ELECTRONIC, PERFORMANCE AND DIGITAL GOVERNMENT: WHICH IS THE BETTER CONCEPTUAL MODEL FOR PUBLIC ADMINISTRATION IN THE 21ST CENTURY?

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Abstract: The research explores, in comparative lines, the concepts of electronic government, performance government and digital government, with the latter being the most recent model presented for understanding the impacts of information society for Public Administration in the 21st century. The theme-problem starts from the premise that obsolete models, such as electronic government and performance government, long debated and explored by the nineteenth century doctrine, demand improvements and revisions. In the hypothesis, Law No. 14.129/2021 (Digital Government Law) is investigated in general lines, recognizing its essentiality and originality for the consolidation of the digital government model as an adequate archetype that best reflects the current challenges for addressing public issues emerging from the influxes of emerging digital technologies. The research is qualitative and based on literature review. The deductive method is used.

Keywords: electronic government; performance government; digital government; Law No 14.129/2021.

INTRODUCTION

The enactment of Brazilian Law No. 14,129 on 29 March 2021 enshrined an important array of legal norms—principles and rules—of undeniable relevance for understanding and restructuring certain foundations of Public Law and of the Public Administration itself in the twenty-first century. Indeed, the regulatory framework in question opts for the term "digital government" when referring to the impact of digital transformation on state tasks at this particular moment, abandoning the previously consolidated terminology ("electronic government") to better reflect today's challenges, faced in the transition between eras marked by their own obstacles.

There is no doubt that the primacy of efficiency—from which the intent to debureaucratize state action emanates—is of great importance for redefining the role of the State in the new century. Nonetheless, the law itself is permeated by elements that allow one to distinguish the so-called "digital

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government" from older archetypes, such as the aforementioned "electronic government" and, insofar as the abstruse quest for numbers and indicators is concerned, the "performance government."

Despite this, in the very preamble of the law one notes the emphasis given to the constitutional principle of efficiency as the driving force behind the legislative innovation, which gives rise to questions that converge on the central problem of this essay: after all, when one speaks of "digital government" in light of Law No. 14,129/2021, is the pursuit of efficiency the sole propellant of digital transformation in the Public Sector? As the answer is evidently negative, it becomes necessary to highlight the importance of clarifying these terminologies.

In the research hypothesis, returning to conceptual discussions of the twentieth century, it will be possible to isolate the characteristics that shaped the definition of "electronic government" at the height of the Third Industrial Revolution (owing to the spread of electronics and computing) and the definition of "performance government," strictly based on indicators and the primacy of efficiency. Next, the peculiar points of the Brazilian regulation will be highlighted so as to allow its differentiation from the two other models, with emphasis on the democratic function pursued through the guarantee of administrative consensus and, furthermore, through the promotion of digital governance.

As for scientific methodology, the research will employ the deductive method of approach. Regarding research technique, a bibliographic-doctrinal review will be used. Finally, a conclusion will be presented with the aim of consolidating the observations made throughout the investigation.

I. CONCEPTUAL MODELS: ELECTRONIC GOVERNMENT, PERFORMANCE GOVERNMENT AND DIGITAL GOVERNMENT

In exact proportion to the fact that Information and Communication Technologies (ICTs) are pointed to by many as the main driving forces of today's transformations—with emblematic expressions such as the "telecommunications bomb," for Albert Einstein[1]; the "third wave," for Alvin Toffler[2]; or the "global village," for Marshall McLuhan and Bruce Powers[3]—it is certain that, beyond their impactful predicates, the technological changes

[1] According to Pierre Lévy, the expression was coined by Einstein when referring to the three major transformations that would profoundly reshape social life during the twentieth century: the telecommunications bomb, the demographic bomb, and the atomic bomb. Lévy, Pierre. *Cyberculture*. Translated by Carlos Irineu da Costa. 3rd edition. São Paulo: Editora 34, 2010, 13.

[2] Toffler, Alvin. *The Third Wave*. New York: Bantam Books, 1980.

