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#### IMPROVING E-GOVERNMENT AS ONE OF THE PRECONDITIONS FOR ECONOMIC DEVELOPMENT

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In the article the author argues that the comparison of key indicators of the functioning of e-government in Ukraine and the EU show that countries that have a well-functioning system of e-government have higher levels of economic development. The author concludes that the development of e-government will improve the quality and efficiency of public services, making them accessible and transparent, help reduce costs and reduce the administrative burden on businesses and citizens in the process of interaction with the public administration. Improving e-government system in Ukraine can use the experience of EU countries, adaptation of the basic principles of e-government in the EU when developing national legal acts.

**Keywords:** e-government, public administration, administrative services, transaction costs, EU, post-industrial society, information, economic development, sustainable development.

Introduction. In terms of the establishment of the post-industrial society, the information has become increasingly important as a factor of production. There is a growing role of ICT in the economy, in government and society. For the majority of the developed country the information society is a national priority. The spread of the internet allows exporters to trade more intensively, exploiting economies of scale

(efficiency). The information and communication technologies are a necessary tool of social and economic progress, a major factor in the development of the innovative economy.

The international experience suggests that digital technologies are a driving force of socio-economic development, economic recovery in many countries of the world establishing the basis for sustainable development in the future.

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It is important to stress that in the context of Ukraine's European aspirations for further development the country acquires improvement of the e-government as a form of cooperation between government and society introducing the European principles of the e-government construction.

There is the urgent need in forming the sustainable development to create a peaceful society taking advantages of effective and fullfledged institutions accountable to people. The international experience suggests the most economically developed countries demonstrate that effective means which can provide openness transparency of government. implementation and effective use of Information Communication **Technologies** (ICT) and improvement system of e-government will effect increase public confidence in the authorities providing more effective set of administrative services and less costly to administer.

**Analysis** of recent researches and publications. It should be noted that the issue of e-government is relatively new, but more and more scientific papers recently have appeared outlining issues of e-government: G.Pocheptsov, A.Semenchenko, I.Klymenko, D.Dubov, S.Chukut, M.Novikova and other. For example, G.Pocheptsov considers the main problems of information policy [1], A.Semenchenko explores e-government [2], M.Novikova was analyzed the theoretical aspects of e-government [3], D.Dubov investigates the different aspects information security, I.Klymenko examines the electronic governance technologies [5].

**Previously unsettled problem constituent.** The issue of improving e-governance as a prerequisite for economic development is the unexplored area of research.

**Main purpose of the article** is to consider the improving of e-government as a prerequisite for economic development.

Results and discussions. It is important that

the development of e-government system allows countries to reduce corruption, helping them to increase level of competitiveness and welfare, promoting further economic development. There is the new methodological framework for the collection and assessment of the Survey's data on e-government development based on a holistic view of e-government incorporating three important dimensions that allow people to benefit from online services and information. These are: adequacy telecommunication the of infrastructure, the ability of human resources to promote and use ICT, and the availability of online services and content. The Survey tracks progress of e-government development via the E-Government Development Index (EGDI). In 2016 Ukrainian's E-Government Development Index (EGDI) was lower than average in Europe, but higher than Moldova's EGDI (65), Slovenia's (67), Romania's (75) and others [1].

EGDI is a weighted average of normalized scores on the three most important dimensions of e-government, namely: scope and quality of online services (Online Service Index, OSI), status of the development of telecommunication infrastructure (Telecommunication Infrastructure Index, TII) and inherent human capital (Human Capital Index, HCI). Each of these sets of indices is in itself a composite measure that can be extracted and analyzed independently stated below [6, 7, 8, 9, 10, 11, 12] in table 1.

Ukraine has low rates on e-government -62 (low levels of telecommunications infrastructure (0,4) and online services (0,6)). The scientists call such the main factors hindering the introduction and development of e-government in public administration as:

- lack of state control system in this area;
- virtual absence of a centralized governance structure of information processes of public bodies;
- lack of interaction in the operation of information and communication systems of

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public authorities, departmental isolation;

- ineffective government policies on standardization, particularly in the field of open standards for their use in public services, credit and finance, economics, e-commerce, education, etc:

- Inconsistency of legislation in the field of ICT and information security system with EU legislation [2, 86].

