

E-GOVERNMENT AND ITS DEVELOPMENT IN THE REGION: CHALLENGES

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ARTICLE INFO	ABSTRACT
<p>Article history:</p> <p>Received 21 November 2022</p> <p>Accepted 31 January 2023</p>	<p>Objective: This article, of a theoretical nature, was oriented to the contextual analysis referred to digital government, its origin, aspects, and trends; mainly, the way in which it was implemented and developed in some Latin American countries was emphasized, in addition to the reflections on the implications related to digital government in the current situation, as well as the challenges it has been facing and future challenges.</p>
<p>Keywords:</p> <p>Electronic Government; Public Administration; Information and Communication Technologies; Management.</p>	<p>Theoretical framework: The universe of more contemporary aspects regarding electronic government was explored from the perspective of state management, as well as the foundations on which it has been consolidating and the changes it has undergone and at the same time generated in its wide spectrum of applications.</p> <p>Design/Methodology/Approach: A descriptive systematic review has been implemented with the collection of various definitions, approaches and strategies in relation to electronic government. Based on the qualitative approach, the analysis and extraction of various articles with relevant information from various databases such as Scopus, Ebsco, ProQuest and Scielo was carried out; taking into account those of the last four years.</p>
	<p>Findings: The acceptance of electronic government processes was based on the characteristics of citizens and their attitude towards technology; public bodies continue to show a series of problems, among which a marked inability to resolve the duties effectively and efficiently in charge despite having the appropriate technological tools and implements stands out.</p> <p>Research, practical and social implications: Future efforts that seek not only electronic government, but also a scaffolding that supports the development of administration processes through TIC and new platforms based on artificial intelligence.</p> <p>Implications/Originality/Value: The real implementation of an electronic government requires, urges and forces cultural changes in society due to the use of TIC and cutting-edge technological resources.</p> <p>Doi: https://doi.org/10.26668/businessreview/2023.v8i1.939</p>

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O E-GOVERNO E SEU DESENVOLVIMENTO NA REGIÃO: DESAFIOS

RESUMO

Objetivo: Este artigo, de natureza teórica, foi orientado para a análise contextual referente ao governo digital, sua origem, aspectos e tendências; principalmente, a forma como foi implementado e desenvolvido em alguns países da América Latina foi enfatizada, além das reflexões sobre as implicações relacionadas ao governo digital na situação atual, bem como os desafios que vem enfrentando e os desafios futuros.

Estrutura teórica: O universo de aspectos mais contemporâneos do governo eletrônico foi explorado a partir da perspectiva da gestão estatal, bem como as bases sobre as quais ele vem se consolidando e as mudanças por ele sofridas e ao mesmo tempo geradas em seu amplo espectro de aplicações.

Design/Methodologia/Aproximação: Uma revisão sistemática descritiva foi implementada com a coleta de várias definições, abordagens e estratégias em relação ao governo eletrônico. Com base na abordagem qualitativa, foi realizada a análise e extração de vários artigos com informações relevantes de vários bancos de dados como Scopus, Ebsco, ProQuest e Scielo; levando em conta os dos últimos quatro anos.

Descobertas: A aceitação dos processos eletrônicos de governo foi baseada nas características dos cidadãos e em sua atitude em relação à tecnologia; os órgãos públicos continuam a mostrar uma série de problemas, entre os quais se destaca uma marcada incapacidade de resolver as tarefas de forma eficaz e eficiente, apesar de possuir as ferramentas e implementos tecnológicos adequados.

Pesquisa, implicações práticas e sociais: Esforços futuros que buscam não apenas o governo eletrônico, mas também um andaime que apóie o desenvolvimento de processos administrativos através de TIC e novas plataformas baseadas em inteligência artificial.

Implicações/Originalidade/Valor: A implementação real de um governo eletrônico requer, urge e força mudanças culturais na sociedade devido ao uso de TIC e de recursos tecnológicos de ponta.

Palavras-chave: Governo Eletrônico, Administração Pública, Tecnologias de Informação e Comunicação, Gestão.