[3] McLuhan, Marshall, and Bruce R. Powers. *The Global Village: Transformations in World Life and Media in the 21st Century*. Oxford: Oxford University Press, 1989.

of recent years have produced severe social consequences.

In other words, technology ceases to present itself as an autonomous element disconnected from society and culture, becoming instead the very amalgam of individual interrelationships, now being re-signified in great strides.

Bill Gates, Nathan Myhrvold, and Peter Rinearson[4], in their renowned work *The Road Ahead*, had already highlighted the role that the Internet would play in the twenty-first century, even though, in the course of the second half of the twentieth century, only timid data flows were envisioned, with few images, texts, and graphics exchanged through a still rudimentary and loosely interconnected system called web 1.0, conceived on military premises by the Advanced Research Projects Agency (ARPA) of the U.S. Department of Defense[5].

The second "stage," called web 2.0, then emerged, and the Internet acquired fundamental legal significance owing to the intensification of data sharing and the massification of its use for varied purposes, a problematic that came to be addressed in the short and medium term, exerting fundamental influence on daily information practices and prompting visions of a "post-territorial" era[6]. We are already in the era of the so-called web 3.0, marked by real-time network operability, uninterrupted data storage (always recording), the creative web, three-dimensional technology, and virtual avatars, giving rise to the "semantic web" and to the legibility of the network by machines—no longer only by human beings—and to hyper-connectivity linking communications between individuals (person-to-person, P2P), between individuals and machines (human-to-machine, H2M), or between machines (machine-to-machine, M2M), by means of a vast technical apparatus[7]. Moreover, several authors already indicate that we are heading toward the predominance of web 4.0, or the "smart web," characterized by the presence of the Internet of Things[8].

Under a new designation, reference is made to "Web3" as a concept that

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[4] Gates, Bill, Nathan Myhrvold, and Peter Rinearson. *A Estrada do Futuro*. Translated by Beth Vieira, Pedro Maia Soares, José Rubens Siqueira, and Ricardo Rangel. São Paulo: Companhia das Letras, 1995, 145-173.

[5] Kanaan, João Carlos. *Informática Global*. 2nd ed. São Paulo: Pioneira, 1998, 23-31.

[6] Goldsmith, Jack, and Tim Wu. *Who Controls the Internet? Illusions of a Borderless World*. Oxford: Oxford University Press, 2006, 13.

[7] O'Reilly, Tim. "Web 2.0: Compact Definition?" *Radar: Insight, Analysis, and Research about Emerging Technologies*, October 1, 2005. http://radar.oreilly.com/2005/10/web-20-compact-definition.html (accessed May 26, 2025).

[8] Quan-Haase, Anabel, and Barry Wellman. "Hyperconnected Network: Computer-Mediated Community in a High-Tech Organization." In *The Firm as a Collaborative Community*, edited by Paul S. Adler and Charles Heckscher. New York/Oxford: Oxford University Press, 2006, 285.

condenses the techno-informational interstice of the two previous stages. In the current moment of the information society, the Internet of Things (IoT)—situated at the frontier of the so-called Internet of Everything (IoE)—indicates that life in society already suffers the impacts of digital transformation in an unstoppable and irreversible way, since gadgets and electronic devices[9]—and even automobiles and household appliances—are already, of themselves, connected to the great network, being capable of enabling the automated performance of legal acts through algorithms and artificial-intelligence systems[10].

Seen in perspective, this entire evolutionary context could not fail to generate impacts on public activities. Indeed, the State has always re-formulated itself in response to technological advancement[11]. Throughout history, tendencies toward the formulation of a renewed mode of governance, through the use of new technologies, consolidated what came to be called, in law, "electronic government," despite the obsolescence of that nomenclature—which is an earlier creation symbolizing a technical transition[12]. In this respect, emphasizing the paradigm shift from "manual government" (m-gov) to "electronic government" (e-gov) and beyond, it is worth recalling Robert Behn's explanation:

