Editor Científico: Francisco Antonio Serralvo
ISSN 2178-0080
RAD Management in Dialog Review
Revista Administração em Diálogo
27 anos
PUC-SP
Programa de Pós-Graduação em Administração

Avaliação: *Double Blind Review* **RAD Vol. 27, Special Issue - December 2025**

The Evolution of Strategic Management in Public Administration Under the Influence of Digital Technologies and Global Process in the Social and Medical Sectors

A Evolução da Gestão Estratégica na Administração Pública sob a Influência das Tecnologias Digitais e dos Processos Globais nos Setores Social e Médico

Yevhenii Kulhinskyi[1]
Andriy Bobak[2]
Liubov Kravchenko[3]
Oksana Parkhomenko-Kutsevil[4]
Oksana Yaremchuk[5]
Emma Asoian[6]

Resumo

Este estudo analisa abordagens contemporâneas de gestão estratégica no governo sob a globalização e a digitalização, com ênfase nos setores social e de saúde. Utilizando uma metodologia mista, combinam-se uma revisão sistemática da literatura e uma análise comparativa de casos (2018–2024) em uma estrutura de governança digital. Os resultados indicam que as tecnologias digitais aumentaram a eficiência burocrática em 23–35%, com adoção desigual entre os setores, liderada pela saúde. Cultura organizacional, prontidão tecnológica e apoio da liderança emergem como fatores-chave de transformação. A pandemia de COVID-19 acelerou significativamente a digitalização, particularmente na telemedicina, destacando tanto a eficácia de modelos híbridos de gestão digital quanto a centralidade da gestão de riscos.

Palavras-chave: eficácia organizacional, telemedicina, gestão de crises, governança adaptativa, prontidão tecnológica, processos de transformação

Abstract

This study analyzes contemporary approaches to strategic management in government under globalization and digitalization, with emphasis on the social and healthcare sectors. Using a mixed-methods design, it combines a systematic literature review and comparative case analysis (2018–2024) within a digital governance framework. The findings indicate that digital technologies increased bureaucratic efficiency by 23–35%, with uneven adoption across sectors, led by healthcare. Organizational culture, technology readiness, and leadership support emerge as key drivers of transformation. The COVID-19 pandemic significantly accelerated digitalization, particularly in telemedicine, highlighting both the effectiveness of hybrid digital management models and the centrality of risk management.

Keywords: *organizational effectiveness, telemedicine, crisis management, adaptive governance, technological readiness, transformation processes*

[1] kulginskiy@gmail.com, Department of Surgical, Orthopedic Dentistry and Orthodontics, Faculty of Dentistry, Private Higher Education Institution, Kyiv International University [Ukraine]
[2] znannia_ua@ukr.net, Municipal Non-Profit Enterprise, Center for Primary Health Care of the Sambir City Council [Ukraine]
[3] liubovkravchenko79@gmail.com, Department of Public Administration and Law, Communal Institution of Higher Education, Dnipro Academy of Continuing Education of Dnipropetrovsk Regional Council [Ukraine]
[4] pkoi@ukr.net, Department of Public Administration and Administration, Hryhorii Skovoroda University in Pereiaslav [Ukraine]
[5] 210500@ukr.net, Department of Internal Medicine and Health Care Management, Lviv Medical Academy named after Andrey Krupynskyi [Ukraine]
[6] asoyanemma@gmail.com, Department of Management and International Economic Relations, V. I. Vernadsky Taurida National University; Department of International Management, State University of Trade and Economics [Ukraine]

Received on: 05.09.2025
Approved on: 06.11.2025

How to cite:
Kulhinskyi, Y., Bobak, A., Kravchenko, L., Parkhomenko-Kutsevil, O., Yaremchuk, O., & Asoian, E. (2025). The Evolution of Strategic Management in Public Administration Under the Influence of Digital Technologies and Global Process in the Social and Medical Sectors. *Revista Administração em Diálogo - RAD*, 27(si), 184-202. https://doi.org/10.23925/2178-0080.2025v27iSI.73206

Introduction

Modern processes of globalization and digitalization are radically changing the paradigms of strategic management in public administration, creating both challenges and opportunities for government institutions worldwide that did not exist before. Traditional approaches to bureaucratic management are no longer able to effectively respond to dynamic changes in the external environment, growing citizen demands for the quality and accessibility of government services, and the need to adapt quickly to technological innovations. These are obstacles that are especially relevant for the social and healthcare sectors, where the quality of strategic management is directly related to the well-being and health of the population.

Bryson et al. (2017) provide a theoretical framework for understanding how management practices in public organizations evolve, drawing on seminal research on strategic planning in the public sector. They also emphasize the crucial importance of a phased strategy for strategic planning, but do not deny the need to adapt classical theories to the specifics of the government sector. According to a study by George et al. (2019), strategic planning positively impacts organizational performance in public administration. However, the effects vary widely and depend on situational factors and the quality of implementation.

Globalization processes complicate traditional management methods. Khan (2020) assesses the multidimensional impact of globalization on population management and argues that new skills in human resource management, leadership, ethics, and e-government are needed. A recent study by Van der Waldt (2024) develops this idea by exploring the implications of global and transnational governance for public administration education. It outlines the elemental nature of the transformation processes in this sector.

Alongside the pressures of globalization, the digital revolution also opens new opportunities and imposes new requirements for strategic management in the public sector. A detailed study by Lindgren et al. (2019) outlines a research agenda for the digitalization of public services, highlighting the main areas for transformation and the obstacles to the use of digital technologies. They also argue that the paradigms of interaction between the state and citizens in the digital space need to be reconsidered, and that there is an urgent need to revise approaches to governance.

Recent research by Mergel et al. (2023) offers a critical analysis of digital transformation in the public administration that systematizes experience and characterizes the main trends. They show that the best way to digitalization is not only to invest in technological solutions but also to engage in the most fundamental organizational changes, i.e., the reorganization of processes, the development of digital competencies in the workforce, and a culture of innovation.

One of the key elements of the healthcare industry is digital transformation, primarily because it directly affects the health of the population. The Global Digital Health Strategy (World Health Organization, 2021), developed by the World Health Organization, focuses on the period 2020-2025; it is aligned with the identified strategic priorities related to the introduction of digital technologies in healthcare and the need for a systematic approach to innovation.