EL GOBIERNO ELECTRÓNICO Y SU DESARROLLO EN LA REGIÓN: DESAFÍOS

RESUMEN

Objetivo: Este artículo, de carácter teórico, se orientó al análisis contextual referido al gobierno digital, su origen, aspectos y tendencias; principalmente, se enfatizó la forma en que se implementó y desarrolló en algunos países de América Latina, además de las reflexiones sobre las implicaciones relacionadas con el gobierno digital en la situación actual, así como los retos que ha venido enfrentando y los desafíos futuros.

Marco teórico: Se exploró el universo de aspectos más contemporáneos relativos al gobierno electrónico desde la perspectiva de la gestión estatal, así como los fundamentos sobre los cuales se ha venido consolidando y los cambios que ha experimentado y a la vez generado en su amplio espectro de aplicaciones.

Diseño/Methodología/Enfoque: Se ha implementado una revisión sistemática descriptiva con la recopilación de diversas definiciones, enfoques y estrategias en relación al gobierno electrónico. A partir del enfoque cualitativo, se realizó el análisis y extracción de diversos artículos con información relevante de diversas bases de datos como Scopus, Ebsco, ProQuest y Scielo; tomando en cuenta los de los últimos cuatro años.

Resultados: La aceptación de los procesos de gobierno electrónico se basó en las características de los ciudadanos y su actitud frente a la tecnología; las entidades públicas continúan mostrando una serie de problemas, entre los que destaca una marcada incapacidad para resolver con eficacia y eficiencia las funciones a su cargo a pesar de contar con las herramientas e implementos tecnológicos adecuados.

Investigación, implicaciones prácticas y sociales: Futuros esfuerzos que busquen no sólo el gobierno electrónico, sino un andamiaje que apoye el desarrollo de procesos de administración a través de las TIC y nuevas plataformas basadas en inteligencia artificial.

Implicaciones/Originalidad/Valor: La implementación real de un gobierno electrónico requiere, urge y obliga a cambios culturales en la sociedad debido al uso de TIC y recursos tecnológicos de vanguardia.

Palabras clave: Gobierno Electrónico, Administración Pública, Tecnologías de la Información y la Comunicación, Gestión.

INTRODUCTION

The reason for the development of society, in its functional part, is the product of how the established government system has been facing and solving the needs and requirements at a given historical moment; for which, it has used the resources of its time and the implementation of strategies promoting viable changes, transformations, redesigns and restructurings and subject to improvements in management processes. One of the most distinctive characteristics of the current modern society is based on the intensive use of knowledge, whose appropriation and management has a growing strategic importance whose effects are of capital importance, such as, for example, the processes of transformation and modernization of public administration, through the development and application of various technological tools and a flourishing aspect of interactivity in digital environments (Loza et al., 2020; Ripalda, 2019). Currently, the evolution of knowledge tends to be increasingly recognized as a solid strategic resource that seeks the efficiency of all types of organizations and institutions, whether private or public (Noprisson, 2019).

The mechanisms that allow modernizing the state are based on a series of sensitive public processes and policies to be applied in the medium and long term, which allows showing transparency in public management, which is why e-government is useful in the processes of public institutions of the State (Blas et al., 2022; Soledispa et al., 2020). E-government, due to its new and changing nature, tends to lead to promising scenarios of generating greater benefits and hopes based on the use of TIC whose application could generate the necessary changes and transformations to improve the way in which governments work (Sundberg, 2019). In many developed countries, governments provide options to carry out reforms in public administration, most of them use TIC to offer electronic government services (Singh and Sahu, 2021; Monsalve and Gomez, 2021). As expressed by Noprisson (2019), if in this era of knowledge that is produced in a massive way, an adequate management of it can be considered as a significant factor with an added value character.

In various developed countries, governments promote processes aimed at generating reforms in public administration, most of which are essentially linked to the use of TIC to offer e-government services. Regarding the processes related to innovations in the field of administration and management mechanisms, Freire (2019) mentioned that in the case of this part of the world, there were two moments or waves, the first referring to the last century characterized by the neoliberal vision of governance without government or leaving eventual self-regulation to the market with minimal state participation; then, a second moment or wave referred to the post-neoliberal vision, typical of this century, which is framed in processes

supported by a liberal-democratic perspective as well as statist or mixed governance that bets more on innovations and the use of TIC.

