.

When compared to buying retail in traditional commerce, the consumer usually has more information available in terms of informative content and there is also a widespread idea that you'll be buying cheaper, without jeopardizing an equally personalized customer service, as well as ensuring quick processing and delivery of your order.

3. Consumer-to-Consumer (C2C): Consumer-to-Consumer (C2C) type e-commerce includes all electronic transactions of goods or services conducted between consumers. Generally, these transactions are conducted through a third party, which provides the online platform where the transactions are actually carried out. A right example of C2C E-commerce will be e-bay. By using the online platform, a consumer can sell any of the products new or used to another consumer. As this is a open platform for B2B and B2C as well, the platform has create millions of E-commerce opportunities.

4. Consumer-to-Business (C2B): In a Consumer to Business situation, there is a complete reversal of the traditional sense of exchanging goods and this has only been possible because of the development of E-commerce as a whole. This type of e-commerce is very common in crowd sourcing based projects. In this structure of business, a large number of individuals make their services or products available for purchase for companies seeking precisely these types of services or products.

Examples of such practices are the websites where designers present several proposals for a company logo and where only one of them is selected and effectively purchased. Another platform that is very common in this type of commerce are the markets that sell royalty-free photographs, images, media and design elements, such as iStockphoto.

5. Business-to-Administration (B2A): This part of e-commerce encompasses all transactions conducted online between companies and public administration. An area that involves a large amount and a variety of services, particularly in areas such as fiscal, social security, employment, legal documents and registers build such business. E-procurement can be a good example where businesses are exclusively selling their products to the Government agencies. However, in an E-procurement website, only the enlisted suppliers or businesses are allowed to sell their products. These types of services have increased considerably in recent years with investments made in e-government.

6. Consumer-to-Administration (C2A): The Consumer-to-Administration model encompasses all electronic transactions conducted between individuals and public administration. Examples of C2A applications including Education – disseminating information, distance learning, etc., Social Security – through the distribution of information, making payments, etc., Taxes – filing tax returns, payments, etc. and Health – appointments, information about illnesses, payment of health services, etc. (Bloomidea, 2014).

The study was conducted from desktop review various field work and research on the modern approaches for waste management in developed countries. Field visit and personal consultation of waste management companies, professional, waste management authorities were initiated to get background information on the sustainable waste management practices. Technical analysis of waste management journals. Publications and articles were carried out. The process of data collection was carried out after establishing the research problem and the study design. Inferences and conclusions for the study were drawn from the secondary data collected. Qualitative approach was adopted for this study so as to provide a view point of the present situation.

4 E-COMMERCE 2.0: HOW IT HAS EVOLVED

The concept of E-commerce 2.0 is to make shopping over the internet interactive, innovative and more user-friendly. The concept of E-commerce is dependant on few core principles. The first principle is the product availability. Increased availability of the product increases the visibility and marketing. Consumers expect to find a good product easily available, marketed and found on a number of websites that are trusted, for example Amazon. The second principle is to discover the niche markets to take advantage of new sources of income. Third principle is to give priority to the customers by creating user-generated contents like blog pages, product reviews and social networking. Let customer do the talking. Fourth principle is to make shopping fun. The final and fifth principle is to integration and collaboration to provide uninterrupted user access and interaction with E-commerce sites (Manzoor, 2010).

The emergence of social network has changed the E-commerce for good. This is the age of Web 2.0. Web 2.0 is the second generation of Internet-based services that lets people collaborate and share information online in new ways, such as social networking sites, wikis, communication tools etc. Comparing to the early days of the Web, Web 2.0 is characterized by greater user interactivity and collaboration, more pervasive network connectivity and enhanced communication channels. One of the most significant differences between Web 2.0 and the traditional World Wide Web is greater collaboration among Internet users, content providers and

enterprises. Originally, data was posted on Web sites, and users simply viewed or downloaded the content. Increasingly, users have more input into the nature and scope of Web content and in some cases exert real-time control over it. Emergence of social network is possibly the biggest contribution of Web 2.0

Social network is a category of Internet applications that help connect friends, business partners, or individuals with specific interests by providing free services such as photo presentation, e-mail, blogging, and so on using a variety of tools. social networking service (SNS) builds online communities by providing an online space for people to build free homepages and that provides basic communication and support tools for conducting different activities in the social network. Social networking platforms (Facebook, Twitter, Google+, Instagram etc) have created enormous amount of opportunities for the users to connect. Therefore, E-commerce have changed as well. These are the implications:

- By using social networks, businesses can directly reach the consumers and try to sell their products and services.
- Social networks provide wider awareness about their brands and services.
- Businesses can redirect the traffic towards their website from social media platform.
- Businesses can create conversations amongst the consumers and potential consumers on social networking platforms.
- Businesses can get feedback from the consumers using social networks.
- The consumers are more proactive than ever. Before purchase, they always like to look online and try to find the reviews about the business / products. Social network is the platform that consumers trust and find reviews about the products

These are few of many implications of social networking platforms that have shaped E-commerce.

5 MAJOR CAPABILITIES THAT CONTRIBUTE TO THE GROWTH OF E-COMMERCE

The worldwide expansion of the Internet has considerably contributed to the transformation of trade and store transactions. E-commerce statistics confirm the explosive pace at which this industry has developed as worldwide B2C e-commerce sales amounted to more than 1.2 trillion US dollars in 2013 (Statista, n.d). The following graph shows the B2C sales growth projection worldwide till 2018.

Although currently in 2016, the overall growth is 13.1% (projected), slightly lower than 2015, when it was 15.6%. The Calculated Annual Growth Rate is 18.3%.

