

# The Evolution of International Electronic Business

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## Abstract

*The pace of development of e-commerce is now more significant than that of world trade as a whole, reflected in the work of the World Trade Organization. Reduced costs compared to traditional stores contribute to the opening of new companies. One of the main trends of this year were the changes that have occurred in the work of the great giants of the Internet. For the sake of possible growth, the largest companies are expanding towards 'real markets', for example, Amazon in the US and Singapore, Zalora. At the same time, a number of providers are expanding their online offers, such as Walmart, Nordstorn. The aim of this study is to present an overall analysis of the evolution of international e-business, to identify the problems that hinder their development and to present smart solutions that could be successfully applied by real-life entrepreneurs.*

**Key words:** e-commerce market, international electronic business, internet

**J.E.L. classification:** M30, M31

## 1. Introduction

The business field in particular, for which "Time is money", could not be left behind by the other fields that have come to a great extent in this informational universe (Eugenia Iancu, (2016)). Of course, online transactions have advantages and disadvantages, the Internet market is growing steadily from one year to the next, with the number of beneficiaries being per year increasing (Wright RW, Tiessen J., Turner I. (2001), Gillies LE (2008).

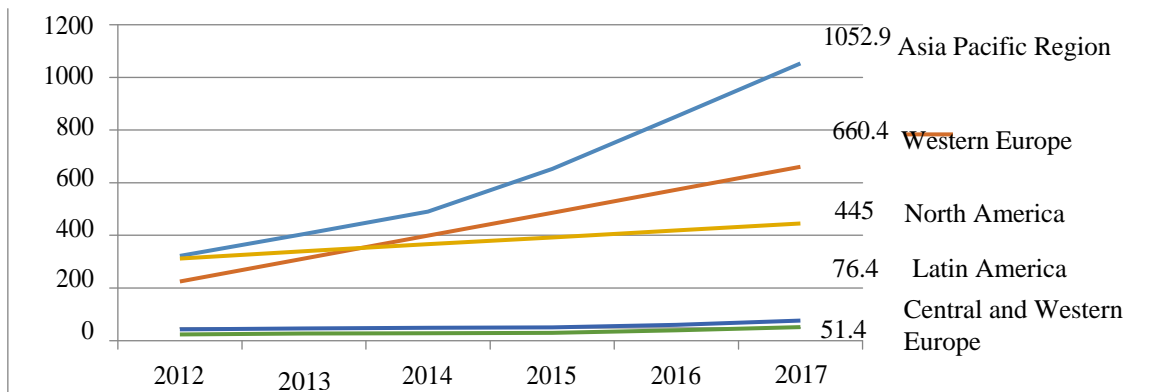
Also, an important trend is manifested by the growing use of the variety of mobile devices. The number of smartphone owners in developing countries is higher than in developed ones. The price for smart telephony is steadily decreasing. According to the World Bank forecasts, by 2020, an additional one billion people will have access to the Internet, that is, the increase in the use of mobile devices (Buraga S, 2005).

## 2. Theoretical background

What are the causes of inexhaustible interest in e-commerce? According to estimates by the Internet Society (ISOC), the number of registered Internet users in the world has exceeded 3 billion people and this year is on average up 12%. It is worth mentioning that most of the growth takes place not in developed countries but in developing countries, including the developed ones such as South Africa, Central Africa and the Pacific (Pașcu, Iancu, Socaciu, 2016 ).

Year 2017 has brought significant changes in the e-commerce market by country group.

Figure no. 1 E-Commerce in World Regions (Billion USD)



Source: elaborated by author after <http://unctadstat.unctad.org/wds/ReportFolders/reportFolders.aspx>.

In the vast majority of countries, the volume of electronic transactions is steadily increasing. A.T.Kearney's international consulting firm, which calculates the world's e-commerce network worldwide, highlights leading countries, ie, the world's largest markets for e-commerce (<https://www.atkearney.com/>).

