

El Ammar, C., Profiroiu, C. M. (2020). Innovation in public administration reform: a strategic reform through NPM, ICT, and e-governance. A comparative analysis between Lebanon and Romania. *Administratie si Management Public*, 35, 75-89.  
DOI: 10.24818/35-05

***Innovation in public administration reform:  
a strategic reform through NPM, ICT, and e-governance.  
A comparative analysis between Lebanon and Romania***

**Charbel EL AMMAR<sup>1</sup>, Constantin Marius PROFIROIU<sup>2</sup>**

**Abstract:** *In addition to the involvement of public administration (PA) as a catalyst for economic development, today we are witnessing the need to enhance innovation in PA itself, with a commitment to maximizing efficiency, effectiveness, performance, and to improve quality of public service. In PA, the emerging theory of innovation represents a combined effort between conventional organizational innovation tools such as strategic planning and modern ones such as Information and Communication Technology (ICT) and e-governance. With regard to this challenging situation, this paper seeks to present a substantial literature concerning the theory of innovation, New Public Management (NPM), ICT, and e-governance. Furthermore, using a qualitative approach based on centered semi-structured interviews, this article illustrates the current activities conducted by the Lebanese government, specifically the Office of Ministry of State for Administrative Reform (OMSAR), compared by data gathered from platforms and databases from Romanian PA such as Ministry of Communication and Information Society, OECD, DESI index, and Eurostat on ICT and e-governance at European level. The paper results reveal the significant effect of innovation in Romanian PA paving the road toward facing the challenge to achieve its digital 2020 agenda and contributing to transparency, efficiency, effectiveness, community participation, and development of public service. However, Lebanese PA should join and shake hands to strengthen the adoption of innovation in its public corridors and should cross the notion of “still born” application of ICT to a fruitful implementation contributing to strategic innovation in public services and improved PA efficiency and performance.*

**Keywords:** Public Administration, Innovation, New Public Management, Information and Communication Technology, E-governance.

**JEL:** M10, M15, M16, O57

**DOI:** 10.24818/amp/2020.35-05

---

<sup>1</sup> Ph.D. Candidate, Bucharest University of Economic Studies, Bucharest, Romania, charbel.alammar@gmail.com

<sup>2</sup> Professor Ph.D., Bucharest University of Economic Studies, Bucharest, Romania, mprofiroiu@ase.ro

## **Introduction**

The global digital transformation has witnessed a strong development and opportunities to thrive deeply across countries on earth. Such evolution was effectively carried out by the rise of information and communication technology (ICT) that generated a functional environment in the modern digital era. Societies across the globe experienced a challenging myriad of issues that are being neglected by conventional governmental interventions (Golden, 1990). Government bodies are working in an extremely dynamic climate that calls for a rising awareness for innovation and reform through PA in order to turn modern thoughts to reality. The primary source of reform in PA is described by the implementation of New Public Management (NPM) (Hood, 2000). NPM represents the philosophy of the latest fundamental shift on how to manage PA (Lane, 2000), and to boost entrepreneurial governance toward the emergence of information technology (Margetts & Dunleavy, 2013). The emergence of ICT reflects a change of concepts that involves creating a new competitive solution that gains influence, generates a flock of thoughts, and encourages adoption (Margetts & Dunleavy, 2013). PA reform includes the delivery of public goods in quick, accurate, efficient, and cost-effective manners, and even more by redefining the policy-making methods and policies depending on the application of ICT and strategic thinking. The increase and rapid expansion in the socio-economic environment pushed PA to grasp opportunities arising from the emergence of ICT and build a modern strategy based on transparency and people involvement (OECD, 2011). This paper presents a comparative analysis of innovation in PA reform between Lebanon and Romania based on the implementation of NPM, ICT, and e-governance.

In conjunction with the negotiations that the Lebanese government is carrying out with the International Monetary Fund and donors countries to receive financial aid and prevent the state from falling under the weight of financial and economic burdens faced as a result of the Corona crisis, aside with the spread of corruption and wrong policies in PA, the Lebanese government, through its PA should accelerate the adoption of innovation and ICT, which is considered a still born concept, contributing to an innovate strategy in the delivery of quality public services and enhancing PA performance (Harfouche & Robbin, 2012). In contrast, the need for an outstanding accomplishment of its 2020 digital agenda, Romania, as a part of the European community, has developed significant impacts and measures on PA strategy by its relentless pursuit to implement modern technological innovations in order to adapt efficiently and effectively to the socio-economic challenges and to promote transparency, citizens' involvement, and quality in public service delivery (Matei & Savulescu, 2014).

