

THE ROLE OF NICT IN THE IMPLEMENTATION OF THE STRATEGY OF CREATING THE DIGITAL SINGLE MARKET

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Abstract

New information and communication technologies (NICT) are no longer a specific sector, they are the foundation of all modern innovative economic systems. Digital technologies and the Internet transform our lives, drive us the way we work - as individuals, in business, and in our communities as they become integrated into all sectors of the economy and society as a whole. This paper highlights the importance of digitizing the economy in promoting growth and employment and boosting EU competitiveness. The starting point of the study is to determine the opportunities offered by the creation of the single digital market, but also the barriers to the completion of a single digital market. Therefore, in this paper, we have been pursuing to focus on the strategy for a digital single market that transforms European society, ensuring that it can confront the future with confidence.

Key words: digital revolution, digital single market, NICT, strategy of creating the digital single market

JEL classification: M15

Introduction

The NICT sector has become an important part of the industrialized countries' economy, with a direct contribution of 5.9% of GDP in Europe. Beyond the sector itself, NICT contributes to the development of all other economic sectors, representing the NTIC effect of over 50% of productivity growth in Europe.

With regard to creating a digital single market in Europe, this means removing barriers to harnessing the opportunities that the online environment offers. It is time for Europe to adapt to the digital age, eliminating the regulatory "walls" for online services, creating hundreds of thousands of new jobs.

1. The need and importance of creating a digital single market at European level

The EU's single market offers Europe's citizens and businesses many freedoms and rights - to travel, trade, or operate anywhere in the Union. These freedoms have a positive effect on innovations that are evolving and spreading widely, and citizens have a wide offer and many opportunities.

But today, more and more products and services are digital or online. European citizens often face obstacles when using online services and tools, despite the fact that over the years the EU has been working to remove these barriers "offline". Obstacles can be of various types: disproportionate and disproportionately high shipping charges, deliberate "geoblocking" of services to limit them to a single country or region, lack of access to the Internet (Chart 1) or digital skills and the existence of a whole of different rules at EU level. For whatever reason, it means that Europeans have to lose:

- citizens can not benefit from the widest range of goods and services or online products, or from the many opportunities the Internet offers;
- Internet companies and start-ups have limited horizons and can not carry out their activities on a large scale as they would like - that means fewer innovations and fewer new jobs;
- single market organizations do not benefit from high-quality digital services.

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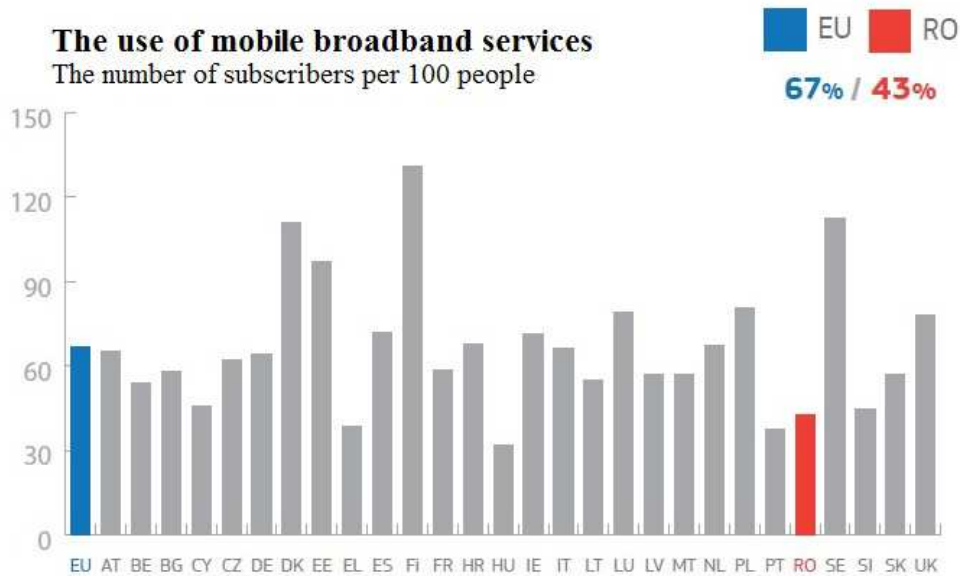
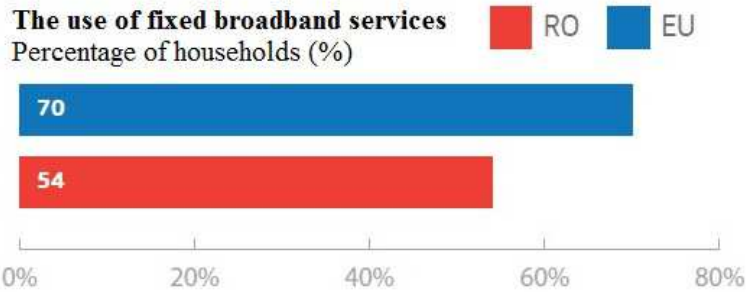