ELECTRONIC GOVERNMENT

In recent decades, there has been a notable increase in the scope of the Organization for Economic Co-operation and Development and emerging countries regarding the debate on administrative reforms in public management in relation to the use of technological tools in the public sector to seek a novel way of generating links between the government, administrations and society, which tends to be collaborative, transparent and multidirectional for the benefit of citizens (Loza et al., 2020; Suing et al., 2018). According to Pinacho et al. (2020), digital government emerged in the 1990s due to the growing need to implement new technologies at the service of government activities and processes; for which, at the beginning, the use of the internet was considered. In the case of Latin America, the digital government has gained a notable boom in the last decade which, according to Rodriguez (2021), is due to the classic paradigm shift towards that of the knowledge society and the use of TIC, whose prospects gravitate in the effectiveness of the public administration with which governance would be facilitated.

E-government is an application of information and communication technology (TIC) that seeks to generate more open forms of communication between governments, citizens, and companies (Singh and Sahu, 2021; Garcia and Plasencia, 2020; Guedez, 2019; Noprisson, 2019; Ripalda, 2019; Sundberg, 2019). By e-government, it refers to the use of the Internet and web resources that allow government services and information to be managed by institutions (public or private) and citizens, aimed at improving the effectiveness and efficiency of the dissemination of services in the public sector (Ali and Anwar, 2021; Dwivedi et al., 2020; Gonzalez et al., 2020; Sundberg, 2019). On the other hand, the e-government, in its conception, is linked to the use of TIC since this form is visualized and materialized in the quality of service of the public administration towards the citizen (Alvarado et al., 2019; Rasmi et al., 2018). According to Zamora et al. (2018), the electronic government derives from the application of TIC that has allowed a true reform in public management on the way to its modernization oriented to substantive improvements in the interactivity of the public administration with users and taxpayers that, due to its disruptive nature, allows us to envision new flanks within new governance processes and increasingly efficient administration mechanisms (Chica and Salazar, 2021).

The question is: what is the purpose of an e-government? The exception to the incisive question is provided by Ali and Anwar (2021) who mentioned that said purpose lies in the improvement in management processes, improvement in the quality of life of citizens, transparency, accountability, and greater trust in government. According to Noprisson (2019), the objective of the application of electronic government is to cover and manage the methods of transfer and/or exchange of knowledge. The real implementation of an e-government requires, urges, and forces cultural changes in society due to the ineluctable use of TIC and increasingly powerful resources, various advances in the possibilities of new technologies such as artificial intelligence, big data, and intelligent systems (Valenzuela et al., 2020). In this regard, Guedez (2019) proposed four levels of linkage referring to e-government: (a) government-government link: to establish intragovernmental links, facilitating the management of public administration through the development and application of TIC resources, improving links intra and inter-institutional, markedly reducing bureaucracy, therefore, increasing effectiveness, efficiency and transparency in management; (b) government-citizen link: it is oriented towards access to information and administrative services mediated by TIC with availability and access at all times; (c) government - company: it is similar to the previous case, but it takes into consideration the sector and type of business that requires a service, giving priority to the development of strategies related to emergencies in the private sector and (d) government - employee: it is oriented to provide services that allow developing the professional expertise of public sector employees.

According to Singh and Sahu (2021), e-government is the cornerstone of improvements supported by information systems to digitize service delivery and governance development that is carried out at all stages of government. The development in the Latin American region of proposals based on electronic government reflects the full security of the state in using TIC and resources based on online support technology to attend management processes and quality of services since, according to Gutierrez (2019), this process is based on the certainty that TIC are requirements per se that can ensure greater effectiveness and efficiency in the application and development of the policies of the government in power. According to the perspective of Sundberg (2019), the perspectives on e-government are very broad, as well as carrying various promises of better performance thanks to TIC, which, due to its importance, can be considered as a new paradigm to revalue values, democratic and institutional that will be forged on a coordinated and joint work between the various government agencies of a cohesive nature, a fact that will allow the generation of adequate solutions integrated by each agency and also in collaboration between them.

Regarding the acceptance of electronic government in other latitudes, the researchers Ali and Anwar (2021) found that an increase in the levels of perception regarding the usefulness of the use of an electronic government should lead to a similar proportion to the increase in an attitude each increasingly positive towards it, so they concluded that the majority of Iraqi citizens had a positive attitude towards the use and implementation of electronic government. These findings are supported by the high standards of affinity of Iraqi citizens towards technological resources. This last aspect must be considered if significant achievements are desired in the levels of e-government warning and thereby reverse negative indicators on the part of the population, a fact that leads to sustaining that a population that possesses digital skills is more sensitive to adapting to processes based on electronic government.