Table 1. Global Indexes and Ratings of Ukraine in comparison to the EU countries

| Country  | EGDI | E-Government      |      | HCI  | GDP per     | CPI     | GCI | DB | GDP  |      |
|----------|------|-------------------|------|------|-------------|---------|-----|----|------|------|
|          |      | Development Index |      |      | capita, \$. |         |     |    | 2015 |      |
|          |      | OSI               | TII  | HCC  |             |         |     |    |      |      |
| Finland  | 5    | 0,94              | 0,76 | 0,94 | 1 (85,86)   | 41920,8 | 2   | 8  | 10   | 0,2  |
| Sweden   | 6    | 0,88              | 0,81 | 0,92 | 5 (83,29)   | 50272,9 | 3   | 9  | 8    | 4,2  |
| Norway   | 18   | 0,80              | 0,73 | 0,90 | 2 (84,64)   | 74734,6 | 6   | 5  | 9    | 1,6  |
| UK       | 1    | 1,00              | 0,82 | 0,94 | 19 (80,04)  | 43734,0 | 10  | 10 | 6    | 2,2  |
| Germany  | 15   | 0,84              | 0,73 | 0,89 | 11 (81,55)  | 41219,0 | 10  | 4  | 15   | 1,7  |
| Denmark  | 9    | 0,78              | 0,82 | 0,95 | 7 (82,47)   | 52002,2 | 1   | 12 | 3    | 1,0  |
| Belgium  | 19   | 0,71              | 0,68 | 0,97 | 10 (81,59)  | 40231,3 | 15  | 19 | 43   | 1,4  |
| Austria  | 16   | 0,91              | 0,71 | 0,84 | 12 (81,52)  | 43438,9 | 16  | 23 | 21   | 1,0  |
| Czech    | 50   | 0,48              | 0,60 | 0,86 | 25 (78,42)  | 17231,3 | 37  | 31 | 36   | 4,5  |
| Republic |      |                   |      |      |             |         |     |    |      |      |
| Poland   | 36   | 0,70              | 0,59 | 0,87 | 30 (77,34)  | 12494,5 | 30  | 41 | 25   | 3,6  |
| Italy    | 22   | 0,87              | 0,65 | 0,81 | 34 (75,85)  | 29847,0 | 61  | 43 | 45   | 0,8  |
| Ukraine  | 62   | 0,59              | 0,40 | 0,84 | 26 (78,13)  | 2115,0  | 130 | 79 | 83   | -9,9 |

Note the abbreviations in the table: Telecomm. Infrastructure Component HCC – Human Capital Component, HCI – Human Capital Index; CPI – Corruption Perception Index; GCI – Global Competitiveness Index; DB – Doing business.

In 10 of the leaders on the development of e-government were included such countries as Great Britain, Finland, Sweden, Denmark, Netherlands. They have developed a system of e-government that is the least corrupt and competitive. They lead the pack of the top twenty on the index of human capital, in the top ten for ranking on the ease of doing business index; have a higher GDP per capita and rate of economic growth than Ukraine.

For instance Denmark and is aiming for digital by default, meaning that digital services are so straightforward and convenient that all those who can use them will choose to do so whilst those who can't are not excluded. The use of digital identity is fast becoming a norm and a must-have feature of any functional e-government website in Europe, even though it may still be considered as an advanced innovation in other regions. Digital identity is often linked to a personal identification number and must be recognized as a legal instrument for authenticating users [1]. Let's illustrate: the experience of France using the innovative approach to policy-making is astonishing, it has on a regular basis used the crowd sourcing in regards to enacting its new

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digital law. In a bid to tap widespread views and ideas, an open and participatory consultation process attracted over 20,000 people and organizations to go online to vote and comment on the text of the new digital law in that country.

The internet can lead to more trade, better

capital use, and greater competition. The ICT sector is a fairly modest part of the overall economy. Its share in GDP is around 6 % in OECD member countries and considerably less in developing countries (fig. 1) [8].

