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FACULTY OF COMPUTER SCIENCE AND CYBERNETICS)  
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**DIGITAL COMPETENCE IN E-GOVERNANCE EDUCATION: A SURVEY STUDY**

Factors of social change culminate in the development of the so-called networked society. Subsequently, networked society calls for networked governance. The development of e-government in Ukraine is impossible without appropriate training of relevant qualified professionals. Based on e-governance the activity profile a survey was conducted among the stakeholders of electronic government institutions – in-service government officials and students of government management programs.

The paper objective is to assess the survey as to the needs and possible avenues of E-governance curriculum development for higher educational institutions, in-service government officials and general public. The Master's Program in E-government, developed within the framework of a Ukraine-Estonia joint project on e-governance curriculum implementation, will promote the state policy in the field of information, e-governance, development and use of national electronic information resources, elaboration of the information society.

Based on the activity profile (e-governance) a survey was conducted among the stakeholders of electronic government institutions – in-service government officials and students of government management programs. The survey comprised of 13 questions total (multiple choice and scoring), divided into such categories: 1) questions on overall experiences in e-government; 2) questions on the needs and modes of e-government education; 3) questions on e-democracy as a social framework (to be disclosed fully in the upcoming studies). 70 respondents total took part in the survey.

Group 1 of survey questions - *overall experiences in e-government* - yielded the following results across the board. The prevailing understanding of e-governance by stake-holders (Figure 1) is disclosed by the such top scoring concepts: 1) Round the clock access to information and e-services (35,7%); ICT implementation for interaction of state and community (22,9%); 3) ICT technologies use for corruption surveillance (20%).

Group 2 of survey questions - *the needs and modes of e-government education* - yielded the following results across the board. The educational formats (Figure 5), efficient or sought after in the area of governance digitization is distributed as such: one-off trainings and workshops (40%); persistent online courses (34,3%); webinars (22,9%).

When asked to assess the knowledge needed or lacking to use digital technologies (Figure 7), in-service and in-training governance stakeholders identified the following top scoring priorities: Digital services development (67,1); Digital data

bases operation (60%); Digital literacy and digital skills (58,6%); Digital workplace tools proficiency (48,6); Re-engineering of government services (44,3%).

Digital competences, mandatory for any modern in-service government official (Figure 8) were assessed by respondents according to the following ranking: Digital transformations management (50%); Electronic democracy and social engagement (41,4%); Cybersecurity basics (41,4%); Terminology mastery in the realm of digital governance (34,3%)

The evaluated educational components, skills and practices provide a groundwork for the estimated structure of E-governance education curriculum project.

Survey results in the area of digital competence and structures of knowledge, sought after or in demand by e-governance stakeholders in specialized education, correspond directly to the comprehensive frameworks of digital competences, elaborated and tested in the recent decade.

The survey results corroborate the informed decisions behind elaboration and implementation of a comprehensive curriculum project of an integrated E-governance Master's program.

In the framework of globalization, information society development and social strife against corruption in government, traditional methods of interaction of state and local government with citizens and business become less sufficient. To avoid the emergence of corruption components and to create new and more convenient methods of access to information and services, the state is implementing e-governance - a form of government which provides a new level of open cooperation between the state and society, due to the widespread use of modern ICT, supplying a full range of public services for all categories of citizens and enterprises. The use of new ICT in public government determines the need for training highly qualified specialists in the field of public administration and management, in possession of the ultimate, up to date ICT skills.

Borys Grinchenko Kyiv University proposes a master's program of e-government under the auspices of the Ministry of Education of Estonia and in collaboration with the Tallinn University of Technology.

The curriculum project outline presupposes 4 stages of implementation: 1) Resources accumulation; 2) Theoretical premise of teaching e-democracy development; 3) Teaching e-democracy development methodology development; 4) E-democracy and e-governance studies dissemination.

E-governance curriculum development project corresponds fully to the National standard of e-government implementation in Ukraine. The 8th Framework project of European Commission Horizon 2020 academic collaboration incorporates a specific creed of Europe in the Changing World studies, which unfolds into a range of problematic issues open for project studies and development, including Understanding Europe - Promoting The European Public and Cultural Space, including civil society development as an operative foundation for e-democracy elaboration. E-governance comprehensive curriculum development is also in keeping with key priorities of the 9th Framework project of European Commission Horizon Europe.