On the other hand, Sundberg (2019) proposed, based on a review of the literature, that the risk situations perceived in electronic government contemplate four aspects, each with its own epistemological and ontological features, such as: (a) the security of information technologies, which will make it possible to prevent and predict possible violations or cyber-attacks on electronic government; (b) incorporation of users into the system, through the implementation of technology acceptance models based on statistical analysis to understand and predict the etiology of citizens regarding government services; (c) politics and democracy, there is a risk associated with a greater use of digital technology in society as well as the public sector, which would go unnoticed under the classic risk management models due to their ambiguous nature and (d) difficulties in the implementation, seeks to evaluate and weigh solution processes to electronic government.

PUBLIC POLICIES AND ACHIEVEMENTS OF E-GOVERNMENT IN LATIN AMERICA

E-government is the centerpiece of information systems-supported improvements to digitize service delivery and governance development that are taking place at all stages of government (Singh and Sahu, 2021). Latin America has advanced in the last decade towards processes that have substantially improved the development of electronic government; highlighted, in this process, the interaction with the user (as part of the development policy of e-government) as one of its main strengths, which is denoted in the agility of administrative processes, the same ones that used to present bureaucratic entrapment that, although there are progress, there is still a long way to go in this regard in the region (Rodriguez, 2021).

The Chilean case was addressed by Gutierrez (2019) who in this regard located the development of electronic government in Chile, which, during the last period, has shown

significant development through an accelerated modernization of services and the new form of management that transformed the orientation and culture within the organizations, aimed at the taxpayer as a client and based primarily on savings and cost reduction, technology evolution and substantial improvements in the quantity and quality of services. On the other hand, Gonzales et al. (2020) examined the case of the implementation of electronic government at the municipal level in Chile, they found that the model was successful in the communes evaluated and that an additional success factor was the use of social networks to bring the population closer to the services.

In the Ecuadorian case, within the state modernization policies implemented since 2009, Ripalda (2019) mentioned that the Ecuadorian e-government was located at level 84 among more than one hundred and ninety countries evaluated, which corresponded to a significant improvement. compared to previous years. On the other hand, Zamora (2018) has been evaluating through the electronic government development index (prepared by the United Nations) the level of predisposition and capacity in the use of TIC achieved by the public administration. In this process, it has been possible to implement more than one hundred technological resources with web support that have substantially improved the interactivity of citizens with the state administration, making procedures viable, thereby eliminating barriers to access for citizens, a fact that has been made clear in a level of high acceptance of 67% by users. For his part, Freire (2019), attended a work of the Ecuadorian reality in relation to the modernization of the management of the public sector, pointed out the effectiveness of e-government, the use of TIC as well as technological tools regarding a new paradigm in the control and regulation of administrative processes, especially accountability and transparency, outlined in a new state scheme of the national development plan with the legal framework of the Organic Law related to public service, achieving significant improvements in accountability. On the other hand, Suing et al. (2018) reported that the web pages of various Ecuadorian municipalities do not provide quality information, half of them have a search engine and another part lacks discussion walls, in addition to the fact that the offer of services is limited, which is why it is lost. the opportunity to take advantage of technology to strengthen integration processes.

About e-government in the Colombian reality, it is described by Moncayo (2020) who described the need for its implementation based on a new public management and to found the new institutionalism, in addition to specifying that said process does not It was linear, much less simple, since there were marked ups and downs. The implementation began in the first decade of this century with the process of an "online government" that encouraged the use of

TIC in public bodies. At the beginning of the second decade, the projects and formulations of electronic government began to land and materialize in a concrete way through programs such as great planning to develop and increase institutional web pages to increase levels of effectiveness, a fact that was positive due to conditions such as the increase in the use of mobile devices and internet access, as well as a relatively young population whose proximity to new technologies has proven to be successful in relation to policies focused on digitization. In addition, the author highlighted some mishaps regarding the achievements such as there is no equivalence relationship between the levels of electronic government implemented and the satisfaction of the population, due to the reduced development efforts in remote rural areas and the lag of public entities. of these zones that refuse to the new changes.

