

DEVELOPMENT OF E-COMMERCE IN ORDER TO IMPROVE THE SYSTEMATIZATION OF THE ECONOMY

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***Abstract:** Electronic commerce or E-commerce for short, has recently developed significantly in the year of 2020-2021. Almost all segments of e-commerce are developing, from corporate electronic trading platforms, retails online stores, payment and new gateway systems. E-commerce is based on three pillars – a server, a database, and a system for delivering a product or service to a customer. Most crucial part for the development of e-commerce system is a high-quality and fast server. Why has e-commerce exploded over the past decade? E-commerce continues to grow and the business is using the services of internet entrepreneurs.*

***Keywords:** E-commerce, economy, development, CMS systems*

INTRODUCTION

There is no general definition of electronic commerce, but generally e-commerce is defined as E-commerce (electronic commerce or EC) is the buying and selling of goods and services, or the transmitting of funds or data, over an electronic network, primarily the internet but also all other activities which are associated with any transaction such as:

- ✓ Delivery,
- ✓ Payment facilitation,
- ✓ Supply chain and service management, can also be categorized or put under this section of economy. (Anuj, Fayaz, Kapoor, 2018)

E-commerce is the use of Internet and the web to transact business but when we focus on digitally enabled commercial transactions between and among organizations and individuals involving information systems under the control of the firm it takes the form of e-business (Nemat, 2011).

An e-commerce transaction can be a simple confirmation of the desire and ability to purchase with a credit card and the subsequent transfer of the required amount from one account to another. But it can also be very complex when information must be transmitted over many networks.

For many business, electronic commerce means using the Internet as a distribution channel to market and sell goods and services to the consumer. This narrow definition really defines only Internet commerce. Therefore, E.C. includes, but is not limited to, the Internet, intranets, extranets, electronic data interchange (EDI), and others (Fruhling, 2000). Globalization creates new structures and new relationships, with the result that business decisions and actions in one part of the world have significant consequences in other places (Mesut, 2014).

Modern electronic commerce typically uses the World Wide Web at least at one point in the transaction's life cycle, although it may encompass a wider range of technologies such as e-mail, mobile devices social media, and telephones as well (Niranjanamurthy, 2013).

E-COMMERCE TYPES

Coronavirus damages how e-commerce operated; it added more pressure on the servers due to such a high demand of customers. According to research, 52% of consumers avoiding to go brick and mortar shopping and crowded areas (Hamza, 2020).

Depending on the field of application and the method of the device, the following forms of electronic commerce are distinguished: B2C, B2B, B2G.

Other terms that are often used when talking about e-commerce are B2B and B2C, shorthand for business-to-business, where companies do business with each other, and business-to-consumer, where companies do business with consumers using the Internet. These are considered to be main forms of e-commerce. (Kamal, Shawkat, 2005)

• B2C type

The meaning comes from business to consumer. Forms of doing business on the Internet, which include selling products or providing services to end consumers, are called B2C e-commerce. The basic model of this type is the e-shop model, which enables manufacturers to have direct contact with end consumers.

The Internet has also expanded opportunities for B2B and B2C e-commerce transactions across borders. Especially, for business to consumer

transactions, the internet brings a potential revolution to global commerce: the individualization of trade. It gives customers the ability to manage a transaction directly with a foreign seller without traveling to the seller's country. The Internet provides sellers to put their storefronts, in the form of web pages, in front of customers all over the world (Ham and Atkinson, 2001).

However, for companies that have intermediaries in distribution, marketing or sales, this business model is not always efficient. There are several classifications of online stores:

General and specialized stores. General stores are large markets on the web that sell all types of products. The most famous example of that kind of store is Amazon. In contrast, specialized stores sell only one or a few types of products, such as electronics or books.

Regional and global stores. Regional stores server the local market, while global goods are sold worldwide. Global stores usually tend to offer lower prices and have fast mechanism for cheap and safe delivery that will make them competitive compared to local stores.

Clean and mixed online stores. Some stores operate exclusively over the Internet (Amazon), while some have physical "brick and mortar" points of sale. B2C e-commerce models can be improved by applying good customer relationship management methods.