Chart 1. Access to the use of fixed and mobile broadband services

Source: Single digital market - national fiche (2017), https://ec.europa.eu/commission/sites/beta-political/files/romania_ro.pdf, accessed on 10.11.2017 at 12:30

At European level, technology research and innovation has resulted in the digital revolution (the emergence of smartphones, high-speed internet, mobile applications) and the creation of a single digital market. The Internet and digital technologies transform the world we live in. Therefore, the completion of the single digital market:

- ✓ will boost competitiveness;
- ✓ will transform the industrial sector of Europe;
- ✓ will create new products and services for this expanding market.

In support of research and innovation on emerging and future technologies, the European Union ensures: establishing rules in the field of telecommunications; protecting consumer rights; setting technical standards. However, there are barriers that restrict access to products and services:

- ✓ only 15% of citizens shop online in another EU country;
- ✓ Internet companies and start-ups can not take full advantage of the opportunities offered by the electronic environment;
- ✓ only 7% of small businesses sell goods or services across borders;
- ✓ businesses and governments do not benefit sufficiently from digital tools.

In other words, a digital single market means fewer obstacles, more opportunities, a place where citizens and businesses can carry on their activities, can legally innovate and interact safely and at a reasonable cost, making them easier so life. Companies will also be able to make full use of new technologies, and small businesses in particular will be able to

reach the other side of the EU "with just one click". This could contribute € 415 billion a year to our economy and create hundreds of thousands of new jobs.

In 2015, the Commission presented its Digital Single Market strategy, which includes a series of 16 new legislation and measures, and by the end of 2016, the Commission has made concrete proposals for each of them. Initiatives are grouped into three main pillars: providing access, creating the right environment for online innovation in Europe, and ensuring that every European citizen, business and administration can get the most out of digital transformation through more modern common rules, and more harmonized in areas such as consumer protection, copyright and online sales.

2. The strategy of creating the digital single market

The strategy aims to broaden the digital economy at European Union level to provide consumers with affordable services to support business development at the same time.

In less than a decade, the largest economic activity will depend on digital ecosystems, the integration of digital infrastructure, hardware and software, applications and data. Digitization of all sectors will be necessary if the EU maintains its competitiveness, maintains a strong industrial base and manages the transition to an industrial economy and intelligent services.

2.1. Facilitating access for consumers and businesses to digital goods and services across Europe

The European Commission has presented a three-pillar plan to stimulate e-commerce by tackling the issue of geo-locking, by ensuring a more cross-border delivery of more affordable and efficient parcels, and by promoting consumer confidence through improved protection and enforcement.

❖ Facilitating cross-border e-commerce

➤ *Preventing geolocation and other forms of discrimination on grounds of nationality or residence*

The Commission has proposed a regulation to ensure that consumers who want to purchase products and services in another EU country, whether online or in person, are not discriminated against in terms of access to prices, sales conditions or payment.