In the Peruvian case, Alvarado et al. (2019) stated that the implementation process of the so-called electronic government has been developing since 2003 and that, due to its situation, it reaches all public entities of the state that, in subsequent years, has been developing at the level of the so-called regional governments (25 in total) seeking the continuous improvement of governance mechanisms by generating public value for citizens, institutional support (intra and/or inter-institutional) at all levels (local, regional, national) at the same time of global technology trends. In this regard, the researchers have concluded that an adequate level of effectiveness has not yet been reached, since the regional web portals that offer a series of services to citizens presented notable shortcomings in terms of quality in user interactivity, resulting in non-functional experiences pleasant while aspects such as information and digital resources had an average acceptance despite being subject to continuous improvement, for which they recommended the need for a process of modernization of the state towards the consolidation of a solid e-government that allows configuring administrative processes and of management with and for the citizens. On the other hand, Acevedo et al. (2019) mentioned that the National Institute of Statistics and Informatics of Peru, in 2016, developed a strategic planning aimed at implementing electronic government, a project that was framed in Law No. 27658 on the modernization of state management, in which a modernization mechanism is sought in order to be able to optimize the use of public resources and to be able to contribute to the materialization of a state of marked character in greater effectiveness, transparency, proactivity and inclusiveness that provides opening of ways of approaching the citizenship towards the services and information provided by the state. According to that objective, said plan had five guiding axes called strategic goals: (a) achieve the development and provision of better services to society through interoperability between the various levels of the state, the private sector and civil society, (b) rapprochement of the state to citizens, (c) have mechanisms

that can guarantee complete integrity, confidentiality and availability of information, (d) catalyze processes of general digital inclusion of citizens and that at the same time respect cultural diversity and the environment and (e) the establishment of a regulatory framework that facilitates ways of monitoring and supervising the development of the aforementioned strategic plan.

CHALLENGES

When a state establishes solid and defined institutions aimed at improving the quality of life of citizens, the levels of interaction between them are broader and more democratic; therefore, electronic government and the application of TIC to management is one of the most promising ways to achieve this ideal (Moncayo, 2020). Understanding and recognizing the importance of successfully implementing an electronic government project has become a capital necessity, since it allows the improvement of the service to the citizenry, as well as moving towards improvements in the levels of operations and performance of the organizations from the public and private sector (Ali and Anwar, 2021) although Pinacho et al. (2020) stated that public bodies continue to show a series of problems, among which a marked inability to resolve the duties effectively and efficiently in charge despite having the appropriate technological tools and implements stands out.

Adopting e-government, due to its essence and importance, is not a simple and homogeneous process because it responds to a wide range of variables that go beyond issues related to infrastructure and technological support; but also factors of an economic-social, cultural and political nature (Cadena et al., 2018).

According to Bannister and Connolly (2018), the implementation mechanism of new technologies in the public sector generates high expectations of value realization, as well as considerable uncertainty and complexity. Among the series of challenges that most public administrations must face, at a global level, is that of generating a greater dynamic between the State and the citizenry as a faithful reflection of an adequate government process (Alvarado et al., 2019). On the other hand, Ali and Anwar (2021) have stated that electronic government should be considered as the fundamental piece of any of the improvements structured and executed based on information systems due to the digitization processes in the distribution of services and with this is the development of governance that takes place at all levels of government.

According to Noprisson (2019), policies and a suitable legal framework that provide an adequate action plan that allows managing knowledge in electronic government have not yet

been developed; but due to the undeniable advance and positioning of new technologies and the development of innumerable applications based on multiplatform services, innovative mechanisms and programs have been designed and generated to enhance the relationship between governments and citizens (Pino, 2020). On the other hand, Gutierrez (2019) exposed aspects related to electronic government, which occurred in the midst of neoliberalism, on the processes of interaction between the State and a part of the citizenry that has been excluded, generally, the less privileged social groups (poor, elderly, residents of rural and remote areas) who are violated in their right of access from the use of the internet, as well as digital tools applied to the management of public services; asynchronous reality in which those affected are unable to exercise their right to access and use the services that the state has through the Internet; therefore, the democratization in the use of information technologies (IT), coupled with the knowledge management process, would not only allow effective performance by generating competitive advantages for an organization, including the public sector (Noprisson, 2019); but it would also generate inclusion and empowerment of society and pave the way for society towards an adequate transition to the knowledge society (Valenzuela et al., 2020).