Table no. 1 World wide e-Commerce Ranking

Ranking position	Dynamics	Name of the state
1	+2	US
2	-1	China
3	+1	UK
4	-2	Japan
5	+1	Germany
6	+1	France
7	-2	South Korea
8	+5	Russia
9	+15	Belgium
10	-1	Australia

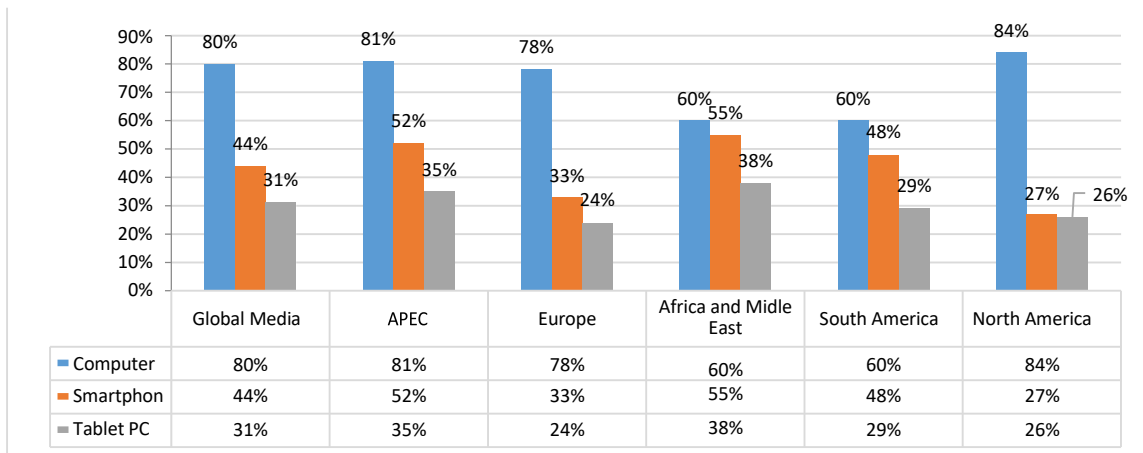
Source: elaborated by author after <http://unctadstat.unctad.org/wds/ReportFolders/reportFolders.aspx>.

Table 1 shows that ranking leaders ranked the US, China, UK. In the top 30 countries, the developed and developing countries were generally included. At the same time, the US, with a market volume of 238 billion dollars, ranked first, although in 2014 it ranks third. The authors of the study note that this leap was made possible by improving the US economy and increasing consumer confidence. However, Internet sales rates grew less significantly, compared to other countries, namely 15% in 2015. US high rating reflects the fact that the largest American Internet stores - Amazon, Ebay, Itunes and the world's top markets in terms of profits and sales, significantly outstriking Asian trade space. Internet shops in the countries of Europe were placed in a surplus position, with the United Kingdom reaching the 3rd position in the ranking, Germany-5, France-6, and Belgium showed an increase of 15 points and reached the 9th position.

### 3. The e-commerce market

Another trend of the current e-commerce market has been the increase in the use of smartphones and PC tablets over the previous year. Many applications, which allow you to choose and pay for online shopping, expand the opportunities of buyers.

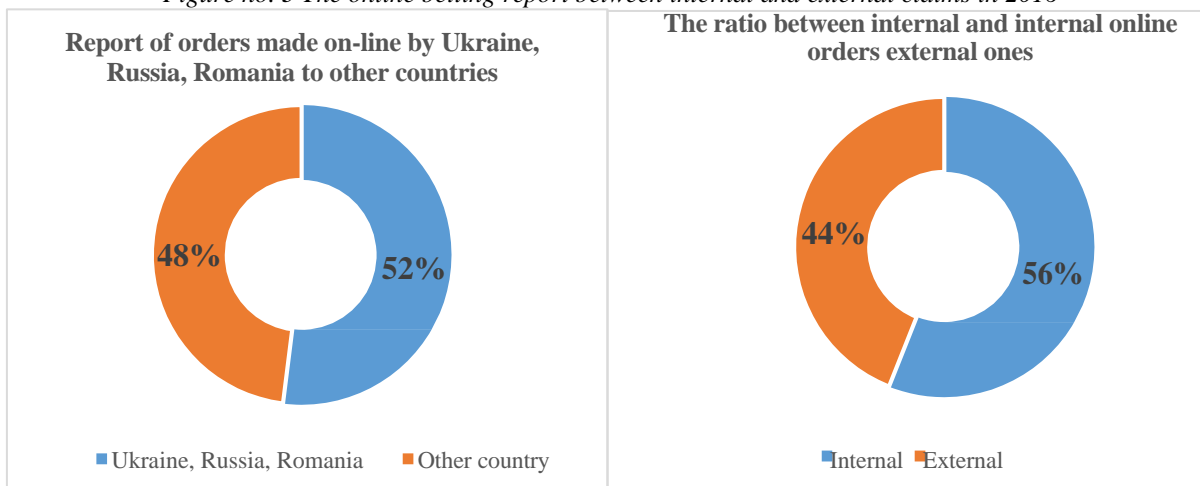
Figure no. 2 The share of device use when purchasing Internet purchases in regions of the world