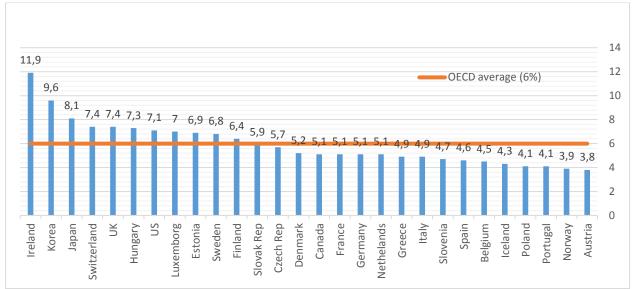


Fig. 1. Share in GDP, OECD countries, 2011 [8]

Many countries are making the more and more attractive conditions for investors and business using IT (table 2). Some countries of EU are changing tax conditions for attracting foreign investment and registration of private companies is in their territory. Denmark, for instance, has a high sub-index "starting a business" by introducing it by an online platform allowing simultaneous completion of business and tax registration. Ukraine has better conditions to start

a business easier by reducing the time required for VAT registration and by eliminating business registration fees. Germany has made starting a business easier by making the process more efficient and less costly. Italy has made enforcing contracts easier by introducing a mandatory electronic filing system for court users, simplifying the rules for electronic service of process and automating the enforcement process.

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Table 2. Ratings of Doing business of Ukraine in comparison to the EU countries [11]

| in comparison to the EO countries [11] |      |                        |   |                        |                         |                   |                                     |                 |                        |                        |                         |
|--|------|------------------------|---|------------------------|-------------------------|-------------------|-------------------------------------|-----------------|------------------------|------------------------|-------------------------|
| Economy                                | Rank | Starting a<br>Business | Dealing<br>with<br>Constructio<br>n Permits | Getting<br>Electricity | Registering<br>Property | Getting<br>Credit | Protecting<br>Minority<br>Investors | Paying<br>Taxes | Trading Across Borders | Enforcing<br>Contracts | Resolving<br>Insolvency |
| Denmark                                | 3    | 29                     | 5   | 12                     | 9                       | 28                | 20                                  | 12              | 1                      | 37                     | 9                       |
| UK                                     | 6    | 17                     | 23  | 15                     | 45                      | 19                | 4                                   | 15              | 38                     | 33                     | 13                      |
| Sweden                                 | 8    | 16                     | 19  | 7                      | 11                      | 70                | 14                                  | 37              | 17                     | 24                     | 19                      |
| Norway                                 | 9    | 24                     | 26  | 18                     | 13                      | 70                | 14                                  | 14              | 45                     | 8                      | 6                       |
| Finland                                | 10   | 33                     | 27  | 16                     | 20                      | 42                | 66                                  | 17              | 32                     | 30                     | 1                       |
| Germany                                | 15   | 107                    | 13  | 3                      | 62                      | 28                | 49                                  | 72              | 35                     | 12                     | 3                       |
| Ireland                                | 17   | 25                     | 43  | 30                     | 39                      | 28                | 8                                   | 6               | 48                     | 93                     | 20                      |
| Austria                                | 21   | 106                    | 47  | 17                     | 26                      | 59                | 36                                  | 74              | 1                      | 6                      | 18                      |
| Poland                                 | 25   | 85                     | 52  | 49                     | 41                      | 19                | 49                                  | 58              | 1                      | 55                     | 32                      |
| Italy                                  | 45   | 50                     | 86  | 59                     | 24                      | 97                | 36                                  | 137             | 1                      | 111                    | 23                      |
| Ukraine                                | 83   | 30                     | 140   | 137                    | 61                      | 19                | 88                                  | 107             | 109                    | 98                     | 141                     |

The leaders of Trading Across Borders are Austria, Denmark, Italy, Poland. To illustrate: in Poland the total time to export (document

compliance) does not exceed1 hour, in comparison to Ukraine where this procedure takes you up to 96 hours (table 3).