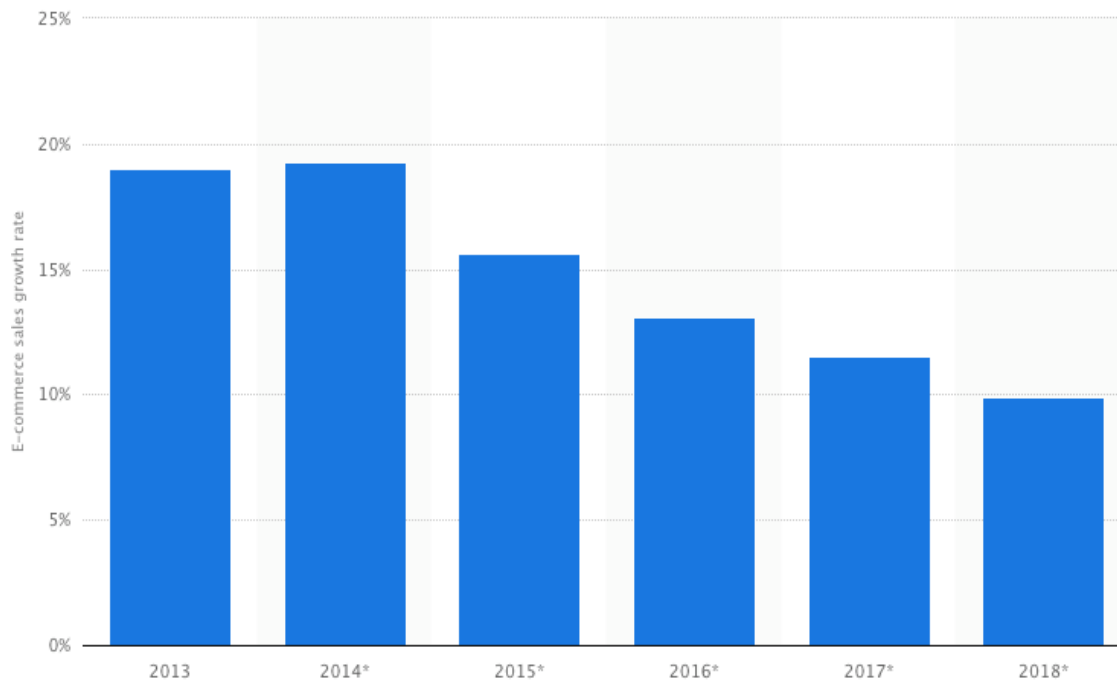


Fig. 4 Annual Growth Rate Projection of B2C E-Commerce Global Sales

The massive growth has been possible as E-commerce holds some major capabilities:

- The transactions are easy on E-commerce platform. The consumers can enjoy multiples ways to pay for their products and multiple sellers are offering those. Therefore, efficient transactions are present.
- Once the business has a website, the reach is global. This was unthinkable at the old age. Global reach means a business can target any consumer denying geographic distance.
- A consumer can search the products or buy it using any platform at any time, from anywhere.
- If a consumer needs information, that can be delivered or gained very fast.
- Consumer can proactively find the vendor information and do not need to depend on the vendor to reply for most of information.
- Price comparison is one of the biggest conveniences. Lots of price comparisons websites are present to help the consumers.
- Personalization and customization is possible using E-commerce as the information is easy to disseminate.
- By using rich media, businesses are able to do their marketing better than before. By using social networking, the consumers receive better reviews and the products.
- Consumers have better knowledge and advise about the products and business.
- The overall productivity increases as online increases overall efficiency (Schuessler, 2012).

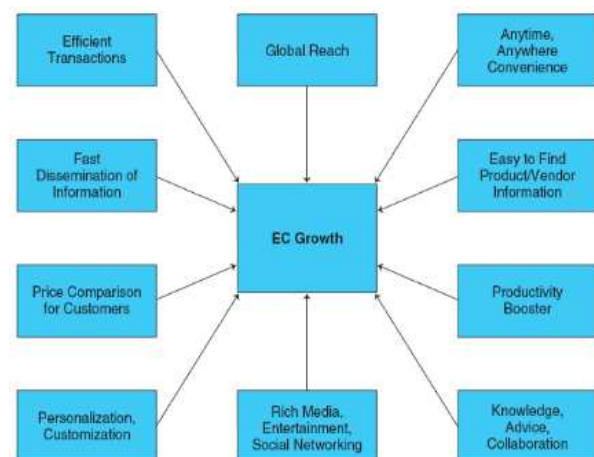


Fig. 5 Capabilities of E-commerce growth

6 CONCLUSION

This is the last section of the assignment that will talk about the recent developments and how the future of E-commerce is shaping. Lots of E-commerce companies are getting brick and mortar shops or physical retail shops. E-commerce has become more and more expensive as marketing and advertisements depend on bidding on keywords and finding popular places to advertise. Furthermore, the E-commerce businesses are finding it easier to have a physical presence that helps them to reach customers and potentially gain competitive advantage.

Amazon have recently opened their first brick and mortar shop in Seattle University Village and that have raise everyone's attention as Amazon is famous

for their E-commerce business, not physical presence (Walsh, 2016).

The technology and their advancement are also shaping the E-commerce. For example the mobile advancement is an amazing contribution to the E-commerce. Mobile e-commerce are rising every year and this is because of the Smartphone usage increase.

Smartphones are helping businesses to offer further conveniences to their consumers as now truly they can shop from anywhere at any time. Smart phones users like to use mobile apps as they provide much better user experience than websites. E-commerce businesses are building mobile apps for their consumers as that is giving them more opportunities to market their products to the consumers too.

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