RESEARCH ARTICLE

European Journal of Development Studies
www.ej-develop.org

Digital Services in Albania

Ermelinda Satka, Fadil Zendeli, and Ervi Kosta

ABSTRACT

Since the 1960s, organizations in the public sector have used new technology to manage their workloads more effectively. The context in which citizens and public employees engage has altered because of digitized public services, changing the location of public meetings from a public official's office to a technological device. This paper aims to identify important aspects of public service digitization that changed our understanding of the interaction between citizens and government. It is a hermeneutic literature review that aims to expand our understanding of how the digitization of public services is developing in Albania. The authors try to explore the relationships between citizens, government agencies, and digital public services, which are those that are offered or mediated by the Internet. As a methodology, secondary data was used, i.e., a thorough review of the literature, including laws, decisions, official reports and documents, scientific articles and studies, books, etc. to provide a comprehensive analysis of the current state of public service digitalization in Albania. In conclusion, during the last 16 years (2005-2021), the use of information technology for the benefit of public service administration innovation has gained particular importance, supported by a framework of policies, plans, regulations, and new institutions. On the other hand, Albania has made notable progress in this area, offering 61% of public services online, through the e-Albania platform. The paper recommendations to improve the infrastructure for inclusiveness in access to services, giving importance not only to individuals with special needs but also to the development of rural areas.

Keywords: Access, Digitalization, E-Albania Platform, E-Government, Public Services.

Published Online: July 10, 2023

ISSN: 2736-660X

DOI: 10.24018/ejdevelop.2023.3.4.285

E. Satka, M.Sc. *
Assistant Lecture, Agricultural University of Tirana, Faculty of Economy and Agribusiness, Department of Rural Tourism Management, Tirana, Albania.
PhD Candidate, South East European University, Faculty of Contemporary Social Sciences, Tetovo, North Macedonia.
(e-mail: es30510@seeu.edu.mk)

F. Zendeli, Prof. Dr.
South East European University, Faculty of Contemporary Social Sciences, Tetovo, North Macedonia
(e-mail: f.zendeli@seeu.edu.mk)

E. Kosta, M.Sc.
Agricultural University of Tirana, Faculty of Economy and Agribusiness, Department of Finance-Accounting, Tirana, Albania
(e-mail: ervikosta10@gmail.com)

Corresponding Author

I. Introduction

Since the 1960s, public sector organizations have tended to adopt new technology to organize their work more effectively and efficiently (Pieterson *et al.*, 2017). The development and use of information and communication technology in today's society has greatly influenced the relationships between institutions, citizens, and the business community by increasing the interaction between them. In the late '90s, public administrations at all levels launched e-government projects aimed at providing electronic information and services to citizens and businesses.

E-government is the use of information and communication technology by public administration to provide more efficient and improved services to citizens, businesses, and other agencies. The main purpose of this practice is to improve the exchange of information and to involve citizens, businesses, and institutions interactively in electronic processes. Advancing the participation of individuals in these processes is important to ensure the harmonization of development policies at the state level and to meet public challenges. *Electronic services* are a form of organization that is assisted by information technology and information systems. This practice requires the development, interaction, and delivery of digital services, and its treatment will be a key topic in this paper. In a very real sense, not all countries are able to achieve the same benefits from sustainable development through the development of e-governance, where the benefits for communities and vulnerable segments of the population have been disproportionate and unequal. The COVID-19 pandemic has further exposed the divisions of e-governance between and within countries at the regional, national, and local levels. On the other hand, digitalization is redefining and transforming the way government's function.

The digitalization of services means replacing manual processes with digital ones to provide faster, easier, and more qualitative services. The Internet and the use of ICT today have become a necessity and a very important aspect of the development of the digitalization of public services in the country. As a result, digitalization today has fundamentally changed the economies of many countries around the world.

Financial services and public services are continuing to digitize in Albania, a developing country that aims to integrate into the European Union. This process brings difficulties and challenges, but the benefits are considerable. Digitalization reduces monetary and bureaucratic costs and increases information, accuracy, and coordination in an ever-growing network. The most important features of this stage of development are high speed and accuracy, increased production, reduced costs, and the growth of the labor market globally.