Table 3. The Indicator of the Trading Across Borders of Ukraine in comparison to the EU countries [11]

| Indicator                                 | Austria | Denmark | Italy | Poland | Ukraine | OECD high income | Europe &<br>Central<br>Asia |
|---|---------|---------|-------|--------|---------|------------------|-----------------------------|
| Time to export: Border compliance (hours) | 0       | 0       | 0     | 0      | 26      | 15               | 28                          |
| Cost to export: Border compliance (USD)   | 0       | 0       | 0     | 0      | 75      | 160              | 219                         |
| Time to export: Doc. compliance (hours)   |         | 1       | 1     | 1      | 96      | 5                | 31                          |
| Cost to export: Doc. compliance (USD)     | 0       | 0       | 0     | 0      | 292     | 36               | 144                         |
| Time to import: Border compliance (hours) | 0       | 0       | 0     | 0      | 52      | 9                | 23                          |
| Cost to import: Border compliance (USD)   | 0       | 0       | 0     | 0      | 100     | 123              | 202                         |
| Time to import: Doc. compliance (hours)   |         | 1       | 1     | 1      | 168     | 4                | 27                          |
| Cost to import: Doc. compliance (USD)     | 0       | 0       | 0     | 0      | 292     | 25               | 108                         |

So the digital economy requires a strong analog foundation, consisting of regulations that

create a vibrant business climate and let firms leverage digital technologies to compete and

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innovate; skills that allow workers, entrepreneurs, and public servants to seize

opportunities in the digital world; and accountable institutions that use the internet to empower citizens.

In the context of Ukraine's European aspirations special importance is the study of design and effective functioning government. I should add that the EU egovernment is an effective tool for modernizing public administration, allowing you to maintain coordination and cooperation between Member States. For example, during 2011-2015. The Implementation of e-governance in the EU facilitates coordination of national e-government policies and shares the best practices between countries (e.g., the development of technological systems in public utilities) and frees cross-border digital public services contributed to increased competitiveness and has the EU more attractive for investment. The European Action Plan for building e-government in 2016-2020 years was developed in accordance with the adopted in 2016 in the EU Strategy digital single market. Its aims are to eliminate existing digital barriers to the digital single market and prevent further fragmentation, which arise in the context of modernization of public administrations.

Thus, the plan sets out the principles for the Single EU digital market and will be a catalyst for the coordination of efforts to modernize the public sector and resources in the field of egovernment. The Action Plan doesn't have a dedicated budget or funding instrument; it will however help to coordinate funding sources and accompanying measures that are available to Member States through different EU programs. The plan stipulates that by 2020 public authorities and public institutions in the EU must comply with the principles of transparency and efficiency, and innovative approaches are used to develop and provide better services to meet the needs and demands of citizens and businesses.

The main principles are:

**Digital by Default**: public administrations should deliver services digitally (including machine readable information) as the preferred option (while still keeping other channels open for those who are disconnected by choice or necessity). In addition, public services should be delivered through a single contact point or a one-stop-shop and via different channels.

Once only principle: public administrations should ensure that citizens and businesses supply the same information only once to a public administration. Public administration offices take action if permitted to internally reuse this data, in due respect of data protection rules, so that no additional burden falls on citizens and businesses.

**Inclusiveness and accessibility:** public administrations should design digital public services that are inclusive by default and cater for different needs such as those of the elderly and people with disabilities.

**Openness & transparency:** public administrations should share information and data between themselves and enable citizens and businesses to access control and correct their own data; enable users to monitor administrative processes that involve them; engage with and open up to stakeholders (such as businesses, researchers and non-profit organizations) in the design and delivery of services.

**Cross-border by default**: public administrations should make relevant digital public services available across borders and prevent further fragmentation to arise, there by facilitating mobility within the Single Market.

Interoperability by default: public services should be designed to work seamlessly across the Single Market and across organizational silos, relying on the free movement of data and digital services in the European Union.

**Trustworthiness & Security**: all initiatives should go beyond the mere compliance with the

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legal framework on personal data protection and privacy, and IT security, by integrating those

elements in the design phase. These are important preconditions for increasing trust in and take-up

of digital services.