As an innovative tool, electronic government requires large-scale conjunctural changes as a result of the generation of adequate and efficient public policies, seeking the increasingly active participation of citizens, promoting the continuous improvement of its processes and being permanently subject to possible changes. and restructuring typical of the development of new technologies (Ocaña et al., 2021). For this reason, Ali and Anwar (2021) recommended managers and leaders of any administration interested in implementing electronic governance or related processes to keep in mind various aspects such as legal, political, organizational, human capital and technological factors.

According to Rodriguez (2021), the region is far from consolidating governance from the perspective of an e-government, since the investment made by the governments of the day in response to the infrastructure needs in rural areas is scarce, a fact that is not unrelated either to various urban areas because it is essential that all e-government and related administrative processes have computerized support and agile and efficient network interactivity, which would strengthen public management and administrative processes, in addition to breaking down cultural gaps that, in the case of Latin America that has multi-ethnic realities, would achieve true integration (Rodriguez, 2021).

According to Zamora (2018), a key resource for the development of innovative processes in the public management of a state must start from technological innovation processes as the basis of the tools of a true e-government, which should not only be useful for

a better interactivity of citizens with their government; rather, it should be perceived as a transparent mechanism based on citizen trust in its administration, to better governance of society derived from specific policies of empowerment towards digital citizenship.

Regarding questions regarding e-government and its incursion into public management, Sundberg (2019) estimated that this issue tends to increase, which, according to his data, has serious setbacks and negative effects on democracy since, for said researcher, the problems come from two sources, one of the most burdensome refers to the hierarchical conformation of the state (local, regional, national), derivation of functions (health, education, taxes, among others) and the bureaucracy, aspects that, from their point of view, they become serious obstacles to being able to establish an integrated government since various organizations continue to work in a conspicuous way, ignoring the generation of service integration. Because citizens require greater proximity to the services of any government entity, the researcher proposes their integration to overcome the chronic model of organizational structures. On the other hand, Bannister and Connolly (2018) stated that a possible integration could be difficult to establish because a possible integration of the functions related to the public sector could alter important constitutional safeguards such as the separation of powers and control mechanisms.

An aspect diametrically opposed to the classic proposals on the difficulties that the effective materialization of an electronic government must overcome is disclosed by Sundberg (2019), who in this regard mentioned that many initiatives derived from e-government are often associated with promises of a more efficient transformational form of government for which it uses modern technology to increase democratic commitment; but that in reality, they do not usually provide the promised benefits and do not usually convene a large part of the citizens, due to the fact that the various initiatives have been driven by technology and not by the central values of the government, resulting in a democracy weak in that respect.

Although many authors recognize the benefits of applying new technologies in management processes, in accordance with current state policies, Sundberg (2019) provided another sidelined aspect of reality; that is the failures or shortcomings that occurred, such as the case of the servers of the American website healthcare.gov, which in 2013, after a little over two hours, became saturated and collapsed as a result of overwhelming demand; this due to design deficiencies and whose repair exceeded the cost estimates of said project. He also mentioned the notorious case of the company "Cambridge Analytica", a company that in 2016 acquired, without prior permission, sensitive data from several million Facebook users, the same ones that were used for political purposes and that put, in the legal field, the ethical

dilemmas derived from a biased use of information in the absence of data protection forms or mechanisms.

Instead of seeing e-government and e-democracy as transformative tools, we need to consider how technology can be used to preserve what we already have, such as a separation of powers that can make a state more resilient against authoritarianism, for example, by creating interfaces to citizens; but preserving the separation inside (interoperability instead of integration).

CONCLUSIONS

Due to the series of changes that have occurred as a result of the pandemic, the sanitary measures in addition to the immobilization of people, a greater rootedness in the use of TIC has been catalyzed; therefore, public management had to use the resources it already had at its disposal, in addition to developing many others so that it can overcome the lack of direct treatment or "face to face" to make way for greater interactivity based on digital media.

