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## THE LEGAL CHALLENGES RELATED TO THE DIGITALIZATION OF PUBLIC SERVICES: A PRINCIPLES PERSPECTIVE

*The digitalization of public services has revolutionized the way governments interact with their citizens, offering efficiency, accessibility, and convenience. The legal principles of the administrative procedures endorsing active administrative support to public entities provide opportunity to such entities to promote the use of digital means for ensuring access to public services. In light of this, public entities have gone even further by digitizing the majority of governmental services. Certainly, there are numerous benefits, such as the improvement of efficiency in delivering public services with limited resources. This is certainly a plausible transformation of traditional governance into e-government. This could serve as a premise for further application of innovative solutions provided by artificial intelligence modules, that could “substitute” instead of “merely supporting” the human capital in public administration.*

*However, this transformation also brings forth a myriad of legal challenges that need to be addressed to ensure the effective and equitable delivery of services. This paper explores the key legal challenges faced in the digitalization of public services, including but not limited to data privacy and security concerns, digital inclusion and accessibility issues, regulatory compliance, jurisdictional complexities, the need for robust legal frameworks to govern emerging technologies, and internationalization of marginal economic cost. By examining these challenges, this paper aims to contribute to the ongoing discourse on how to navigate the legal landscape of digital public services to promote transparency, accountability, and trust between governments and citizens. Relevant legal principles shall be employed in order to elaborate on such legal challenges the e-revolution is bringing in the area of governance, with the ultimate question that remains open: Is this what citizens need?*

**Keywords:** digital transformation, accountability, administrative law, public administration, cybersecurity risks.

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## 1. INTRODUCTION

Public services are undergoing a transformation from a traditional to a digital modus in most countries in the world, notwithstanding their level of development. This transformation could be explained by political reasons as much as by economic ones related to the accomplishment of cost efficiency, improvement of quality of services, increase in transparency and reduction in corruptive practices. Quantitative research is needed to observe the real impacts of digitalization in these directions. However, this paper is based on the assumption that the digitalization of public services is beneficial for society, without judging the proper effects it has in the quality and quantity of services. Rather, this paper addresses some concerns related to the legitimacy of the digitalization processes, including the Artificial Intelligence (“AI”) systems, in terms of constitutional and legal principles regulating the public administration.

At the outset, the paper shall bring some notes on the most important legal and constitutional principles of administrative law and procedure permeating the traditional modus of public administration. These principles are mainly explored within the European Union jurisdiction, as an exemplary legal framework that has well combined treaty law with domestic law, and where the administrative law principles can be traced very clearly with the support of the jurisprudence of the European Court of Justice. In the third section we shall shed light on the main understanding of the digitalization processes of public services, to continue with some threats and benefits of the transformation process of the traditional public services into digitalized modus. Here, the concept of AI shall be also highlighted. In the third section, the process of the digitalization of public services shall be discussed in view of the constitutional and legal principles and institutions, before reaching some conclusion on this discourse.

## 2. PUBLIC SERVICES AND THEIR ANCHOR IN CONSTITUTIONAL AND ADMINISTRATIVE LEGAL PRINCIPLES

Public services can be referred to as services provided or facilitated by the governments for the general public’s convenience and benefit.<sup>1</sup> Such services are expected to be delivered by a public entity that has the capacity to act and can be provided to the public directly or indirectly, by means of government’s subcontractors. In any case, the process for delivering such services, whether performed through a governmental body or a specialized corporation organized on a commercial basis, the public service should be delivered in conformity with legal principles governing the activities of public services or public administration. Indeed, administration of public services is based on administrative law to a wide extent and should be delivered as such in compliance with administrative procedures.

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<sup>1</sup> See for example: Garner, B. A. 2004. *Black’s Law Dictionary*. USA: Thomson West Publishing Co.

