

MANAGERIAL STRATEGIES

DIGITIZATION AND GDP

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***Abstract:** The concept of "pooling and sharing resources" is used regarding the Internet, this principle being very well understood by those who navigate the infinite network named Internet. From information regarding any educational sector to multimedia applications, the Internet makes sure to supply the user anything they want, in one way or another, as soon as possible.*

***Keywords:** digitization, GDP, e-commerce*

INTRODUCTION

We cannot strictly classify the advantages of using the Internet, but we can classify the categories of services it can supply, some of them are for free, some of them must be paid for.

When buying and selling goods using the Internet (e-commerce) it is not necessary to go to the bank to pay the offerors or suppliers of goods and services, the role of the bank being to convert cash in bits. Probably cash cannot be completely eliminated, but for sure it will be more and more transformed in digital money.

According to the literature, digitization is based on the following aspects¹:

The first aspect is the correlation between telecommunications, media and information technology sectors, and government, for policy making in this area.

Second, policymakers need to look beyond infrastructure and turn their attention to building local capacities in content and application creation by developing the knowledge economy, investing in resources such as ICT parks and innovation hubs.

¹ Maximizing the impact of digitization | Strategy& (pwc.com)

Digitization, Data and GDP

If the restrictions in the last two years led to digitalisation in almost all sectors, the e-commerce entered a new stage, which is more a stage of marketing, that of *digital commerce*.

Digital commerce is, also, an effective tool of marketing. It includes a large range of additional tasks compared to e-commerce, given the fact that the development of communication and information technologies make possible a more complex strategy².

E-SHOPPERS BY REGION, 2020

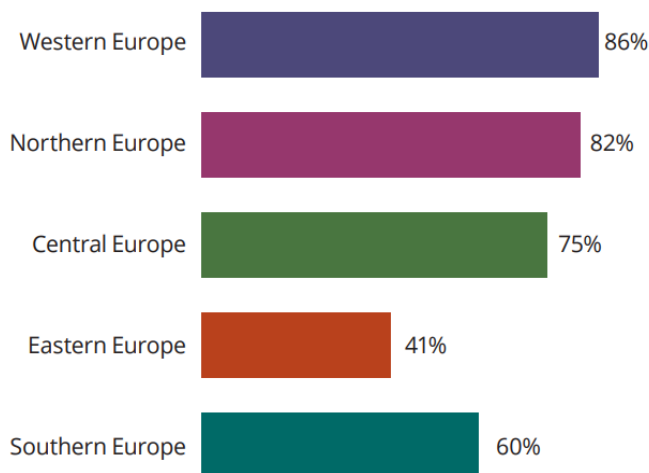


Figure no. 1. E-shoppers

Source: 2021-European-E-commerce-Report-LIGHT-VERSION.pdf (ecommerce-europe.eu)

Current standards of electronic payments use encryption and electronic signatures. By using electronic signatures one can test the identity of the person who uses a bank account or a credit card.

²Digital Commerce: Everything You Need to Know (2022) (bigcommerce.com)

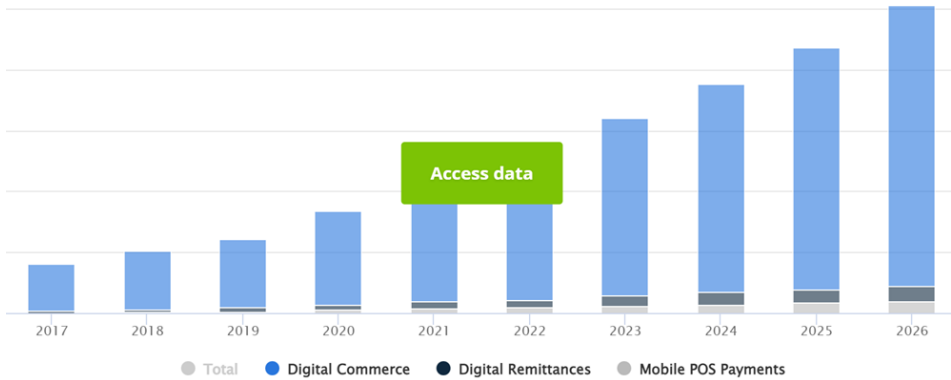


Figure no. 2. Digital payments – Romania
 Sursa: Digital Payments - Romania | Statista Market Forecast

