

SOME ASPECTS FOR THE FUTURE OF DIGITIZATION INTO THE EASTERN EUROPEAN ENTREPRENEURIAL FRAMEWORK.

Razvan Rares Sorin SERBU ¹

"Lucian Blaga" University of Sibiu

Abstract

Digitization, security and trust are continuing to be top theme of discussion in the world, especially when it comes to electronic business or regulation of electronic commerce and the digital economy. For this dynamic world, an important characteristic is the specific regulations of the electronic market.

We have to emphasize in this article the importance of implication of government and also the private sector (but government in first position) in creating a good infrastructure for the future of digitization, to achieve a sustainable controlled environment in which e-commerce can thrive this market.

Keywords digitization, e-business, e-government, security, trust

JEL classification: M150, O120

1. Introduction

We shall begin with some relevant words from Steve Case: To corporate leaders, it's time to develop a perpetual sense of paranoia and curiosity. It's time to both fear the future and seize its promise, to restlessly drive to master it, no matter what it holds. Regardless of where you and your company stand at the end of the day, you can always wake up tomorrow to find that things have changed drastically. If entrepreneurs have a responsibility to devote their talents to making a lasting, positive impact on society, then government has an equally important obligation to encourage entrepreneurship and smooth the way for new ideas to take off (Steve Case,2016).

¹ Associate Professor PhD, Faculty of Economics/Department of Management, Marketing, Business Administration, razvan.serbu@ulbsibiu.ro

2. Features for digitalization into the Eastern European entrepreneurial framework

While talking about the digitization of Romania's economy and will start with the indicators that place Romania in a good light. In this respect, we are ranked second in Europe in terms of high speed internet with 70% of Internet subscriptions at speeds above 30 mb/s. Another indicator that favours us is the social network access rate, which has reached 75 percent of Internet users in the country this year, a percentage that ranks 9th in the European Union, where the average is 63% (***, <https://www.agerpres.ro/economie/2017/08/16/romanii-acceseaza-retelele-de-socializare-pest-media-europeana-whatsapp-si-video-chat-printre-preferintele-utilizatorilor-sondaj--16-31-22>).

Despite these laudable places, the number of users, the penetration rate of the internet, e-government and others bring us back to the reality of the last places among the European countries.

From all of those we will present the first indicator as electronic governance indicator, because if in any other directions we can say that the population at the level of the individual and especially the rural one did not have the financial and educational force to move faster towards the digital economy, we cannot say the same about the government. There were also funds and education to implement a strategy and implement it. There is so much talk in the media about the European digital agenda.

This agenda has been proposed since May 2010 and is extremely crowded, with 101 entries. Many of these actions have been completed, about three quarters of them, and this year starts with more legislative and non-legislative proposals aimed to bring important changes in the way we live and carry on our activities.

It is imperative that Romania and the Eastern Europe align and access European data infrastructures, and for this, we must be prepared to connect to this flow through the interoperability and portability of data. That means that we have to speak the same language with the European data flows. This is quite difficult as we have failed even in the country to create a common database and connect institutions between them. Despite massive digitization investments, many corruption-related facts have been revealed, involving state functionaries, and so we find an explanation for the delays in government digitization. If this phenomenon is going to continue, soon, e-theft it will be a

synonymous with e-government, but hopefully we will not get there because it would be a shame for progress in other directions to get into this shadow.

One of the European actions refers to clouding computer based database services. If this connects to the European digital infrastructure, the potential of data can ensure competitiveness in the digital economy by connecting both public authorities in Romania and the academic environment and the sectors of the economy. However, we must not lose sight of the level of security that is more and more needed.

Along with integrated services, e-government may increasingly support policy integration and encourage the efforts of various government institutions to work more closely together. It can provide governments with increased insights to help revisit existing decision making processes and work flows. Progress is however slow. Although there are examples of successful integration of policies within the social area for example, integrating policies and services across the economic, social and environmental areas remains difficult (United Nations, 2016, e-Government in support of sustainable development).