In the online environment, there are too many situations in which consumer access to offers from other countries is blocked, for example by redirecting the consumer to the website of his country or imposing an obligation to pay for it using a debit or credit card from a particular country. This kind of discrimination has no place in the single market.

➤ *Cross-border delivery of parcels, more accessible and more efficient*

The Commission has proposed rules to help increase price transparency and regulatory oversight of cross-border parcel delivery services so that consumers and retailers benefit from affordable deliveries and convenient return options, even to or from regions peripheral.

➤ *Modern digital contract rules to better protect consumers who shop online in the EU and to enable businesses to grow their sales on the Internet*

The Commission has adopted two proposals: one relating to the provision of digital content (for example, music in streaming access) and one on the sale of online goods (Chart 2).

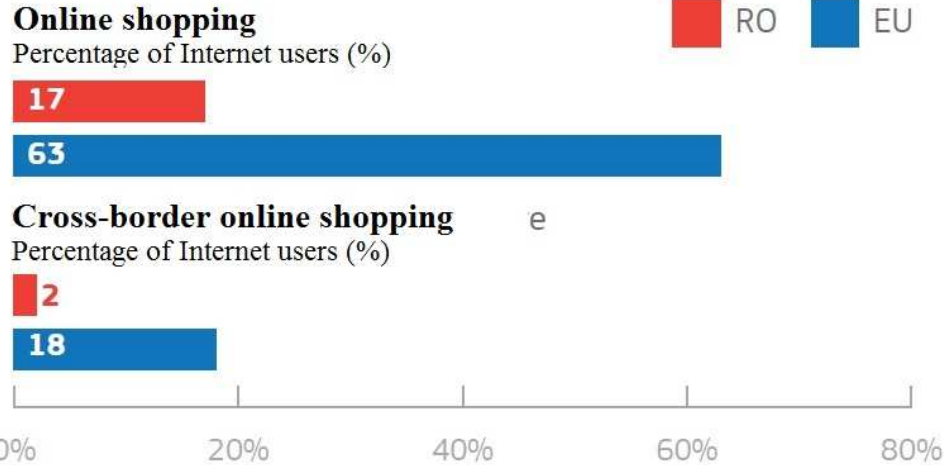


Chart 2. Online shopping / cross-border online shopping

Source: Single digital market - national fiche (2017), https://ec.europa.eu/commission/sites/beta-political/files/romania_ro.pdf, accessed on 10.11.2017 at 13:10

The two proposals tackle the main obstacles to cross-border e-commerce in the EU: the legal fragmentation of consumer contract law and its high cost for businesses (Chart 3) and the low level of consumer confidence when shopping online from another country (Chart 4).