Source: elaborated by author after [https://www.wto.org/french/res\\_f/booksp\\_f/world\\_trade\\_report15\\_f.pdf](https://www.wto.org/french/res_f/booksp_f/world_trade_report15_f.pdf)

Figure 2 shows the analysis of sociological research data by The Nielsen Company, the personal computer (PC), remains a convenient way for online browsing and the purchase of goods. The second place in all regions is the mobile phone. The share of its use in Africa and the Middle East (55%) is higher, and in the Asia-Pacific region (52%). The use of PC tablets when making orders only uses one third of the population, due to difficulties in connecting to the Internet. But there are countries where the share of PC tablet use is higher than the average - Egypt (46%), Saudi Arabia and Finland (44%), India (41%).

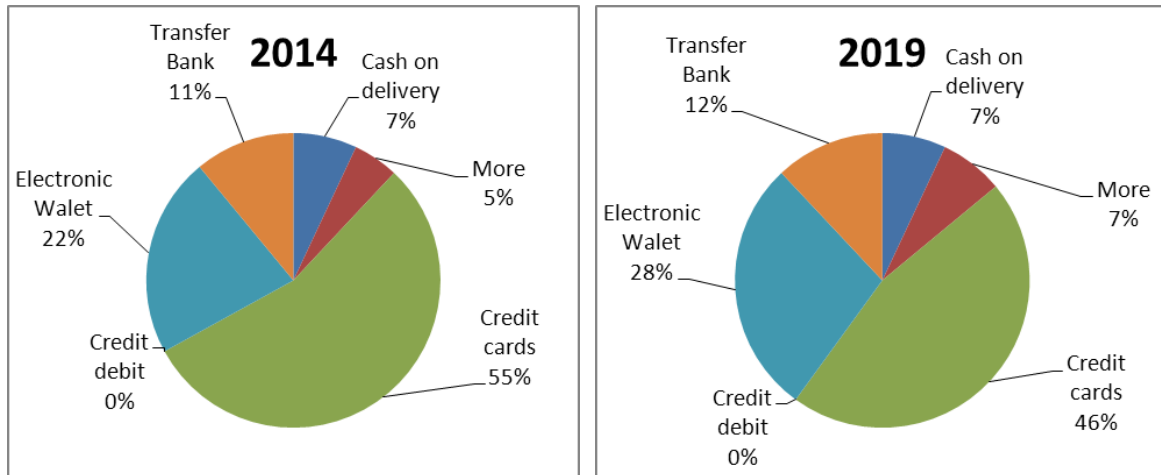
Figure no. 3 The online betting report between internal and external claims in 2016



Source: elaborated by author after <https://www.atkearney.com>

Products purchased on the Internet can be paid online or offline. Credit cards are the most prevalent payment method worldwide for the value of the online transaction and are expected to remain constant until 2019. Although other payment options are being used more and more frequently, credit cards are the most widespread option on the B2C site. Thus, lack of a credit card would impose a consumer's ability to shop at any online store. Therefore, an important indicator is the spread of the credit card among the population aged 15 years. The credit card option includes all card payment solutions (credit card, debit card, charge card and prepaid card). Figure 4 presents data collected in a Worldwide Worldwide Findex Survey on Online Payment Options.

