

The evolution of e-commerce in Romania

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Abstract: The evolution of e-commerce in Romania has undergone several stages of development over time with the development of the Internet, the emergence of online stores and new payment methods.

1. Introduction

The changes within modern society, respectively the growing demands of the population, have led to an overcoming of the limits imposed by traditional trade, so that it must adapt to technological progress. As a result, the notion of electronic business – e-business appears, which represents the development of a business opportunity with the help of information technology through an efficient management of the information system, but which is not limited to the purchase and sale of goods and services, but also includes the collaboration with business partners or the management of organizations through electronic means.

E-business represents a new way of thinking, a new business perspective, an important role being played by the exchange of information at all levels of an organization, which leads to a redesign of the business process. Thus, the exchange of information is the starting point in raising awareness of the concept of electronic business.

E-commerce is a part of e-business, which revolutionizes the way shopping is done nowadays through the Internet, which is not only a means of communication but also a distribution channel for increasingly diverse products and services. Thus, e-commerce represents the activity of buying and/or selling through remote data transmission and offers the possibility to market products 24 hours a day around the world, by eliminating geographical barriers between sellers and buyers.

2. The beginnings of e-commerce in Romania

In Romania, e-commerce appeared in the late 1990s – early 2000s with the launch of the first online stores (e.g. cybershop.ro launched in 1997 or emag – launched in 2001) - focused on sales in the field of household appliances and books, a period in which the number of Internet users in our country was relatively small and trust in online transactions was very low. In this context, a large part of online transactions were rudimentary with a minimal payment and logistics infrastructure, the first online purchases being made out of curiosity, their payment being made on delivery, mostly in cash.

In the early 2000s, the value of e-commerce transactions was modest, with a value of €2 million in 2001. The year 2003 is considered a starting year for e-commerce in Romania because from this year a faster development of this type of commerce began, so that the value of transactions in 2004 was 3 million euros, placing Romania on the 43rd place in Europe in terms of e-commerce. In 2004, the first solutions for securing online payment methods were laid and the 3D Secure system was implemented, which led to an increase in confidence in making online payments. As a result of these steps, the value of card payments issued in Romania increased from EUR 1.8 million in 2003 to approximately EUR 5 million in 2004.

In 2005 there were over 500 virtual stores, e-commerce being in a real expansion, the value of transactions reaching 20 million euros and the e-commerce market was at a value of 80 million euros.

With the increase in confidence in making online payments, the number of online card transactions also increases, reaching the value of 34.8 million lei in 2007 with an increase of 2.63 times higher than in 2006, and the total value of the e-commerce market was estimated at 115 million euros. So 2007 was a year with a rapid growth of online transactions in a market dominated by more than 800 online stores with activities in the field of electronics, books and services.

Although the number of Internet users in Romania is increasing, only 4% of Romanian citizens aged between 16 and 74 made online purchases in 2008, when the value of the e-commerce market reached the amount of 250 million euros, an amount that refers only to the sales of physical products without taking into account services such as tourism or bill payment, of which online card transactions had a value of 53.1 million euros, thus placing Romania on the penultimate place in the European Union in terms of online shopping.

The year 2009 brings a rapid growth of e-commerce in Romania with the expansion of the number of online stores that reach approximately 1000 by expanding into new areas such as fashion, home appliances, IT and consumer confidence in this type of commerce, although Romania was in a period of transition to digitalization. The year 2009 was a year of recession, the total value of e-commerce fell slightly to the amount of 225 million euros, but the value of the e-commerce market experienced a significant increase in the field of online payments reaching the amount of 92.8 million euros even though the market was dominated by cash on delivery.

The e-commerce market in Romania was growing in 2010, although the effects of the economic crisis were still being felt, with an estimated number of 1500 online stores, which led to a significant increase in online payments up to the value of 127.8 million euros following 2.26 million transactions, even though most of the transactions were still based on cash on delivery. This significant increase was also due to the sales made by the most important online store – eMag – which had a turnover at the end of 2010 of 102 million euros.

The evolution of the value of e-commerce, in millions of euros, in Romania between 2000 and 2010 is represented in Figure 1.