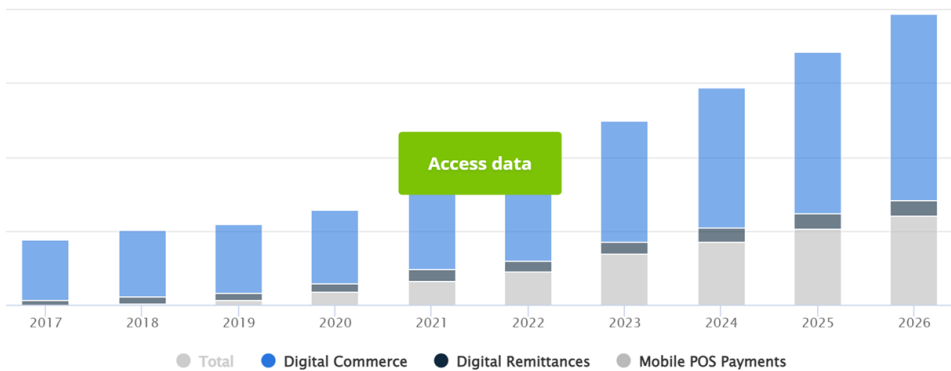


Figure no. 3. Digital payments – Austria
 Sursa: Digital Payments - Austria | Statista Market Forecast

Reducing expenses has as a goal to increase the number of users, so that anyone can afford this service, because all expenses for the equipment needed to receive Internet connection are fully paid by the user.

In a continuous technological development, there are several possibilities to make a payment in an online environment: from cash (when collecting a parcel), card or other bank electronic means to electronic systems of payment, and even the new cryptocurrencies.

When using this digital wallet, the user is the one who approves the payment. The digital wallet closes, the online shop gets the control, it transfers the identifier of the client's accept in the ePay system. The online shop requires the bank to effectively make the payment, besides this requirement also transmitting the information regarding the payment (sum of money, shop, order ID).

A more complex analysis at European level, the one that used the information supplied by GPeC, shows the fact that Eastern European countries use the payment on delivery, while Western European countries use digitalisation.

After validating the data, the electronic wallet shows the user the list of cards (if there are several) they have at the bank institution, in order to select one of them to make the payment. The selected card, together with the details regarding the payment (sum of money, shop, order ID) are registered in the ePay server at the bank institution.

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Nowadays there are several payment systems. The most serious problem is related to security. Most of messages sent by e-mail are unencrypted, that means that they can be used by anyone who gets their hands on them.



Figure no. 4. Digital Wallets
Source: Digital Wallets

Table no. 1.

Payments method

Country	Payment method	Procent
Belgia	Visa/Mastercard	51%
Franța		45%
Austria	Invoice/Factură	43%
Germania		51%
România	Cash On Delivery/Plata la livrare	69%
Ungaria		54%
Slovacia		72%
Croația	Digital Wallet/Portofel digital	53%
Irlanda		46%
Anglia		46%
Cehia	Bank Transfer/Transfer Bancar	58%
Polonia		52%

Sursa: EcommerceEU

In fact, *security* must become a main element of all electronic business websites, its importance being lately taken more and more into consideration by the companies that adopted this form of business, they having as example the negative experiences of some e-commerce websites that did not take the necessary measures regarding Web security and had to suffer because hackers took advantage of existing security vulnerabilities. This situation damaged the image of those companies and led to large financial losses.