## **1. Literature Review**

### **1.1 The Innovation and New Public Management Concept**

PA is considered a substantial player in promoting innovative technology and supporting economic development. PA should initiate innovation in public institutions aiming at rising output, improving effectiveness, enhancing the quality of public service delivery, and meeting community demands (Matei & Savulescu, 2014). Given its immense presence, managing innovation has always been an inexperienced technology. It seems that prevalent method and understanding are absent between executives and scholars, in terms of what influences the capacity of an organization to think outside the box and drive innovation (Boustani & Chedrawi, 2019). PA should be capable and qualified to integrate input, knowledgeable data, and resources into innovative systems and harmonize it with people, organizations, and other entities' desires (Bekkers, Edelenbos, & Steijn, 2011). Innovative technology is a method for creating and implementing new technologies, improvements in organizational frameworks, as well as introducing modern management strategies to fulfill people, organizations, and community desires (Matei & Savulescu, 2014). The study on innovation in PA suggests that modern information and perspectives arise by considering thoughts, prudence, and residents knowing how to behave like consumers (Oudshoorn & Pinch, 2003), the presence of line managers in public institutions (Fuglsang & Pedersen, 2011) and individuals' involvement on everyday public service delivery (Von Hippel, 2007). Innovative technology is recognized as being a collaborative process (Oudshoorn & Pinch, 2003). Almost all innovative technologies in PA possessed ICT elements. ICTs are integrated into several pursuits in PA such as knowledge sharing and interaction. Innovation capabilities in ICT are based on particular features such as the capacity to utilize and connect huge information further away than temporary, operational, and geographical boundaries (Homburg & Bekkers, 2005). The ability to innovate in PA is considered a tool for organizational culture and performance as well as environmental and organizational structure (Osborne & Brown, 2005).

The concept of New Public Management (NPM) was introduced as a management substitute to the conventional paradigm of PA (Harffouche & Robbin, 2015). NPM represents a philosophy of the latest transformation model toward governance in PA (Lane, 2000). NPM concept is indeed directing reform in PA for many years, positioning itself on the development of efficient administrative command based on major insights such as continuous performance development based on an outcome-based approach instead of procedure-based methods, establishing managerial and organizational performance measures relying on objectives, control, and reward systems, implementing decentralization, and minimizing dependence on policies and regulations (Verbeeten & Spekle, 2015). The implementation of NPM would ultimately lead to an inexpensive PA, further productivity, and quick reaction toward the public (Politt & Dan, 2011). Similarly, NPM reform's primary objectives are to enhance and render PA's effectiveness and

efficiency, decrease government spending, and enhance administrative accountability and transparency (Wright, 1991). NPM has changed the assortment techniques in allocating resources in PA from power and orders, to agreement and interchange. NPM ignored development in technology in favor of focusing management on organizational structures and good corporate governance (Margetts & Dunleavy, 2013). Also, NPM has preferred management components and has provided limited rational importance to digital technologies (Boustani & Chedrawi, 2019).

## **1.2 ICT and E-governance**

E-Government is generally characterized by the use of ICT for the provision of governmental services; thus, e-government is tightly correlated to the managerial organizational section. To illustrate, ICT is applied in order to promote and support public decision-making process in PA, strengthening government procedures across society, and improving interactions with residents, companies, and governmental organizations (Gatautis, 2008). E-governance corresponds to the implementation of ICT, like the internet and e-mail, by governmental organizations that would enhance their interactions with people, companies, and various governmental bodies. The application of such innovation will result in: superior provision of quality services for the public, enhanced relationship between economic sectors, people authorization to public data, and effective governance. The value derived from such operations and actions will contribute to minimizing bribery and corruption, boosting transparency and accountability, improving quality, and reducing costs (Basu, 2004). The implementation of ICT in PA is associated with the development in organizations and modern capabilities and expertise toward enhancing the quality of services, improving democracy, and increasing government support (European Commission, 2003), thus, the justification for e-governance is whether it improves PA effectiveness in boosting the provision of valuable service to the public (World Public Sector Report, 2003). The goal of e-governance is represented by permission for people to undertake demand for specific governmental services without heading to the state department and requiring interactions with public staff, therefore, such services are provided via governmental webpages (Brannen, 2001). Researchers argue that the primary goals of e-governance should contain three essential aspects: reorganization of institutional operations; the reduction and removal of obstacles and difficulties toward communication and integration inside PA; and controlling PA performance (Wimmer & Traunmuller, 2001). In addition, scholar stated two key purposes for e-governance; the first is providing people the entrance to data and resources concerning the political system and service providers; and second, making conceivable the switch from negative info toward robust people involvement through giving information to people, motivating and supporting people, and consulting them (Backus, 2001). Researchers pointed out that e-governance goals should ensure the following: significant costs decrease and productivity

improvements, efficiency in service delivery for end-users, transparency and accountability, fighting corruption, increased governmental capabilities, development of computer system, enhancing the accuracy of decision-making process, and encouraging the adoption of ICT tools in many community segments (Nkwe, 2012). E-governance involves three core areas which include: e-administration that focuses on adopting ICT in governmental and PA procedures; e-services that concentrate on internet usage, websites, and other technological systems in order to boost the delivery of public services; e-democracy that focuses on ICT implementation in order to increase people engagement and participation in decision-making in democratic organizations (Ojo, 2014).