Developed in a national legislation context since the late medieval states and more furiously after the Enlightenment Movements, administrative law has expanded its frontiers under the pressure of comparative law to inspire even the law of the European Union since the early days of the Communities, the latter being depicted as a *sui generis* legal order with supranational features.<sup>2</sup> The main principles of administrative law inspire the administrative action from a substantive perspective. Such principles include:

- The general principle of administration through law, in that the administrative action should be in full compliance with the norms of general application provided in the primary and secondary legislation;<sup>3</sup>
- The principle of non-discrimination requiring an equal and non-discriminatory administrative conduct of the decision-making authority;<sup>4</sup>
- The principle of proportionality, requiring an administrative action to be proportionate to the objectives sought by the measure, by adopting the less radical means;<sup>5</sup>
- The principle of legal certainty<sup>6</sup> and of protection of legitimate expectations<sup>7</sup> by which the confidence of persons concerned deserves to be protected;
- The right to a hearing before an adverse decision is taken by a public authority;<sup>8</sup>
- The maintenance of a balanced and fair administrative process.

In addition to these substantive law principles governing the content of a certain decision-making, the administrative action should also comply with the principles of administrative procedure, which govern the way how the administrative body should act under the imperative of the rule of law.<sup>9</sup> Such principles and institutions include the duty to act with the granted powers (competencies), the right of the administrative entities to make investigations within the limitations thereof, right of defense of the affected or interested parties, respect of formal requirements of the decision-making process, such as the formulation of the decision, the duty to give reasons, notification to parties, etc.

All these principles are inherently vested in the administrative entities delivering any public services.

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<sup>2</sup> On a more detailed analysis of the European Union law as a community of administrative law see: Schwarze, J. 1992. *European Administrative Law*. London: Office for Official Publications of the European Communities, pp. 11 *et seq.*

<sup>3</sup> See for example ECJ Case C-113/77 *NTN Toyo Bearing v Council* [1979], E.C.R. 1985, at 1209, para. 21.

<sup>4</sup> See for example ECJ Joined cases 117-76 and 16-77 *Ruckdeschel and Others v Hauptzollamt Hamburg-St. Annen and Diamalt AG v Hauptzollamt Intzenhoe* [1977], E.C.R. 1753, at 1770, para. 8.

<sup>5</sup> See for example ECJ C-11/70 *Internationale Handelsgesellschaft mbH v Einfuhr- und Vorratsstelle für Getreide und Futtermittel* [1970], E.C.R. 1125, at 1137

<sup>6</sup> See for example Case C-111/63 *Lemmerz Werke v High Authority* [1965], E.C.R. 677, at 690.

<sup>7</sup> See for example ECJ Case C-1/73 *Westzucker GmbH v Einfuhr- und Vorratsstelle für Zucker* [1973], E.C.R. 723, at 729, para. 6.

<sup>8</sup> See for example ECJ Case C-17/74 *Transocean Marine Paint Association v Commission* [1974], 1073, at 1080, para. 20.

<sup>9</sup> See for a detailed comparative view on the matter: Schwarze, 1992, p. 1173 *et seq.*

### 3. PUBLIC SERVICES IN THE ERA OF DIGITALIZATION

The concept of digitalization refers to the transformation of analog processes into digital processes by revising these processes and introducing new organizational models.<sup>10</sup> Since their invention, the governments have been the primary customers of the digital technology market. As of the '60s, the public sector organizations have felt the need to adopt new technologies to organize their work in a more effective and efficient manner, such as storing and retrieving citizens' data in shared databases.<sup>11</sup>

Such technology has been used for decades to support and improve productivity in delivering public services. Digital technology and the data revolution offer countries significant potential to increase public service efficiency and delivery, and to boost transparency and citizen trust.<sup>12</sup> In this view, the technology was not delivering the service, but was used as tool for storing and processing information and data management. Hence, since the late '70s the introduction of technology in the public services has been seen as a tool for improving the interaction between government and citizens.<sup>13</sup>

With the expansion of digital technology in the wide society, governments are relying more on digital products and services. A new potential is being created for bringing services closer to citizens by creating a direct digital link between the government as a service provider and the citizen as its client. The pandemic caused by the Coronavirus in 2019 can well be regarded as a trigger for shifting most of the public services from paper-based to digitalized products. This shift brought a different perspective in the perception of the systemic relationship between governments and citizens. Accessing public services remotely from any place in the world via the internet by means of various devices, from personal computers to mobile phones, is certainly more than just a convenient tool for reaching the services. Digitalization served in this way as a communication channel between the government and any citizen in an isolation period, thus turning into a tool for crisis management.<sup>14</sup> After the crisis, this platform was transformed into a great potential for de-bureaucratization of governance and the improvement of quality of services allowing for reallocation of human resources in a more efficient way. In this view, digital technology is regarded as a medium for interaction between the public official and the citizen, without eliminating the decision-making capabilities from the human actor. Hence, most services are still dependent on human resources, and this fades most of the advantages of the technology in terms of the time for delivering the services.<sup>15</sup>

<sup>10</sup> Fischer, C., Heuberger, M. & Heine, M. 2021. The impact of digitalization in the public sector: A systematic literature review. *Zeitschrift für Public Policy, Recht und Management*, 14(1), pp. 3-23.

