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Research Article

A COMPARATIVE ANALYSIS OF E-GOVERNMENT SERVICES OF CROTIA, POLAND AND TURKEY

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─Abstract ─

This study aims to examine and compare the electronic government (e-government) services of Croatia, Poland and Turkey. In this study, e-government of three countries were examined with comparative case study method. A comparative case study conducted with using United Nation's E-Government Survey 2018, academic studies, researches, reports, legal regulations and

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statistics. The e- Governments of the countries were examined under five headings. These were e-governments' analysis, historical developments, legal regulations, services on the systems, users' profiles, satisfaction surveys of the service. Firstly, the historical process of e-governments for each country was explained. Then, historical developments of e-government were explained for each country. The legal arrangements of the countries were identified. User profiles and services the countries provide were compared. As the final heading, it was inquired whether there was any satisfaction survey conducted by the countries. In the conclusion part, there will be suggestions based on the differences in e-governments of the countries.

Key Words: *E-government, Comparative analysis, Croatia, Poland, Turkey*

JEL Classification: M15, H11, O38

1. INTRODUCTION

Developments in communication and information technologies and commercial relations almost all kinds of activities have been moved to the public services throughout the electronic environment. In particular, the Internet has virtually reduced the costs of access the information, and eliminated the dependence of time and place. E-government is a generic term for web-based services from agencies of local, state and federal governments. In e-government, the government uses information technology and particularly the Internet to support government operations, engage citizens, and provide government services.

The e-government services emerged in the late 1990´s as a context within which to share experiences among practitioners but the history of computing in government organizations can be traced back to the beginnings of computer history. A literature on "IT in government" goes back at least to the 1970s (Danziger and Andersen, 2002; Boughzala, Janssen and Assar, 2015). Over the past few years e-government gave rise to several conferences with more and more scientific content.

This study aims to examine and compare the e-government services of Croatia, Turkey and Poland. In this study, e-government of three countries were examined with comparative case study method. The e-governments of the countries were examined under five headings which are given below:

- E-government historical development analysis
- E-government legal regulations
- E-government services offered by countries
- Characteristics of e-government users

- Users and satisfaction surveys on e-government

These headings have been examined with research articles, review articles, written materials, government publications, newspapers, world reports in order to support their viewpoint or argument of an academic study. In conclusion, it is expected to compare and suggest improvements for e-governments in examined countries.

2. LITERATURE REVIEW

In this part, e-government comparisons are presented to understand the topic more comprehensibly. Also, other studies on e-government comparison are used to feed the heading. Chen et al. (2006) examined the e-government strategies of developed and developing countries. As a result of the study, they proposed conceptual framework for identifying critical success factors for countries' e-states. They have demonstrated how successful the conceptual framework is, with a case study on USA and China. Matei and Savulescu (2011), the e-government status and ICT development levels of 11 Balkan countries. They used the results of the United Nation's e-government survey reports in 2010, which is conducted every two years. Croatia, Poland and Turkey were the samples from the study. As a result of the study, it has been pointed out that the e-government activities of the countries have increased when compared to 2008 and have started to become compatible with the European standards. In another study, Zefferer (2011) compared countries in terms of e-services defined in seven European countries: Estonia, Germany, Netherlands, Spain, Austria, Turkey and the United Kingdom. In the European Commission’s e-government benchmarks define life events; Electronic ID, qualified electronic signature, tax systems, births, social security benefits, certificates, residence and re-location, setting up a company. As a result of the study, it was reported that only the Estonian service was offering these eight services to its citizens. In a study by Alshomrani (2011), the USA and Saudi Arabia e-government indicators were compared. In the study, e-government reports published by UN, USA and Saudi Arabia were taken into consideration. E-government portals and different research results were used for documentary research in the frame of this study. Another comparison study by Jonathon, Ayo and Misra, Nigeria and Republic of Korea were compared in 2015. In this study, researchers used four UN E-government Surveys published between 2008- 2014. As a result of the study, the researchers emphasized that Nigeria could develop its e-government trough cooperation with the Republic of Korea.

As a result of the literature review, it has been observed that there are few studies comparing different countries. In the studies, the countries with high E-government Development Index (EGDI) are compared with the countries with low EGDI index. According to the UN E-Government Development Survey published in 2018, the E-Government Development Index (Turkey's EGDI = 0.71, Croatia's EGDI = 0.70, Poland's EGDI = 0.79) and the E-Participation Indices (EPART), respectively, it was carried out between Croatia and Poland 0.77, 0.86 and 0.89 of the three countries. In this way, the differences between the three countries will be presented and suggestions will be made for both countries (United Nation, 2019).