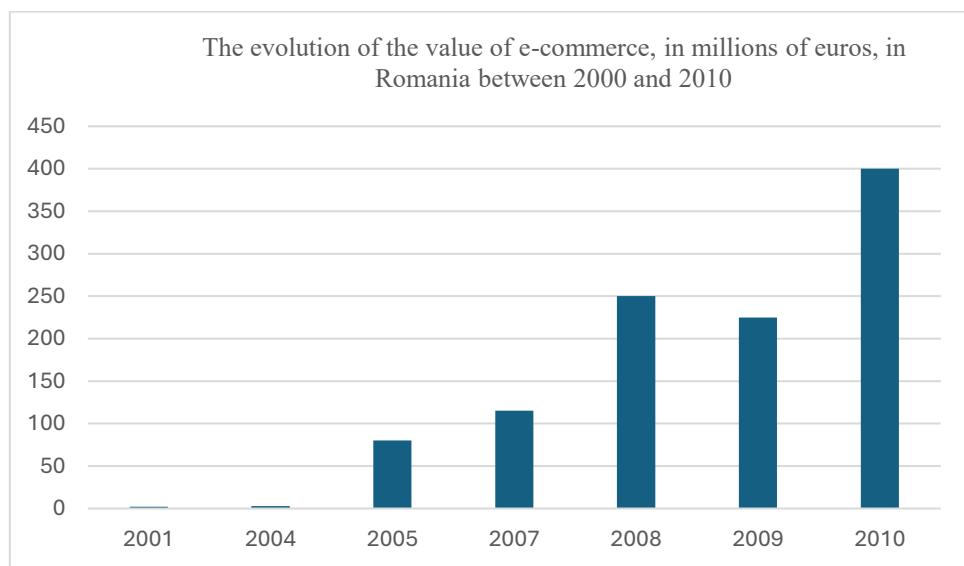


Figure 1. The evolution of the value of e-commerce in Romania between 2000 and 2010

3. The evolution of e-commerce after the recession

The year 2011, immediately following the recession, marked a significant increase of 30% in the value of e-commerce reaching a total of €527 million, with card payments also increasing by 25% to €158.9 million, representing an important component of e-commerce.

In 2011, eMag introduced the notion of "Black Friday" where in a single day customers made purchases worth 8 million euros, with approximately 90,000 products ordered, being the beginning of a phenomenon that was a success in 2025 as well.

The year 2012 brought a significant growth of the e-commerce market, by approximately 35% compared to the previous year, respectively an increase in online payments to the value of 220 million euros, thus increasing Romanians' confidence in using digital platforms. Although Internet access has increased in Romania to 43% (with 9 million active users), only 1 million people made online purchases in 2012.

The following years marked a rapid expansion of e-commerce also due to the use of mobile devices (tablets, phones) by 1.4 million Romanians, respectively the access through social networks (Facebook, Instagram) of online stores that reached a number of 5000. Under these conditions, the value of the e-commerce market increases to 1.2 billion euros in 2014, double compared to 2013, being also helped by the Black Friday campaign which achieved sales of approximately 40 million euros. Most sales were in the field of Electro-IT, fashion but also products in the Home & Deco category.

The year 2015 led to a 24% increase compared to the previous year of the e-commerce market, reaching 1.4 billion euros, of which 514 million euros were paid by online payment, placing Romania on the 4th place in Europe at the growth rate of e-commerce. In 2015, sales of 45 million euros were achieved through the Black Friday campaign, being the best year since the beginning of the campaign started in 2011. Of the 11 million Internet users, 6.7 million have made at least one online purchase generally using mobile phones or tablets.

In 2016, e-commerce in Romania had a record growth to the value of 2.05 billion euros, ranking Romania with the highest evolution of e-commerce in Europe with a percentage of 38% in this sector exceeding the European average of 15%. This value of e-commerce in 2016 represented 1.2% of Romania's GDP.