New opportunities for digitizing public service delivery related to data mining, learning the use of devices and technologies, and service automation have been discussed by researchers and policymakers (Matheus, Janssen, & Maheshwari, 2018; European Commission, 2016). On the other hand, rapid technological development and policymakers' drive towards automation and digital self-service make it imperative for government researchers to understand how digitalization affects the interaction between citizens and public authorities in the context of public service delivery (Layne & Lee, 2001). By reading scientific papers on the selected topic in a systematic and analytical way, the authors have managed to accumulate knowledge and experience to classify the relevant ideas, findings, and contributions related to the selected topic. Through this literature review, we will present a conceptual framework that includes a critical assessment and evaluation of the state of knowledge about the topic. Based on this assessment, problems in established knowledge are identified, and arguments for a research gap are developed. These arguments, in turn, can be used to further develop the study. Based on a critical evaluation of the identified literature, the authors tried to find coherent arguments and identify, in addition to development and problem areas related to the digitization of public services in our country,

The main purpose of this article is to analyze the availability of digital services in Albania and identify the challenges and advantages of this process, referring to various published sources related to the topic. In this way, we aim to provide an overview of current developments in the field of digitalization of public services and e-government in Albania.

The article is important for a number of reasons. First, it contributes to e-government research by presenting a theoretical framework for understanding and discussing how digital public services can influence interactions between citizens and governments. Also, it further contributes to a critical discussion on what the digitalization of public services can bring to society by raising ethical questions and concerns regarding the equality and accountability of citizens and public officials as the delivery of digital public services evolves.

II. Electronic Governance in Albania (e-Governance)

In the field of public administration, e-government" is a concept that implies two categories of its function: the use and application of IT by the administration and governance through IT. E-government is the provision of services by government institutions through information and communication technology (such as the internet and mobile networks) to citizens, businesses, and other categories. E-government is recognized as a driver of good governance, reducing the operational costs of government as well as increasing the ability of citizens and businesses to access public services efficiently and effectively (Heeks, 1999; UN, 2008; UN, 2010).

E-government lies between two global revolutions: the information revolution and the government revolution. Both of these revolutions are changing the way society is governed. Electronic services, as a modern aspect of innovation, are considered an opportunity to provide government information to citizens 24 hours a day. Greater progress towards e-government encompasses a variety of administrations, including e-democracy, e-management, e-commerce, e-justice, e-education, e-health, etc. E-government and IT are considered key elements of initiatives towards the modernization of government and programs, which facilitate the process of simplifying the work of public administration. Achieving the above objectives requires the appropriate legal basis, knowing that the vast majority of laws and other legal acts in the field of administration have their weaknesses; therefore, it is clear that there is a need to change them in accordance with the requirements of the digital age, (Strategy for Electronic Government, 2009-2015; Government of the Republic of Kosovo).

According to the United Nations report (2018), between 2014 and 2018 the proportion of countries providing digital services increased by up to 71%, depending on the type of service. This percentage is expected to increase in the coming years thanks to a global trend for eGovernment initiatives.

A. Legal and Institutional Framework for the Implementation of E-Government

In Albania, access to innovation in public policies began with the digitalization of services closer to citizens. The use of information technology for public service innovation has gained particular importance over the last 16 years (2005-2021), accompanied by a new framework of policies, strategies, laws, and institutions in this regard. During this period, there has been a sustained approach to the digitization of state data, enabling online public administration services, despite the various governments in power.

The process of expanding digitization and the provision of online services was further deepened through new policies for institutional reorganization and the creation of new structures during the governance mandate from 2013–2017 and the current governance mandate from 2017 to the present day.

Initially, an innovative approach was noted in the field of public services related to this approach called "fight against corruption", which accompanied the general campaign of the 2005 parliamentary elections and was dedicated mainly to a new approach in this regard: removing administrative barriers for businesses that were considered a cause of corruption, providing public services through internet access, and increasing transparency (Official Gazette, 2005, p. 1423). This meant the creation of electronic systems, as indicated by the Transparency International index[1]. The innovative public services approach through the digitization of processes and the use of information technologies was supported by the United States to fight corruption within the framework of the initial Millennium Challenge Assessment Program (MCCA1) (Official Gazette, 2006, p. 1838). As a result of this agreement, the reform and modernization of the tax administration, public procurement, and business registration procedures were made possible using information technologies and legal improvements. To follow and implement various policies, projects, and initiatives in this field, the Albanian government established the National Agency for the Information Society (NAIS) with DCM No. 248, dated April 27, 2007, which was initially established as a public state agency under the prime ministership and, in 2012, would pass under the jurisdiction of the Ministry of Innovation and Information and Communication Technology (MITIC). In addition to AKSHI, one of the most important developments in this regard was the creation of the National Registration Center (NRC) in 2007, now known as the National Business Center (NBC), which made it possible to register businesses through a single window or “one stop shop”. Meanwhile, in 2008, the Albanian government signed the second phase of the agreement between the Government of the Republic of Albania and the United States of America, to fight corruption, in the framework of the initial Millennium Challenge Assessment Program (MCCA2)[2](Official Gazette no. 66, 2006, p. 1838).