<sup>11</sup> Mina-Raiu, L. & Melenciuc, M. 2022. The role of digitalisation in the process of improving the quality of urban public services. *Theoretical and Empirical Researches in Urban Management*, 17(4), pp. 22-35.

<sup>12</sup> Bjerde, A. & Demirgüç-Kunt, A. 2024. Digitalization and data can vastly improve public service delivery for citizens. World Bank blogs. Available at: <https://blogs.worldbank.org/en/europeandcentralasia/digitalization-and-data-can-vastly-improve-public-service-delivery-citizens> (4. 8. 2024).

<sup>13</sup> Lynn, T. *et al.* 2022. Digital Public Services. In: Lynn, T. (ed.): *Digital Towns*. Cham: Springer International Publishing, p. 50.

<sup>14</sup> Lynn *et al.*, 2022, p. 50.

<sup>15</sup> Lynn *et al.*, 2022, pp. 50-51.

Indeed, while the governments are still working on developing, enabling and improving the platform for delivering public services, they are at the same time preparing to adopt AI products for their needs, as tools that promise to deliver many more benefits in terms of productivity, cost-effectiveness, customer satisfaction and quality.

The focus of the digitalization process is mainly set on the capacity building of the public administration. As Bjerde and Demirgüç-Kunt put it: “Governments must encourage the adoption and development of robust data systems within the civil service. This will require recruitment and capacity building of staff to improve the use of data for evidence-based decision-making. Enhancing digitalization of public services and improving coordination of decentralized data systems across institutions are also necessary”.<sup>16</sup>

Digitalization of public services brings significant benefits both from a quantitative and qualitative perspective. Automated systems certainly allow for a significant increase in the number of services by utilizing the same or even a lower number of human resources. Any citizen can communicate with the office 24/7 without being restricted by the opening hours. Considering that the majority of public services can be delivered remotely, the organizations may allocate their personnel in those areas where the work overload is higher, without having to increase personnel. The statistical information is easily managed and, in this way, it allows for adaptation strategies over time.

However, the provision of public services in a digitalized mode is based on several assumptions in order to work properly. First and foremost, it is based on the assumption that the system works perfectly well from an operational perspective. This means that the system shall not be interrupted for any reason and that the hardware, as well as software elements, are duly protected from security threats or unauthorized access. Secondly, it is based on the assumption that the citizens own both the digital devices and the necessary literacy to operate the systems or platforms for accessing the desired public services.<sup>17</sup> If these preconditions are not met, various threats of a legal nature may emerge.

Digitalization is criticized for detaching public services from the traditional places of government.<sup>18</sup> This is certainly not merely a physical problem. A citizen that is unable to access a digitally provided service, for various reasons, is essentially denied that service. Hence, although digitalization has increased the outreach of public services from the majority of society, essentially it constitutes a safe premise for denying access to a certain number of citizens. It is for this reason that alternative channels of communication should remain available and easily accessible by any citizen, in order to be able to obtain the relevant services.

Another downside of digitalization is the vulnerability of data to externally or internally driven cybersecurity threats. Such threats may cause a leak of sensitive data related to citizens or even a blackout of digital services for significant amounts of time. This would expose the governmental bodies to a significant civil liability towards citizens, and most

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<sup>16</sup> Bjerde, A. & Demirgüç-Kunt, A. 2024. Digitalization and data can vastly improve public service delivery for citizens. World Bank blogs. Available at: <https://blogs.worldbank.org/en/europeandcentralasia/digitalization-and-data-can-vastly-improve-public-service-delivery-citizens> (4. 8. 2024).

<sup>17</sup> See also: Lynn *et al.*, 2022, p. 51.