## 2. Research Methodology

This paper aims to create a comparative analysis based on strategies' implementation regarding NPM, ICT, and e-governance, between Lebanon and Romania. An exploratory study is conducted in order to present the situation in Lebanon vs. Romania. The main objectives of this paper are, to examine the need of innovation in Lebanese PA through the adoption of NPM, ICT, and E-governance by OMSAR in order to maximize efficiency, effectiveness, performance, and to improve the quality of public service; and to examine the level of improvement and the role played by Romanian government to boost innovation in PA by improving performance, efficiency, and enhancing the provision of public service in order to reach its 2020 strategic digital agenda. To reach such objectives, the articles should address the following questions: Are the head of the Technical Cooperation Unit (TCU) and the head of the Institutional Development Unit (IDU) in OMSAR aware of the necessity of innovation in Lebanese PA? How Romanian government contribute to the achievement of the European Union 2020 digital strategy agenda through the adoption of ICT and E-governance in Romanian PA? To make a comparison between Lebanon and Romania based on the implementation of NPM, ICT, and E-governance in their PAs. For the exploratory study, a qualitative method in the form of semi-structured interview with the head of TCU and the head of IDU in OMSAR in Lebanon is conducted. From Romania perspectives, approaches related to the strategy used concerning the implementation of NPM, ICT, and e-governance are realized and accomplished through qualitative method and based on the results of conceptual data obtained from scientific journals, conference papers, articles (mentioned in table 1), and European Commission publications. Also, secondary data is gathered from platforms and databases in Romanian PA such as the Ministry of Communication and Information Society, OECD, and Eurostat on ICT and e-governance.

**Table 1. Articles and their Respective Authors**

Title of the Article	Authors
Romanian public administration reform 2.0: using innovative foresight methodologies to engage stakeholders and the public	Zulean M., Gheorghiu R., Andreescu L., Roescu A. (2017)

Title of the Article	Authors
Enhancing the capacity for innovation of public administration. An exploratory study on e-Governance, ICT, knowledge management in Romania	Matei A., Savulescu, C. (2014)
Public Administration Reform in the Perspective of Romania's Accession to the European Union	Tudorel A., Carp R., Dragos D. (2006) Marius Profiroiu (Coordinator)
The digital economy in Romania: theoretical approaches and the current state of development in the context imposed by the European Union	Ciurea M. (2019)
Reform and Management in Romania. Strategy and structural change	Hintea C. (2011)

*(Source: Authors own contribution)*

### **2.1. Lebanon Background and Public Administration Reform**

In 1970, Lebanon, an average income nation associated with a prosperous economic system through the private sector, was deeply affected by 20 years of war, conflicts, fighting, and foreign invasion. All economic sectors have been affected by this crisis which had a great impact on financial development and growth. The war destroyed both the institutional and the public framework and halted the regular procedure of PA adaptability to change and separated the state from the entire globe for about twenty years. Though considerable attempts have been undertaken to minimize the effect of this crisis on the PA, yet the Lebanese PA is still facing several dysfunctions: many government bodies have obsolete frameworks and systems; outmoded transactions ruled by rules, traditions, or norms; the lack of workers in different fields and disproportionate jobs in many sectors have caused an inconsistency in human resources allocation; the deficiency in NPM adoption and ICT knowledge; the public service which poses significant questions regarding PA prospective function with lack of professional strategies and plans; and ICT projects are lagging while current systems are underused.

Lebanese government realized that an effective PA and even the creation of a sustainable legislative framework were necessary for private national and international investments and effective restoration and rehabilitation. The Lebanese government has few initiatives to reestablish PA, allow and encourage it to implement future reforms. The task for managing such initiatives and efforts was assigned by the Lebanese government to OMSAR. In 1994, through the UN Development Program, OMSAR developed a special unit composed of the IDU in order to manage and organize future reforms and the TCU to lead and execute reconstruction. OMSAR function was considered crucial by operating as a representative and delegate for the reform. OMSAR was selected as the test subject of this article through which has been tried, by conducting a centered semi-structured interview process with Head of IDU (SM1) and the Head of TCU (SM2), to analyze the knowledgeable perception of OMSAR concerning PA

innovative technologies. In the present, OMSAR is adopting technological innovation that covers the operational and managerial structures. Two interesting conclusions or predictions raise concerns about the primary reason for innovation in PA. First of all, innovative technologies in Lebanese PA should offer a unique strategy and concept that defies the prevalent doctrine (Light, 1998), and second, innovative technologies in PA should achieve two objectives: maximizing efficiency and effectiveness toward reaching public service sustainability and generate social and public quality value.