As a result of the new relations that were created with the citizens' data and their identification online, law no. 9880, dated February 25, 2008, "On electronic signature", No. 9887, dated March 10, 2008, "On the protection of personal data," and No. 9918, dated May 19, 2008, "On electronic communications in the Republic of Albania" established a clearer regulation of this approach and the new relationship of citizens and businesses with public administration and services.

The adoption of laws on electronic signatures, personal data protection, and electronic communications improved the access of citizens and businesses to public administration and services. The Cross-Sector Strategy for the Information Society 2009–2013 aimed to improve the interaction between institutions and citizens by developing a more informed and involved society. Access to public service innovation, the digitalization of administration, and the establishment of the Integrated Public Service Delivery Center (ADISA) were some of the main challenges that were undertaken in Albania after the rotation of political power. ADISA was established to improve and facilitate the lives of citizens through the provision of public services and was supported by donors and international organizations to be as vulnerable as possible to citizens. The UN and the World Bank supported the modernization of public administration in Albania, helping to build a citizen-centric service delivery model. This was accomplished through the "Citizen-centric Public Services" project, which aimed to improve access and efficiency in public administration while combating corruption and fostering a culture of customer care. This project was included in the Cross-Sector Public Administration Reform Strategy (2015–2020) and the Digital Agenda Strategy (2015–2020) (Official Gazette, 2015, p. 2441).

The strategy focuses on providing quality services to citizens and improving their lives. The sustainability of online public services and the creation of a state database have improved the regulatory framework. The COVID-19 pandemic highlighted the importance of innovative policies and e-services. The E-Albania platform is an important tool for providing more than 1,200 online services to Albanian citizens and businesses. According to the US State Department's "Investment Climate 2021" report, by March 2021, 95% of all public services for citizens and businesses would be available online through the portal.

[1] In the Corruption Perception Index (CPI) of 2005, Albania was ranked 126th out of 159 countries with 2.4 points and on a level with Niger and Sierra Leone.
[2] Law no. 10026, dated 11.12.2008, "On the ratification of the Grant Agreement between the Government of the Republic of Albania and the United States of America (USA), of the strategic objective to fight corruption, within the framework of the initial Challenge Assessment Program of the Millennium – MCCP (second phase)".

The platform "E-Albania" had 1.3 million registered users, and 2.2 million requests for exit permits were submitted through the portal. Albania received two awards for positive developments in digitalization and innovation in public administration. AKSHI was honored for the platform "E-Albania" and the transformation of the public administration into an innovative structure.

TABLE I: NUMBER OF REGISTERED USERS ON THE E-ALBANIA PORTAL

Registered on the e-Albania portal	**1,781,700**
Coordination and interconnection of state databases	55 institutions
Electronic seal services	848, 367 tax certificates from businesses 549, 601 generations of vehicle certificates 6,374,424 civil status certificate generation 173,673 Generations of electronically signed extracts 1,348,676 health card generations 18,000 deposits of financial statements 848, 367 tax certificates from businesses

Source: AKSHI, Inc. (2020). Cross-Sector Strategy - Albania's Digital Agenda 2015-2020: Monitoring Report. the Council of Ministers December

The expansion of online services and digital governance requires a sustainable internet infrastructure with broad coverage and fast, reasonable access for all layers of society. According to data from the Electronic and Postal Communications Authority (AKEP, 2021), the internet has penetrated about 60% of Albanian households. Meanwhile, in relation to the total population, broadband internet is estimated to have a penetration rate in the territory of up to 15.6%. Despite the rapid growth in recent years, AKEP estimates that internet service penetration rates are much lower than in the EU and regional countries. It also highlights the difference in internet penetration rates between urban and rural areas. According to AKEP (2021), in urban centers, internet service has reached about 25% of the population, while in rural areas, the rate is much lower, at only 5%. The differences are also quite deep between the different districts of the country. Tirana has the highest rate of internet service penetration in the population, with about 37%, while Dibra has the lowest, with 12%. Low internet penetration, especially in rural and suburban areas of the country, is a problem of social and economic impact at a time when services are increasingly moving towards digital channels. In terms of comparative data with the ICT region, a comparison is provided for e-government according to the data in the UN report for 2020.

