



Advantages of digital society



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Introduction

The ongoing digital revolution is having a significant impact on almost every aspect of the way we live. It is changing the way we are doing business and the way we work and live. The digital revolution is everywhere and can be beneficial to all businesses and all sectors of the economy. What matters is how fast we react and adapt to the changing world.

Digitalisation, the Internet of things and big data are leading and will lead to the creation of new business models and changes in the supply chain. Digital solutions allow a more efficient use of resources and products can be customised to a degree that was unreachable only a few years ago. Thanks to online platforms consumers have better choice, better quality and lower prices on goods and services.

Digital transformation is an opportunity and not a threat. Digitalisation, together with automation and robotisation will shape the future of work. It creates numerous opportunities, but also challenges such as new approaches to taxation and redefining the role of human in the production process.

Numerous studies underline that digitalisation will have an extraordinary impact on societies in the decades to come. The exact consequences are still difficult to estimate, as is the way that society could prepare for such changes.

Digital society – numerous benefits with few challenges: the Estonian example

A good business environment is digitalisation-friendly. Estonia offers an excellent example here, ranking No. 1 in the EU for data economy and being No. 1 for data market size. Estonian companies can be established, registered, and administered entirely online.

Estonia is the most advanced digital society in the world. There are more than 1.2 million active digital ID cards in Estonia. That is nearly 94 % of residents. The digital ID platform enables secure access to all of the state's e-services and a large number of private sector e-services.

It is possible for Estonian e-residents to perform almost all administrative procedures (except for marriage, divorce and buying a property) online. Voting, tax declarations and e-prescriptions are just some of activities that are performed online by majority of Estonians.

Digitalisation saves time and money as well as enhancing administrative processes. According to estimations, digital signature alone enables Estonia to save 2 % of its GDP per year. Thanks to e-taxation Estonia has one of the best rates of tax collection in the world. Participation in elections has increased due to e-voting. More than 30 % of voters voted online during the last general elections in 2015.

One of the keys to Estonia's success in digitalisation was the strategic decision taken by policy makers to first focus on building a core infrastructure – called X-Road – to allow a free and reliable flow of data. X-Road is the backbone of e-Estonia. It allows various public and private sector databases to link up and operate in harmony.

To ensure secure transfers, all outgoing data from X-Road is digitally signed and encrypted, and all incoming data is authenticated and logged. Today, X-Road is also implemented in other countries, i.e. Finland. Since June 2017, there has also been a certain level of data exchange between the Estonian and Finnish systems.

Cyber security – indispensable for the success of e-society

In a digital society, cyber accidents carry serious consequences for the whole population and for democracy. High dependence on digital services brings a risk of serious disruption to banking and financial systems and the work of hospitals, as well as the risk of distortions in election results.

In 2007, Estonia was the target of mass cyber security attacks. The lesson learned from that experience was that in order to stand against similar attacks in the future all levels need to contribute: the state, corporations and individual citizens.

The government's reaction to the 2007 attacks – by providing information openly about the situation and its consequences – increased societal trust in e-services. The government also succeeded in standing against these attacks thanks to close cooperation with the best specialists from the private sector and academia.

Currently, numerous policy makers still consider cyber security to be a purely technical matter. In order to change this approach, the political effects of technical processes must be better interpreted and explained clearly at political level. Cyber security needs more discussion at strategic level and a degree of political courage.

Societal challenges of the digital revolution

As some areas of the administration were digitalised in Estonia at the beginning of 21st Century, there is a growing generation of people who take these solutions for granted and have even higher expectations for the future. They have a crucial role to play in creating policies that will shape the future of digital society.

New business models and new technologies come with a new mindset and new complexities. The new digital reality requires a balanced regulatory framework which both addresses areas such as liability, accountability, integrity and ethics and does not hinder further innovation. Another upcoming regulatory challenge is proper legislation on artificial intelligence, which is increasingly affecting daily life.

Societal trust in the institutions responsible for creating and maintaining digital services is crucial in developing digital society. According to the polls, trust in e-services in Estonia is significantly higher than trust in the government. This phenomenon can be explained by the fact that society perceives digital services as something that cannot be negatively affected by human factors.