The outcomes achieved were unexpected, but nevertheless diverse. For Lebanon, there is no concrete strategy for innovative technologies at the government and state level and variations in perception and awareness concerning NPM, ICT, and E-governance techniques were found between OMSAR senior managers. The lack of government support for innovative technologies and the essential understanding of both the procedures and benefits offered from the adoption of such innovation in PA represent challenging opportunities to be grasped in order to reform. Both interviewees argued that the reform of PA toward innovation is an exceedingly challenging task for the below-mentioned causes:

- The outdated government rules and legislations prevent reform and the adoption of innovative technologies in PA (SM1).
- The absence of funding infrastructure restricts adequate government spending in innovation, namely, NPM, ICT, and E-governance (SM1, SM2).
- Almost all reforms in Lebanese PA depend on the international community financed projects such as the UN, EU, and the World Bank (SM1, SM2).
- Government staff needs advanced training on modern concepts of PA, ICT, NPM, and E-governance to improve efficiency and performance (SM2).

The results may also be analyzed through the cross-examination summary in table 2 to have a greater understanding of the proposal of our interviewees.

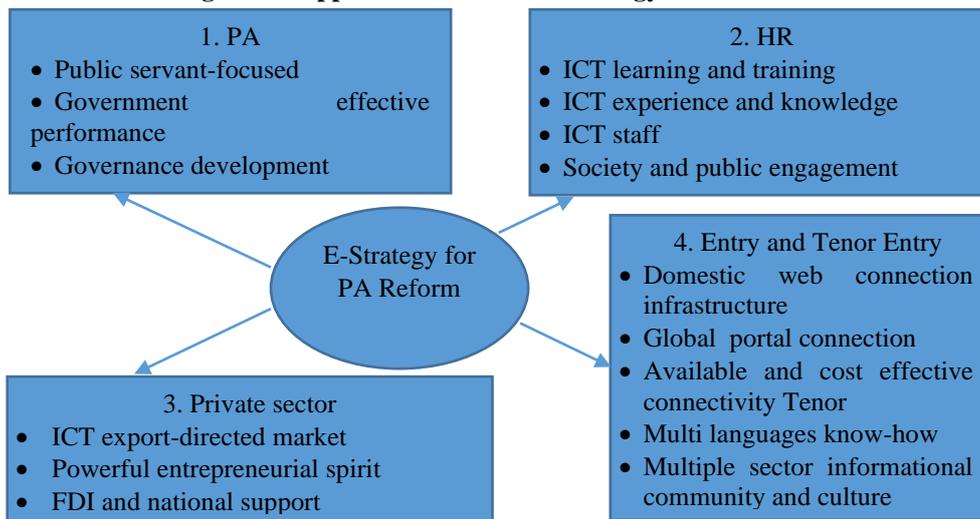
**Table 2. Interviews Outcomes**

#	Innovation in PA	NPM, ICT, and E-governance
SM1 SM2	Innovative technologies are a need to enhance Lebanese PA.	NPM, ICT, and E-governance are the key techniques in order to support the updates and improvements in PA frameworks.
SM1	Innovative technologies in Lebanese PA should be focused on accurate strategic plans to enhance Lebanese PA institutional structure.	Without NPM, ICT, and E-governance, Lebanese PA will miss the opportunity to innovate. Thus, monetary and non-monetary support will be obtained in the adoption of an effective model dedicated to PA reform.
SM2	Innovative technologies are quite necessary due to several bureaucratic public barriers, expectations, and limits.	NPM, ICT, and E-governance are considered preconditions for reform; the absence of capital assumed that modernization with these methods is not feasible.

*(Source: Authors own contribution)*

In addition, the answers from the interview and the proposed steps are depicted in figure 1 that shows their perceptions about the innovative strategy.

**Figure 1. Support Elements for E-strategy in PA Reform**



(Source: Authors own contribution)

The primary operational requirement of such proposed innovative strategy represents the management and improvement of OMSAR operations and activities related to PA. Innovative technologies need layouts, improvement, and institutionalization of multiple procedures through which PA will be able to facilitate the full implementation of innovative operations (SM1, SM2), thus, the implementation of NPM, ICT, and E-governance techniques through IDU and TCU are intended to strengthen the strategic position of OMSAR and improve PA efficiency and performance.

## **2.2 Romania Background and Public Administration Reform: 2020 Digital Strategy Agenda**

Forty-three years spanning from 1946 to 1989, Romania witnessed the most dictatorial communist rule in Eastern and Central Europe. The complete disappearance and collapse of this regime was the result of a popular and massive revolution that took place at the end of 1989. The deterioration of the socio-economic environment, the heritage of centralized and political-based PA, the prevalent and common spread of corrupted acts, the weak organization structure, and the complete absence of feasible PA resources capable of planning and implementing reforms and communicating effectively with people, are all considered obstacles to establishing a consistent and adequate strategic reform agenda (Hintea, 2008). Since 1991, the major drivers that have affected the