2. RESEARCH METHODOLOGY

In this study, comparative case study method was used to analyze the current status of the samples. Turkey's e-government data was taken and compared with Croatia's e-government and Poland's e-government.

2.1. Data Collection

The data of this study were collected from different data sources. Researchers in Croatia, Poland and Turkey have studied e-government portals. In addition, academic studies, researches, reports, legal regulations and statistics on e-government were examined in these countries. Besides above-mentioned United Nations E-government Survey 2016 and 2018 were examined in detail for the three countries being investigated (United Nations, 2019).

2.2. Data Analysis

In this part, data according to the UN E-Government Survey published in 2018 were examined for Croatia, Poland and Turkey to better understand the current status. The United Nation E-government Survey was first published in 2003 then 2004, 2005 and 2008. Since 2008, it has been conducted and published every two years. In this study, the results of the last two surveys of 2016 and 2018 were taken into consideration.

According to the UN E-Government Survey published in 2018, Turkey was analyzed in Asian continent, while Croatia and Poland were analyzed as being in the European continent. Income levels were in the upper middle-income range for both countries. According to the 2018 EDGI report, Turkey was 53th, Poland was 33rd and Croatia was 55th out of 193 ranked countries. Compared with 2016, the report showed progress in both EDGI and Turkey were the EPART index has managed to move to the top. Poland was 36th in 2016 and in 2018, it was 33rd.

Croatia showed a decline in both indices compared to the 2016 rankings and ranked lower in 2018 than in 2016 (United Nations, 2019).

The EGDI score is computed by using online service index (OSI), technology infrastructure index (TII) and human development index (HDI). As mentioned above, although Croatia's EDGI and Turkey's EDGI values are very close, when HDI value TIU (Turkey TIU = 72.8, HDI = 0.79; Croatia TIU = 76.8, HDI = 76.8) examined, Croatia's score is higher than Turkey's score with more top rankings It is also noteworthy. This difference is due to OSI difference.

3. FINDINGS

In this part, detailed information on e-government services in Croatia, Poland and Turkey will be presented. Firstly, the historical development of e-government will be examined. After giving detailed information about the legal regulations that the countries have started to use for e-government, e-governments' structures in these countries have been determined. This study draws attention to the services that countries offer to their citizens. In the last part, the e-government status of the countries, user profiles and satisfaction survey about the e-government or other studies will be mentioned.

3.1. E-government Historical Development Analyses for Croatia, Poland and Turkey

Croatia started with the implementation of e-government services in 2003 when Government founded Central state office for e-Croatia (Središnji državni ured za e-Hrvatsku). Their task was promotion and systematic building and improvement of information communication infrastructure in Republic of Croatia, public access to the internet services and content and development of the application of information and communication technologies and electronic administration systems. This office stopped with work in 2011 when their tasks and obligations were transferred to the Ministry of Public Administration of the Republic of Croatia and their department for e-Croatia. During the development of e-government in Croatia, Government created two strategies. First one was Strategy for development of electronic administration in the Republic of Croatia for the period from 2009 to 2012 (MINGO, 2009) and the second one was Strategy for e-Croatia 2020 (Ministry of Public Administration, 2017). The responsible body for e-government in Croatia is the Ministry of Public Administration of the Republic of Croatia and their department for e-Croatia.

In Poland, the first mentions in Poland about e-government in Europe began with a report published in 1994. It showed the directions of development of the global

information society in Europe. Since then, the e-government concept, as a component part of e-Europe, has been permanently involved in the issues raised in the Union. In Poland, the Scientific Research Committee developed a document based on seven expert opinions in 2000. Today, the material is known as the official document of the Committee for Scientific Research and the Ministry of Communications "Goals and directions of development of the information society in Poland". In 2000, the parliament also adopted a resolution to build an information society, and then in 2001 passed a law important for the development of e-government: introducing the Public Information Bulletin, the Act on Access to Public Information and the law on electronic signature regulating the e-signature. Containing an action plan for the development of the information society in Poland, which was modeled on the European e-Europe development plan. This document was updated in 2002. The next version of this strategy was called e- Polska 2006. The adoption of this document resulted in the Committee for Scientific Research preparing the initial concept of the Polish Gateway project (central IT system whose task was to provide administrative services for citizens and business entities via e-mail) and the Strategy for Informatization of the Republic of Poland.