Estonia also managed to create a unique level of trust and cooperation between private and public sector. Numerous technological solutions that created the foundations for sustainable and reliable e-society and e-government infrastructure were the results of private-public partnerships. For example, when online taxation was launched, the government decided to use authentication methods used by banks. This also increases societal trust in offered solutions, which are seen as the result of collective public-private efforts.

Digital society also requires that the overarching majority of citizens have a sufficient level of digital skills to be able to freely and independently use e-services. This requires a proper framework for education programmes and life-long learning.

With increasingly tailored content generated for individual users (i.e. through social media), we should raise the question of freedom of expression and the security and sustainability of democracy. The influence of communications activities sponsored by third countries on elections and referendums and their impact on democracy has to be counteracted.

Digital Single Market – the way forward

Europe must act as a single data space in order to compete with other global players. Only by ensuring that the Digital Single Market works, the EU will be able to benefit from technological advances. This will make digitalisation more cost effective, efficient and accessible.

We should be putting end users – i.e. companies and citizens – first by offering them easy access to the internal market and not building digital barriers on top of physical borders. A digital area requires a new type of mindset as well as a new kind of rules.

The free flow of data should, in near future, be treated as the fifth freedom of the Single Market (after the free flow of people, goods, capital and services). There is a growing need to facilitate access to data. As the future of services will heavily depend on real-time access to data from different databases (both from the private and the public sector) a mechanism that allows data to flow between the private and the public sector in an efficient and transparent manner is needed. In Estonia, cooperation between private and public sector as well as international cooperation between public entities (mainly with Finland) on this issue is already developing.



There is a need for a proper regulatory framework for innovation. It is crucial that new regulations do not hinder innovation. As innovative solutions usually surpass existing regulation, it is important that any adjustment to the regulatory framework does not stop further innovation.

The quality of regulation and a stable regulatory environment are pointed out by business as the most important requirements for the Digital Single Market. Also, a joint European approach to digitalisation creates effects of scale, allowing digital opportunities to be grasped more efficiently.

The Estonian Presidency has agreed on a number of priorities for the Digital Single Market Strategy with the upcoming Bulgarian and Austrian Presidencies. As highlighted by Estonia, these include: legal basis for investment, e-commerce, cyber security and the free flow of data.

Currently the free movement of data between EU Member States is still hindered by numerous barriers such as different regulations in various countries. There is a need for common rules on government to government data sharing. Providers in the EU are still fragmented to a great extent. This requires harmonisation and may be done only with public support. Further development of broadband infrastructure will require both public and private investment.

The issue of digital sovereignty could be efficiently addressed by the creation of a European cloud system. Even though such a solution would be expensive, this idea is seen as very useful and reliable. This aspect of cyber security is also closely related to confidentiality and the integrity of the data.

The EU industrial strategy must also address issues of digitalisation, the development of smart specialisation, innovation and investment programmes. The industrial strategy should take the needs of both larger and smaller Member States into account. The overall goal should be to ensure competitiveness of the European industry in the long-term.



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This document provides a summary of the discussion entitled “Advantages of digital society” which was held in Tallinn (Estonia) on 25 October 2017. The conference was organised by the Employers’ Group of the European Economic and Social Committee together with the Estonian Employers’ Confederation and the Estonian Chamber of Commerce and Industry. The seminar was included in the Calendar of the Estonian Presidency to the Council of the EU.



European Economic and Social Committee
Employers’ Group

About the Employers’ Group

The Employers’ Group brings together entrepreneurs and representatives of business associations working in industry, commerce, services and agriculture in the 28 Member States of the European Union. Its members are committed to putting their own experiences to good use to further the European venture.

The European Economic and Social Committee is the only European institution that brings together entrepreneurs and people fully involved in the economic and social life of their home country. It ensures that the voice of business is heard at European level.



European Economic and Social Committee

Rue Belliard/Belliardstraat 99 • 1040 Bruxelles/Brussel • BELGIQUE/BELGIË
Published by: “Visits and Publications” Unit • EESC-2017-109-EN
www.eesc.europa.eu

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Print
QE-06-17-193-EN-C
ISBN 978-92-830-3858-0
doi:10.2864/70040

Online
QE-06-17-193-EN-N
ISBN 978-92-830-3860-3
doi:10.2864/955541