Albania is better than other countries in the region (Bosnia and Herzegovina, Montenegro, and North Macedonia), while with a low margin, Serbia stands first for the indicator for online services. For 2020, our country ranks 59th in the world, climbing 15 positions globally for the overall e-government indicator compared to 2018, when the last report was published. Specifically, the indicator has improved from 0.6519 points in 2018 to 0.7399 in 2020 (the highest value by which a country can be evaluated is 1). Also, the EGDI (E-Government Development Index) (United Nations Department of Economic and Social Affairs, (2022) indicator is calculated on the basis of three sub-indicators:

For online services, Albania has improved from 62nd place in 2018 to 31st place in 2020, with points equal to Canada, Kuwait, and Uruguay. For e-participation, our country has moved from 61st place in 2018 to 36th place in 2020 with points equal to Spain, leaving behind in Europe countries like Italy, Greece, Portugal, Germany, and all Western Balkan countries. At the same time, in the State Department's annual report on Albania (United Nations Department of Economic and Social Affairs, 2022), U.S. officials emphasize that e-Albania is a significant progress of the Albanian government in its work for the digital revolution. According to the DASH report, the passage of online services through e-Albania significantly increases the service to citizens as physical contact with officials is avoided and corruption is cracked. The report estimates that currently, Albanian citizens receive 61% of online public services, or 15% more than last year, while it is expected that NAIS will pass 91% of all online public services in a short time. In conclusion, the government portal "E-Albania" can be accessed anywhere from a computer, tablet, or mobile device and can be used for receiving electronic services from anyone who owns an Albanian identification number.

III. DIGITALIZATION OF SERVICES IN ALBANIA

The level of development of digitalization in Albania, unlike economic, social, and legal parameters, has moved at a relatively satisfactory speed compared to developed countries. According to INSTAT (2016) data, in 2016, in Albania, the vast majority of enterprises (95.6%) and a significant part of employees (28%) used the computer for work purposes. 96.8% of enterprises have access to the Internet, and 7.1% of them sell products via the Internet. A wide range of public services are in the process of digitization, offering not only convenience but also cost reduction for both the state and the citizen (e.g., Albania). The government interaction platform is a key platform for the realization of the interaction of the systems of institutions in the public administration.

Through the interaction of all state databases and their unique representation on a single platform, electronic services are provided in real time without the need for secondary data required by a service to be addressed to various public administration offices. As of March 2021, 1200 services, or 95 percent of all public services for citizens and businesses, were available online through the E-Albania Portal.

However, Albania continues to score poorly on Transparency International's Corruption Perceptions Index. In 2021, Albania fell to 110th place out of 180 countries, a drop of six places from 2020. Albania continues to rank low on the Global Innovation Index, ranking 84 out of 132 countries.

Among the sectors that have been affected by digitalization in Albania we emphasize:

1) Digitalization of financial services

The increasing level of financial services, especially banking operations, is reflected in the total digitization of banking services, the increase in the number of POS and ATMs, as well as the ever-increasing mass use of cards and, recently, banking applications.

2) Transfer of services

The growth of the "call center" sector, which uses digitalization to transfer parts of services from high-wage countries to Albania, where the wage level is more competitive, This, of course, has transferred some of the unemployment from a developing country like Albania to developed countries, mainly Italy, Germany, etc.

3) Digitalization of public services

Albania has a satisfactory level of digitalization of public services compared to other countries in the region. Through the e-Albania system, they offer in real time and with minimal cost an ever-increasing range of services for companies and individuals, ranging from certificates, health cards, certificates for contributions to the taxpayer's situation, means of transport and driving licenses, information, certificates, and permits related to real estate, etc. For example, in medicine, the project of digitally transferring all medical recommendations, prescriptions, and other services of an administrative nature is in progress.

4) Digitalization in education

In the first steps of education in Albania, there are signs of testing combined platforms in teaching, organizing, and controlling knowledge electronically, providing abundant information and notifications through websites and social networks, opening personal accounts for university students from where they receive online and real-time information about obligations, exams, exam results, etc.

5) Digitization in the job market

One of the main concerns about the process of digitalizing work is the impact it is expected to have on the levels of unemployment in Albania. It is expected to result in job losses and difficulties for workers over the age of 50 to stay employed. The internet and information technology have changed the importance of many key factors in traditional businesses. In addition, successful online marketplaces such as Amazon.com, eBay.com, and others have facilitated the penetration of companies in the e-commerce market. The success of pioneers in e-commerce such as Yahoo, Galileo, Amazon.com, eBay.com, Google.com, and others has completely changed the traditional way of doing business. These companies became market leaders for a short time by selling virtual products and/or services, acting as middlemen in sales, selling space for online advertising, and offering "everything for free", where most of their activities had nothing to do with activities in traditional markets. In the existing literature on business-client interaction in public institutions, studies show that, as a consequence of the relatively low level of interaction in the online environment (Lin, 2004; Bucklin & Sismeiro, 2009), online visits by customers and visit data (Moe & Fader, 2004) play an increasingly important role in actors' behavioral manifestations (Kumar *et al.*, 2010). Ultimately, developments in Internet technologies have created very good opportunities to establish new businesses and/or adapt existing businesses to the new environment, earning through customer satisfaction (Vargo *et al.*, 2008).