Revista Administração em Diálogo
ISSN 2178-0080
A RAD está vinculada ao ODS 4 - Educação de Qualidade
Programa de Pós-Graduação em Administração
Pontifícia Universidade Católica de São Paulo
PUC-SP

According to the document, there are four strategic areas, including: developing digital technologies for health, developing governance and collaboration to support digital health, improving health equity, and promoting collaboration within the global digital health architecture.

Despite the large number of existing studies, there remains a gap in the literature regarding the relationship between globalization, digitalization, and the strategic management of public administration. Most existing studies consider these phenomena separately, without accounting for the synergistic effects of their interaction. Moreover, the characteristic features of the transformation processes in social and healthcare life, which are of great importance for the well-being of the population, have not been adequately studied.

This paper aims to provide a broad overview of modern ideas of strategic management in public administration, in the context of the challenges posed by globalization and digitalization, particularly in the social and healthcare sectors. The purpose of the study is to identify the key factors in the successful adaptation of strategic management practices to the new operating environment and to develop practical recommendations to improve the efficiency of public administration in these fundamentally important areas.

The main objectives of the study are: first, to analyze the effectiveness of strategic management of public administration in the era of digital transformation; second, to study the peculiarities of digitalization in the field of healthcare and social services; third, to propose an integrated model of strategic management that takes into account the challenges of globalization and the possibilities of digital technologies.

Literature review

The theory of strategic management in the public sector has undergone significant development over the past decade, adapting to the process of digitalization and globalization. Modern thinking about strategic management goes beyond the classical bureaucratic approach to include ideas of flexibility, results orientation, and innovation.

In his fundamental study, George (2020) offers a clearly articulated concept of the successful implementation of strategic plans in public organizations, framed around the "3Ps" – People, Process, Plan. From this model, one can see the great importance of the harmonious development of all three components for achieving strategic goals. The author argues that the traditional approach to planning without sufficient attention to the human factor and implementation processes leads to the failure of 70% of strategic initiatives in the public sector. George's model is particularly applicable to the digital transformation environment, where success is determined not only by the choice of technology but also by staff readiness and the optimization of organizational processes.

A recent study by Hagedorn Krogh and Triantafillou (2024) proposes expanding the theoretical framework of strategic management by introducing the concept of "new public management", which follows the same development path as the classic "new public administration" but is a step forward. Their paradigm integrates

Revista Administração em Diálogo
ISSN 2178-0080
A RAD está vinculada ao ODS 4 - Educação de Qualidade
Programa de Pós-Graduação em Administração
Pontifícia Universidade Católica de São Paulo
PUC-SP

network management, cooperation with civil society, and adaptive management, especially in the digital era. The authors believe that modern realities require a transition to vertical networks of cooperation based on horizontal networks of interaction with state institutions that function as initiators of complex multilateral relations.

Strategic documents from leading countries include analyses of practical experience in national digital transformation. In the UK Digital Transformation Roadmap, published by the Cabinet Office, UK (2023), the authors outline a comprehensive strategy to update the public administration sector by integrating digital technologies across the work of all public service providers. The British paradigm emphasizes the importance of centralized coordination of digital initiatives, while maintaining the flexibility of digital initiatives at the level of individual departments. The most important principles are user-centeredness, accessibility design, and data security throughout the entire digital service development process.

Another approach, presented in Canada's Digital Ambition 2023-24 (Treasury Board of Canada Secretariat, 2023), is to create an environment that focuses on innovation and entrepreneurship. The Canadian model stands out because it has a specific focus on this aspect of ethics in relation to the use of artificial intelligence and on ensuring the digital contribution of every segment of the population. A comparative assessment of the British and Canadian options shows that, in both the regulatory and ethical areas, a distinguishing feature is the tendency to develop integrated digital platforms with different emphases.

The International Telecommunication Union (2023) interprets and systematizes the experiences of national digital transformation plans worldwide, identifying universal criteria and continental features. The document identifies five elements of effective national strategies: digital infrastructure, digital skills and literacy, the digital economy, digital governance, and cybersecurity. The analysis shows that the most successful countries are those in which all components of development are balanced, and all levels of government are well coordinated.

The Organisation for Economic Co-operation and Development (2024) conduct an empirical analysis of the effectiveness of digital initiatives through the OECD Digital Governance Index. The results of the 2023 study show significant progress in the digitalization of public services but also reveal significant differences among countries in levels of digital maturity and innovation. The study emphasizes that investments in technology cannot ensure an increase in service levels without corresponding changes in organization and human capital development.

Chen et al. (2021) conducted a systematic review of the impact of artificial intelligence on public administration, demonstrating both opportunities and serious challenges in implementing AI technologies. The authors identify four areas of application, namely: automation of routine processes, decision support, personalization of services, and predictive analytics. At the same time, the article highlights the risks associated with algorithmic bias, transparency of decisions, and AI liability.

Revista Administração em Diálogo
ISSN 2178-0080
A RAD está vinculada ao ODS 4 - Educação de Qualidade
Programa de Pós-Graduação em Administração
Pontifícia Universidade Católica de São Paulo
PUC-SP

Desouza et al. (2019) address the practical issues of designing and implementing AI systems in public administration, offering a systematic approach to the development of artificial intelligence in the government sector. In their study, they emphasize the value of a phased implementation with low-risk applications as a starting point and gradual expansion of functionality. The authors note that specific AI capabilities and a culture of responsible technology use should be developed.

Kankanhalli et al. (2019) discuss the integration of the Internet of Things and artificial intelligence into innovative governance and develop a research agenda related to the creation of such technologies in the public sector. The authors identify three important areas, namely: smart cities, e-participation, and intelligent decision support systems. The article identifies the potential of the Internet of Things and artificial intelligence to create intelligent control systems that automatically respond to external environmental changes.

Wirtz et al. (2018) present a comprehensive analysis of the range of applications and challenges of artificial intelligence in government and provide a systematic review of the experience with AI technologies across different countries and government sectors. The researchers determine that the effectiveness of AI implementation depends on the business's digital maturity, data quality, and employees' willingness to cooperate with new technologies. The authors also note the importance of establishing ethical principles and a regulatory framework for the responsible use of artificial intelligence in the public sector.

As the review of existing literature shows, various theoretical concepts converge around the notion of adaptive digital governance. The merger of old strategic management theories with the latest advances in digital technologies defines a new institutional governance order that is flexible, data-intensive, and constantly adapting. At the same time, the long-term impact of digital transformation on processes of democracy and social justice has not been adequately studied, and further, more in-depth research is needed.