Conclusions and further researches directions. It should be concluded that the modern life is becoming more digital, which will lead to future growth expectations of the public for the effectiveness of the administration. It is for further research and study to explore how services working better. Stressing here that it is for future investigations to understand how institutions work and function better for common people that are eager to achieve greater transparency in decision-making. Therefore, government should become more reliable and responsible. In addition, the accessibility and openness of public sector data, compliance with the legal framework for the protection of personal data and privacy could help improve investment climate, which leads to the increased

of level competitiveness, rate of economic growth. Therefore, the sustainable development and creation of a peaceful society require effective and accountable to common people institutions. Improving the quality and efficiency of public services, speeding up and making them provide more convenient and transparent, reducing the time and monetary costs are possible with the introduction of e-governance, which in turn will reduce the administrative burden on businesses and citizens in the process of interaction with the public management. Developing a system of e-government in Ukraine it should taken into account that the basic principles of e-government in the EU, are namely: Digital by Default, Once only principle, Inclusiveness and accessibility, Openness & Cross-border transparency, by Interoperability by default, Trustworthiness & Security. We should continue to explore the institutional prerequisites for economic development.

#### References

- 1. Pocheptsov G.G., Chukut S.A. Ínformatsíyna polítika (2008). Kiiv. [in Ukraine].
- 2. Horbulin V.P., Hrytsiak N.V., SemenchenkoA.I., KarpenkoO. et al. (2014). Elekthrone uryaduvannya. Kiiv. [in Ukraine].
- 3. Babaev V. Novíkova M., Gayduchenko S.Yelektronne uryaduvannya. (2014). Kharkiv. [in Ukraine].
  - 4. Dubov D. Navchalniy posibnik. (2006). Kiiv. [in Ukraine].
  - 5. Klimenko I., Linov V. Tekhnologii yelektronnogo uryaduvannya (2006). [in Ukraine].
- 6. United nations E-government survey 2016: E-Government in Support of Sustainable Development. (2016). New York.
  - 7. The official website of the World Bank. Retrieved from www.worldbank.org
  - 8. The Global Competitiveness Report. (2015). Geneva.
  - 9. Corruption Perceptions Index 2015. transparency.org. Retrieved from http://transparency.org
  - 10. Human Capital Report 2016. (2015). Geneva.
  - 11. Doing business 2016: Measuring Regulatory Quality and Efficiency. (2015). Washington.
  - 12. World Development Report 2016: Digital Dividends (2016). Washington.

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#### ВДОСКОНАЛЕННЯ ЕЛЕКТРОННОГО УРЯДУВАННЯ ЯК ОДНА З ПЕРЕДУМОВ ЕКОНОМІЧНОГО РОЗВИТКУ

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Порівняння ключових показників функціонування електронного уряду в Україні та країнах ЄС доводить, що країни які мають добре функціонуючу систему електронного урядування мають вищі показники економічного розвитку. Удосконалення електронного уряду сприяє підвищенню рівня якості та ефективності державних послуг, скороченню витрат та зниженню навантаження на бізнес та громадян в процесі взаємодії з органами публічної влади. Удосконаленню системи електронного урядування в Україні може сприяти вивчення та використання досвіду країн ЄС, зокрема, врахування при розробці нормативно-правових актів основних принципів розвитку електронного уряду в ЄС.

**Ключові слова:** електронне урядування, публічне управління, адміністративні послуги, трансакційні витрати,  $\mathcal{E}C$ , постіндустріальне суспільство, інформація, економічний розвиток, сталий розвиток.

#### СОВЕРШЕНСТВОВАНИЕ ЭЛЕКТРОННОГО УПРАВЛЕНИЕ КАК ОДНА ИЗ ПРЕДПОСЫЛОК ЭКОНОМИЧЕСКОГО РАЗВИТИЯ

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Сравнение ключевых показателей функционирования электронного правительства в Украине и странах ЕС показывает, что страны которые имеют хорошо функционирующую систему электронного управления имеют более высокие показатели экономического развития. Также развитие электронного правительства способствует повышению уровня качества и эффективности государственных услуг, сокращению затрат и снижению нагрузки на бизнес и граждан в процессе взаимодействия с органами публичной власти. Совершенствованию системы е-правительства в Украине может способствовать изучение и использование опыта стран ЕС, в частности, учета при разработке нормативно-правовых актов основных принципов развития электронного правительства в ЕС.

**Ключевые слова:** электронное управление, публичное управление, административные услуги, трансакционные издержки, EC, постиндустриальное общество, информация, экономическое развитие, устойчивое развитие.