Regarding the use of cards, the implementation of *3D Secure* represents a valid global standard, to authenticate the clients identity, buyers in the online environment. This service, 3D Secure, is based on a unique password associated to each transaction, ensuring the protection of the card holder, by authenticating their identity the moment the transaction takes place. The e-commerce security system is implemented on the selling sites under the name of Mastercard Secure Code in the case of Mastercard cards and Verified by VISA in the case of VISA cards.

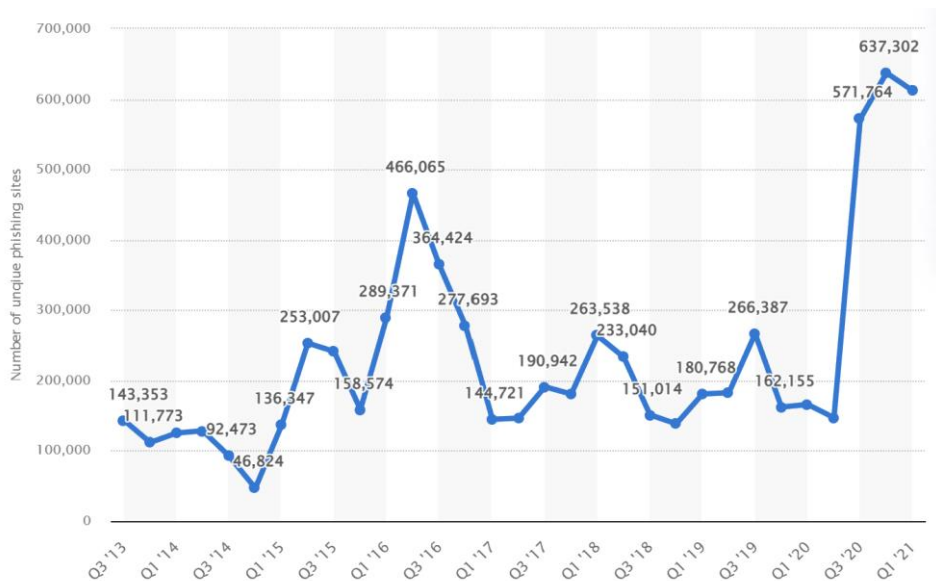


Figure no. 5. Phishing attack
 Sursa: Number of global phishing sites 2021 | Statista

The development of information technology made the bank services evolve, and, even more, offer us several facilities without having to go to the bank’s headquarters. The question is: are these new services worth it? ... the answer if for sure: YES, they are. But, besides this YES, they are, there is a serious problem: THE RISK.

Distribution of Android malware, by types:

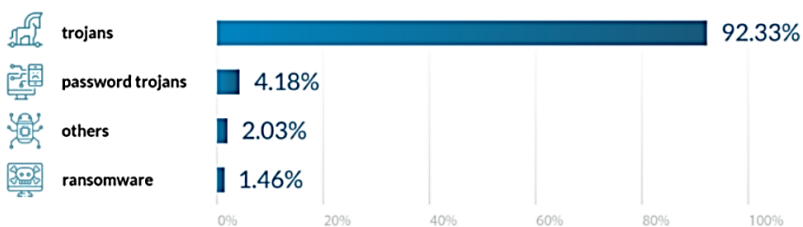


Figure no. 6. Android malware
 Sursa: 73 Important Cybercrime Statistics: 2021/2022 Data Analysis & Projections - Financesonline.com

After the digitalization phase during the pandemic, there is an increase in the value of GDP, both at national and European level. These figures are increasing, but from the FORBES study, only about 4% is due to the digitalization of the economy. At the same time, if we take into account

inflation due to this period and global actions, we cannot specify exactly this weight. But one thing is certain, there is this influence.