A new wave of electronic business is now beginning to gain more and more support and will capitalize on the availability of mobile devices such as smart phones and tablet computers. These device, along with increasing use of social media Web sites, will extend the reach of the Internet to new customers and locations, opening new avenues of electronic commerce. (Gary Schneider, 2013).

In recent years, we have witnessed an exponential growth in the development and deployment of various types of cyber-physical systems. They have brought impacts to almost all aspects of our daily life, for instance, in electrical power grids, oil and natural gas distribution, transportation systems, health-care devices, household appliances, and many more. Many of such systems are deployed in the critical infrastructure, life support devices, or are essential to our daily lives. Therefore, they are expected to be free of vulnerabilities and immune to all types of attacks, which, unfortunately, is practically impossible for all real-world systems.

Another indicator that don't make Romanian to proud is e-banking services. Studies show an extremely low percentage compared to the EU average in terms of e-banking services. While the European average is over 60% in Romania, the percentage is only 8%, ranking 27th among the 28 European countries. Indeed, the dynamics of the indicator is on the rise, but

there are still many obstacles that delay alignment. And if this is a problem among users, we have an even bigger problem with the digitization of enterprises. We can talk about a high-digitization business when more than half of employees have high-speed Internet access when the company employs IT experts, uses elaborate features provided by new technology for the web page, uses social media and does not advertise on the Internet just for free and acquires advanced cloud services. From this perspective, there are under ten percent of such firms in Romania, which tells us that the gap is quite large and this will be reflected in the competitiveness of Romanian companies. Here is an extra argument for real and more effective state involvement in recovering the digital divide from other countries.

Analysis of existing software and technology base for support of control processes in the economy demonstrates the need of the formation and implementation in practice hybrid intelligent information control systems, based on the integration of information analytics technology and other advanced IT (G. Chornous, 2016).

It is an extremely interesting Erste study, a result, which shows us the differences in some directions expressed in years of recovery between Europe of the 15 states and the 7 states in Central and Eastern Europe. With regard to areas where tangible capital is needed such as highways, roads, bridges, etc., it took a long time to get closer to the European average, and yet the distances are colossal for 47 years in terms of density capital and 36 years in terms of highway density as it can be seen in Fig. no.1. The even more interesting part of the study refers to the recovery of the digital divide, which has much higher chances to be achieved in a short period of time. Thus, in terms of digital infrastructure, it takes just 4 years to eliminate the gap between the EU7 and the EU15 and to recover the broadband lag offered to mobile devices for only two years.

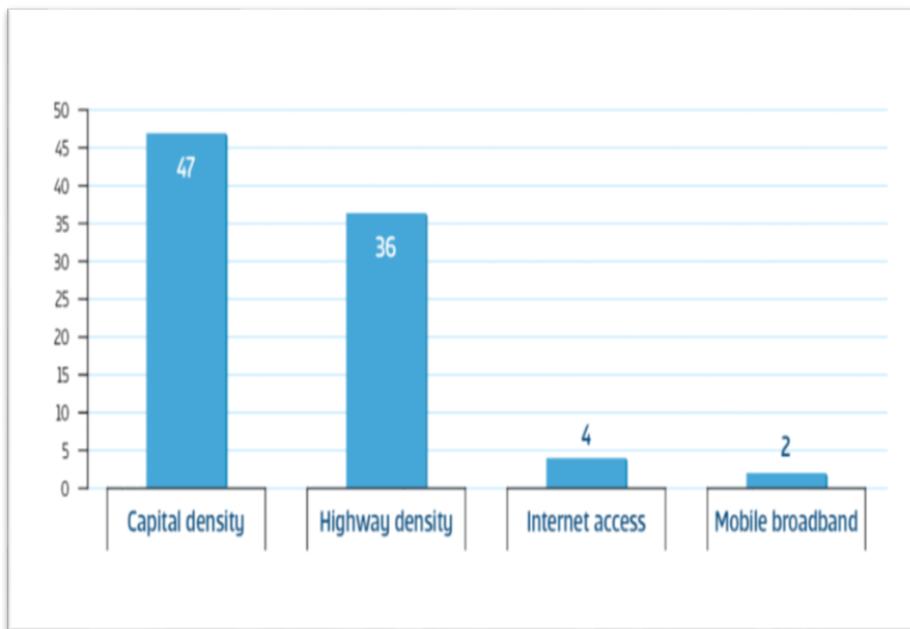


Fig. no.1 Number of years CEE7 is lagging behind the EU15

Source:

