

The impact of the ICT on public administration in Europe

Sabie Oana Matilda

Bucharest University of Economic Studies, Bucharest, Romania

Armenia Androniceanu, Bucharest University of Economic Studies, Bucharest, Romania

Irina Georgescu, Bucharest University of Economic Studies, Bucharest, Romania

Abstract: One of the objectives of the European institutions and the EU member states is the accelerated integration of ICT in the social and economic systems in order to build a competitive Europe based on a digitized economy and administration. The priorities of the European Regional Development Fund (ERDF) for the period 2021 – 2027 are based on an increased ICT investment to adapt European states to the digital age – one of the objectives pursued by the Commission. An information system is an organized combination of human resources, equipment, application programs, communication networks, data, policies, and procedures, which accumulate, process, and disseminate information in a public administration institution. Our research aim is to discover the impact of new information systems and communication technologies on the public administrations of EU states and European citizens, who need efficient, quality, and smart public services. For this research, we have identified 10 specific variables in the EUROSTAT database, so that our research has relevance and representativeness in the EU space. The Principal Component Analysis (PCA) was used to identify the main correlations and the intensity of the ICT impact on the administrations of the EU states and on the public services offered to European citizens as well. The analysis in main components is a statistical analysis tool, which helps us to compare the stage of ITC integration in the public administrations of the EU states. It also helps us verify the research hypotheses and identify the intensity of the impact of the variables included in the research. The PCA revealed that 77.05% of the variation in the original data can be captured in two linear combinations. The first direction accounts for 64.43% of the variance, while the second direction captures 12.62% of the variance. After the Varimax rotation, the first principal component is positively determined by the government effectiveness index, online service index, e-government development index, employed ICT specialists (% of total), internet use, connectivity, integration of digital technology, digital public services, and digital economy and society index. The second PC is positively dominated by government expenses. The results of the research contribute to the formation of a clear and coherent updated image regarding the impact of ICT on the administrations of the EU states in recent years. These results can be of interest both for researchers as they contribute to the development of the field of knowledge, as well as for the administrations of the EU states and for the European institutions in their joint effort to support the digitization of the state administrations in order to be able to offer efficient, sustainable and quality public services for all citizens of the member states.