> In his original article on "re-engineering," Michael Hammer distinguished between the automation of business processes and their re-engineering. Automation, he argued, had "produced disappointing results" because it consisted merely of using "technology to mechanize old ways of doing business." To implement Hammer's re-engineering concept, companies, on the other hand, "would harness the power of modern information technology to radically redesign their business processes in order to achieve dramatic improvements in their performance." Likewise, under the rubric of electronic government, public agencies automated existing processes and reformulated them. In fact, some agencies did more than convert manual government (m-gov) into electronic government (e-gov). They went beyond using technology merely to automate or even re-engineer m-gov into e-gov. In some cases, agencies employed the

[9] Webster, Frank. *Theories of the Information Society*. 3rd ed. London: Routledge, 2006, 35-37.

[10] Faleiros Júnior, José Luiz de Moura. "Inovação, desenvolvimento e a Lei do Governo Digital (Lei nº 14.129/2021): perspectivas quanto às estruturas de governo como plataforma." *Inova Jur: Revista Jurídica da UEMG* 1, 2022: 1–29.

[11] Schiller, Herbert I. "The Communications Revolution: Who Benefits?" *Media Development* 30 (4), 1983: 18–20.

[12] Faleiros Júnior, José Luiz de Moura. "Perspectivas terminológicas da 'accountability' no governo digital: uma abordagem das dimensões política, administrativa, profissional e democrática." *Revista EJEF (TJMG)* 2, 2023: 1–28.

> power of statistical analysis and the advantage of data distribution, enabled by all those tiny electrons, to create information-based innovations. They moved from manual government and electronic government to what is truly innovative: performance government (p-gov).
> What was envisaged was a tendency for Public Administration to be restructured by the presence of electronics and computing (a result of the twentieth-century Third Industrial Revolution). Technology was used only to change the way administrative tasks were performed without altering their essential content. What had been manual and mechanical became electronic and supported by computing. However, the technological advance that followed was extremely swift, culminating in the advent of the Internet and networks, which have already altered all earlier proposals for configuring the so-called "electronic government."[13]

When one considers an "electronic government," the conclusions of José Fernando Brega regarding the development of a legal perspective on the incorporation of new technologies into the activities and routines of the Public Administration resonate with signals that must transcend the mere proposal to transfer administrative acts and processes from paper to digital media[14]. Without doubt, the hypotheses investigated by the author in his pioneering thesis deserve specific quotation:

> (...), the three hypotheses advanced in its introduction were investigated: 1) electronic government is a legal reality that can also be understood from the standpoint of administrative law; 2) as a legal reality, electronic government is subject to a set of foundations derived from the current legal order, especially its constitutional precepts; 3) the use of electronic means produces substantial consequences for classical institutes of administrative law, making it necessary for these and their respective bases to be reassessed by legal science in light of current technological reality and the systematic legal foundations referred to in the previous hypothesis[15].

There is no doubt that various institutes of contemporary administrative

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[13] Behn, Robert D. "The Challenge of Evaluating M-Government, E-Government, and P-Government: What Should Be Compared with What?" In *Governance and Information Technology: From Electronic Government to Information Government*, edited by Viktor Mayer-Schönberger and David Lazer. Cambridge, MA: MIT Press, 2007, 215.

[14] Mergel, Ines, and Stuart Bretschneider. "A Three-Stage Adoption Process for Social Media Use in Government." *Public Administration Review* 73 (3), 2013: 390–400.

[15] Brega, José Fernando Ferreira. *Governo Eletrônico e Direito Administrativo*. Brasília: Gazeta Jurídica, 2015, 320.

law require revisitation and careful study of their details so that, in light of the impacts brought by new technologies, they can be improved[16]. The incidence of technological modalities on various state activities related to this essential roll of principles allows a rethinking of the State's structure beyond the mere notion of a government that uses electronics and computing to perform its tasks[17]. Far more than the benefits of speed, security, and efficiency, technology has the power both to strengthen and to undermine the State, the latter alarming possibility being an undesired consequence of its inertia and lack of structural adaptations to future demands[18].