transformation of the Romanian community involved the following: economic reforms, adherence and commitment to the EU, fighting corruption, and developing effectiveness, efficiency, and democracy in the Romanian PA. The empirical and technical field of PA was redefined following the fall of communism focusing on concerns including increased efficiency in resource allocation, improved government services, and ICT integration (Zulean, Gheorghui, Andreescu, & Roescu, 2017). Governmental reinvention or NPM (Osborne & Gaebler, 1992) was increasingly widespread, theoretically though perhaps not practically, and asserted to implement effective private industry concepts and practices. At the same time, throughout the transformation phase, the PA in Romania pursued its self-road toward change and reform depending on help and support from global institutions and donors like United Nations, EU, and the World Bank. Romanian PA reform began following the 1991 amendment of the Constitution and included four different paths: regulatory restructuring; structural and procedural reform; government policy restructuring; and institutional adjustment (Hintea C., 2011). Likewise, before the accession to the EU, researchers highlight the fundamental factors of the Romanian PA reform, a pivotal moment becoming the implementation of the strategic approach for boosting PA reform and the establishment of the governing board for controlling PA reform (Profiroiu, Profiroiu, & Andrei, 2009). The major aspects of such a strategic approach were decentralization, the reform of the government sector, and the restructuring of the framework of strategic government policies. Financial support has been provided under the OPACD (Operational Program for Administrative Capacity Development) to develop the Romanian PA efficiently and effectively. Enhancing strategic planning in PA, creating a new, efficient, and adaptive government and public service structure, and boosting performance toward a quality service are major objectives for setting a strategic framework in Romanian PA (NSRF, 2007).

To boost the economic improvement of Europe and to achieve innovation, sustainability, and social inclusion in economic development, the EU created the 2020 digital agenda. Its primary goal is to create and establish a unified digital or electronic market. Romanian local electronic and digital strategic agenda and plan were drawn up based on the EU 2020 digital plan and it was considered the structural model for the development of the Romanian PA between 2014 and 2020. For achieving the shared goals of the strategy, significant contributions and commitments are needed from PA members (Ciurea, 2019). With such considerations, the local strategy for the Romanian 2020 digital agenda targets the ICT domain immediately, contributes to the growth of the economy and enhance Romania's performance directly in terms of successful implementation of ICT and indirectly in terms of enhancing productivity and profitability in PA by minimizing bureaucratic obstacles and delivery of qualitative public services (Ministry of Communications and Information Society, 2019).

Beginning with the key elements that surround and underlie EU 2020 electronic and digital agenda, Romania has announced several duties and tasks in

the main fields of operation related to the existing social circumstances and public value, illustrated as follows:

- E-governance, ICT integration, information system security, information processing, and innovative platforms will play a guidance role in improving effectiveness and performance and lowering costs, thus leading PA in Romania toward modernization.

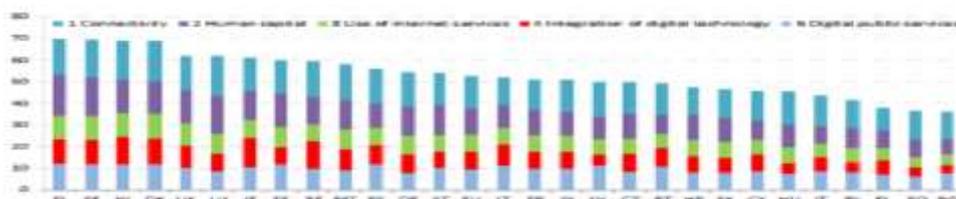
- Considering and including ICT in the public sector and PA, such as in healthcare and educational system in order to make sure that investing in ICT will have a beneficial effect on the public and social framework.

- Including e-business, R&D, and innovative technologies in ICT builds upon competitiveness in Romania's territory regions and endorses economic development and social welfare.

- Concerning telecommunications and the electronic Services base, such a task is focused on adopting the aforementioned areas of operation and the relevant resources and solutions.

The Ministry of Communication and Information Society has created a strategic plan and policy for the 2020 electronic and digital agenda since the PA and governmental bodies are accountable for developing and implementing it. The EU releases yearly a study about the level of economic and social digitization through the Digital Economy and Society Index (DESI) to compare the outcomes achieved by EU members, evaluative comparisons are carried out among states on E-governance, ICT, R&D, innovative technologies, and the availability of the financial investments in creativity and technological development in the 2020 agenda. Based on the recent DESI survey conducted in 2019, figure 2 illustrates Romania's position comparing with the other EU countries (Eurostat & European Commission, 2019).

**Figure 2. Romania's Situation in European Electronic Market based on the Digital Economy Society Index (2019) ranking**



(Source: DESI, 2019)

Romania ranks on the 46 position in the globe throughout the global rating. The growing electronic resources provided by Internet quality and capacity placed Romania in the sixth place worldwide (OECD, 2019). The growing electronic drawbacks are essentially public and resulting in the lack of cooperation between PA, private and governmental sectors (Markova, 2019).