Percentage of businesses selling online products / services

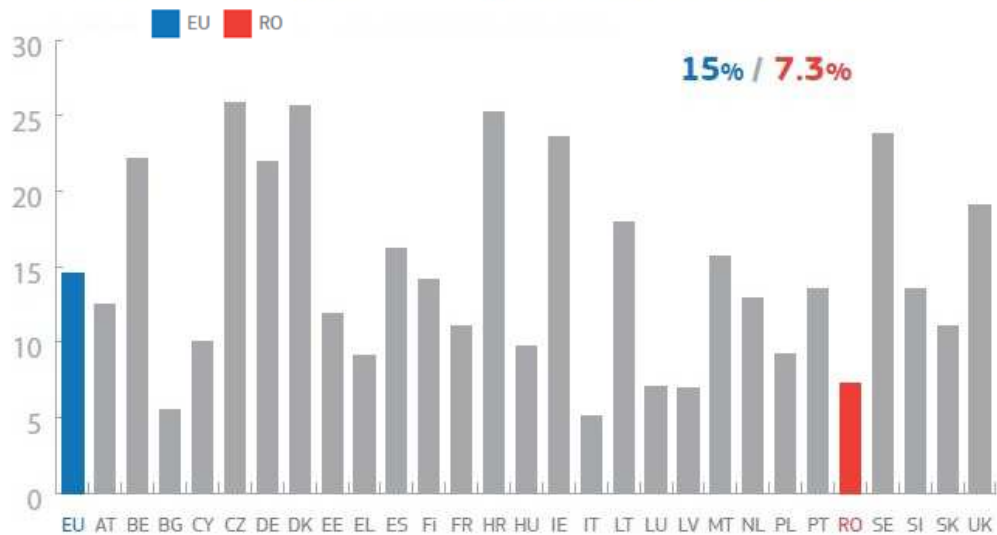


Chart 3. Percentage of businesses selling online products / services

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RO EU

What worries you when you use the internet for activities such as online banking or online shopping?

You worry that someone might use your personal data abusively



You are concerned about the security of online payments



Do you prefer to make the transaction in person, for example, in order to be able to check the product or to ask questions about this product to a real person



You worry about the possibility not to receive the goods or services you buy online



Other



No worries



I do not know



0% 10% 20% 30% 40% 50%

Chart 4. Trust and security of using the Internet

Source: Single digital market - national fiche (2017), https://ec.europa.eu/commission/sites/beta-political/files/romania_ro.pdf, accessed on 10.11.2017 at 14:50

Consumers will benefit from a higher level of protection and a wider variety of products at more competitive prices.

Undertakings will be able to provide digital content and sell goods online to consumers across the EU, applying the same set of contractual rules. The new EU-wide rules will allow businesses to save up to € 243,000 if they want to sell in all other EU member countries.

➤ *Enhancing consumer confidence in e-commerce*

In addition to the new rules on digital contracts, the Commission has proposed a revision of the regulation on consumer protection cooperation. More power will be given to national authorities to ensure better enforcement of consumer rights. Authorities will be able to check whether websites are practicing consumer geolocation or offer after-sales conditions that do not comply with EU rules (for example, withdrawal rights), will be able to request the immediate closure of sites hosting the scams and will be able to request information at domain registration offices and from banks to detect the identity of the responsible trader.

❖ **A more modern European framework for copyright regulation.** More modern European legislation on copyright will be created. It will improve citizens' access to online cultural content, thus promoting cultural diversity and facilitating new opportunities for creators. Cross-border portability, a new European consumers' right: Roaming charges have been completely lifted since 15 June 2017.

2.2. Create an environment conducive to the development of digital networks and services

❖ **EU Broadcasting Standards, in step with the 21st century.** The Commission presented a proposal to update the "Audiovisual Media Services Directive", ie the common rules governing audiovisual media services (Chart 5), cultural diversity and free movement of content in the EU for 30 years. So, the Commission wants to achieve a better balance of the rules currently in place for traditional broadcasting operators, on-demand video content providers and video-sharing platforms, especially with regard to child protection.