The impact of the digitalization of public services on the public meeting Lindgren *et al.* (2019) conclude that digital public services change the diadic nature of public meetings by changing when, where, and how interaction can occur, which actors are involved, what each actor does, and the skills required for all actors involved.

TABLE II: SUMMARY OF HOW THE DIGITIZATION OF PUBLIC SERVICES AFFECTS THE PUBLIC MEETING

Aspects	Changes made possible by the digitalisation of public services.
The nature and purpose of the meeting	Digitalization facilitates the automatic exchange of information and self-service of citizens.
Form and setting of communication	Digitalization provides additional channels of communication. The “country” of government varies from an official setting to almost everywhere, but especially in the homes of citizens.
The central players involved.	Digitization changes the roles of the actors involved and adds new actors related to technology.
Start, duration and stretch	Digitalization enables 24/7 access to government services and changes citizens' expectations of the government's response time.

Source: Lindgren *et al.* (2019).

6) Digitalization and use of ICT in the function of real estate security

When it comes to the functionality and accuracy of available map data, digital maps have obvious advantages, and the unification of all maps of institutions dealing with ownership issues in a single system would be the ideal solution for stabilizing the property situation and avoiding the problem of overlapping properties, which is widespread in Albania. The advantages of digitalization and unification of maps are:

1. The digitalization of maps in Albania can avoid and solve the problem of overlapping properties.
2. The accuracy of digital maps is much greater than that of paper maps. Through digitalization, speed and readiness are achieved in the service of citizens, and there is a lower cost than the paper format.
3. The digitalization of the map helps to improve the efficiency of the process and the quality of the map.
4. Digitization also highlights the history of old records as well as the owner's identification with the property over the years.

Albania has made progress in the digitization of services for ownership, reducing deadlines and increasing efficiency through the elimination of long queues and the electronic processing of documentation. The registration system should develop the technical and legal regulatory environment in order to ensure the security of the property market. However, digital information still does not have the legal value of a letter.

B. The Impact of Digitalization in the Tourism Sector

The document of the National Strategy for Tourism, 2019–2023 lists the digitization and underuse of information technology in tourism among the weak points to be addressed in the next 4 years. However, this remains a complex sector influenced by negative phenomena, such as the high informality of the sector and the high use of cash in payments for this service. Increasingly, information technology is becoming a key factor in tourism development in Albania. In recent years, Albania has seen a significant increase in the number of tourists from abroad, mainly from European countries. This positive trend has been accompanied by challenges, one of which is the adaptation to new models of customer service and information technology. One of the problems facing the development of tourism in Albania is that the use of information technologies in the tourism industry is limited.

Tour operators are making extensive use of information technology to promote tourist destinations, interaction between tour operators, and continuous and sustained growth in the number of tourists. Public institutions have been mainly sufficient in drafting policies for the development of tourism and action plans in support of the tourist season. In the framework of the Cross-Sector Strategy "Albania's Digital Agenda 2015-2020", one objective is to increase the efficiency of the manufacturing sector, agriculture, tourism, and industry through ICT systems. Meanwhile, the National Strategy for Sustainable Tourism Development 2019–2023[15] has specific objectives and measures for the development of digitization in the tourism sector. To this end, an information portal will be set up on promotion agents, destinations, and tourist products that can be developed in Albania.

"E-consular services" means the implementation of online services by the Ministry of Foreign Affairs through the establishment and operation of the E-consulate service. The e-Consulate is an informative ex-foreign service application for all Albanian citizens living abroad or as a guide for the safety of Albanian citizens who undertake trips to any country in the world. The app is also used for investment promotion agencies, tourism promotion agencies, and tour operators. The platform has also helped our institutions with the voluminous registration process for Albanian citizens living abroad. It can be downloaded from the AppStore or Playstore, enabling full contacts of any Albanian representation in the world; information on document legalization procedures; other consular services at home and abroad; as well as information on the situation for each of the countries part of the E-Consulate. The Online Consular Service offers automated procedures and the digitalization of all consular services, where Albanian citizens can receive 23 online services without having to appear in person and 13 services by appearing only once.