With this, the reflections advanced in the next three chapters, although they do not purport to "reinvent the State,"[19] will certainly contribute to producing a critical rereading of its role and its primordial institutes, optimizing its "backbone" on more solid structural bases and, surely, more aligned with the relentless innovation that marks the twenty-first century[20].

On the other hand, the mention of a "performance government" (p-gov), as indicated by Robert Behn[21], is closely related to the study of processes of innovation, interactivity, and data collection precisely because information comes to determine the content of administrative acts, reflecting their effects on society. Thus, "electronic government"—or the use of Information and Communication Technologies (ICTs) in public activities—involves both a break and a continuation of the nature of government in modern nation-states[22]. The new paradigm is, in truth, "digital" (and no longer "electronic"), for it implies a series of new and important impacts on the dogmatic reconstruction of administrative acts and processes, going far beyond the impacts of electronics and computing, as will be seen. Nevertheless, despite the methodological inconsistency of the expression "electronic government,"

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[16] Faleiros Júnior, José Luiz de Moura. *Administração Pública Digital: Proposições para o Aperfeiçoamento do Regime Jurídico Administrativo na Sociedade da Informação*. 2nd Edition. Indaiatuba: Foco, 2024, 111-113.

[17] Brega, José Fernando Ferreira. *Governo Eletrônico e Direito Administrativo*. Brasília: Gazeta Jurídica, 2015, 253.

[18] Kerckhove, Derrick de. "Connected Intelligence for the Civil Society: The Internet as a Social Limbic System." *Spanda Journal* (The Hague) 5 (July–December, 2014): 71–78.

[19] Finidori, Helene. "Collective Intelligence Is a 'Commons' That Needs Protection and a Dedicated Language." *Spanda Journal* (The Hague) 5 (July–December, 2014): 79–89.

[20] Faleiros Júnior, José Luiz de Moura. *Administração Pública Digital: Proposições para o Aperfeiçoamento do Regime Jurídico Administrativo na Sociedade da Informação*. 2nd Edition. Indaiatuba: Foco, 2024, 140.

[21] Behn, Robert D. "The Challenge of Evaluating M-Government, E-Government, and P-Government: What Should Be Compared with What?" In *Governance and Information Technology: From Electronic Government to Information Government*, edited by Viktor Mayer-Schönberger and David Lazer. Cambridge, MA: MIT Press, 2007, 215.

[22] Henman, Paul. *Governing Electronically: E-Government and the Reconfiguration of Public Administration, Policy and Power*. London/New York: Palgrave Macmillan, 2010, 3.

its popularization, especially on the European continent, signals the difficulty of terminological readjustment[23].

There seems to be no doubt that, for the most part, such terms seek to refer, in broad strokes, to two major realities: the use of electronic means in the activities proper to the Public Administration and the use of electronic means in relation to the democratic process[24]. However, the distinction between such activities has not been sufficient for the adoption of a univocal terminology, especially due to the widespread global diffusion of the expression *e-government* and its delicate translation for the European politico-administrative system[25].

This issue has profound repercussions, for the proper framing of terms leads the interpreter to a deeper question: how should the role of technology in governing conduct be understood? "Government" and "politics" are widely seen as exclusively human domains, yet, in disparate writings of Political Science, Sociology, History, and Philosophy[26], some considered reflections on technology applied to government have already been produced, generating, indeed, the aforementioned terminological controversy that originated in Europe, to the point that an even more careful differentiation became necessary, since "within the European politico-administrative institutional system, the expressions *e-government*, electronic administration, and *e-administration* would be equivalent, all referring to the application of technologies by the Public Administration"[27].

We are witnessing a new moment in which proposals are outlined and presented with the aim of re-signifying the role of this contemporary discipline. To cite one example, Robert Behn[28], once again with the proposal of a "performance government" (p-gov), points to four "levels" of evolution

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[23] Faleiros Júnior, José Luiz de Moura. "Transparência ativa, governo digital e acesso à informação." In *Direito e Disrupção: Neurotecnologia, Crimes Cibernéticos, Inteligência Artificial, Blockchain*, edited by Camila Pintarelli and Marcelo Fonseca Santos, 299–314. São Paulo: Thomson Reuters Brasil, 2025, 305.