The analysis describes and responds to the Romanian position based on the components of the EU 2020 digital and electronic strategy. The digital strategy

points out the significant actions that should be taken through the adoption of ICT in achieving EU 2020 goals based on four major fields (Government, Romanian, 2020): First of all, E-Governance, integration, and exchange of information, data security and Information Protection, cloud-based services, and social networking, all of them aimed at boosting performance efficiently and effectively and minimizing cost in Romanian PA through administrative modernization. Second, ICT in the educational system, healthcare, and across communities aiming to develop and boost these sectors. Third, ICT in e-business, scientific examination, and innovative advances aiming at creating competitiveness to Romania's position across the regions supports private industry development. Fourth, Internet services and electronic communication networks aiming to build and support the aspects of social integration and involvement. Complete fulfillment and achievement of the ICT strategy map in Romania would contribute in a cumulative investment of about EUR 2.4 billion. Significant steps laid down in the Plan would result in (Government, Romanian, 2020): Assuring that people and institutions have access to online public services, enhancing Internet connectivity to reach high-capacity transmission using a wide range of digital communication systems, motivating people toward Internet utilization, expanding the volume of transnational public e-services, improving electronic resources and developing ICT technology in the areas of healthcare, education, PA, and across communities, strengthening ICT expansion and quality by fostering R&D and innovative technologies adoption across PA.

**Table 3. Comparative Analysis between Romania and Lebanon**

<b>Field of PA reform</b>	<b>PA reform in Romania</b>	<b>PA reform in Lebanon</b>
<b>NPM</b>	<ul style="list-style-type: none"> <li>- Adopting NPM approach to enhance PA reform through decentralization, Reform of the public sector, and restructuring of public policies.</li> <li>- Funding and financial support from European social fund to develop and improve PA.</li> <li>- Boost strategic planning across PA toward better quality of service delivery and performance.</li> <li>- Enhancing the role of private-public partnership and privatization across public organizations</li> </ul>	<ul style="list-style-type: none"> <li>- Absence of reform in public sector, reliance on outdated policies, and centralization.</li> <li>- International support faced by political conflict and corruption limited the development in PA.</li> <li>- Lack of accountability led to poor quality of service and performance.</li> <li>- Reliance on bureaucracy rather than on entrepreneurship.</li> <li>- The role of public-private partnership and privatization still a debatable issue.</li> </ul>
<b>ICT</b>	<ul style="list-style-type: none"> <li>- Supporting the improvement in ICT knowledge and awareness.</li> <li>- Ensuring community participation for development.</li> <li>- Training employees engaged in managing and improving ICT operations.</li> </ul>	<ul style="list-style-type: none"> <li>- Lack of support, knowledge, and the funding infrastructure and the reliance only on international donors.</li> <li>- Absence of community participation along with political instability represents a</li> </ul>

**Innovation in public administration reform: a strategic reform through NPM, ICT, and e-governance. A comparative analysis between Lebanon and Romania**

<b>Field of PA reform</b>	<b>PA reform in Romania</b>	<b>PA reform in Lebanon</b>
	<ul style="list-style-type: none"> <li>- Improving ICT infrastructure throughout public service organizations such as in health care, educational system, and culture.</li> <li>- Expanding the percentage of job opportunities in ICT industry.</li> <li>- Supporting ICT sector in order to accomplish economic development and achieve EU 2020 strategic agenda.</li> </ul>	<ul style="list-style-type: none"> <li>burden on ICT market growth.</li> <li>- Deficiency in staff knowledge and the absence of training.</li> <li>- Weak ICT infrastructure with high rate of software violators and piracy.</li> <li>- Existence of nepotism and sectarian distribution restrict the opportunities to create the desire job on ICT field.</li> </ul>
<b>E-governance</b>	<ul style="list-style-type: none"> <li>- Spreading transparency in PA by applying digitalization of public and government services.</li> <li>- Expanding information technology and data security platforms and systems across PA.</li> <li>- Enhancing and motivating access to public services digitally</li> <li>- Improving PA through e-governance in order to reduce cost.</li> <li>- Establishing government strategy based on the adoption of automated and electronic public services.</li> <li>- Digital technology measures continue to be below EU average (DESI data).</li> <li>- Little funding from government financial plan for e-governance.</li> <li>- Complexity for change and reform in the bureaucratic system.</li> </ul>	<ul style="list-style-type: none"> <li>- Rampant corruption restrict digital technology adoption.</li> <li>- Limited investment in cyber security and information technology.</li> <li>- Absence of communication between government and its people to foster them to access services by digital technology.</li> <li>- High PA cost associated with conventional structure and lack of automated system.</li> <li>- Weak governmental spending in e-governance projects led to poor digital infrastructure.</li> <li>- Inability to shift from bureaucratic to entrepreneurial one render the adoption of e-governance hard and challenging.</li> </ul>