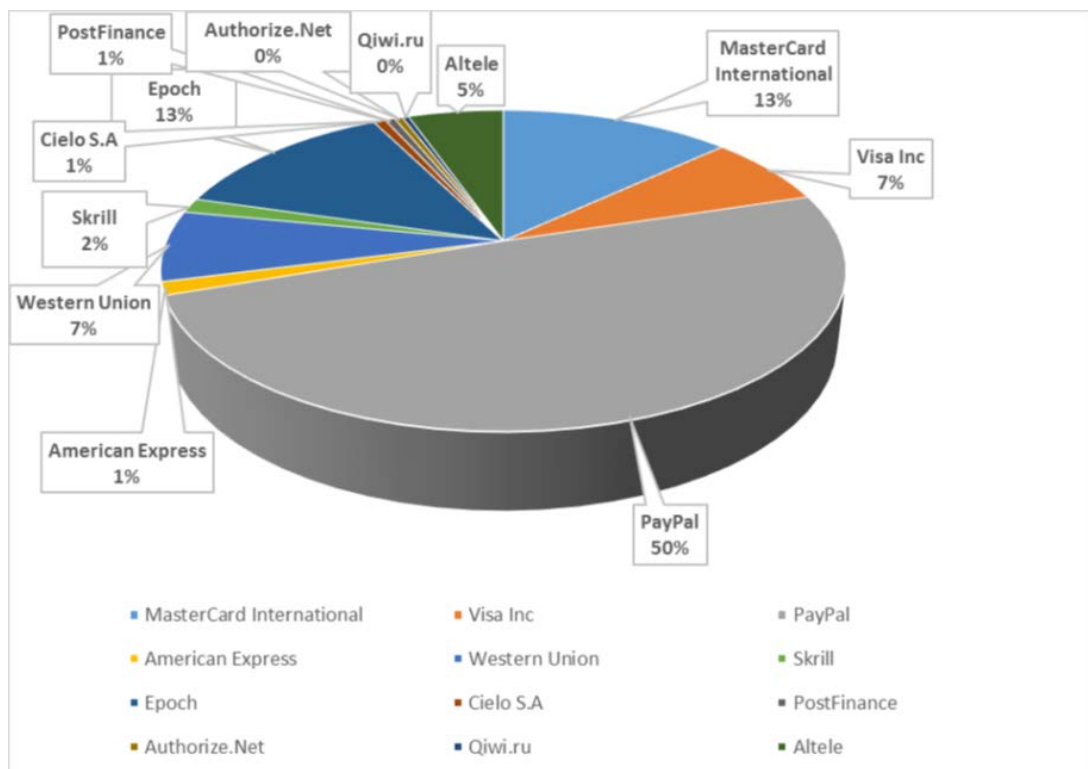
Figure no. 4 Online payment methods



Source: elaborated by author after <https://www.kaspersky.com/about>

As experts say (De Pelsmacker, P. Driesen, L. and Rayp, G., 2005) "as in any other field, Internet technology has created new possibilities for fraud. In the absence of direct contact, a customer may deceive the trader as to his identity or his actual payment possibilities. Most Western virtual mobsters have been detained to send commodities to Eastern Europe, precisely because of the many successful fraud attempts with false Eastern European credit cards. " Another very important issue is data security. A company without Internet access has little reason to worry about the integrity of its IT management systems. Connecting to a public network where anyone can have more or less authorized access to confidential data in the local area raises serious issues (Smith, S., and Barrientos, S. (2005)). Risks that did not exist before this type of trade emerged.

Figure no. 5 Attacks on payment systems used



Source: elaborated by author after <https://www.kaspersky.com/about>

As in the case of attacks on banks, the recognition of the brand is a significant part of the distribution of attacks on payment systems - about 90% of phishing attacks against payment systems accounted for one of five international brands: PayPal, American Express, MasterCard International, Visa or Western Union (Figure 5). PayPal, being exceptionally popular among the payment systems on the Internet, is very popular among the villains - this system has been damaged by about 44.12% of the total attacks. Significant weight was recorded for American Express - 26.26%. MasterCard International and Visa Inc. Payment Systems pages are falsified by attackers much less, being attacked by only 11.63% and 6.36% respectively.

#### 4. Conclusion

One of the conclusions we can draw from these analyzes is that, unlike many other types of attacks, virulent financial attacks usually include a set of different means: from phishing pages, simulating pages sites of legal financial institutions, until vulnerable software use of custom-made virus scams. Because financial cyber attacks are complex, their analysis of the site's security level requires a complex approach.

Another conclusion is that the most representative method of paying worldwide for the value of the online transaction and which is expected to remain constant until 2019 is given by Credit Cards. Although other payment options are used, credit cards are the most widespread option on the B2C site. Thus, lack of a credit card would impose a consumer's ability to shop at any online store. That's why the spread of the credit card among the 15-year-old population is an important indicator since the credit card option includes all card payment solutions (credit card, debit card, charge card and prepaid card).

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