[24] Faleiros Júnior, José Luiz de Moura. "Inovação, desenvolvimento e a Lei do Governo Digital (Lei nº 14.129/2021): perspectivas quanto às estruturas de governo como plataforma." *Inova Jur: Revista Jurídica da UEMG* 1, 2022: 1–29.

[25] Brega, José Fernando Ferreira. *Governo Eletrônico e Direito Administrativo*. Brasília: Gazeta Jurídica, 2015, 41.

[26] Faleiros Júnior, José Luiz de Moura. *Administração Pública Digital: Proposições para o Aperfeiçoamento do Regime Jurídico Administrativo na Sociedade da Informação*. 2nd Edition. Indaiatuba: Foco, 2024, 263.

[27] Brega, José Fernando Ferreira. *Governo Eletrônico e Direito Administrativo*. Brasília: Gazeta Jurídica, 2015, 41-42.

[28] Behn, Robert D. "The Challenge of Evaluating M-Government, E-Government, and P-Government: What Should Be Compared with What?" In *Governance and Information Technology: From Electronic Government to Information Government*, edited by Viktor Mayer-Schönberger and David Lazer. Cambridge, MA: MIT Press, 2007, 216.

to reach the innovation threshold necessary for the proliferation of a p-gov culture:

> *Level I. E-gov* information involves making existing facts and knowledge more widely available to citizens by posting them on the Internet or making them more available to government employees on an intranet. This information may first need to be collected and organized in a new (searchable) database. Once easily available, however, citizens may find this type of electronic-government service very valuable in their daily lives, and public servants may find the information very useful in their daily work. (…)
>
> *Level II. E-gov* automation consists mainly of carrying out electronically—or at least more electronically—the work that previously had been done manually. Why let human eyes and fingers (not to mention human arms and legs) do the work when electrons can do the same thing faster and at lower cost? (…)
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> *Level III. E-gov* re-engineering involves, as Hammer argued, the radical redesign of an important but existing process. Technology is essential to this re-engineering because it makes the redesign of the process possible. (…)
>
> *Level IV. P-gov* innovation begins not with the task of automating or redesigning existing work. *P-gov* involves more than storing data electronically or posting information on the Internet. Instead, *p-gov* is a wholly unique and completely unprecedented strategy for achieving public objectives—perhaps even an entirely new public purpose. Technology makes this new performance strategy possible; it provides a cheap and highly flexible way to collect, analyze, and deploy information to deliver substantially different or conspicuously better services to citizens[29].

There are countless other readings that could be made of the subject, but what matters is the necessity of transitioning to an information-driven government that demands "governance" solutions, harking back, moreover, to the Anglo-Saxon tradition concerning the term's use[30], for, as previously stated, the impacts of electronics and computing on information diffusion

[29] Behn, Robert D. "The Challenge of Evaluating M-Government, E-Government, and P-Government: What Should Be Compared with What?" In *Governance and Information Technology: From Electronic Government to Information Government*, edited by Viktor Mayer-Schönberger and David Lazer. Cambridge, MA: MIT Press, 2007, 219.

[30] Brega, José Fernando Ferreira. *Governo Eletrônico e Direito Administrativo*. Brasília: Gazeta Jurídica, 2015, 42.

matter little; what truly matters is how technology will affect, in essence, the fulfillment of state tasks. A view aligned with this reasoning is that of Viktor Mayer-Schönberger and David Lazer[31], who explain how the processes of collecting, disseminating, and controlling information generate power, making a precise examination of data flow necessary, independently of the medium (whether "clay or silicon," as the authors say), since the medium may remain the same for a long time yet undergo subtle modifications that expand its capabilities and potentialities[32].