C. Cyber Systems

A cyber system is a system in which computers, networks, and physical processes are integrated. Essentially, it represents a mechanism that is monitored by algorithms based on computers closely integrated with the Internet and its users (Lee & Seshia, 2011). The collection and transfer of large volumes of information creates difficulties in management and brings previously unknown risks. Not only that, but every revolution has an impact on the social and economic lives of individuals and societies as a whole. Among the key challenges of this transformative process can be identified as cybersecurity, piracy, and risk assessment. Large volumes of information collected on servers are protected by programs and technical security elements. A brief history has shown that this data is not completely secure because server protections are often broken by making personal and confidential information about individuals, companies, and state entities available to unauthorized persons and perpetrators.

Such events have occurred and caused the disclosure of data and the movement of funds from depositor accounts in the banking sector, the extraction of financial and commercial data, the disclosure of secret state information, or the disclosure of communications and personal data of individuals with high functions in the state administration and commercial companies.

IV. Digital Services Issues

The National Information Society Agency is supporting the idea of the Albanian government to use online services and increase the level of digitization in the provision of public services. However, experts in the field of e-government have expressed concern that the focus on this progress can forget the negative consequences it can have on the privacy and integrity of citizens, as well as the lack of equal access for the groups most affected by social divisions. Thus, this paragraph discusses the problems that can be encountered during the digitization of public services.

Among the issues identified in the digitalization of public services are:

- Digitalization changes the place of civic-government interaction, but the meaning and impact of this change on the e-government environment are not explicitly addressed. This creates a gap in the field of research regarding how this change in the environment affects citizens' perceptions of their government and, in turn, the perceived accountability and legitimacy of government.
- The problem in the field of e-government relates to the change of caste and the role of the actors involved. In this regard, there is a lack of a clear discussion on the effects of e-government changes on case judgment, power asymmetries, new skills, and the transparency of stakeholders in government decision-making. In addition, there is a lack of clear discussion on the role of actors responsible for designing and implementing the technology used, as well as their role in building and shaping a digital society.
- Digital public services are complex and have an impact on citizens' lives, but their studies are general. In this context, it should be discussed who should be the best public official—man or machine—which actors and skills are central to digital public meetings, and what are the actual consequences of these services for the quality of life of citizens. This reflects the need to define the tasks and qualities that technology and people can deliver in these services. Technological developments create new environments for communication and public meetings, while the dividing line between the physical and digital worlds becomes increasingly blurred. Critical studies are needed to investigate the growing ethical concerns of automating public services and governments' use of technology.
- The cyberattacks on the E-Albania portal have caused concern, and it is not known if they were real attacks or a failure of the online system. Problems started after the services were switched online, and citizens complained about the blocking of the sites and the collapse of the system. For the elderly, this service is provided informally at a fee by the stationery shops and bookstores, raising the alarm about the abuse of personal data. Some points in the capital offer the opening of addresses in e-Albania with different payments.
- Dissemination of personal data: the problem arising from the dissemination of personal data of citizens who, against payment, gain access to e-Albania at uncontrolled points. The businesses in which these services are offered are unauthorized, and there is no information on what is done with citizens' data after these accounts are opened. Meanwhile, even on social networks, there is an increasing number of profiles that offer these services for payment, many of them as personal accounts and others as pages. Even official figures from INSTAT show that only a low percentage of people over the age of 18 manage to perform actions such as filling out or downloading forms on online government services. According to these data, in 2020 only 15.1% of citizens could send completed forms via the Internet, while in 2021 this figure varied very little to 15.7%.

V. Conclusion

The above paper reflects on some areas of services that have been influenced by e-government, where the movement and the super-fast developments of the use of technology in the service of citizens require both reaction at the infrastructure level as well as education and assistance to citizens in the use of these services.

The use of ICT in public services remains a priority for the Albanian government, and the achievements are visible but not uniform and effective across the population that uses these services. There is still an insufficient understanding of how the design and implementation of e-government initiatives affect people of different genders, ages, abilities, and income levels and what needs to be done to tackle exclusion and discrimination. Rapidly approaching and to an increased extent, digital smart devices and the elimination of certain services, which have traditionally been provided by human hands in cooperation or not with

machines, have taken out of the labor market a significant category of employees. The latter are faced with two paths: either to be out of work or to adapt and integrate with new equipment. This adaptation requires qualification, which is difficult for some employees, especially those with secondary or upper-middle-aged education. This category risks not being integrated into new jobs that highlight the need to improve digital infrastructure. For many citizens and businesses, the biggest difficulty lies in learning to trust the online service. For this, it is necessary to know how safe this service is. The level of trust and security of digital services were part of the research; these are very important components. The presented research and other relevant results show that institutions in general have not yet reached a level of development compared to most EU countries when it comes to the level of development of basic digital services.