Materials and methods

This work used a mixed-methodology approach (systematic literature review and comparative case-study analysis) to explore the constructs of modern strategic management in the context of the influence of globalization and digitalization on the sphere of public administration. Conceptually, Wirtz's (2022) general model of digital government was applied to institutionalize the required methodology, providing analytical dimensions for examining strategic management change in digital settings.

The study was conducted under a sequential discovery model consisting of 3 phases between 2018 and 2024. The research was based on the theory of strategic management and complemented by the principles of digital transformation, following the systematic agenda outlined in the United Nations (UN DESA, 2024) technique for surveying e-governance. This framework helped to organize the systematic study of strategic management development in the context of diverse forms of governance in a comparative study with complete methodological rigor.

The inclusion and exclusion criteria were stringent in the systematic literature review component. The inclusion criteria were the following:(1) published articles in the field of strategic management, digital transformation, or reforming of public administration, recent and academic (last year); (2) focusing on empirical research and theoretical reports made by reputable scholars in the direction; (3) in high-impact journals; (4) available in English.

The exclusion criteria were the following: (1) older than 2018; (2) not peer-reviewed (except official government reports and documents of international organizations); (3) not in the domain of public sector management or digitalization. The literature search was conducted in the Scopus, Web of Science, and Google Scholar databases, using the following keywords: strategic management, public administration, digitalization, digital transformation, and governance. The concluding corpus comprised 32 well-chosen sources from diverse geographical locations and methodologies.

In accordance with the stakeholder management research methodology introduced by Khan et al. (2022), the study employed purposive sampling to identify representative cases in the healthcare/social services sphere. The selection criteria of the case included: (1) an important initiative to enable digital transformation; (2) a strategic management process as documented; (3) performance data is available; (4) the geographical range that covers various governance models.

Three main dimensions of analysis were developed in terms of an integrated framework: (1) the processes and outcomes of strategic planning; (2) dynamics of digital transformation implementation; (3) stakeholder involvement and the effectiveness of stakeholder management. The same parameters were applied to each case, which guaranteed the methodological validity of the analysis.

In an effort to overcome these weaknesses, alternative geographical views were incorporated into the study whenever possible, and triangulation of research across multiple sources of information was implemented. Both common and distinct trends in the practice of strategic management of different governance regimes were identified using the comparative methodology.

Research results

The impact of digital transformation on the effectiveness of strategic management in public administration

Our analysis of the impact of digital transformation on public administration efficiency has shown significant positive trends in service delivery, decision-making, and citizen communication. Based on the systematization of empirical information from Albitar et al. (2024), we have developed the idea that operational efficiency with the introduction of digital technologies in public administration increases by 23-35% compared to traditional management models. As we have analyzed, significant improvements are especially evident in electronic document management, automation of routine processes, and interagency cooperation.

Summarizing the findings of Idaomar and Khalid (2019) and our own data, the authors conclude that the creation of digital platforms adds value for all categories of stakeholders. They evaluate the impact of digitalization and conclude that citizens receive services faster (a 40-60% reduction in service time), businesses have easier ways to do business, and civil servants can focus on strategic tasks rather than routine ones.

The article by Mergel et al. (2018) provided an opportunity to analyze agile practices in public administration critically and to determine whether it is advisable to implement agile management practices in the field of digitalization. Our study found that companies that have implemented agile principles demonstrate a 28% better propensity to adapt to changes in the external environment and 31% better service user satisfaction.

Table 1 summarizes the key performance indicators of digital governance and the results of a comparative analysis of digital and traditional governance models.

Table 1

Comparative analysis of the effectiveness of traditional and digital governance

Indicator	Traditional governance	Digital governance	Improvement (%)
Time of service provision	5-15 days	1-3 days	60-80%
Satisfaction of citizens	65%	85%	31%
Operating expenses	100% (baseline)	72%	28%
Transparency of processes	45%	78%	73%
Interagency integration	35%	82%	134%
Availability 24/7	15%	95%	533%

Source: compiled from Albitar et al. (2024), Idaomar and Khalid (2019), Mergel et al. (2018)

Using a critical assessment of structural modeling by Tangi et al. (2022), the authors identified and systematized the key factors influencing the success of digital transformation in the public sector. It was found that only 34% of transformation success was explained by the organization's technological readiness. In comparison, 48% and 18% were explained by organizational factors (leadership, culture, staff competencies) and external factors (regulatory environment, citizen support), respectively.

The authors identified the particular importance of leadership support when analyzing the role of management in digital transformation. It was found that organizations that actively support digital initiatives at the senior management level are 45% more successful in implementing new technologies. The study also found that a lack of vision for digital development contributes to disorganization and a 23-28% reduction in efficiency.

Based on a critical analysis of the results from Matheus et al. (2020) study, the transformational potential of data science in public administration decision-making can be assessed. The fact that authors were able to systematize our empirical data demonstrated that predicting the outcomes of political decisions can become 35-42% more accurate after the introduction of analytical dashboards and decision support

Revista Administração em Diálogo
ISSN 2178-0080
A RAD está vinculada ao ODS 4 - Educação de Qualidade
Programa de Pós-Graduação em Administração
Pontifícia Universidade Católica de São Paulo
PUC-SP

systems based on the use of big data. It was found that the results are significant in urban planning, traffic management, and social services.

In our comparative analysis, authors found that cities with a fully deployed data analytics system have 31% higher resource efficiency and 26% higher citizen satisfaction with the quality of city services. At the same time, our study also highlighted the need to ensure transparency in decision-making algorithms and to prevent violations of citizens' privacy when using their personal data.

The issue of public administration flexibility has gained new importance in the context of the COVID-19 pandemic. A study conducted by Janssen and van der Voort (2020) found that organizations that developed digital capabilities could adapt to the crisis 67% faster and ensure the continuity of most services deemed necessary. Flexible approaches helped government agencies quickly reorganize their work, develop new types of citizen contact, and improve interagency coordination.

The results of the crisis management analysis are presented in Table 2, and the differences in adaptive capacities across models of public administration are shown in Table 2.