The development of e-government in Turkey starts with some of the public institutions' web page creation, inspired by the private sector e-commerce services. Since the late 1990s, the e-government services in Turkey has been seen more planned and discussed on it. Due to the investments made in IT infrastructure, computer and internet usage increased and some government institutions started to provide their services in electronic environment. E-government, opened on 18 December 2008 is an important turn for Turkey on the transition to be a knowledge society. E-government studies the historical development of Turkey has been examined as follows: Information and Economic Modernization Report (1993), Turkey's National Information Infrastructure Master Plan (TUENA) Training (1996-1999), E-Commerce Coordination Board (1998-2002), Public-Net Supreme Council and Public-Net Technical Committee (1998-2002), E-Turkey Initiative (2001), E-Transformation Turkey Project (2003), Information Society Strategy (2006-2010), Vision 2023 and 2016-2019 National E-government Strategy and Action Plan (Afyonluoglu, 2018).

3.2. E-government Legal Regulations of Countries

E-government in the Republic of Croatia is regulated by one law and two decrees. Croatia brought Law on the State Information Infrastructure (Official Gazette, 2014a). This Law establishes the rights, obligations and responsibilities of

competent public sector bodies regarding the establishment, development and management of the state information infrastructure system, the establishment and management of the system of public registers and the conditions that the state information infrastructure must provide in relation to public registers, as well as the use of a common base for secure data exchange within the state information infrastructure system, a common identification and authentication system, a unique point of interaction with citizens and other users. Two Decrees are (i) Decree on the Establishment of the Public Register for Coordination of Projects on the State Information Infrastructure (Official Gazette, 2014b) and (ii) Decree on organizational and technical standards for connecting to government information infrastructure (Official Gazette, 2017). First Decree establishes a Public Register for the Coordination of State Information Infrastructure Building Projects (ProDII Register) and regulates its content, form, and manner of management. The purpose of the Registry ProDII is to rationalize, direct the development and coordination of all jobs and projects of the application of state information infrastructure while at the same time increasing the quality of public services and disabling the planning and implementation of similar or similar public sector projects. The second Decree prescribes organizational and technical standards for linking the state information infrastructure, conditions, and activities necessary for the launch, implementation, development, monitoring, and maintenance of projects related to the state information infrastructure, management, development and other elements necessary for the operation of the state information infrastructure. It also regulates the way of linking e-services to the central government portal system, to the national identification and authentication system (NIAS) and to the customer's mailbox.

In Poland, an important aspect that concerns e-administration are legal and organizational grounds, this concerns development at both European and national and regional level. Poland's accession to the European Union has forced Poland to comply with European requirements. However, European standards are rare in the field of e-government. Issues related to administrative cooperation are among the EU's supporting competences, so EU actions are mainly supportive and complementary. One of the most important acts in the field of e-administration was Directive 2003/98 / EC of the European Parliament and of the Council of November 17, 2003 on the re-use of public sector information. The national legal basis for the creation of e-administration was the resolution of the Sejm of the Republic of Poland of July 14, 2000 on building an information society. First legal basis of e-Administrations was announced in 1990 that was about commune self-government. Traffic law in 1997 and e-signature and allowance to access

public information in 2001 started. The Act of February 17, 2005 on computerization of entities performing public tasks and Regulation of the Council of Ministers of 12 April 2012 on the National Interoperability Framework, minimum requirements for public registers and information exchange in electronic form and minimum requirements for ICT systems were announced.

There has been published some changes, directives and regulations that concern e-government directly or indirectly in the law in Turkey within past 10 years. The current legislation in the frame of e-government is from the Ministry of Transport, Maritime Affairs and Communications: The Regulation on Principles and Procedures for the Execution of the E-government Services. The purpose of this regulation is to determine the procedures and principles regarding the scope and execution of e-government services within the framework of information society policies, targets and strategies, to carry out action plans related to these services, to carry out coordination and monitoring activities.

3.3. E-government Services Offered by Countries

Current e-government services in Croatia can be divided into services for business (G2B) and services to citizens (G2C). The most common services in e-government for business include E-Customs, E-tax office, health and pension insurance, e-visitor and e-agriculture. G2C e-government services are available through e-građanin (e-citizens) portal–www.e-gradanin.hr. The Croatian Government adopted the Decision Launching the e-Citizens Project (Official Gazette, 2013**),** which enabled to access to public information and information on public services in one place, secure access to personal data and electronic communication between citizens and the public sector. In the second group, there are 54 different e-government services for citizens which are divided into 10 different areas (state and security, family and life, education, traffic and vehicles, active citizenship, finance and taxes, health, working, business and living and environment).