Romanians spent an average of 5 million euros per day for purchased products, the most purchased products being those in the field of Electro-IT, Fashion, Home & Deco but also in the Children's Items category. At the same time, the volume of online card payments increased to a value of 745 million euros, with an increase of 44.9% compared to 2015. As part of the Black Friday campaign, sales of approximately 72 million euros were achieved.

According to the Romanian Association of Online Stores (ARMO), in 2017 e-commerce in Romania exceeded the value of 2.8 billion euros, with an increase of 35% compared to 2016, achieving a significant increase and Romanians spent an average of 7.67 million euros per day for the products purchased. Although the cash on delivery method was preferred by the vast majority of buyers, the value of online card payments was €1.2 billion.

The value of the e-commerce market in 2018 was €3.6 billion, a considerable increase of 30% compared to the previous year's value, with an average of €9.86 million per day spent on online shoppers. This value placed Romania on the 3rd place in Central and Eastern Europe in terms of the size of e-commerce.

This growth of the e-commerce market was influenced both by the growth of online stores and by Black Friday sales, which reached a value of approximately 250 million euros in 2018.

Although in 2019, 74% of the Romanian population had access to the Internet, only 23% of them shopped online, generating a value of 4.3 billion euros for the Romanian e-commerce market, spending over 12 million euros per day on online shopping, especially in the field of Fashion or Electro-IT. The constant increase in the value of the e-commerce market was also due to the increase in online shopping in rural areas, which until 2019 had more modest values.

This value of e-commerce in 2019 represented 2.42% of Romania's GDP and placed Romania on the 2nd place in Central and Eastern Europe after Poland in terms of e-commerce size.

The evolution of the value of e-commerce, in millions of euros, in Romania between 2011 and 2019 is represented in Figure 2.

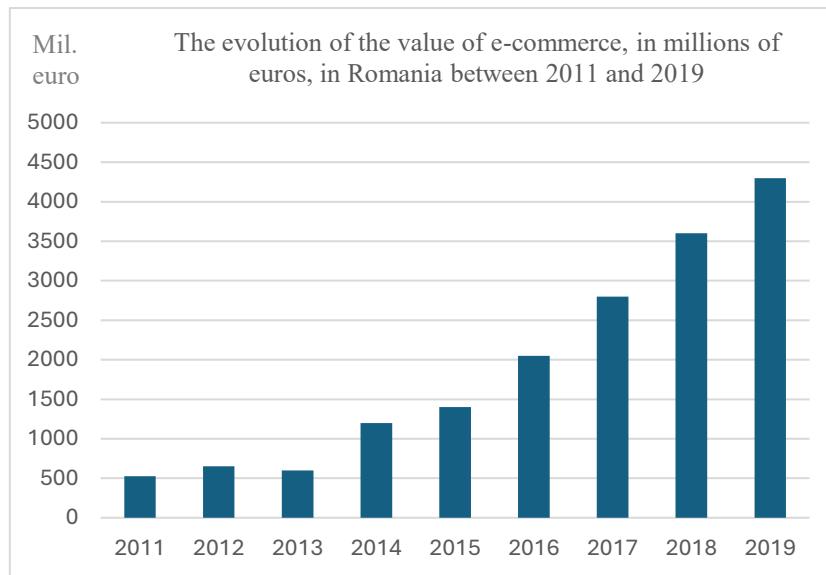


Figure 2. The evolution of the value of e-commerce, in Romania between 2011 and 2019

4. The evolution of e-commerce after the COVID-19 pandemic

The COVID-19 pandemic, which forced the Romanian population to stay at home longer, forced the population to widely adopt online shopping regardless of their area of residence. Thus, 2020 represented a year with a dynamic increase in the value of e-commerce reaching 5.6 billion euros, with an increase of 30% compared to 2019, increasing the share of online shoppers both in urban areas by 77.1% and 67.3% respectively in rural areas. A percentage of 36% of the value of online payments was made by card, reaching the value of 2.016 billion euros. As part of the Black Friday campaign, sales of approximately 120 million euros were achieved.

During the pandemic, 70% of Internet users made at least one online purchase, in the fields of Fashion which achieved an increase of 40%, Electro-IT and Media with an increase of 26%, but the largest increase was in the field of Catering/Home Deliveries with 124%.