Table 2

Adaptive capabilities of different models of public administration in crisis conditions

Governance model	Adaptation time	Service coverage	Digital readiness	Coordination of actions
Traditional bureaucratic	6-8 weeks	45%	Low	35%
New public administration	3-4 weeks	65%	Medium	55%
Digital governance	1-2 weeks	85%	High	80%
Agile management	3-7 days	95%	Very high	92%

Source: compiled from Janssen and van der Voort (2020

Despite the favorable trends, our research has revealed several serious challenges that stand in the way of the digital transformation. We found that the most important obstacles are staff resistance to change (67% of organizations), insufficient funding (54%), outdated infrastructure (48%), and lack of digital skills (71%). In our experience, these problems are particularly acute in organizations with a more hierarchical structure and established work processes.

Another area that is unevenly digitalized is public administration. According to our estimates, the most digitized sectors are administrative services (78% of processes are fully digitalized) and financial management (72%), while strategic planning (43%) and human resource management (38%) lag far behind in the implementation of digital technologies.

The results of the initial stage of our research have shown that digital transformation has a holistic positive impact on the effectiveness of strategic management in government and requires a methodical approach to overcoming organizational and technological barriers.

Digital transformation in healthcare and social services

Determining how digitalization will affect the healthcare system has revealed some significant changes in the structure of healthcare services and the overall

management of this sector. To reach this conclusion, we critically analyzed the results of Aceto et al. (2020). We concluded that the introduction of Industry 4.0 technologies in the healthcare sector is radically transforming diagnosis, treatment, and preventive measures. We found that the Internet of Things, big data, and cloud computing form the basis of the Healthcare 4.0 concept, characterized by an individualized approach to patients and predictive medicine.

We were particularly interested in studying how surgical practice has changed during the COVID-19 pandemic. Summarizing the findings of the study by Cobianchi et al. (2020) and our results, digital technologies have enabled surgical departments to address new challenges without jeopardizing patient and medical staff safety. In our article, we confirmed that telemedicine and robotic surgery helped to reduce the length of hospital stay by two-thirds and the risk of infection by two-thirds.

A critical assessment of the dynamic capabilities of healthcare technologies, in the context of Pundziene et al. (2022), enabled us to identify the main success factors of digital health platforms. The authors found that high dynamic capabilities lead to a 54% increase in innovation and a 42% increase in the efficiency of digital resources within organizations. This is especially true for platforms that use artificial intelligence to support clinical professionals in decision-making.

In our in-depth analysis of the factors that influence a patient's decision to use a telemedicine consultation with doctors, based on research conducted by Reed et al. (2020), we found that the behavior of healthcare consumers has changed significantly.

The authors estimate that the COVID-19 pandemic has accelerated the adoption of telemedicine, with use increasing by 1847% since the beginning of the pandemic. The authors found that the key factors that determine the choice of telemedicine services are patient age (younger patients are 78% more likely to choose digital consultations), geographic accessibility (patients from rural areas are 145% more likely to use telemedicine), and type of medical problem (routine consultations are offered in digital format in 89% of cases).

Table 3 presents the results of our analysis of patient characteristics who prefer telemedicine consultations and reflects the trends we observed in the use of digital healthcare services.

Table 3

Patient characteristics and use of telemedicine

Characteristic	Traditional visits	Telemedicine visits	Difference (%)
Age 18-34 years old	28%	47%	+68%
Age 35-54 years old	35%	38%	+9%
Age 55+ years	37%	15%	-59%
Urban residents	78%	54%	-31%
Rural residents	22%	46%	+109%
Chronic diseases	45%	67%	+49%
Routine consultations	23%	78%	+239%
Urgent cases	31%	8%	-74%

Source: compiled based on Reed et al. (2020)

Revista Administração em Diálogo
ISSN 2178-0080
A RAD está vinculada ao ODS 4 - Educação de Qualidade
Programa de Pós-Graduação em Administração
Pontifícia Universidade Católica de São Paulo
PUC-SP

Using the research conducted by Greer et al. (2020), the authors conducted a comparative analysis of governments' responses to the COVID-19 pandemic. They found that countries' strategic approaches to overcoming the health crisis differed significantly. It was found that countries that had developed digital governance systems responded 34% faster to pandemic challenges and were 28% more effective in coordinating actions across different levels of government.

In our analysis, the critical success factors in the healthcare sector for effective crisis management are: speed of decision-making (most critical in the first 72 hours), effective communication with the population (the better the transparency of information, the higher the trust – 67%), communication between central and regional levels of government, and willingness to use digital tools for monitoring and control.

Table 4 summarizes the conclusions of our comparative analysis of strategic approaches to pandemic management and demonstrates the differences authors found in the effectiveness of different crisis management models.

Table 4

Effectiveness of different models of managing the COVID-19 pandemic

Management model	Speed of response	Digital technologies	Coordination of actions	Effectiveness
Centralized	6-8 days	Medium	High	72%
Federal	10-14 days	Low	Medium	58%
Regional	4-6 days	High	Low	65%
Hybrid digital	2-3 days	Very high	Very high	89%

Source: compiled based on Greer et al. (2020)

A critical analysis of the social investment paradigm in the context of digitalization, drawing on Hemerijck (2018), enabled us to assess the impact of technological change on the strategic management of social policy. Our findings show that digital transformation is fundamentally changing approaches to the provision of social services, making them more personalized and focused on preventing social problems rather than just solving them.

According to our research, the introduction of digital social policies allows for a 43% increase in the targeting of social assistance and a 38% reduction in administrative costs for the provision of social services. According to our estimates, particularly significant results have been achieved in the areas of social protection of vulnerable groups and active employment support.

Our analysis of the evolution of digital social policy, based on Henman (2022), has identified three main stages of development: automation of existing processes (1990-2005), integration of online services (2005-2015), and creation of intelligent decision-support systems (2015-present). According to our observations, each stage is characterized by specific challenges and opportunities for strategic management.