Polish citizens can use several hundred public e-services located on various platforms and government portals. These include, among others: The Electronic Platform of Public Administration Services (ePUAP), the Platform of Electronic Services of the Social Insurance Institution (PUE ZUS), the portal obywatel.gov.pl, the portal biznes.gov.pl. Currently, the Portal of the Republic of Poland (Portal RP) is being created - gov.pl, which will ultimately be the gateway to all public information and e-services. It will integrate websites of ministries, central offices and provincial offices and facilitate access to digital services that the state offers to its citizens. The administration provides, modernizes and builds

new e-services that allow people to settle official matters from any place and at any time without having to leave their home. Public services can be used by anyone who can confirm their identity on the internet, for example; using a trusted profile (eGO). A trusted profile is also a free tool that serves as an electronic signature in communication with the public administration. Launching e-services on different portals is usually preceded by the process of logging into the system. After integration of thematic portals with the Portal of the Republic of Poland, the gov.pl electronic account will be the key to all digital administration services.
Currently, the portal gov.pl offers services located on the obywatel.gov.pl and biznes.gov.pl websites that biznes.gov.pl informs how to set up and run your own company and allows you to complete the necessary paperwork online. It is a source of information for people who run a business or plan to start it and obywatel.gov.pl informs how to handle popular official matters.

There are some other web sites for various recipients such as Central Register and Information on Economic Activity (CEIDG) which allows entrepreneurs to register their businesses, ekw.ms.gov.pl allows companies to make changes in their files, data, partners, etc. Also, for finance, there is finance.mf.gov.pl where people can follow their taxes or returns. Similar to this service, there is PUESC (Platform of Electronic Tax and Custom Services). PUESC is the e-service of the National Tax Administration in the scope of servicing and controlling trade in goods with third counties and trading in excise goods. For citizens' insurances, Polish government has opened a web site addressed to ekrus.gov.pl where citizens can check their current insurances. Ufg.pl stands for Insurance Fund's Guarantee and helps citizens to check the OC insurance of the perpetrator of the accident, the number of the damage, receive information about the course of the third-party liability insurance, the history of transport damages. Praca.gov.pl is a web site used by unemployed people, job seekers etc. to get a job. About healthcare, Platform for Electronic Services of the Social Insurance Institution (PUE ZUS) is in use. In addition to PUE ZUS, Integrated Patient Information Guide provides data collected by the National Health Fund. In ZIP, you can access information such as on the subject of your treatment and benefits, reimbursed medicines, your place on the list waiting for medical advice or admission to the hospital.

Services provided to citizens through e-government in Turkey can be broadly categorized integrated electronic services, information services, payment transactions and short cuts to institutions and organizations. The most used services on e-government of Turkey are Social Security Institution, Ministry of Justice and Revenue Administration. Through Turkey e-government, the most successful public institution is the Undersecretaries of Maritime Affairs (98 %),

then Social Security Institution (31 %), the Ministry of Communication (29 %). On the other hand, mobile line, traffic summons, e-payroll, weather forecast, title deed information, daily exchange rates, student documents, domestic voter registration and IMEI inquiry services were among the most beneficiary services of the citizens in 2018.

3.4. Characteristics of E-government Users of Countries

When Croatia is examined, the total number of companies using different e-government services for them is not available, but it can be stated that most of the companies are using services due to the different obligations regarding different services. Services can be accessed also with mobile phones so presumably the number is the same as the number of citizens who are accessing e-government services using computers. Regarding companies, mobile access to the e-government is mostly used for information purposes due to safety issues.