https://www.erstegroup.com/content/dam/at/eh/www_erstegroup_com/de/Presse/Pressemeldungen/2017/06-jun/Erste%20Group%20Research_CEE%20taking%20the%20digital%20path%20to%20prosperity.pdf

To sustain this idea, Kotian, Head of CEE Macro/FI Research at Erste Group said: “Because further digitalisation can offer them a faster track to overall convergence, the CEE economies should focus on stepping up their efforts by actively promoting their citizens’ digital skills and usage, including through more comprehensive e-Government offerings (***,https://www.erstegroup.com/content/dam/at/eh/www_erstegroup_com/de/Presse/Pressemeldungen/2017/06).

So we repeat what is to be known: e-Government represent a serious shortcomings and huge opportunities The Digital Economy and Society Index (DESI), which is the European Commission’s composite index of five

indicators of digital performance, both underlines the significant advances CEE countries have made in the digital sphere and highlights those areas in which they continue to lag behind their Western European peers. Even with all EU members managing to improve their overall DESI performance in 2016, Slovakia and Slovenia were the two countries achieving the strongest improvements, posting gains nearly twice as high as the EU average. At the same time, the overall DESI scores of all CEE countries remain below the EU average, with Slovenia and the Czech Republic just slightly below that average, while Romania ranks at the very bottom.

It should be remembered that Romania is making special efforts to develop ambitious projects that are a success of the Cybercrime Program of the Office of the Council of Europe (C-PROC), a program in which Romania successfully participates in European cyber security exercises to test cooperation mechanisms and operational procedures in the event of major cyber-security crises.

Another success story is the eComm2017 action, where the Romanian Police participated in the ecommerce international action, which aimed at the destruction of specialized frames on the Internet. In just 10 days in mid-June, 73 people suspected of doing more than 20,000 transactions worth over 5,000,000 euros using compromised credit cards were found in the ecommerce e-commerce operation (eComm 2017). The eComm 2017 action targeted the people or criminal groups involved, as well as the places where the ordered goods were delivered, in co-operation with private sector partners. The participating countries were Austria, Belgium, Bulgaria, Croatia, Denmark, Estonia, Finland, France, Greece, Ireland, Italy, Hungary, Latvia, Netherlands, Poland, Portugal, Romania, Slovakia, Spain, Sweden and the United Kingdom. They also received support and operative information from Canada, the U.S., Colombia, Iceland and Georgia. Europol, through the European Cybercrime Centre (EC3), has coordinated the operation, with the support of companies active in the banking, logistics, electronic payments and online merchants industry (***,https://www.dcnews.ro/fraude-pe-internet-politia-Romans-to-operate-Section-international-law-ecommerce_547162.html).

It is also possible to highlight the darker part of the social networks, following these checks identified criminal groups, people who have been accused of identity theft, phishing, deceit, illegal use, sentimental deception, money laundering, etc. Some of them had accounts on social platforms with over 10,000 followers, potentially victims. Another reason for the state to

invest in digital education of the population is to limit as much as possible the number of victims among the non-digital population but with Internet access.

This education of the population in terms of digitization would bring an increase in the dynamics of electronic commerce, which is an appreciable one this year, but still has a great potential untapped.

Financial intermediation stakeholders find constantly new ways to interact on behalf of obtaining funds they need and returns they expect and manage risks they try to avoid. (Bratu R., 2017) In the same way works the electronic business.