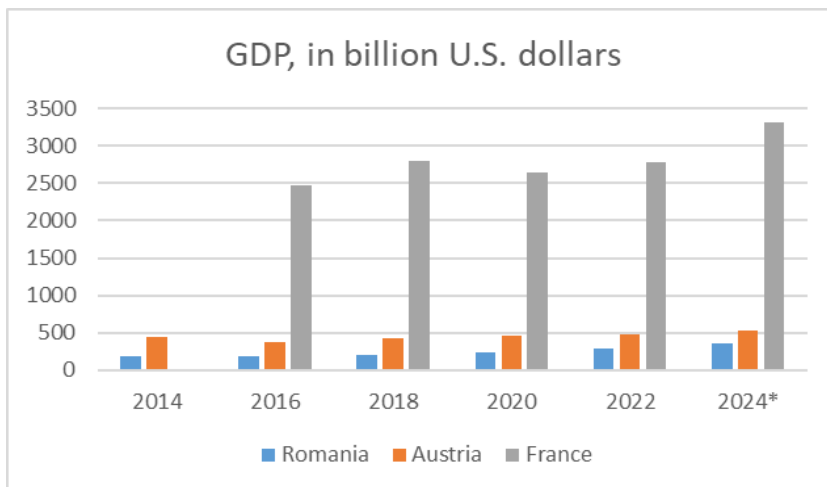


Figure no. 7 GDP Romania, Austria and France
Source: Global GDP - Statistics & Facts | Statista

Digital economy leaders are investing heavily in fundamental capabilities by building teams, technology and data platforms. Thus, they have taken four key actions to accelerate their digital strategies³:

1. Focus digital investments on innovation and new products and services.
2. Encourages employees to experiment and allows for increased agility and speed over earlier processes.
3. Centralize operating models with a strong, outcome-driven incentive system.
4. Promoting digital projects that require more examination, research

From the above, there is also an increase in the percentage of data usage in the cloud, which accelerates but also facilitates access to various information. This data has three properties: it is accessible, it is secure and it is scalable.

³ Four Ways Digital Leaders are Accelerating Their Innovation Strategy - SPONSOR CONTENT FROM EY-PARTHENON (hbr.org)

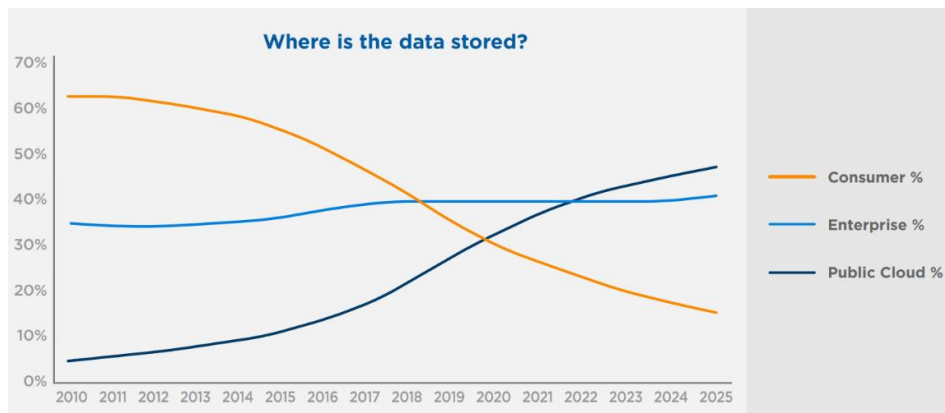


Figure no. 8. Data storage
 Source: The Digitization of the World from Edge to Core (seagate.com)

CONCLUSIONS

Nowadays, more than 30% of total population uses this service, for personal use, as well as for educational or commercial use. Thus, in most Western European countries, USA, Central and Eastern Asia, the costs related to Internet services and the time spent on this network are much more reduced than in Eastern European countries and Central Africa, where these technologies hardly now are at the implementing stage. Reducing expenses has as a goal to increase the number of users, so that anyone can afford this service, because all expenses for the equipment needed to receive Internet connection are fully paid by the user.

In the virtual environment, where information circulate at high speed and in all directions, the most important thing is represented by SECURITY. But also in this sector there are plenty of methods to secure transactions.

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