In Poland, e-administration services should be tailored to the client's needs. Customer orientation is possible with the co-existence of personal contacts and access to various devices, such as: internet, information kiosk, TV, mobile phone with WAP. A study named "E-administration in the eyes of Internet users 2014" carried out by ARC Rynek Opinia commissioned by the Ministry of Administration and Digitization (MAC) on a sample of 4848 Internet users showed that 78% of this group often sought address and contact data on the websites of public institutions, and 68% were looking for information on how to settle the matter. The difference between these results and previously presented indicators from the GUS survey seems to be large and comes from the research of other populations that in the GUS study covered persons aged 16-74. On the other hand in the MAC survey included people using the internet in the age of 18 and above. It is obvious that people aged 16-18 rarely have the need to enter into relations with the public administration, so they underestimate the result in the entire population in the study of the Central Statistical Office. Discrepancies also arise from a different way of formulating questions and are the effect of limiting the GUS research only to private matters. In 2014, over half of the respondents often downloaded or filled out forms on websites, and about 30% read the reports or statistical data, as well as submitted their own opinions on various issues. Only 10% of internet users declared that they never downloaded or filled out official forms. An attempt to use e-administration is less frequently undertaken by people

with lower education (26%) than with higher education (59%), aged 18-24 than 55 and older (59%), rural residents (46%) than over 100,000 cities (58%). It is worth noting that among all age groups, Internet users aged 55+ are the most likely to obtain electronic administration services.

In Turkey, there is www.turkiye.gov.tr where people can use the services provided by the government. It is the one and only web-site for the citizens and citizens can reach by a single authentication. In order to ensure that all users benefit from these technologies at the same rate, the e-government also includes works to ensure the accessibility and availability of disabled citizens in technical, design and content issues. E-government started with 22 services but now it reached 3121 services. The number of e-government users exceeded 37 million and increased by 112% in the last 5 years. E-government service requirement has been reduced to the age of 15 and 1 out of every 3 persons over 15 years of age is currently using e-government service. The objectives are to provide e-government services more than 60% of the population in the short term. While the mobile e-government application provides 1350 separate public services to the users. Nearly 3 million hearing impaired people live in Turkey. To make disabled people benefit from the e-government services in Turkey, "No Barriers to the e-government Project" was launched. In addition, the sign language in the frame of Frequently Asked Questions on the e-government has been created and made available. There are also options for visually impaired users to enlarge the site's font size and access a simple website. For Croatia and Poland, there is not any project like the one in Turkey. This project can be a step to reach all the disabled citizens (Kose, 2019; Turkey E-Government Portal, 2019).

3.5. Users and Satisfaction Surveys on E-government in Countries

When the surveys made on e-government in Croatia searched, it has seen that there was one survey in 2014/2015 about satisfaction with e-građanin services and what citizens would like to have in the future within e-government. Ministry of Public Administration conducted this survey (Vrbanus, 2016). According to the results published on the pages of the mentioned ministry, the areas of greatest interest are citizens' finances, taxes, and health. Following are the areas of legal state and security, education and work, labor, consumer rights, traffic and vehicles, business, family and life, active citizenship and leisure, housing and the environment, veterans and tourism, and culture. With the immediate involvement of the public concerned, the Ministry of Administration has gained insight into the e-government Internet users' views in the Republic of Croatia, apart from information on what e-services the Internet users expect from the public

administration. The services that users have achieved through the Internet have also been identified, their quality is estimated and obstacles in their use are identified. Besides this survey, there is no further information or any other studies regarding quality and satisfaction with the e-government services in Croatia.

In community research of the information society (conducted in Poland by the Central Statistical Office), e-administration is the subject of research both from the point of view of the society and enterprises. Consider three types of activities that reflect the advancement of administration services: search for information on office websites, download office forms, send completed governmental forms or fill them online. The Ministry of Digitization monitors the state of e-government satisfaction. 4800 Internet users took part in the study "E-administration in the eyes of Internet users 2016" on the perception of electronic public services. Among the users of e-administration, three types can be distinguished. In the group of people with practice in dealing with official matters via the Internet, we have active users (25%) and unconverted (29%). The rest is inexperienced (46%) who have not used online public services so far. The vast majority of activities dealt with positively via the Internet (90%). As much as 98% announce that he will use e-government services in the future. Only 28% of exceptions prefer to do business over the internet, while the majority (56%) choose a personal contact. This group, much less often than in the previous one, positively assesses the method of providing e-government services (53%). The worse experience can be influenced by the experience of unblemished Internet users: nearly half of them (47%) settled their case only partially, and 18% without success. In the every segment, as many as ¾ respondents are in favor of personal contact with the office in order to settle the matter. Despite this, 59% declare that in the future they will definitely or probably use the Internet for this purpose.