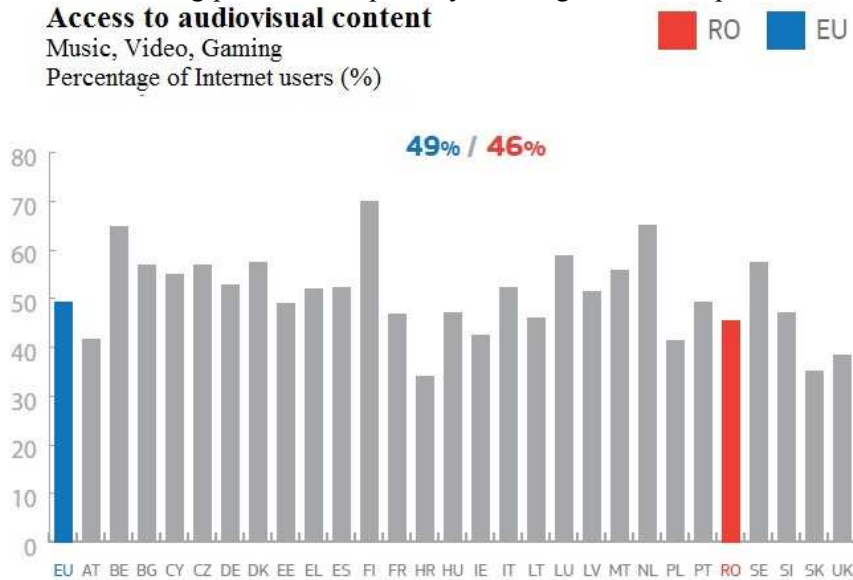


Chart 5. **Access to audiovisual content**

Source: Single digital market - national fiche (2017), https://ec.europa.eu/commission/sites/beta-political/files/romania_ro.pdf, accessed on 10.11.2017 at 15:15

More specifically, the Commission has proposed:

- *Platforms responsible for video sharing:* Platforms that organize and mark a large amount of video will have to protect minors from harmful and all citizens, incitement to hate.
- *A more important role for audiovisual regulators:* The directive ensures that regulators are genuinely independent of governments and industry and that they can best perform their role: ensure that audiovisual media act in the interest of viewers.
- *Several European creations:* At present, television stations invest approximately 20% of their original revenue and service providers on demand under 1%.
- *More flexibility for television stations:* The viewers who bother with the large number of TV commercials can choose online offers without advertising, which did not exist 10 years ago.

It is expected that these measures will have a positive economic impact on media service providers, especially television operators, and will increase their capacity to invest in audiovisual content. This is important for the competitiveness of the EU audiovisual sector.

❖ **A modern telecommunication framework.** The Commission is pursuing more efficient coordination of radio spectrum, creating incentives for investment in high-speed broadband infrastructure, ensuring a level playing field for all traditional and new market players and creating an effective institutional framework.

Under the new EU network neutrality legislation, European operators in the telecommunications sector will have to treat all types of Internet traffic equally and will have to justify giving priority to certain services in their own network that impose a higher cost on the consumer than more.

- *Elimination of roaming charges in June 2017:* Starting mid-June 2017, Europeans will pay the same price regardless of whether they use their mobile devices in their own country or in another EU country.

- *The Next Generation of Communication Networks - 5G*

In the future, we will all use 5G, the next generation of communications networks. By 2020, there will be 26 billion connected devices and 70% of the population will own a smartphone. The 5G network will be the cornerstone of the EU's single digital market, future industries, modern public services and innovative applications such as connected cars, smart homes or mobile health services.

❖ **New rules on data protection.** The new rules strengthen existing ones and give citizens more control over their personal data. In particular, they include:

- *Facilitating access to their own data:* Individuals will have more information about how their personal data is processed, and this information should be available in a clear and easy to understand presentation.
- *Right to data portability:* Your personal data will be easier to transfer between service providers.
- *Clarifications on "the right to be forgotten":* when you no longer want your data to be processed and if there are no good reasons to keep them, they will be deleted.
- *The right to know when your personal data has been pirated:* for example, businesses and organizations must notify the national supervisory authority of serious data breaches as soon as possible so that users can take appropriate action.

❖ **Online platforms.** Online platform play a key role in innovation and growth in the digital single market. They revolutionized access to information and connected buyers and sellers in a more appropriate and effective way. EU action is needed to establish the appropriate framework to attract, retain and develop new innovative entities in online platforms. The Commission has defined a clearly-based, principle-based approach to resolving the issues raised by the participants in the public consultation carried out by the Commission during the evaluation of the platforms, which has been running over several years. The Commission will support the efforts of businesses and stakeholders in terms of automotive and co-regulation to ensure that this approach will continue to be flexible and current. Areas of action include:

- *Comparable standards for digital services*
- *The obligation for online platforms to have a responsible attitude*
- *Trust is indispensable*
- *Open markets for a data-based economy*
- *A Fair and Innovative Business Environment*

❖ **A partnership with the industry on cyber security.** According to a recent survey, at least 80% of European businesses have faced at least one cyber security incident in the past year. This affects European businesses, whether large or small, and threatens to undermine confidence in the digital economy. As part of its strategy for a Digital Single Market for Europe, the Commission wants to strengthen cross-border cooperation as well as between all cyber security entities and sectors and contribute to the development of innovative and safe technologies, products and services throughout the EU.