• B2B type

Business-to-business or B2B are commerce transactions between two or more businesses. Contrasting terms are B2C and B2G (Nemat, 2011). One of the main differences between the markets is the emotional component of the process. When a person, buys a product, he buys for his own personal pleasure or need. Mass advertising and brands work very well in this segment. Shopping is often impulsive, irrational. It is the prestige and the familiar advertising image that do their job. In B2B sales, the opposite is true: selling, like buying, is part of a routine work, usually difficult, associated with stress, fear of mistakes. Therefore, catch advertising here fades into the background, and accurate and detailed descriptions of the product itself, technical characteristics, cases of use by other buyers are more suitable for promotion.

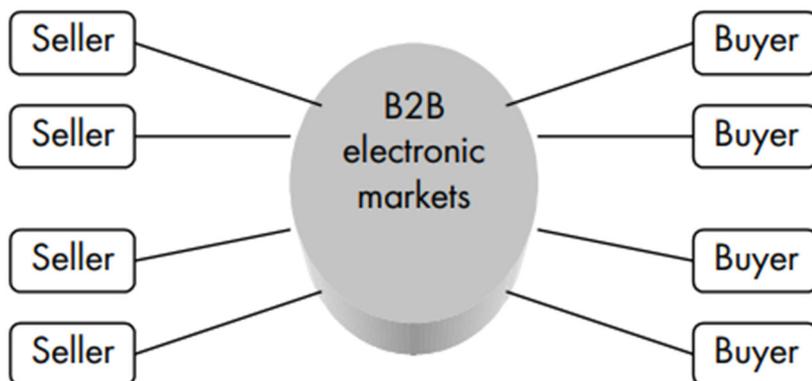


Figure 1. B2B Electronic Markets
 Source: Dai & Kaufmann (2002)

In the concept of a brand for B2B, more attention is paid to reputation and reliability than fame. The most difficult task in b2b is the exact identification of the person in a particular company who makes the purchase decision. This is definitely not an accountant, quite rarely - a director or an owner, and almost never a manager who came to negotiate a purchase. It is important to remember that this interest is not always directly financial and that the chain of those responsible for the decision can be 5-7 people. Large sales are predominantly multi-step, i.e. the customer rarely buys after the first contact. For this, the company requires a client department, the role of which is higher than that of the marketing department, and its employees begin to work after the client has contacted the company. Thus, the main difference in tactics for big sales will be careful preparation, partner research, and offer personalization.

• **B2G type**

It is believed that the government is the most reliable partner for cooperation after the signing of the contract. Types of business-to-business electronic commerce application include: electronic data interchange, electronic funds transfer, electronic forms, integrated messaging, and shared databases (Ann, 2000).

It is difficult to sign a contract with such a partner, since you will have to participate in a special competition known as a tender that lasts more than one day and in which, along with you, your numerous competitors, both from the local market and international business compete. Most often,

the government interacts with business owners through procurement. The process of making such purchases is accompanied by bureaucratic difficulties. All purchases initiated by the government must be conducted in accordance with numerous laws.

G2G systems generally come in one of two types:

- Internal facing - joining up a single Governments departments, agencies, organizations and authorities - examples include the integration aspect of the Government Gateway, and the UK NHS Connecting for Health Data SPINE.

- External facing - joining up multiple Governments IS systems - an example would include the integration aspect of the Schengen Information System (SIS), developed to meet the requirements of the Schengen Agreement (Nemat, 2011).

SYSTEM SOLUTIONS AND E-COMMERCE SECURITY

Currently the most used content management system or CMS is WordPress.

In the beginning, WordPress wasn't even used as an ecommerce type of system/website. It was primarily used as a blogging tool, similar to googles own Blogger. But due time, and popularity, multiple plugins have been developed to turn this blogging tool into an ecommerce system for people who want to develop their own e-commerce websites. Currently more than 40% of the Internet is powered by WordPress content management system, and most are using it as a starting point for ecommerce trade. Due to its easy learning curve, many companies are using it to turn their stores and maximize payments via this platform.

WordPress was officially published in 2003, and it gained fraction past the year of 2004. In the graph, the growth of WordPress is rising, and because of the pandemic of 2020/2021, there will be an exponential growth of its popularity.



Figure 1. WordPress survey
Source: Shreve (2010)

Most e-shopping applications operate within the context of the Web. This means that there are two approaches to searching: those offered by browsers, which exploit hyperlinks between documents or sites, and search engines, which perform searches on the basis of words or phrases, through the use of a large index of Web resources (Jennifer, 2000).

All of these e-shop applications websites, use the same protocol, for the users a mark-up HTML language that will render its components to the end users, they use a specific transfer protocol, either HTTP or HTTPS, in security sense, the HTTPS is more secure due to the fact that we use payment gateways and systems to register and transfer money online. Most of these premade e-shop systems use PayPal as a mean to handle money transaction.