As manifested in the case of the acceptance of e-government processes in some places on the planet where it had already been established, this achievement is based on the characteristics of citizens and their attitude towards technology; that is, they have digital skills and acceptable levels of skills and digital literacy that allow them to function in such environments. Therefore, if a State decides to update its management systems based on electronic government, it has a growing obligation and a marked need to achieve consensus regarding public policies regarding the perspectives of electronic government since the population is unaware of its level of effectiveness. and participation in relation to the empowerment of TIC, coupled with shortcomings in the field of digital literacy and a balanced level of digital skills, facts that are emerging as serious challenges that must be resolved promptly to consolidate a cultural profile of digital citizenship that will be the inexorable and ineluctable transcript towards which humanity advances. There is no doubt that the training of citizens in digital skills is, now more than yesterday, an inexorable vanguard to achieve standards that facilitate the implementation and development of e-government.

The region must transition to e-government under an integrative perspective that makes possible the integration of the various social realities which in their universe gravitate between congruent axes such as greater interactivity mediated by e-government and other discordant ones such as the multiple geographical and cultural realities that they slow down the advance. That is why these parameters must be synchronized with the political interests of the governments in power.

Future efforts that seek not only electronic government, but also a scaffolding that supports the development of administration processes through TIC and new platforms based on artificial intelligence, the actions of increasingly effective boots and new resources should assume suggestions such as the urgent need to generate greater transparency in the governmental mechanism that allows and promotes a healthy and effective citizen participation for which processes of transformation of the relationships between the various entities must be catalyzed (endowed with the resources and implements required for that matter) and citizenship (full and aware of their rights and duties); both gaps will be overcome and the efficiency of electronic government will materialize.

REFERENCES

- Acevedo, S., Barrutia, I., Urquizzo, J. y Venero, R. (2019). Public administration and sense of well-being for progress. *Religion: Journal of Social Sciences and Humanities*, 4(17), 116-123.
- Ali, B. y Anwar, G. (2021). Factors Influencing the Citizens' Acceptance of Electronic Government. *International journal of Engineering, Business and Management*, 5(1) 48-60. https://dx.doi.org/10.22161/ije_bm.5.1.5
- Alvarado, P., Cevallos, P., Morán, E. y Preciado, L. (2019). Peruvian e-government model: citizen services in regional government portals. *Digital Visionary*, 3(3), 100-116. <https://doi.org/10.33262/visionariodigital.v3i3.656>
- Arcentales, R. y Gamboa, J. (2019). Impact of e-government on public management in Ecuador. *Espiraes multidisciplinary journal of scientific research*, 3(26), 28-39.
- Bannister, F. y Connolly, R. (2018). The fourth power: ICT and the role of the administrative state in protecting democracy. *Information Polity*, 23(3), 307-323. <https://doi.org/10.3233/IP-180072>
- Blas, F., Uribe, Y., Cacho, A. y Valqui, J. (2022). State modernization in public management: systematic review. *Social Science Journal*, 28(5), 290-301.
- Cadena, L., Filian, F., Maldonado, A. y Torres, R. (2018). Technology and Public Management. Contemporary. *Dilemmas: Education, Politics and Values*, VI(42), 1-24.
- Chica-Vélez, S. y Salazar-Ortiz, C. (2021). Post-new public management, governance and innovation. Three concepts around a form of organization and management of the public. *OPERA*, (28), 17-51. <https://doi.org/10.18601/16578651.n28.02>
- Dwivedi, Y., Rana, N., Tamilmani, K. y Raman, R. (2020). A meta-analysis based modified unified theory of acceptance and use of technology (meta-UTAUT): a review of emerging literature. *Current Opinion in Psychology*, 36, 13-18. <https://doi.org/10.1016/j.copsyc.2020.03.008>

Freire, M. (2019). Modernization of public management and accountability: analysis of the Ecuadorian case. *Management Studies*, (5), 147-179. <https://doi.org/10.32719/25506641.2019.5.6>

García, W. y Plasencia, J. (2020). Key aspects for informatization and Electronic Government. *Cuban Journal of Informatics Sciences*, 14(3), 124-147.

González-Bustamante, B., Carvajal, A. y González, A. (2020). Determinants of electronic government in municipalities. Evidence from the Chilean case. *Management and Public Policy*, 29(1), 97-129. <https://doi.org/10.29265/gypp.v29i1.658>

Guédez, J. (2018). E-government and the inter-organizational network in public administration. Case of analysis: Lara State Comptroller's Office. *Compendium*, 21(40), 1-6.