<sup>18</sup> Lynn *et al.*, 2022, p. 51.

probably, the possibility of redressing could be impossible as there is no adequate policing force to enforce criminal offences in the global virtual environment. Therefore, amid these risks, the due level of care that the government should exercise could be prohibitively high.

Amid these drawbacks, by digitalizing public services, governments have established a new model for delivering the outputs of public administration. In this new paradigm, platforms of communication, such as e-governments, are more than a medium for facilitating the exchange of information between the government and its citizens by means of self-service tools. E-government, consisting of the use of digital technologies in government to promote efficiency and cost-effectiveness, has managed to facilitate public access to information for citizens and businesses, has favoured economic development, and made governments more accountable.<sup>19</sup> These platforms operating electronic governmental services, initially designed as a medium for the exchange of information, have modified the models of organizations in public entities, requiring further specialization in the use of technology for almost every member of the organization.

In terms of the actors involved, further intermediates are most likely to be involved in facilitating the communication between the classic actors, namely the public body and the citizens. Hence, the services now are more dependent on third parties acting as service providers for creating, maintaining and operating the platform of communication between the main actors. In terms of the initiation of public services, digitalization allows for 24/7 access to public services, and this certainly might change the expectations of citizens for the government response time in general.<sup>20</sup>

However, this new model is the basis for inseminating a future model of providing services through AI programs. Such programs shall overtake the human role in many directions and might well interact with the citizens in the name of the public administration during the delivery of services. Algorithms may lead to proactive delivery of services based on constant incoming data flow.<sup>21</sup> The European Union is among the first entities regulating the development, placing on the market, putting into service and use of AI systems, with the aim to classify and mitigate, prevent or prohibit potential risks these systems could cause to the public.<sup>22</sup> The AI Act is introduced on the premises that: “AI is a fast-evolving family of technologies that contributes to a wide array of economic, environmental and societal benefits across the entire spectrum of industries and social activities. By improving prediction, optimising operations and resource allocation, and personalising digital solutions available for individuals and organisations, the use of AI can provide key competitive advantages to undertakings and support socially and environmentally beneficial outcomes, for example in healthcare, agriculture, food safety,

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<sup>19</sup> Terlizzi, A. 2021. The Digitalization of the Public Sector: A Systematic Literature Review. *Rivista Italiana di Politiche Pubbliche*, 1, pp. 5–38.

<sup>20</sup> Lynn *et al.*, 2022, p. 50.

<sup>21</sup> Lynn *et al.*, 2022, p. 51.

<sup>22</sup> Regulation (EU) 2024/1689 of the European Parliament and of the Council of 13 June 2024 laying down harmonised rules on artificial intelligence and amending Regulations (EC) No 300/2008, (EU) No 167/2013, (EU) No 168/2013, (EU) 2018/858, (EU) 2018/1139 and (EU) 2019/2144 and Directives 2014/90/EU, (EU) 2016/797 and (EU) 2020/1828 (Artificial Intelligence Act).

education and training, media, sports, culture, infrastructure management, energy, transport and logistics, public services, security, justice, resource and energy efficiency, environmental monitoring, the conservation and restoration of biodiversity and ecosystems and climate change mitigation and adaptation”.<sup>23</sup>

The digitalization of public services has changed significantly the concept of government for offering public services. This is not a mere transformation from paper to digits, but a transformation modus of communication of service providers with citizens.<sup>24</sup> Digital transformation implies change at the core of the organization, its processes and routines, as well as in its environment, business models, products, and services, and in the interaction between users and the organization itself.<sup>25</sup> Governments believe that this transformation is a game changer in terms of the amelioration of service quality as well as an opportunity to reduce corruption practices. The entire society needs to be prepared to respond adequately to this transformation, but the governments have also to adapt to a new reality. They need to reconceptualize their roles and functions in a digitalized society, where the threats could be as high as the benefits of this digitalization. Governments have to achieve greater trust in the system, including through responsiveness and transparency, and by providing opportunities for greater outreach among citizens.<sup>26</sup> In essence, governments need to redesign themselves into digital modus, and this requires a systemic reconceptualization of the public administration and the public sector in general. According to the OECD: “Becoming digital by design requires: 1) setting a strategic vision and clear mandate for digital government; 2) securing solid organizational leadership to steer digital government policies and actions, and 3) establishing effective coordination and collaboration within and outside the public sector for government-wide digital transformation in a coherent and inclusive manner”.<sup>27</sup>