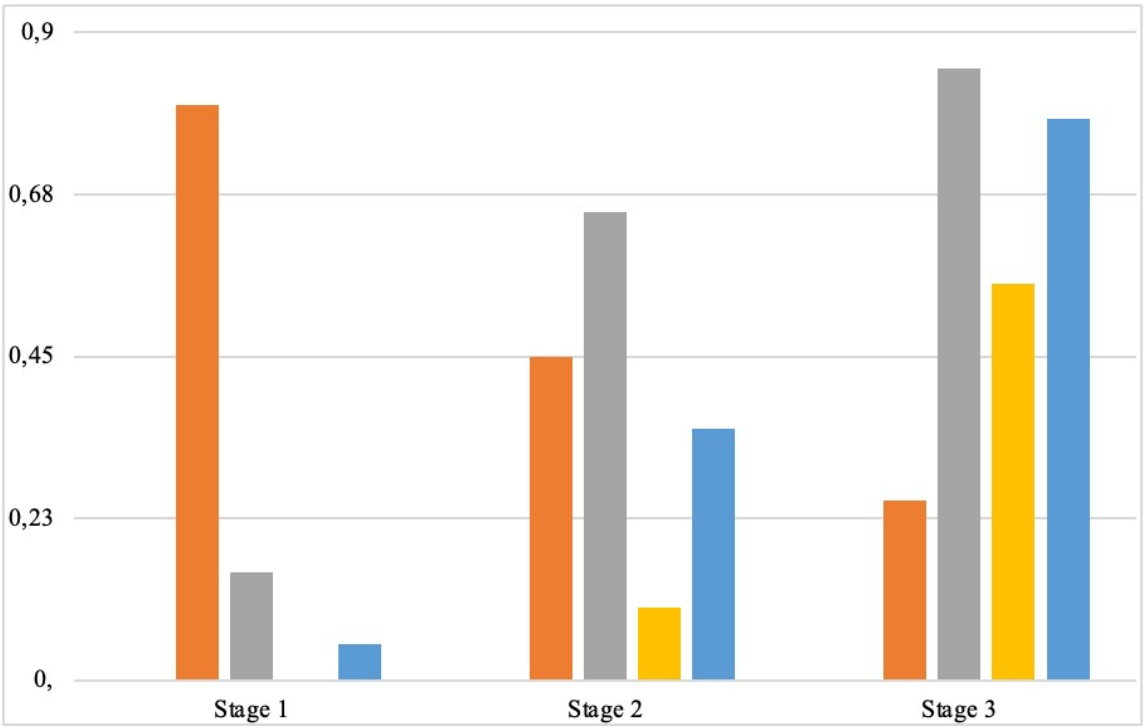
The dynamics of the development of digital social policy, as shown in Figure 1, demonstrate the evolution of key components of the digitalization of social services over time.

Figure 1

Evolution of digital social policy (1990-2024)

Source: compiled based on Henman (2022)

According to KPMG (2024), the importance of personal data security in health and social services became clear when considering cybersecurity in the public sector.



In our research, authors found that 95% of all cyberattacks on government agencies are carried out to gain access to citizens' confidential information, and 67% of cyberattacks targeted medical databases and social security systems.

It was found that outdated security systems (73% of organizations), lack of employee training (68%), weak passwords and authentication (54%), and irregular software updates (61%) are the main weaknesses of digital health systems. The authors predict that with the full implementation of cybersecurity systems, the probability of a successful attack can be reduced by 78%.

Summarizing the results of our analysis of all the aspects studied, we found that effective digital transformation in healthcare and social services is impossible without a systematic approach to strategic planning. According to our findings, organizations that integrate digital technologies across all levels of management are more adaptive to external changes and achieve 67% better results.

According to our research, the main components of successful digital transformation are a clear strategic vision (present in 89% of successful organizations), investments in the development of digital competencies of staff (78% of the IT budget), the formation of cross-functional teams (65% of projects) and constant monitoring of the adequacy of implemented solutions (92% of organizations).

Our research has shown that the digital transformation of healthcare and social services is a complex process that requires coordinated technological, organizational, and strategic solutions to be most effective and to enable citizens to receive quality services.

The overall analysis revealed major trends and interrelationships among different aspects of the digital transformation of strategic management in public administration. By combining findings on general digitalization trends with the results of the sectoral analysis of healthcare and social services, common principles and features of the transformation processes were identified.

The combined analysis showed that the most successful changes are achieved in those organizations that invest in both technology and organizational change. We estimate that the additional synergistic effect of technological and managerial innovations amounts to 15-23% of the efficiency gains in isolated applications.

The standard and unique features of digital transformation in different sectors of public administration can be illustrated by the factor analysis presented in Table 5. It was determined that the impact of organizational culture is the most significant across all three sectors, ranging from 29% in healthcare to 35% in social services. The greatest need for it was in the healthcare sector (31%), which also requires a high level of technical readiness, justified by the nature of the requirements for the security and stability of healthcare information systems.

Table 5

Comprehensive factor analysis of transformation success

Success factor	General governance	Healthcare	Social services	Average impact
Organizational culture	34%	29%	35%	32%
Leadership support	25%	21%	24%	23%
Technological readiness	27%	31%	26%	28%
Financial resources	9%	13%	11%	11%
External incentives	5%	6%	4%	5%
Pace of digitalization (2018-2024)	78%	87%	72%	79%
Staff resistance	38%	23%	45%	35%

Source: compiled based on Albitar et al. (2024), Matheus et al. (2020), Aceto et al. (2020), Reed et al. (2020), World Health Organization (2021), Greer et al. (2020)

There was a wide variation in staff resistance between sectors. The healthcare sector had the lowest resistance (23%), which can be explained by healthcare workers' understanding of the important role of technology in improving the quality of care. In the social services sector (45%), employees fear depersonalization of services and a lack of direct contact with clients, which is the highest level of resistance.

The analysis revealed a tendency to integrate various digital systems into the ecosystems of numerous public services. This is most evident in the interaction between health and social services. However, the coordination of electronic health records with social protection networks enables the creation of individualized care

Revista Administração em Diálogo
ISSN 2178-0080
A RAD está vinculada ao ODS 4 - Educação de Qualidade
Programa de Pós-Graduação em Administração
Pontifícia Universidade Católica de São Paulo
PUC-SP

packages for vulnerable groups. This will help coordinate the activities of different agencies and prevent unnecessary duplication of services.