2.3. Creating a European economy and digital growth society

❖ **Digitizing the EU industry.** The Commission has proposed a series of actions to help European industry, SMEs, researchers and public authorities to take full advantage of new technologies. Thus, a set of measures has been presented to support and link national initiatives for the digitization of industry and related services in all sectors and to stimulate investment through strategic partnerships and networks. The Commission has also proposed

concrete measures to speed up the development of common standards in priority areas such as 5G communications networks or cyber security and to modernize public services. The plans also foresee the establishment by the Commission of a cloud-based European system which, as a first objective, will provide a number of 1.7 million researchers and 70 million science and technology professionals with a virtual environment to store, manage, analyze and reuse a significant amount of research data.

❖ **Ensure free circulation of data.** While personal data is regulated and protected by EU rules, there are no clear guidelines for other types of data. Every second, large volumes of data generated by people or generated by cars, such as sensors that collect information on climate conditions, satellite imagery, digital video and pictures, commercial transaction information, or GPS signals, are produced. They represent a gold mine for research, innovation and new business opportunities. However, data are often blocked at expensive national centers (for example, as a result of Member States' requirements to keep data on their territory). Unnecessary restrictions should be eliminated and prevented. National systems should be better coordinated to allow for better data circulation and the development of promising new technologies such as cloud computing (Chart 6) and the Internet of Things.

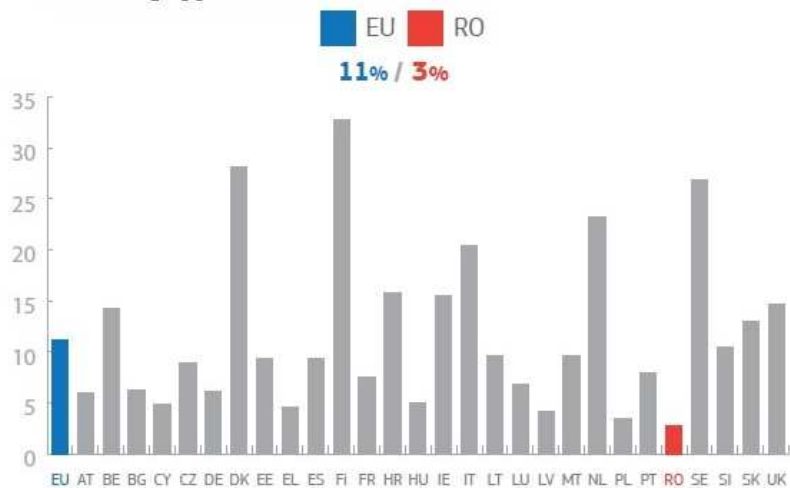


Chart 6. **Enterprises that purchase cloud computing services**

Source: Single digital market - national fiche (2017), https://ec.europa.eu/commission/sites/beta-political/files/romania_ro.pdf, accessed on 10.11.2017 at 16:10

❖ **Appropriate skills for the digital age.** The Commission has adopted a comprehensive new competency agenda for Europe (Chart 7). Its purpose is to guarantee the assimilation of a wide range of skills from a young age and to make the most of Europe's human capital, which will ultimately increase employability and competitiveness and stimulate growth in Europe.

Basic digital skills - People who know how to send emails, use editing tools, install new devices, etc.