#### 4. NORMATIVE PROPOSITIONS FROM THE PERSPECTIVE OF LEGAL PRINCIPLES

The above overview as well as the review of the main literature of recent years on the topic shows that the process of transformation of the public service to digital form is mainly seen as an infrastructural process, in which the governments have to establish institutions to develop and implement digitalization programs across the governmental institutions at all levels. Certainly, the benefits of this process could be enormous for society at large from an economic perspective. Nevertheless, the concerns associated with this process should not be neglected.

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<sup>23</sup> Regulation (EU) 2024/1689, para. 4 Preamble.

<sup>24</sup> See also: Mina-Raiu & Melenciuc, 2022.

<sup>25</sup> Haug, N., Dan, S. & Mergel, I. 2024. Digitally-induced change in the public sector: a systematic review and research agenda. *Public Management Review*, 26 (7), pp. 1963–1987.

<sup>26</sup> Mishra, M. K. 2020. *Digital Transformation of Public Service and Administration*. Kiel, Hamburg: ZBW – Leibniz Information Centre for Economics.

<sup>27</sup> OECD. 2023a. Government at a Glance 2023. Available at: [https://www.oecd.org/en/publications/government-at-a-glance-2023\\_3d5c5d31-en.html](https://www.oecd.org/en/publications/government-at-a-glance-2023_3d5c5d31-en.html) (10. 10. 2024).

The bureaucracy, with all its deficiencies in terms of delivering services in due course and quality, operates on the basis of constitutional principles and legal institutions. Many of these principles are usually implemented during the administration of public services as well as in the course of administrative procedures. In case of failures, administrative and/or judicial review stands as a guarantee for the protection of citizens' rights. The question raised in the context of digitalization of the public services, and particularly in their delivery through AI, is whether the algorithms are able to adhere to the general principles of the constitution and the legal principles to the same extent as public officials are.

The general principle of administration through law requires that the administrative action should be in full compliance with the norms of general application provided in the primary and secondary legislation. The primary and secondary legislation could be easily digitalized and as such, the machines could use the databases to generate automatic answers to many legal questions. Nonetheless, legal thinking in the application of law could barely be taught to machines. This process is inculcated to law students in universities and continues to be enriched throughout their careers. It barely ends, as long as human knowledge is endless. The application of law is everything but a mechanical process of norm application to a certain problem. In between, one could only imagine the challenges of teaching the art of legal analysis and interpretation to an AI machine, in order to obtain the necessary tools for decision-making.

Exercising administrative power is often associated with the duty of the public entity to refrain from discriminative practices. Often, the courts are overloaded with administrative claims related or amounting to discrimination for many written or unwritten grounds. It is for the courts to interpret the law in very sensitive yet narrow trials distinguishing right from wrong in deciding the fate of citizens.

Another core principle of public administration, the principle of accountability, means that the public administration is held accountable to the public for the proper implementation of its duties and responsibilities. The concept of accountability is quite complex and not easily absorbed by all institutions equally. Other stakeholders can also play a role in enhancing or confirming the accountability of the administration, and this makes the adherence to this principle, inasmuch as they may interact with the bureaucracy in various stages of a certain administrative process. While it could seem relatively possible to transform a certain workflow or administrative process into digital processes and programs, it is reasonably very challenging to expect the machines using algorithms to judge the moral values of principles in making decisions that could influence the lives of citizens. It is often the discretion of public officials that determines the veracity of the statements of various stakeholders in a certain administrative process.<sup>28</sup> Similarly, the principle of proportionality provides also for a certain margin of appreciation in exercising public power in particular cases. Hence, it remains unclear whether this discretion, which often could be based on, or determined by, psycho-emotional and cultural factors permeating the public discourse in a given society, could be vested in machines by any sort of digitalization transformation.

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<sup>28</sup> Lindgren, I. & van Veenstra, A. F. 2018. Digital government transformation. In: Janssen, M. (ed.), *Proceedings of the 19<sup>th</sup> Annual International Conference on Digital Government Research Governance in the Data Age*. New York: ACM, pp. 1–6.