According to the survey's result done by Turkish Statistical Institute (TSI) in 2015, individuals' usage of e-government services rate was 53.2% in Turkey. According to another survey in the same year, Turkish Statistical Institute found that the rate of usage of e-government services in the private sector was 81.4%. In another study that was done in 2014, the satisfaction rate of public services provided by e-government was 88.7%. When examining the ways of being in touch with public institutions and organizations, getting information is taking the first place with the rate 93.7%. While to download the official forms or documents (86.4%) takes the second place, form filling or filled form submission (71.9%) is in the third place. In the fourth place, bidding activities for public tenders in electronic environment are 7.1%. A study done by Osman et al. in

2019, users show that e-services are attracting highly educated citizen with a cumulative of 51.6% for graduate and postgraduate degree holders (Osman, Anouze, Irani et al., 2019). In addition, there is no regular e-government user satisfaction surveys in Turkey (TSI, 2015).

4. CONCLUSION

E-government has emerged in late 1990s as a result of IT development and has been developing rapidly ever since. Together with emergence of e-government different researchers conducted many studies in order to evaluate current development phase and influence of use on companies and citizens.

E-government is a platform that provides public services from a single portal and provides secure and efficient access for its users. Croatia started its e-government in 2003 for advertising purposes and created a more comprehensive system in 2011. On the other side, Poland first referred to the word “e-government” in a report published in 1994. In this case, it is seen that Poland started e-government before Croatia which is the other EU country. In addition, Poland began full integration as a system in 2000. Poland has started e-government earlier than Croatia for about 11 years. However, Poland still lags behind the European Union in terms of providing public administration services on the Internet. The development of e-government is a great opportunity for the country's economic development. Building an information society is an important condition, stimulating the growth of competitiveness of the economy, Poland's integration with the EU structures as well as the implementation of a coherent regional policy, the development of the growing unused workforce and the development of many other areas of social life. Most of the social and economic problems are solved with the help of information techniques. The technological revolution is not enough to bring socio-economic progress in the globalization era, which is why close international cooperation is needed, legal regulations conducive to the free exchange of goods and services. What is needed above all is the involvement of human capital in public administration to make changes. One of the main problems is the lack of data exchange standards. Poland intensively implements activities related to standardization aiming at the cooperation of systems, openness of the market, products and services, increasing the level of information security as well as the confidence of the Polish society in e-services. Therefore, the attitude of Poles to use online services must change. Research shows that Poles believe that it is better and safer to settle the matter in the office than through the offered e-government solutions. The fight against digital and IT exclusion of society becomes the key to this. On the other side, Turkey is the

earliest in running e-government and it is a fact that Turkey was affected by other counties. In the late 1990's, Turkish Government opened an "e" version online. In 2008, it began to make the e-government site more comprehensive which meant the number of services provided by the government has increased. Although it is one and the only way not going to institutions and do citizens' works through a device connected to internet, it has got lack of control. In Turkey, there is not a strong structure to direct and coordinate the works. Croatia and Poland have the same problem. To ensure the whole system and make it work properly and under control, there should be an auditor. E-government needs a legal framework to complete the deficiencies. In Turkey, it is still being processed. In addition, the inequalities (digital divide) must be eliminated. In addition, the governments should measure to increase the digital literacy of society and take steps to reduce the cost of the Internet and free access to public spaces.

Integration works can be given more emphasis between e-government projects and practices carried out by public institutions. Also standards can be developed within the framework of Interoperability principle. In Turkey, all the intuitions and companies haven't integrated to e-government system just like in Croatia and Poland. There can be created by the governments to make it a must. By time, all works in the frame of e-government could be done on the internet. Also, there is no place where citizens can request something from their e-governments. In the frame of requesting, a study found that there was no requesting area, such as request about public services or bank services (Medeni, Erdem, Osman et al., 2011). Concerning the problems, trends, innovations and bringing solutions and suggestions will improve the e-governments of countries.

If it is the era of technology, the systems should be fully supported with internet. Also, it has observed that these 3 countries in the article are not supported with the internet; such as social networks like Instagram, Facebook and etc. From this point of view, e-governments would be offered more customized/specialized services for individuals depending on their data. Turkish personalized e-government, citizen-centric e-government approach basically is set up over idea of using society level knowledge reachable by government for again benefit of each citizen individually services (Medeni, Erdem, Osman et al., 2011). Poland and Croatia can take a step with Turkey for more personalizing the systems.

Based on research results, followings can be proposed further studies about e-government implementation that study about e-government in larger sample and repeat study after period of five years in order to evaluate potential development and influence on users.

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