The year 2021 brings a slight increase of 10% in the value of e-commerce, reaching the amount of 6.2 billion euros, Romanians spending an average of 17 million euros per day on online shopping, with online card payments representing a value of 2.5 billion euros. In this context, Romania generated half of all online sales in Eastern Europe.

The most popular online shopping categories in 2021 were those in the fields of clothing/footwear, accessories – 68%, food – 31%, furniture, home accessories – 29%, cosmetics, wellness – 27%.

In 2022, the phenomenon of e-commerce consolidation appears after the growth of the post-pandemic years, the value of e-commerce being 6.3 billion euros with a fragile increase compared to 2021, even if the number of those who shopped online is around 5 million, which represents 66% of Internet users. During 2022, the number of payments made by card exceeded the number of cash on delivery payments, reaching the value of 3 billion euros, being the preferred payment method.

The most popular online shopping categories in 2022 were clothing/footwear, accessories – 42%, food – 19%, furniture, cosmetics, wellness – 17%.

The value of e-commerce in Romania in 2023 reaches the threshold of 7 billion euros, registering an increase of 10% compared to the previous year and is considered an important pillar of the digital economy. More than 70% of the country's population that has access to the Internet has made at least one purchase online, with moderate growth trends due to investments made in the field of digitalization. As for card payment, although it is constantly growing, only 35% of online shoppers have used this payment method, the vast majority have opted for cash on delivery.

The most popular online shopping categories in 2023 were clothing/footwear, accessories – 79.6%, food – 32.7%, cosmetics, wellness – 29.1%, sporting goods – 18.3%, cleaning products – 16.9%, electrical and household appliances – 14.3%, books, magazines – 13.6%.

The year 2024 records a 10% increase in the value of e-commerce compared to 2023, reaching the value of 7.7 billion euros. An important role in this growth is the investments made by the main players

in the online industry, such as Altex or eMag, which are leaders of the online market in Romania, which have diversified their payment methods, or the Turkish retailer Trendyol, which has opened a logistics center near Bucharest, with the possibility of managing 2.5 million deliveries per year.

73% of Internet users made at least one online transaction in 2024, with an increase in the number of online shoppers in rural areas due to high-speed Internet or the development of courier networks.

The value of e-commerce in Romania in 2025 exceeded the threshold of 8 billion euros, being considered a constantly growing market for the goods and products segment, representing 3.5% of Romania's GDP.

In addition to the big players in the online industry in Romania, Asian online stores such as Temu or AliExpress have entered the Romanian market, which have quickly gained the preferences of Romanians. At the same time, artificial intelligence has gained ground in online stores that have invested in artificial intelligence solutions in order to personalize offers.

The most popular online shopping categories in 2024 were those in the fields of clothing/footwear, accessories – 78.9%, food – 36.4%, cosmetics, wellness – 34.5%, sporting goods – 20.8%, electrical and household appliances – 15.8%, medicines/food supplements – 16.7%.

The evolution of the value of e-commerce, in millions of euros, in Romania between 2020 and 2025 is represented in Figure 3.

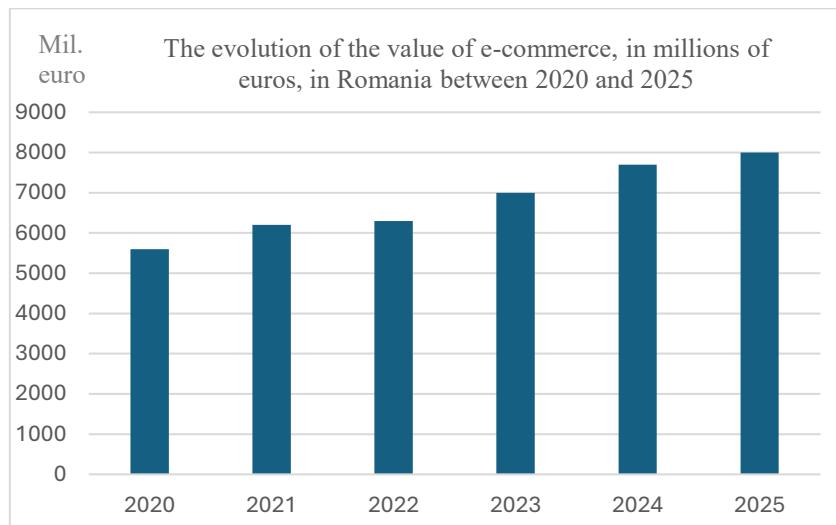


Figure 3. The evolution of the value of e-commerce, in Romania between 2020 and 2025