It is the duty of the public administration to guarantee the confidence of people involved in a particular administrative process, or obtaining a certain service. Yet, the principles of legal certainty and of protection of legitimate expectations, as provided in constitutional documents, laws and confirmed by jurisprudence, are quite complex to automatize. Similarly, one could hardly imagine the digitalized administrative bodies observing a fair balance between public and private interests in a certain administrative procedure, or even to exercise public authority within the granted powers (competencies), or to exercise the right to make investigations within the limitations thereof, or observing in an adequate manner other procedural rights, such as the right of defence of the affected or interested parties, to respect the formal requirements of the decision-making process, such as the formulation of the decision, the duty to give reasons, notification to parties. All these principles interact in a very complex way with each other, and this makes the administrative process quite unpredictable. Indeed, although the purpose of the law is to enhance predictability, the automatization or digitalization of the law does not necessarily serve that aim. The nature of law, inasmuch as the predictability is concerned, aims to strike a fair balance under the “regulatory dilemma.” If the lawmaker regulates every human behaviour, the law becomes impossible to implement as the transaction costs in society will increase prohibitively high. In case the lawmaker chooses not to regulate, the trials in the implementation of the law might endanger the legal certainty itself. The art of legislative policy is then to strike the proper balance between these two ends, none of which is purely desired. While the legislators regulate, through a minimalistic approach, the most common and indispensable interests of the society, the principles put some barriers both to citizens and public officials in the conduct of their everyday activities. Here, the question is to what extent would digitalization really guarantee a proper transformation of the public from human to digital modus. Alignment and adherence to shared ethical values and principles for the management of algorithms are essential when using AI in the public sector.<sup>29</sup>

The discourse with the introduction of AI takes another dimension. AI systems are still under development and the mere fact that their adherence to constitutional and legal principles and institutions is quite complex, it should be required that such systems do not get introduced into service providers unless they pass the tests for fundamental rights impact assessment.<sup>30</sup> In addition, AI systems should be programmed to respect the rule of law, human rights, and democratic and human-centred values, including the principles of non-discrimination and equality, freedom, dignity, the autonomy of individuals, privacy and data protection, diversity, fairness, social justice, and internationally recognized labour rights. To this end, AI actors should implement mechanisms and safeguards, such as capacity for human agency and oversight, including addressing risks arising from uses outside of the intended purpose, intentional misuse, or unintentional misuse in a manner appropriate to the context and consistent with the state of the art.<sup>31</sup>

<sup>29</sup> OECD, 2023a.

<sup>30</sup> Regulation (EU) 2024/1689, Art. 27.

<sup>31</sup> OECD. 2023b. Recommendation of the Council on Artificial Intelligence. Available at: <https://legalinstruments.oecd.org/en/instruments/OECD-LEGAL-0449> (10. 10. 2024).

Notwithstanding the above, it should be expected that jurisdictional questions should often arise. AI systems are developed in particular jurisdictions, and their implantation in foreign countries should not be easily adapted from a jurisdictional perspective. This is due to the fact that legal systems and families remain extremely diverse in almost every discipline of law, even in the areas and regions where legal unification has produced a significant degree of legal integration, such as the European Union.

## 5. CONCLUSION

From the moral perspective, the reduction of the human role in the decision-making processes needs to be judged upon the ability of the machines to fully substitute the humans in such roles. It should be noted that the human dimension inherent in traditional public administration and public service, in general, is not a material value that can be convertible to digital products by means of algorithms. Before surrendering our institutions and elected governments to machines, human society should make sure that such algorithms are aligned and adhere to shared ethical values, principles constitutional principles and other legal institutions.

One should not neglect the fact that cyberthreats could have a severe impact on human rights, inasmuch as such impacts could be significantly large and extended in time. Hence, as far as digitalization is concerned, if the central servers of a government are attacked, besides the leaking of information, the services could be denied to the public for a significant amount of time. For governments, it is quite impossible to return to a paper-based administration in a short period of time. Hence, the denial of public services is unavoidable and could amount to a less costly solution.

It is for the above reasons that the digitalization of public services should be taken very carefully from the government, not as a race to the bottom, but as a process of self-development of the public administration into a new system of governance, where the constitutional and legal principles and institutions are also adapted to the new concept of digitalization of public administration.