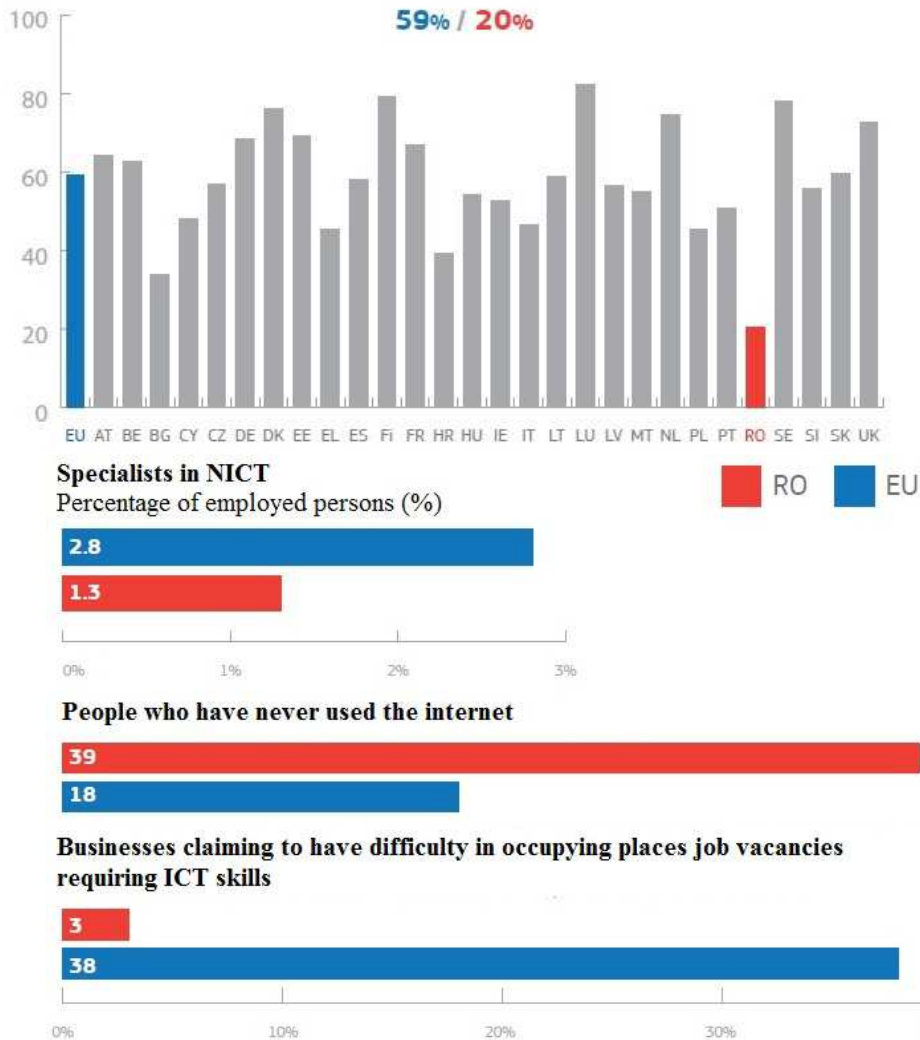


Chart 7. Digital skills in using NTIC

Source: Single digital market - national fiche (2017), https://ec.europa.eu/commission/sites/beta-political/files/romania_ro.pdf, accessed on 10.11.2017 at 16:30

As part of this agenda, the Commission will launch the "Digital Skills and Jobs Coalition", bringing together Member States and stakeholders in the education, employment and industry sectors to create a digital talent set, and to ensure that individuals and the workforce in Europe have the appropriate digital skills.

Conclusions

In conclusion, NICTs are key to the economic growth of the European Union, as the digital economy is growing seven times faster than the rest of the economic sectors. A significant part of the economic growth was due to broadband internet. Currently, the impact of high-speed broadband networks is similar to that of electricity and transport networks in the last century. They support innovative services such as e-health, smart cities and data-based production. Thus, it can be said that investments in NTC are those that have the merit of 50% of the increase in European productivity.

Therefore, digitization of the economy has a tremendous role and an enormous potential in promoting growth and employment and boosting the EU's competitiveness. Thus, the strategy for a digital single market is about to transform European society, making sure it can face the future with confidence.

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