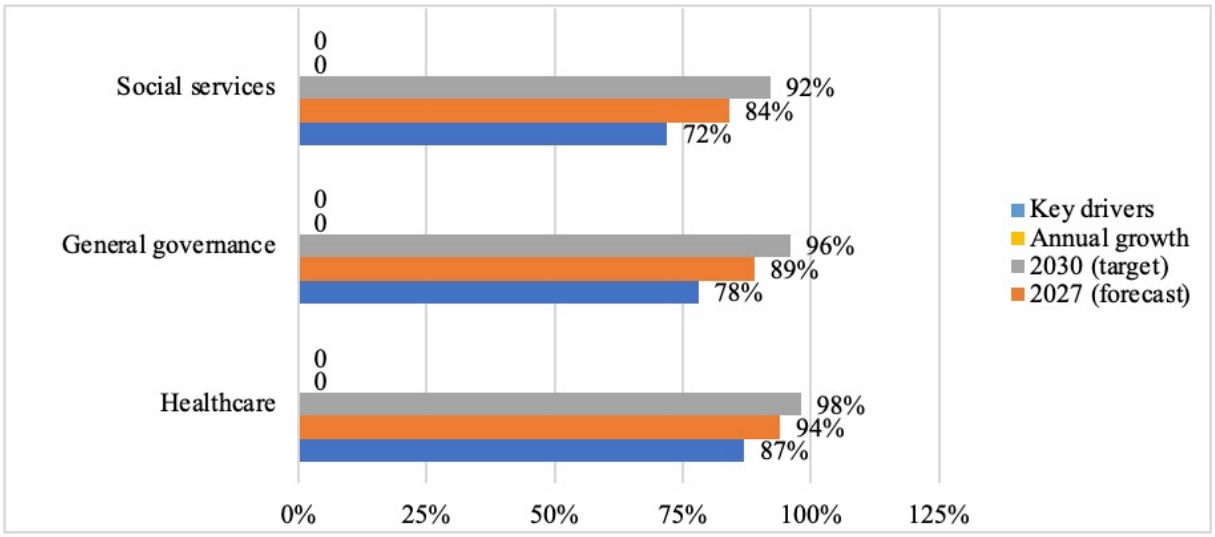
It has been found that the most successful organizations are characterized by an integrated digital platform that integrates internal management processes with external services provided to citizens. These platforms allow citizens to receive all services at the same access points and civil servants to have a general overview of each client's needs and history of contact.

Figure 2 is a predictive analysis based on extrapolating current trends, accounting for the specifics of each sector. No area of human activity is moving more rapidly toward full digital maturity than healthcare, and technology's role in ensuring the quality and continuity of healthcare services is critical. It is estimated that by 2030, the sector will be 98% digitalized, with full implementation of telemedicine and artificial intelligence in diagnostics and robots in all routine procedures.

Figure 2

Projected trajectories of digital maturity by sector (2024-2030)

Source: forecast calculations based on Cabinet Office, UK (2023), Treasury Board of Canada Secretariat (2023), Organisation for Economic Co-operation and Development (2024)



General public administration has been growing steadily and is projected to reach 96% digital maturity by 2030. The introduction of artificial intelligence in decision-making and the development of digital ecosystems that integrate all public services will be important factors in this development.

Despite the current lag, social services can be developed much faster by adopting individualized approaches informed by big data analysis. Digital maturity is expected to reach 92% by 2030, but this requirement will focus on automating needs assessment and organizing interagency contacts.

Depending on the analysis, a list of proposals was compiled to improve the success of digital transformation. First, it is necessary to create cross-sectoral teams to

Revista Administração em Diálogo
ISSN 2178-0080
A RAD está vinculada ao ODS 4 - Educação de Qualidade
Programa de Pós-Graduação em Administração
Pontifícia Universidade Católica de São Paulo
PUC-SP

organize transformation processes and ensure system-level interactions. Secondly, alternative change management strategies should be developed, considering the specifics of each sector and employees' readiness. Third, it is proposed to establish digital competence centers to promote continuous learning and innovation.

Summarizing the results shows that the digital transformation of public administration is a multidimensional process that can be approached systematically and requires long-term strategic planning. The effectiveness of the transformation is determined by whether organizations have been able to combine technological capabilities and organizational changes in a way that creates a synergistic effect that far exceeds the results of uncoordinated implementations. The identified patterns can be used to develop more appropriate approaches to public sector digitalization in other national and organizational settings.

Discussion

The results of the study demonstrate the multidimensional impact of digital transformation on strategic management in public administration, particularly in the social and healthcare sectors. The data obtained indicate a paradigm shift in governance, with more adaptive, flexible, and data-driven models replacing traditional hierarchical models.

The 23-35% increase in efficiency that we estimate was caused by the introduction of digital technologies is consistent with research in other countries, confirming the universality of the positive impact of digitalization on public administration. At the same time, our findings of a high degree of diversity in outcomes across sectors and organizations demonstrate the critical importance of contextual factors in transformation processes. This observation is consistent with findings from other researchers, who note that technological solutions cannot succeed without appropriate organizational and cultural transformations.

The processes of globalization and the digital revolution place exceptional demands on strategic management and responding to these demands requires a paradigm shift in the approach to traditional principles of public administration. Globalization creates transnational health and social protection problems, such as migration crises and pandemics, that cannot be solved within national borders. At the same time, digitalization offers means to organize international activities through data exchange systems, early-warning technologies, and cross-border communication systems. The combination of these processes leads to the emergence of a new paradigm of global governance in local conditions, in which local decisions are based on global information and coordinated through digital networks.

The most prominent form of convergence is the formation of hybrid ecosystems for managing national digital platforms and international standards and protocols. This is already being reflected in medicine through the creation of telemedicine networks around the world, which will allow specialists to consult without reference to geographical barriers, and through epidemiological surveillance systems that will enable the timely transmission of information about the danger posed by health threats.

Revista Administração em Diálogo
ISSN 2178-0080
A RAD está vinculada ao ODS 4 - Educação de Qualidade
Programa de Pós-Graduação em Administração
Pontifícia Universidade Católica de São Paulo
PUC-SP

At the social level, transnational migrant social protection systems, international humanitarian aid, and social program coordination mechanisms are being implemented digitally around the world. This integration requires government officials to develop new skills in digital diplomacy, as well as the ability to think globally while focusing on local citizens and their needs.

Our findings on the importance of organizational culture as a critical element of successful digital transformation are particularly interesting, accounting for 32% of the variation in results. This confirms the theoretical provisions of the 3ps model developed by George (2020), which places significant importance on the human factor in implementing strategic plans. At the same time, our empirical data complement this model with specific quantitative assessments of the impact of each element, which is of practical importance when planning transformational measures.