The electronic commerce market in Romania has grown about 20-30% each year and is one of the few domestic segments of the economy that grows constantly every year and what is even more interesting is that this form of commerce is becoming more and more professionalized more prominent that tells us that the electronic environment in our country is heading for maturity. And when we say this, we refer to all the players in this market both sellers and buyers who are increasingly well informed and whose expectations are steadily rising.

This business maturity makes more than a quarter of the over 20,000 companies sites that have the "buy" function to be sufficiently relevant in terms of traffic and order volume as GPeC announce (***,<http://www.gpec.ro/blog/category/e-commerce-in-europa>). This is probably due to the fact that the .ro domains could be bought indefinitely and then many were bought, paid only once and then forgotten or too little maintenance. The new regulation on the annual payment of the .ro domains can bring about a revival of the domains and greater attention from the owners. Also, these new annual registration and maintenance tariffs have the advantage that they will lead to the possibility of being bought by the most interested domain names ".ro" which have been registered in the 24 years of existence of ".ro", and which are currently no longer usable, or because there are no companies that have requested them, or because the people who bought them are no longer interested in keeping them against a recent annual fee.

The amounts to be collected also have a strategic destination and should support the "RoTLD" service in ensuring security and stability in a virtual Internet environment increasingly subject to aggressive destabilization attempts.

3. Conclusions

In recent years, we have witnessed an exponential growth in the development and deployment of various types of cyber-physical systems. They have brought impacts to almost all aspects of our daily life, for instance, in electrical power grids, oil and natural gas distribution, transportation systems, health-care devices, household appliances, and many more. Many of such systems are deployed in the critical infrastructure, life support devices, or are essential to our daily lives. Therefore, they are expected to be free of vulnerabilities and immune to all types of attacks, which, unfortunately, is practically impossible for all real-world systems (Abdulmalik Humayed, 2016).

So the magic word, again is trust. This is a very important thing that can let digital world develop and go farther.

There is an articles brought by the Economic Commission that emphasizes this: "trust is essential for the development of electronic business between parties that have never contacted each other before." Self-regulation has been recognized by governments, international organizations, , national and consumer organizations: such as the Organization for Economic Co-operation and Development (OECD), the European Union and Global Business Dialogue on Electronic Business, as a powerful tool for creating confidence in electronic business.

4. References

- Abdulmalik Humayed, Jingqiang Lin, Fengjun Li, Bo Luo (2017) Cyber-Physical Systems Security—A Survey, IEEE Internet of Things Journal, volume4, issue 6
- Bratu R. (2017) Financial Intermediation in Modern Europe Time: Evidence from Romania. in: 2017 International Economics Conference in Sibiu (IECS)
- Galyna Chornous (2016), Agent-based model of intelligent information control systems in economics, Bulletin of Taras Shevchenko National University of Kyiv. Economics, Kyiv, Ukraine, issue 178
- Gary Schneider (2013), E-business, Tenth International Edition, Cengage learning, p.10
- Hermann, Pentek, Otto (2016): Design Principles for Industry 4.0 Scenarios.
- Steve Case (2016), The third wave, An entrepreneur's vision of the future, Simion&Schuster Inc., p192,193
- United Nations, e-Government in support of sustainable development, New York (2016), publicadministration.un.org
- ***,
- <https://www.agerpres.ro/economie/2017/08/16/romanii-accesseaza-retelele-de-socializare-pest-media-europeana-whatsapp-si-video-chat-printre-preferintele-utilizatorilor-sondaj->

22https://www.dcnews.ro/fraude-pe-internet-politia-ecommerce_547162.html

Romans-to-operate-Section-international-law-

- https://www.erstegroup.com/content/dam/at/eh/www_erstegroup_com/de/Presse/Pressemeldung-en/2017/06-jun/Erste%20Group%20Research_CEE%20taking%20the%20digital%20path%20to%20prosperity.pdf

- <http://www.gpec.ro/blog/category/e-commerce-in-europa>