Guédez, J. (2019). Implications of governance in e-government: actors and interactions. *Compendium*, 22(42).

Gutiérrez, L. (2019). Neoliberalism and Modernization of the State in Chile: Emergence of Electronic Government and social inequality. *Culture-man-society*, 29(2), 259-280. <http://dx.doi.org/10.7770/0719-2789.2019.cuhso.03.a06>

Loza, A., Ortega, X. y Manzano, R. (2020). Public management and society 2.0. *Knowledge Pole: Scientific-professional journal*, 5(9), 55-66. <https://doi.org/10.23857/pc.v5i9.1675>

Moncayo, G. (2020). Neoinstitutionalism, transparency and e-Government: Quality of life in Bogota and other Colombian cities. *Sarance Magazine*, (45), 118-142. <https://doi.org/10.51306/ioasarance.045.08>

Monsalve, D. y Gómez, J. (2021). Digital transformation: public management in the new era. *Debates IESA*, 25(2), 38-40.

Noprisson, H. (2019). Challenges and Benefits of Knowledge Management Practices in Electronic Government. *International Journal of Scientific Research in Computer Science, Engineering and Information Technology*, 5(4), 271-277. <https://doi.org/10.32628/CSEIT195448>

Ocaña-Fernández Y., Valenzuela-Fernández, L., Vera-Flores. M. y Rengifo-Lozano, R. (2021). Artificial intelligence (AI) applied to public management. *Metaverse*, 2(1), 1-8. <https://doi.org/10.54517/met.v2i1.1795>

Pinacho, A., Cruz, C. y Valencia, O. (2020). Electronic logbook of public works: between electronic and open government. *Digital University Magazine*, 21(3), 1-9. <http://doi.org/10.22201/codeic.16076079e.2020.v21n3.a4>

Pinho, M. (2020). Open Government and Citizen Participation. Some regulations needed in Venezuela. *Global Law. Studies on Law and Justice*, V(15), 63-88. <https://doi.org/10.32870/dgedj.v5i15.255>

Rasmi, M., Alazzam, M., Alsmadi, M., Almarashdeh, I., Alkhasawneh, R. y Alsmadi, S. (2018). Healthcare professionals' acceptance Electronic Health Records system: Critical literature review (Jordan case study). *International Journal of Healthcare Management*, 13(sup1.1), 48-60. <https://doi.org/10.1080/20479700.2017.1420609>

Ripalda-Yáñez, J. (2019). E-government as a strategy to achieve efficiency in public management. *Contemporary Dilemmas: Education, Politics and Values*, VII(48), 1-16. <https://doi.org/10.46377/dilemas.v30i1.1216>

Rodríguez-Román, R. (2021). Digital Government in Local Governments in Latin America. *Koinonía Interdisciplinary Refereed Journal*, 6(11), 163-179. <https://doi.org/10.35381/r.k.v6i11.1227>

Singh, M. y Sahu, G. (2021). Key Factors for Green IS Acceptance in Banking Segment: Pragmatic Analysis. *International Journal of Electronic Government Research*, 17(1), 48-67. <https://doi.org/10.4018/IJEGR.2021010104>

Soledispa-Rodríguez, X., Zea-Barahona, C. y Santistevan-Villacreses, K. (2020). The new public management: challenges and opportunities, *Knowledge Pole*, 5(9), 371-381.

Suing, A., Barraqueta, P. y Carpio, L. (2018). Citizen orientation in the "electronic government" of Ecuador's municipalities. *Teknokultura*, 15(1), 39-53. <https://doi.org/10.5209/TEKN.57176>

Sundberg, L. (2019). Electronic government: Towards e-democracy or democracy at risk?. *Safety science*, 118, 22-32. <https://doi.org/10.1016/j.ssci.2019.04.030>

Valenzuela, L., Collantes, Z. y Durand, E. (2020). On digital governance, digital policy and education. *Eleuthera Magazine*, 22(2), 88-103. <https://doi.org/10.17151/eleu.2020.22.2.6>

Zamora-Boza, C., Arrobo-Cedeño, N. y Cornejo-Marcos, G. (2018) E-government in Ecuador: innovation in public administration. *Espacios Magazine*, 39(8), 1-8.