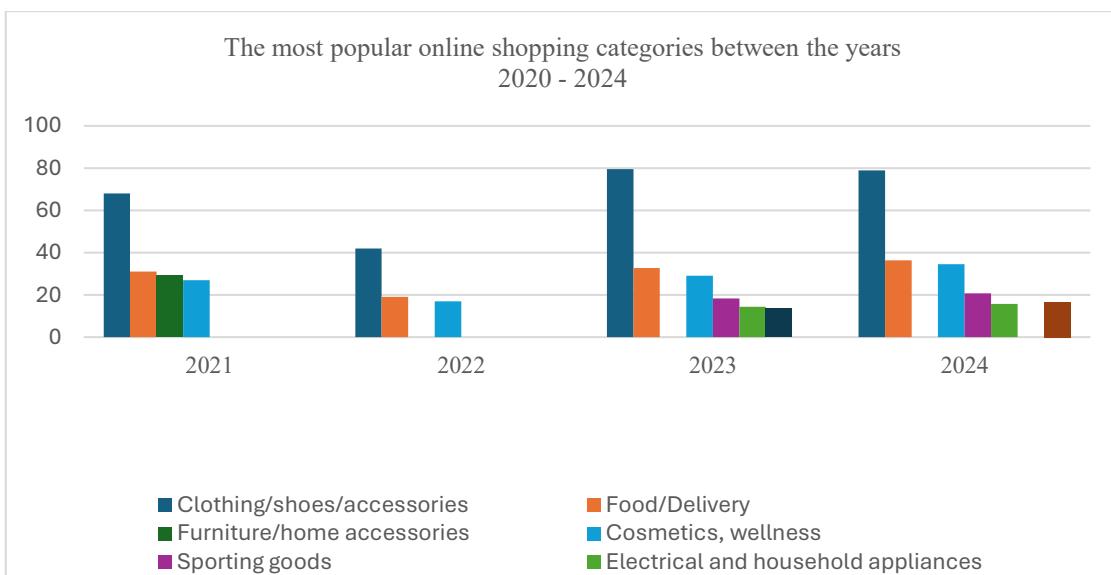


Figure 4. The most popular online shopping categories between the years 2020 - 2024

5. Payment methods within ecommerce

E-commerce has experienced a rapid evolution over the years in Romania, placing our country in the top of the countries in the European Union with the highest growth in this segment.

The most common payment methods in Romania are those with cash on delivery or card payment. The e-commerce market in Romania has optimized and diversified different payment methods so that starting with 2022 the following can be used:

- *Buy now, pay later* – it is a quick method of instant financing of purchases that does not have commissions and can be found both online and in physical stores. In Romania it is present through Mokka, a financial solution offered by Revo Technologies;
- *Contactless or online payments through apps* – this payment method has developed a lot during the pandemic and can be done through Google Pay or Apple Pay apps, being increasingly used both in e-commerce and in physical stores, as customers save time and effort while making their purchases;
- *Mobile payments* – it is increasingly popular among young people who use their mobile phone to pay for their purchases or any other services;
- *Payment with cryptocurrencies* – is preferred by many due to its high transition speed. With electronic wallets downloaded from Google Play or App Store containing cryptocurrencies, payments can be made in online stores both in Romania and anywhere in the world;
- *Biometric payments* – these payment methods have emerged in order to increase transaction security and customer trust. This type of payment, which costs in advanced biometric authentication systems – fingerprint or facial recognition, is used by more and more operators and offers customers a safe and comfortable way to pay.

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