*(Source: Authors own contribution)*

### **3. Conclusions**

Digital innovative technologies offer the opportunity to streamline measures, increase public transparency and accountability, maximize efficiency and effectiveness, and improve the quality of public services (The World Bank, 2016). In conclusion, in Lebanon's case, the most important problems are the conventional public organizational rules, the lack of funding infrastructure and adequate government spending and expenditure in innovation, the reliance on international donors without the help of the Lebanese PA to support the adoption of innovative technologies, and the absence of employees training on modern concepts of PA, modern ICT, NPM and E-governance in order to improve efficiency and performance. Thus the quality of public services indicates that

innovation in PA should be improved and updated to support and help people in a more competent way. In doing so, Lebanese PA through OMSAR should shake hands to strengthen the implementation of innovation in its public corridors and should cross the notion of “still born” application of ICT to a fruitful and profitable implementation contributing to strategic innovation in public services and improved PA efficiency and performance. In comparison, for Romania to achieve its 2020 digital agenda resulted from information and data collected from several sources such as the Ministry of Communication and Information Society, OECD, DESI index, and Eurostat on ICT and e-governance, the article yields significant findings of Romanian PA perspectives on evaluating national ICT and E-governance. First of all, the improvement in quality and employees effectiveness as an urgent matter for ICT adoption; second, the emphasis on enhancing information sharing across workers; third, ability to reduce the processing time for people to address different issues; fourth, increase collaboration among Romanian PA and other related public service organizations; and fifth, boosting learning and development needs for workers, even if they possess sufficient expertise, awareness, and capabilities. Also, in accordance with the goals of the 2020 domestic digital plan, Romania did not behave badly in comparison with the EU digital strategy, yet, lot of efforts should be done for Romania to compete effectively at the digital level and accomplish the adaptation to electronic and digital culture. For the electronic and digital plan to grow completely, Romania should place more emphasis on improving the technological and digital awareness and knowledge of people. Digital technology will significantly increase the quality level of services provided by Romanian PA. The efficient delivery of online government services represents a tool for minimizing spending and costs through PA and increase productivity, efficiently and effectively, and boost transparency and accountability. The major contributions for the Romanian government should be manifested through the significant realization of promoting innovative technologies at both national and EU level, developing a sharing information security infrastructure, improving Information Technology knowledge, and encourage people to experience the advantage of digital technology. Finally, the Coronavirus crises that hit our societies and the huge economic crisis almost all countries across the world will face due to the lockdown associated with COVID-19, both countries, Lebanon and Romania, should strive to create an adequate digital strategy and benefit from the financial support provided from EU in the case of Romania and from International Monetary Fund in the case of Lebanon in order to help and support the economy of both countries and facilitate the delivery of public services which should meet communities’ needs and demands.

#### **Authors Contributions**

The authors listed have made a substantial, direct and intellectual contribution to the work, and approved it for publication.

### **Conflict of Interest Statement**

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

### **References**

- Backus, M. (2001). *E-Governance and Developing Countries: Introduction and Examples*. Research Report.
- Basu, S. (2004). E-governance and developing countries: an overview. *International Review of Law Computers*, 18(1), 109-132.
- Bekkers, V., Edelenbos, J., & Steijn, B. (2011). *Innovation in the Public Sector*. London: Palgrave MacMillan.
- Boustani, N., Chedrawi, C. (2019). Innovation, New Public Management and Digital Era Government, Towards a Better Public Sector Performance Through ICT: The Case of the Lebanese Ministry of Environment. In Y. Baghdadi, and A. Harfouche, ICT for a Better Life and a Better World. Springer.
- Brannen, A. (2001). E-governance in California: providing services to citizens through the internet. *Spectrum: the Journal of State Government*, 74(2), p.6.
- Ciurea, M. (2019). The Digital Economy in Romania: Theoretical Approaches and the Current State of Development in the Context Imposed by the European Union. 1st International Scientific and Practical Conference on Digital Economy (ISCDE 2019). Petroșani, Romania: Atlantis Press.
- European Commission (2003). The Role of E-governance for Europe's Future. Brussels: the European Economic and Social Committee and the Committee of the Regions.
- Eurostat, and European Commission. 2019. The Digital Economy and Society Index (DESI).
- Fuglsang, L., Pedersen, J. (2011). How Common Is Public Sector Innovation and How Similar Is It to Private Sector Innovation. In V. Bekkers, J. Edelenbos, and B. Steijn, *Innovation in the Public Sector* (pp. 44-60). Palgrave MacMillan.
- Gatautis, R. (2008). The impact of ICT on public and private sectors in Lithuania. *Engineering Economics*, 59(4), 18-28.
- Golden, O. (1990). Innovation in public sector human service programs: the implications of innovation by groping along. *J. Policy Anal. Manag.*, 219-248.
- Gov.ro. (2020). National Strategy on the Digital Agenda for Romania 2020. Guvernul României. Retrieved July 24, 2020, from <https://gov.ro/en/government/cabinet-meeting/national-strategy-on-the-digital-agenda-for-romania-2020>
- Harfouche, A., Robbin, A. (2012). E-Government Implementation in Developing Countries: A Neoinstitutional Approach to Explain Failure. An Example from Lebanon. Mediterranean Conference on Information Systems. AIS Electronic Library (AISeL).
- Harfouche, A., Robbin, A. (2015). E-Government Implementation in Developing Countries. In L. Mola, F. Pennarola, and S. Za., *From Information to Smart Society: Environment, Politics and Economics* (Vol. 5, pp. 315-327). Springer's Lecture Notes in Information Systems and Organization Series.
- Hintea, C. (2008). *Public Management Reform: Romania*. 271-281.
- Hintea, C. (2011). Reform and management in Romania. Strategy and structural change. *Revista de Cercetare și Intervenție Socială*, 34, 177-196.
- Homburg, V., Bekkers, V. (2005). The Information Ecology of E-government. In *E-government as Institutional and Technological innovation in Public Administration*, pp. 1-19. Amsterdam: IOS Press.
- Hood, C. (2000). A Public Management for All Seasons? *Public Administration*, 69, 3-19.