In Albania, there are great needs for improvement in the fields of immovable property registration and market guarantee. The registration system should continuously develop the technical and legal regulatory environment in view of the security of the property market. The public sector, through effective policies but also concrete support for the tourism business, should use digitalization and the network of public institutions at the central and local levels, as well as abroad, to provide the right information to tour operators as well as potential visitors.

The digitalization of work has created many new professions that require high technical preparation and occasional training to adapt to new technology and the high dynamics of digital developments. These information and training needs exclude from integration into new workplaces experienced existing staff, who do not have the necessary time for training and integration. There is a current and potential need for legal adjustments to adapt to the changes and challenges that the digital revolution will bring. There are no globally coordinated laws that would protect personal data against the expansion of data volumes and their extent, especially beyond the borders of a country. Good progress has been achieved in terms of adding enough electronic services and improving the digital infrastructure of institutions in the country.

A. Recommendations

Based on the conclusions of the research, we have issued several recommendations that can affect the improvement of digital services through e-government in our country:

1. Digital services must be more secure; otherwise, citizens and businesses will continue to hesitate to use them.
2. Periodic measurements are carried out to measure the assessment of digital service delivery by citizens and businesses because, in this way, one can see how these services are functioning and measure their effects more easily.
3. Expanding the process of digitization of state databases in areas such as school, cadastral, medical documentation, and the provision of online services, enabling its extension at the local level to services received near municipalities.
4. Implementation of the Annual National Survey for the measurement of innovation indicators in the field of administration and public services, as well as the innovation allocation indicator at the local level (municipalities).
5. Financing investments to expand broadband internet throughout the territory of the Republic of Albania; minimizing digital differences between regions and cities through increasing internet access to 70%; and improving the quality of life to 30%.
6. Establishing clear manuals and procedures, as well as control mechanisms for storing and managing the personal data of individuals using platforms such as “E-Albania”.
7. Full and medium-term government policies and programs related to the inclusion of digitalization in the country's economy are needed. In order to successfully implement the strategy, it is necessary to draft the new digital agenda for 2021–2025 and the relevant action plan.
8. Digitalization in tourism should ensure greater interaction with tourists in order to identify and address their needs through appropriate tourist offers.
9. Combining e-services with educational ones is a must. Continuous training of teachers and administrators of digital education management systems should be intensified, and progress should be measured objectively.
10. Populations traditionally identified as vulnerable—people living in poverty, people with disabilities, older individuals, migrants, women, and young people—have benefited from the progress achieved, although additional efforts are needed to ensure that no one is left behind in e-governance and the wider digitization process.

In the future, research studies should be undertaken to identify and study factors that may affect the increased use of digital services, such as security, trust, ease of use, costs, culture, information, etc. In the end, we can say that digital services, as a new model of services offered through multiple and integrated channels, are the future of every country in a century when technological innovation knows no boundaries.

REFERENCES

AKEP (2021). *Authority of Electronic and Postal Communications, Annual Report 2020*. Tirana.

AKEP (2022). *Authority of Electronic and Postal Communications, Annual Report 2021*. Tirana. https://akep.al/wp-content/uploads/2022/06/AKEP-Raporti-Vjetor-2021.pdf.

AkshWpUserAd. (n.d.). *Karçanaj: Pandemia dëshmoi se investimet teknologjike në Shqipëri janë reale – Agjencia Kombëtare e Shoqërisë së Informacionit*. Retrieved from: https://akshi.gov.al/karcanaj-pandemia-deshmoi-se-investimet-teknologjike-ne-shqiperi-jane-reale/.

AKSHI (2020). Cross-Sectoral Strategy-Albania's Digital Agenda 2015-2020: Monitoring Report. Council of Ministers. December.

Beqiri, E. E. (2005). Electronic Business. University of Pristina, FSHAB, Peja.

Bucklin, R.E., & Sismeiro, C. (2009) Advances in Click-Stream Data Analysis in Marketing. *Journal of Interactive Marketing, 23*, 35-48. https://doi.org/10.1016/j.intmar.2008.10.004.

Department of Economic and Social Affairs. (2018). *United Nations E-Government Survey 2018. New York*. Retrieved from: publicadministration.un.org.

Heeks, R. (1999). *Information and Communication Technologies, Poverty and Development*.