## LIST OF REFERENCES

- Bjerde, A. & Demirgüç-Kunt, A. 2024. Digitalization and data can vastly improve public service delivery for citizens. World Bank blogs. Available at: <https://blogs.worldbank.org/en/europeandcentralasia/digitalization-and-data-can-vastly-improve-public-service-delivery-citizens> (4. 8. 2024).
- Fischer, C., Heuberger, M. & Heine, M. 2021. The impact of digitalization in the public sector: A systematic literature review. *Zeitschrift für Public Policy, Recht und Management*, 14(1), pp. 3-23. <https://doi.org/10.3224/dms.v14i1.13>
- Garner, B. A. 2004. *Black's Law Dictionary*. USA: Thomson West Publishing Co.
- Haug, N., Dan, S. & Mergel, I. 2024. Digitally-induced change in the public sector: a systematic review and research agenda. *Public Management Review*, 26 (7), pp. 1963–1987. <https://doi.org/10.1080/14719037.2023.2234917>

- Lindgren, I. & van Veenstra, A. F. 2018. Digital government transformation. In: Jansen, M. (ed.), *Proceedings of the 19<sup>th</sup> Annual International Conference on Digital Government Research Governance in the Data Age*. New York: ACM, pp. 1–6. <https://doi.org/10.1145/3209281.3209302>
- Lynn, T. *et al.* 2022. Digital Public Services. In: Lynn, T. (ed.): *Digital Towns*. Cham: Springer International Publishing, pp. 49–68. [https://doi.org/10.1007/978-3-030-91247-5\\_3](https://doi.org/10.1007/978-3-030-91247-5_3)
- Mina-Raiu, L. & Melenciuc, M. 2022. The role of digitalisation in the process of improving the quality of urban public services. *Theoretical and Empirical Researches in Urban Management*, 17(4), pp. 22–35.
- Mishra, M. K. 2020. *Digital Transformation of Public Service and Administration*. Kiel, Hamburg: ZBW – Leibniz Information Centre for Economics.
- OECD. 2023a. Government at a Glance 2023. Available at: [https://www.oecd.org/en/publications/government-at-a-glance-2023\\_3d5c5d31-en.html](https://www.oecd.org/en/publications/government-at-a-glance-2023_3d5c5d31-en.html) (10. 10. 2024).
- OECD. 2023b. Recommendation of the Council on Artificial Intelligence. Available at: <https://legalinstruments.oecd.org/en/instruments/OECD-LEGAL-0449> (10. 10. 2024).
- Schwarze, J. 1992. *European Administrative Law*. London: Office for Official Publications of the European Communities.
- Terlizzi, A. 2021. The Digitalization of the Public Sector: A Systematic Literature Review. *Rivista Italiana di Politiche Pubbliche*, 1, pp. 5–38.

### ***Legal Sources and Case Law***

- Case C-111/63 Lemmerz Werke v High Authority [1965], E.C.R. 677.
- ECJ Case C-113/77 NTN Toyo Bearing v Council [1979], E.C.R. 1985.
- ECJ Joined cases 117-76 and 16-77 Ruckdeschel and Others v Hauptzollamt Hamburg-St. Annen and Diamalt AG v Hauptzollamt Intzenhoe [1977], E.C.R. 1753.
- ECJ C-11/70 Internationale Handelsgesellschaft mbH v Einfuhr- und Vorratsstelle für Getreide und Futtermittel [1970], E.C.R. 1125.
- ECJ Case C-1/73 Westzucker GmbH v Einfuhr- und Vorratsstelle für Zucker [1973], E.C.R. 723.
- ECJ Case C-17/74 Transocean Marine Paint Association v Commission [1974], 1073.
- Regulation (EU) 2024/1689 of the European Parliament and of the Council of 13 June 2024 laying down harmonised rules on artificial intelligence and amending Regulations (EC) No 300/2008, (EU) No 167/2013, (EU) No 168/2013, (EU) 2018/858, (EU) 2018/1139 and (EU) 2019/2144 and Directives 2014/90/EU, (EU) 2016/797 and (EU) 2020/1828 (Artificial Intelligence Act).