In Brazil, José Fernando Brega[33] further clarifies that the European guidelines regarding the differentiation between "electronic government" and "electronic administration" had not been followed, since the expression "electronic government" gained greater acceptance, including legislatively, appearing, for example, in articles 24, III, and 25, I and IV, of the Civil Rights Framework for the Internet (Law No. 12,965/2014):

> Art. 24. The following guidelines shall govern the actions of the Union, the States, the Federal District, and the Municipalities in developing the Internet in Brazil:
> (...)
> III – promotion of the streamlining and technological interoperability of electronic-government services among the different branches and spheres of the Federation, to allow the exchange of information and the speeding up of procedures;
> Art. 25. Public-sector Internet applications shall seek to:
> I – ensure compatibility of electronic-government services with various devices, operating systems, and applications for their access;
> (...)
> IV – ensure ease of use of electronic-government services[34].

Mention should also be made of the unnumbered decree of 18 October 2000, which, in its article 1, defined the role of electronic government as the

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[31] Mayer-Schönberger, Viktor, and David Lazer. "From Electronic Government to Information Government." In *Governance and Information Technology: From Electronic Government to Information Government*, edited by Viktor Mayer-Schönberger and David Lazer. Cambridge, MA: MIT Press, 2007, 6.

[32] Mayer-Schönberger, Viktor, and David Lazer. "From Electronic Government to Information Government." In *Governance and Information Technology: From Electronic Government to Information Government*, edited by Viktor Mayer-Schönberger and David Lazer. Cambridge, MA: MIT Press, 2007, 8-10.

[33] Brega, José Fernando Ferreira. *Governo Eletrônico e Direito Administrativo*. Brasília: Gazeta Jurídica, 2015, 43-44.

[34] Brasil. Lei n. 12.965, de 23 de abril de 2014. "Estabelece princípios, garantias, direitos e deveres para o uso da Internet no Brasil." *Diário Oficial da União*, 24 abril 2014. http://www.planalto.gov.br/ccivil_03/_ato2011-2014/2014/lei/l12965.htm (accessed May 26, 2025).

mere “provision of services and information to the citizen.”[35] It likewise ordered the creation of an Executive Committee for Electronic Government. Subsequently, the unnumbered decree of 29 October 2003[36] created Technical Committees within that Executive Committee. Both norms, however, were revoked by Decree No. 8,638 of 16 January 2016, which instituted the “Digital Governance Policy within the agencies and entities of the federal direct, autonomous, and foundational public administration.”

The 2016 regulation brought an important conceptual signal by better adapting the adjective “digital,” to the detriment of the outdated “electronic government,” and despite speaking of “governance”[37] rather than “government,” to serve the following purposes: (i) to generate benefits for society through the use of information and ICT resources in the provision of public services; (ii) to stimulate society’s participation in the formulation, implementation, monitoring, and evaluation of public policies and of public services made available digitally; and (iii) to ensure that society obtains information, subject to legally stipulated restrictions[38].

In light of all these issues, the designation “digital governance” is considered more appropriate for the processes of investigating informational flows and their impacts on state tasks, constituting the core of what this research proposes to conceptualize as “digital government.” This was, indeed, the nomenclature adopted by Brazilian legislators in Law No. 14,129 of 29 March 2021, whose very nomen juris has been disseminated as such (“Digital Government Law”)[39], indicating a genuine update[40].

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[35] Brasil. Decreto s/nº, de 18 de outubro de 2000. “Cria, no âmbito do Conselho de Governo, o Comitê Executivo do Governo Eletrônico, e dá outras providências.” *Diário Oficial da União*, 19 outubro 2000. http://www.planalto.gov.br/ccivil_03/DNN/DNN9067.htm (accessed May 26, 2025).

[36] Brasil. Decreto s/nº, de 23 de outubro de 2003. “Institui Comitês Técnicos do Comitê Executivo do Governo Eletrônico e dá outras providências.” *Diário Oficial da União*, 24 outubro 2003. http://www.planalto.gov.br/ccivil_03/DNN/2003/Dnn10007.htm (accessed May 26, 2025).