In a brief two years, PayPal has emerged as the most successful new payment service provider on the Internet. Growing at a rate of 18,000 new accounts per day atop a base of 10 million registered users, PayPal, more than any other service, is shaping how the online community thinks about consumer payments. While the traditional financial services industry looks on—partly in contempt, partly in awe—PayPal continues to bear down: focusing on customer needs, methodically expanding its service, and steering toward profitability. (Jones, 2001)

From captured HTTP traffic to the server: a trace of all personal information sent from the merchant to PayPal via query string or the presence of a server-initiated transaction session, as controlled by the submission of a session token, cookie or some other unique id.

Transcribed screenshots of the PayPal login page, showing personal data that PayPal displays back to the customer, which was confirmed to equal data received from the merchant (Soren, 2015).

The personal information can be encrypted while we use HTTPS protocol which stands for Hypertext Transfer Protocol Secure, instead of a basic HTTP protocol who doesn't have encryption in it.

CONCLUSION

Electronic commerce is one of the most rapidly developing areas of application of the worldwide Internet. Its technical basis is modern network technologies (WWW, e-mail, technological mail, etc.). Its essence lies in the use of a single information space of the Internet to increase the efficiency of communication between participants in commercial operations (seller and buyer, between business partners, employees of the enterprise, etc.).

From the point of view of importance for the largest number of people, the most important area of e-commerce should be recognized as e-commerce - the technology of promoting goods and services to the market using the Internet. E-commerce integrates many different functions. It uses new technologies to organize contact between buyers and sellers, methods of presenting, discussing and forming an order, determining the terms of the transaction, the procedure for selling goods and services, as well as for the process of making payments.

A serious threat to the normal functioning of e-commerce is posed by computer crimes associated with penetration into computer systems and networks of banks and other credit organizations. The solution to the problem of ensuring the economic security of e-commerce is primarily associated with the solution of the issues of protecting information technologies used in it, that is, with ensuring information security.

References

- Ahmet I., Mesut S., Sefer S., The Potential of E-commerce for SMEs in a Globalizing Business Environment, vol 150, pp. 36
- Anam B., Ahmed U. K., Hamza A., Hafiz M. B., E-commerce trends during COVID-19 Pandemic, vol 13, pp. 1449-1452
- Ann L. F., Lester A. D. (2000). The Impact of Electronic Commerce on Business-Level Strategies, vol 1, pp. 13
- Anuj, Fahad Fayaz, Ms Namita Kapoor (2018). Impact of E-Commerce in Indian Economy, IOSR Journal of Business and Management, p-ISSN: 2319-7668. vol 20, issue 5. pp. 59-71
- Atkinson, D. R., Ham, S. (2001). A third way framework for global e-commerce. Progressive Policy Institute, Technology & New Economy Project, pp. 1-29.
- Bettina B., Gunes A., Sören P., Thomas P., Shopping for privacy: Purchase details leaked to PayPal, vol 15, pp. 55-56
- Chowdhuri, E.H., Hoq, Z., Shawkat, K., (2005). The economic impact of e-commerce. BRAC University Journal, vol 2, pp. 49–56.
- Chowdhuri, E.H., Hoq, Z., Shawkat, K., (2005). The economic impact of e-commerce. BRAC University Journal, vol 2, pp. 49–56.
- Dai, Q., Kauffman, R. (2002). Business Models for Internet-Based B2B Electronic Markets, International Journal of Electronic Commerce, vol. 6, Issue 4, pp. 4
- Dharmendra C., Kavyashree N., Niranjanamurthy M., Mr S.Jagannath,DR. (2013). Analysis of E-Commerce and M-Commerce: Advantages, Limitations and Security issues, vol 2
- Fahad F., Ms Namita K., Kumar A., (2018). Impact of E-Commerce in Indian Economy, IOSR Journal of Business and Management, p-ISSN: 2319-7668. vol 20, issue 5. pp. 59-71
- Jenifer R. (2000). Product search in e-shopping: a review and research propositions, pp. 25
- Jones, R. (2001). The PayPal Phenomenon: Lessons from the Leading Edge of Online Payments, CommerceNet Security and Internet Payments Research, pp. 1
- Nemat R. (2011). Taking a look at different types of e-commerce, vol 1, pp. 100-103
- Ric S., (2010). 2010 Open Source CMS Market Share Repor. Water & Stone

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