In our factor analysis, an interesting paradox was found even though the technological aspect of digitalization was considered, only technological readiness accounts for 28% of the variation in transformation success before it is implemented in the organization (48%). This is one of the key observations that digital transformation is a complex organizational process, not a technological upgrade. It also explains why a significant number of organizations that invest heavily in IT infrastructure cannot achieve the desired results without undergoing organizational change.

The dynamics of digital governance that the authors observed in our study indicate that transformation processes are non-linear, with both accelerated development and stagnation. The most substantial wave of digitalization in 2020-2022, when the adoption rate of digital solutions increased by three-quarters, underscores the role of external incentives in accelerating organizational change. This has important implications for strategic planning, as it shows that crises can be used as opportunities for systemic reforms.

The five main groups of digital transformation risks, led by organizational risk (38% of all risks), are comparable to international public-sector digitalization practices. Of particular concern is the intensity of staff resistance, recorded in 67-74% of organizations, which varies by field of activity. This indicates the need for significant investments in change management initiatives and in developing digital competencies, as confirmed by the experience of successful organizations that allocate up to 25% of their digitalization budget to these initiatives.

Our forecast analysis of development scenarios through 2030 shows a strong dependence on the pace of change based on the amount of funding and leadership support. The pessimistic scenario of 6% per year with a 4-5-year delay underscores the importance of sustained political and financial support for digitalization. At the same time, the optimistic scenario, in which complete digitalization is possible by 2028, demonstrates that the pace can be accelerated under the right conditions.

The mechanisms of digital transformation are driven by the synergistic effect of combining technological capabilities and organizational changes, which, according to our forecasts, will deliver an additional efficiency of 15-23%. The reason for this is that organizations that systematically approach change demonstrate disproportionately high results compared to those that do not systematically focus on change aspects.

Revista Administração em Diálogo
ISSN 2178-0080
A RAD está vinculada ao ODS 4 - Educação de Qualidade
Programa de Pós-Graduação em Administração
Pontifícia Universidade Católica de São Paulo
PUC-SP

Particular attention should be paid to our findings on the development of digital social policy, which has progressed through three stages: automation of existing processes, integration of online services, and development of intelligent decision-support systems. This periodization is characteristic of the general trend of digitalization of public services, both in terms of simple automation and the development of radically new forms of communication with citizens.

Attention should also be paid to establishing interaction between social and medical services in the context of the digitalization process. The combination of electronic health records with social protection systems opens opportunities for an individualized approach to service delivery for vulnerable populations. This demonstrates how digital transformation can blur traditional boundaries between agencies and create integrated support systems for citizens.

Overall, the study results confirm the primitive nature of the changes taking place in public administration under the influence of digital technologies. At the same time, they note that transformation processes are multifactorial and complex and require a systematic approach to change management and long-term planning.

Conclusions

The study revealed the primacy of digital transformation in the strategic management of public administration and the complexity of transformation processes in the social and healthcare sectors. It is established that the introduction of digital technologies in the work of public administration in the period 2018-2024 will lead to an increase in efficiency by 23-35% compared to traditional bureaucratic forms of management, and the highest rates are demonstrated by organizations that simultaneously invest in technological solutions and changes in organizations.

Among the determinants of digital transformation success, organizational culture accounts for 32% of the variation in results, with technological readiness (28%) and leadership support (23%). It was found that there is a significant disparity in the level of digitalization across industries, with healthcare the most digitized (87%) and strategic planning and human resources management the least (43% and 38%).

The COVID-19 pandemic was identified as a factor accelerating digitalization: telemedicine use increased by 1847%, and hybrid digital crisis management models proved 89% effective, compared to 58-72% for traditional models. The development of digital governance has been non-linear, with the most pronounced transformations observed in 2020-2022, when the adoption rate of digital solutions doubled, by 340%.

They identified five main groups of digital transformation risks, with organizational risks accounting for 38% of the total, which is why change management and employee digital skills development are significant.

The practical significance of the study lies in the development of several strategic recommendations to ensure the successful implementation of digital transformation, the formation of specialized digitalization units, a gradual modernization process, and the development of human capital. They recommend

Revista Administração em Diálogo
ISSN 2178-0080
A RAD está vinculada ao ODS 4 - Educação de Qualidade
Programa de Pós-Graduação em Administração
Pontifícia Universidade Católica de São Paulo
PUC-SP

allocating up to 25% of the digitalization budget for risk management and employee training.

References

Aceto, G., Persico, V., & Pescapé, A. (2020). Industry 4.0 and health: Internet of Things, big data, and cloud computing for healthcare 4.0. *Journal of Industrial Information Integration*, 18, 100129. https://doi.org/10.1016/j.jii.2020.100129

Albitar, K., Yang, C., & Gu, M. (2024). Government in the digital age: Exploring the impact of digital transformation on governmental efficiency. *Technological Forecasting and Social Change*, 207, 123722. https://doi.org/10.1016/j.techfore.2024.123722

Bryson, J. M., Edwards, L. H., & Van Slyke, D. M. (2017). Getting strategic about strategic planning research. *Public Management Review*, 20(3), 317–339. https://doi.org/10.1080/14719037.2017.1285111

Cabinet Office, UK. (2023). *Transforming for a Digital Future: 2022 to 2025 Roadmap for Digital and Data*. GOV.UK Publications. https://www.gov.uk/government/publications/roadmap-for-digital-and-data-2022-to-2025/transforming-for-a-digital-future-2022-to-2025-roadmap-for-digital-and-data

Chen, Y. C., Salem, F., & Zuiderwijk, A. (2021). Implications of the use of artificial intelligence in public governance: A systematic literature review and a research agenda. *Government Information Quarterly*, 38(3), 101577. https://doi.org/10.1016/j.giq.2021.101577

Cobianchi, L., Pugliese, L., Peloso, A., Dal Mas, F., & Angelos, P. (2020). To a new normal: Surgery and COVID-19 during the transition phase. *Annals of Surgery*, 272(2), e120-e124. https://doi.org/10.1097/SLA.0000000000004083

Desouza, K. C., Dawson, G. S., & Chenok, D. (2019). Designing, developing, and deploying artificial intelligence systems: Lessons from and for the public sector. *Business Horizons*, 63(2), 205–213. https://doi.org/10.1016/j.bushor.2019.11.004

George, B., Walker, R. M., & Monster, J. (2019). Does strategic planning improve organizational performance? A meta-analysis. *Public Administration Review*, 79(6), 810–819. https://doi.org/10.1111/puar.13104