ICTSmedia. (2020, October 30). *Penetrimi i internetit në zonat rurale problem në Shqipëri - PCWorld Albanian*. PCWorld Albanian. https://pcworld.al/penetrimi-i-internetit-ne-zonat-rurale-problem-ne-shqiperi/

INSTAT. (2016). Information and Communication Technology in the Enterprise Report.

Kumar, V., Aksoy, L., Donkers, B., Venkatesan, R., Wiesel, T., & Tillmanns, S. (2010). Undervalued or Overvalued Customers: Capturing Total Customer Engagement Value. *Journal of Service Research, 13*(3), 297–310.

Lee, E.A., & Seshia, S.A. (2011). *Introduction to Embedded Systems - A Cyber-Physical Systems Approach*. Available at: LeeSeshia.org.

Lin, N., Wu, B., Jansen, R., Gerstein, M., & Zhao, H. (2004). Information assessment on predicting protein-protein interactions. *BMC Bioinformatics, 5*(1), 154. https://doi.org/10.1186/1471-2105-5-154.

Lindgren, I, Madsen, C., Hofmann, S., Melin, U. (2019). Close encounters of the digital kind: A research agenda for the digitalization of public services. *Government Information Quarterly, 36*, 427–436.

Matheus, R., Janssen, M., & Maheshwari, D. (2020). Data science empowering the public: Data-driven dashboards for transparent and accountable decision-making in smart cities. *Government Information Quarterly, 37*(3), 101284. https://doi.org/10.1016/j.giq.2018.01.006.

Ministry of Tourism and Environment (2019-2023). *National Strategy for the Sustainable Development of Tourism*. Tirana. https://turizmi.gov.al/wp-content/uploads/2019/06/Strategjia-Komb%C3%ABtare-e-Turizmit-2019-2023.pdf.

Moe, W. W., & Fader, P. S. (2004). Dynamic Conversion Behavior at E-Commerce Sites. *Management Science, 50*(3), 326–335. https://doi.org/10.1287/mnsc.1040.0153.

National Strategy for Sustainable Tourism Development (2019–2023). Ministry of Tourism and Environment. Republic of Albania.

Newsroom. (2020). *Albania presented with two important awards for digital government and e-learning*. Kryeministria. Retrieved from: https://kryeministria.al/en/newsroom/shqiperia-vleresohet-me-dy-cmime-te-rendesishme-per-qeverisjen-digjitale-dhe-e-learning/.

Ndou, V. (2004). E - Government for Developing Countries: Opportunities and Challenges. *Electronic Journal on Information Systems in Developing Countries, 18*(1), 1–24. https://doi.org/10.1002/j.1681-4835.2004.tb00117.x

Official Gazette no. 284 (2005). *On the creation of the Central Group for monitoring the implementation of the reform for the removal of administrative obstacles in the field of investments*. Order of the CM no. 63.

Official Gazette no. 66 (2006). *On the ratification of the Strategic Objective Grant Agreement, between the Government of the Republic of Albania and the United States of America (USA), to fight corruption, within the framework of the initial assessment program of the Millennium Challenge (MCCP)*. Law no. 9549.

Official Gazette no. 56 (2015). *On the approval of the Intersectoral Strategy. Digital Agenda of Albania 2015-2020*. VKM no. 284.

Pieterson, W. J., Ebbers, W. E., & Madsen, C. M. (2017). New Channels, New Possibilities: A Typology and Classification of Social Robots and Their Role in Multi-channel Public Service Delivery. In *Springer eBooks* (pp. 47–59). https://doi.org/10.1007/978-3-319-64677-0_5.

Strategy for Electronic Government (2009-2015). Government of the Republic of Kosovo. Ministry of Public Services. Department of Information Technology.

Schelin, S. H. (2011) E-Government: An Overview. In *Modern Public Information Technology Systems: Issues and Challenges* (pp. 110–126). IGI Global eBooks. https://doi.org/10.4018/978-1-59904-051-6.ch006.

United Nations Department of Economic & Social Affairs. (2022). *E-Government Survey 2022-The future of the Digital Government*. United Nations New York. 1-311. Retrieved from: https://publicadministration.un.org/en/.

United Nations Economic & Social Affairs. (2018). *UN E-Government Survey 2018. Gearing E-Government To Support Transformation Towards Sustainable And Resilient Societies*. Retrieved from: https://publicadministration.un.org/egovkb/en-us/Reports/UN-E-Government-Survey-2018.

Vargo, S. L., Maglio, P. P., & Akaka, M. A. (2008). On value and value co-creation: A service systems and service logic perspective. *European Management Journal, 26*(3), 145–152.