- Lane, J. (2000). *New Public Management: An Introduction*. London: Routledge.
- Light, P. (1998). *Sustaining Innovation*. San Francisco: Jossey-Bass.
- Margetts, H., Dunleavy, P. (2013). *The Second Wave of Digital-Era Governance: A Quasi-Paradigm for Government*. *Philosophical Transactions of the Royal Society*, 1-17.
- Markova, V. (2019). Digital Economy: New Opportunities and Threats for Regions. *Journal Region: Economics and Sociology*, Vol.3. Retrieved from [http://sibran.ru/en/journals/issue.php?ID=177218&ARTICLE\\_ID=177264](http://sibran.ru/en/journals/issue.php?ID=177218&ARTICLE_ID=177264)
- Matei, A., Savulescu, C. (2014). Enhancing the capacity for innovation of public administration. An exploratory study on e-Governance, ICT, Knowledge Management in Romania. *Theoretical and Applied Economics*, 21(11), 7-26.
- Ministry of Communications and Information Society. (2019). National Strategy on the Digital Agenda for Romania 2020. Retrieved July 7, 2020, from <https://www.comunicatii.gov.ro/agenda-digitala-pentru-romania-2020>
- Nkwe, N. (2012). E-Government: challenges and opportunities in Botswana. *International Journal of Humanities and Social Science*, 3(1), 39-48.
- NSRF. (2007). National Strategic Reference Framework 2007-2013. Executive Summary. Retrieved July 6, 2020, from [http://www.fonduriue.ro/res/filepicker\\_users/cd25a597fd-6262/Doc\\_prog/CSNR/2\\_Rezumat\\_CSNR%28eng.%29.pdf](http://www.fonduriue.ro/res/filepicker_users/cd25a597fd-6262/Doc_prog/CSNR/2_Rezumat_CSNR%28eng.%29.pdf)
- OECD. (2011). *Making the Most of Public Investment in a Tight Fiscal Environment: Multilevel Governance Lessons from the Crisis*. Paris: OECD.
- OECD. (2019). Retrieved July 22, 2020, from <http://www.oecd.org>.
- Ojo, J. (2014). E-Governance: An imperative for sustainable grass root development in Nigeria. *Journal of Public Administration and Policy Research*, 6(4), 77-89.
- Osborne, D., & Gaebler, T. (1992). *Reinventing Government: How the Entrepreneurial Spirit is Transforming the Public Sector*. New York: Penguin.
- Osborne, S., Brown, K. (2005). *Managing Change and Innovation in Public Service Organizations*. Routledge.
- Oudshoorn, N., Pinch, T. (2003). *How Users Matter. The Co-Construction of Users and Technology*. Cambridge: MIT Press.
- Politt, C., Dan, S. (2011). The Impacts of the New Public Management in Europe: A Meta-Analysis. Cocops Work Package 1 – Deliverable.
- Profiroiu, A., Profiroiu, M., & Andrei, T. (2009). Main Actors of the Romanian Public Administration Reform. The 5th Administration and Public Management International Conference. Bucharest.
- The World Bank. (2016). World Development Report 2016: Digital Dividends. Washington DC: World Bank. doi:<https://doi.org/10.1596/978-1-4648-0671-1>
- Verbeeten, F., Spekle, R. (2015). Management control, results-oriented culture and public sector performance: empirical evidence on New Public Management. *Organization Studies*, 36(7), 953-978.
- Von Hippel, E. (2007). Horizontal innovation networks – by and for users. *Industrial and Corporate Change*, 16(2), 1-23.
- Wimmer, M., Traummüller, R. (2001). Trends in Electronic Government: Managing Distributed Knowledge. Proceedings of the 11th International Workshop on Database Expert Systems Applications. New York: Springer.
- World Public Sector Report. (2003). E-Government at the Crossroads. New York: UN Department of Economic and Social Affairs.
- Wright, J. (1991). Reshaping the state: the implications for public administration. *West European Politics*, 17(3), 102-137.
- Zulean, M., Gheorghui, R., Andreescu, L., & Roescu, A. (2017). Romanian Public Administration Reform 2.0: Using Innovative Foresight Methodologies to Engage Stakeholders and the Public. Emerald Insight. doi:<http://dx.doi.org/10.1108/FS-09-2016-0047>.