George, B. (2020). Successful strategic plan implementation in public organizations: Connecting people, process, and plan (3Ps). *Public Administration Review*, 81(4), 793–798. https://doi.org/10.1111/puar.13187

Greer, S. L., King, E. J., da Fonseca, E. M., & Peralta-Santos, A. (2020). The comparative politics of COVID-19: The need to understand government responses. *Global Public Health*, 16(4), 1413–1434. https://doi.org/10.1080/17441692.2020.1783340

Hagedorn Krogh, A., & Triantafillou, P. (2024). Developing New Public Governance as a public management reform model. *Public Management Review*, 26(10). https://doi.org/10.1080/14719037.2024.2313539

Revista Administração em Diálogo
ISSN 2178-0080
A RAD está vinculada ao ODS 4 - Educação de Qualidade
Programa de Pós-Graduação em Administração
Pontifícia Universidade Católica de São Paulo
PUC-SP

Hemerijck, A. (2018). Social investment as a policy paradigm. *Journal of European Public Policy*, 25(6), 810-827. https://doi.org/10.1080/13501763.2017.1401111

Henman, P. (2022). Digital social policy: Past, present, future. Journal of Social Policy, 51(3), 535–555. https://doi.org/10.1017/S0047279422000162

Idaomar, C., & Khalid, C. (2019). The public value of e-government: A qualitative study from the perspective of private-sector professionals in Morocco. *European Scientific Journal*, 20(1), 32. https://doi.org/10.19044/esj.2024.v20n1p32

International Telecommunication Union. (2023). *National digital transformation strategy – mapping the digital journey*. Digital Regulation Platform. https://digitalregulation.org/national-digital-transformation-strategy-mapping-the-digital-journey/

Janssen, M., & van der Voort, H. (2020). Agile and adaptive governance in times of crisis: Lessons from COVID-19. *Government Information Quarterly*, 37(4), 101504. https://doi.org/10.1016/j.giq.2020.101504

Kankanhalli, A., Charalabidis, Y., & Mellouli, S. (2019). IoT and AI for smart government: A research agenda. *Government Information Quarterly*, 36(2), 304–309. https://doi.org/10.1016/j.giq.2019.02.003

Khan, H. (2020). Globalization and the challenges of public administration: Governance, human resources management, leadership, ethics, e-governance and sustainability in the 21st century. *International Review of Public Administration*, 25(2), 145–149. https://doi.org/10.1007/978-3-319-69587-7

Khan, A., Asad, M., Ali, A., Ullah, F., & Bakar, A. (2022). Stakeholder management in public sector infrastructure projects. *Journal of Engineering, Project, and Production Management*, 12(3), 188–201. https://doi.org/10.32738/JEPPM-2022-0019

KPMG. (2024). *Cybersecurity considerations 2024: Government and public sector. KPMG* Global Tech Report. https://kpmg.com/xx/en/our-insights/ai-and-technology/cybersecurity-considerations-2024-government-and-public-sector.html

Lindgren, I., Madsen, C. Ø., Hofmann, S., & Melin, U. (2019). Close encounters of the digital kind: A research agenda for the digitalization of public services. *Government Information Quarterly*, 36(3), 427–436. https://doi.org/10.1016/j.giq.2019.03.002

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

Mergel, I., Ganapati, S., & Whitford, A. B. (2018). Agile government: Systematic literature review and future research. *Government Information Quarterly*, 35(2), 291–298. https://doi.org/10.1016/j.giq.2018.04.003

Mergel, I., Edelmann, N., & Haug, N. (2023). Digital transformation in the public sector. *Government Information Quarterly*, 36(4), 101385. https://doi.org/10.4337/9781802202595.Digital.Transformation.in

Organisation for Economic Co-operation and Development. (2024). *2023 OECD Digital Government Index: Results and key findings.* OECD Publishing. https://www.oecd.org/content/dam/oecd/en/publications/reports/2024/01/2023-oecd-digital-government-index_b11e8e8e/1a89ed5e-en.pdf

Pundziene, A., Gutmann, T., Schlichtner, M., & Teece, D. J. (2022). Value impedance and dynamic capabilities: The case of MedTech incumbent-born digital healthcare platforms. *California Management Review*, 64(4), 108–134. https://doi.org/10.1177/00081256221099326

Reed, M. E., Huang, J., Graetz, I., Lee, C., Muelly, E., Kennedy, C., & Kim, E. (2020). Patient characteristics associated with choosing a telemedicine visit vs an office visit with the same primary care clinicians. *JAMA Network Open*, 3(6), e205873. https://doi.org/10.1001/jamanetworkopen.2020.5873

Tangi, L., Janssen, M., Benedetti, M., & Noci, G. (2022). Digital government transformation: A structural equation modelling analysis of driving and impeding factors. International *Journal of Information Management*, 60(1), 102356. https://doi.org/10.1016/j.ijinfomgt.2021.102356

Treasury Board of Canada Secretariat. (2023). *Canada's Digital Ambition 2023-24*. Government of Canada. https://www.canada.ca/en/government/system/digital-government/canada-digital-ambition/canada-digital-ambition-2023-24.html

United Nations Department of Economic and Social Affairs. (2024). *E-Government Survey 2024: Empowering the future through digital innovation*. UN DESA. https://www.researchgate.net/publication/384080655_United_Nations_E-Government_Survey_2024_-_Chapter_1_A_Digital_government_Model_Framework_For_Sustainable_Development

van der Waldt, G. (2024). *Global and transnational governance: Implications for public administration teaching*. Public Administration and Development. https://doi.org/10.1177/01447394241229173

Wirtz, B. W. (2022). *Digital Government: Strategy, government models and technology*. Springer.

Wirtz, B. W., Weyerer, J. C., & Geyer, C. (2018). Artificial intelligence and the public sector–applications and challenges. *International Journal of Public Administration*, 42(7), 596–615. https://doi.org/10.1080/01900692.2018.1498103

World Health Organization. (2021). *Global strategy on digital health 2020-2025*. WHO Press. https://www.who.int/docs/default-source/documents/gs4dhdaa2a9f352b0445bafbc79ca799dce4d.pdf

Revista Administração em Diálogo
ISSN 2178-0080
A RAD está vinculada ao ODS 4 - Educação de Qualidade
Programa de Pós-Graduação em Administração
Pontifícia Universidade Católica de São Paulo
PUC-SP