[37] Brasil. Decreto n. 8.638, de 15 de janeiro de 2016. “Institui a Política de Governança Digital no âmbito dos órgãos e das entidades da administração pública federal direta, autárquica e fundacional.” *Diário Oficial da União*, 16 janeiro 2016. http://www.planalto.gov.br/ccivil_03/_Ato2015-2018/2016/Decreto/D8638.htm (accessed May 26, 2025).

[38] Faleiros Júnior, José Luiz de Moura. *Administração Pública Digital: Proposições para o Aperfeiçoamento do Regime Jurídico Administrativo na Sociedade da Informação*. 2nd Edition. Indaiatuba: Foco, 2024, 180-185.

[39] Brasil. Lei n. 14.129, de 29 de março de 2021. “Dispõe sobre princípios, regras e instrumentos para o Governo Digital e para o aumento da eficiência pública…” *Diário Oficial da União*, 30 março 2021. http://www.planalto.gov.br/ccivil_03/_ato2019-2022/2021/lei/L14129.htm (accessed May 26, 2025).

[40] Faleiros Júnior, José Luiz de Moura. “Democracia digital, consensualização e o Estado brasileiro: reflexões à luz da Lei nº 14.129/2021.” *Revista Digital de Direito*

II. IN BETWEEN DIGITAL "GOVERNMENT" AND DIGITAL "GOVERNANCE"

Government by networks or administrative concertation appears as a rapidly developed and naturally exciting substrate, but there are a series of disadvantages that deserve attention on the path toward digital governance. For example, with the "blurring" of boundaries and the outsourcing of responsibilities, state action begins to indicate a complex re-signification of interests arising from *jus imperii* itself[41]. A supposed dystopia in which technological dependence affects relations between the Administration and the administered to the point of generating weakening and disruptive transformations demands innovative solutions so that public law is not led to ineffectiveness[42].

In 1971, Alan Westin set out his vision of the future, taking the year 2020 as a milestone:

> My 'vision of 2020' is obviously a cautionary tale, in the tradition of negative utopias. It parallels Olof Johannesson's delightful book *The Tale of the Big Computer*. In Johannesson's story, computers become increasingly essential for recording and regulating the economic, social, and political complexity of late-twentieth-century life. Then, a power failure develops through a combination of human carelessness and a struggle for advantage among computer scientists. The computers stop—and with them all productive and life-supporting activities. A human society that had ceased to concern itself with knowing how computers worked was incapable of repairing the computer systems. It took a very long time for the era of the 'Great Disaster' to end, but humanity returned to its starting point and the computers were slowly put back into operation. As they once more reached high speed, the computer programs and analytic components calculated that they could no longer depend on human proposals; they developed a completely self-generated and self-maintained system within the computer networks. At the end of the tale, the question is posed within the computer units whether humanity performs any useful function and whether it should be preserved. There is concern that humans are a 'security risk', capable of attempting a revolt

Administrativo 10, 2023: 1–19.

[41] Faleiros Júnior, José Luiz de Moura. *Administração Pública Digital: Proposições para o Aperfeiçoamento do Regime Jurídico Administrativo na Sociedade da Informação*. 2nd Edition. Indaiatuba: Foco, 2024, 187.

[42] Kerckhove, Derrick de. "Connected Intelligence for the Civil Society: The Internet as a Social Limbic System." *Spanda Journal* (The Hague) 5 (July–December, 2014): 71–78.

> against the communication networks or the power sources. But these risks were so minimized that the decision is made to keep mankind. Just as humans kept a limited number of horses even after the invention of the internal-combustion engine freed them from horsepower, the data machines wish to keep humans out of affection for the earlier symbiotic relationship between man and machine that produced the civilization of data and machines[43].

More than fifty years after the author penned this reflection, concern with data control has never been more pressing. This, in addition to showing that the subject is not new, indicates the urgency that proposals for carrying out administrative tasks through technological tools not be overtaken by sheer enthusiasm—it is at this point that digital governance comes in[44].

Understood as an essential filter of a kind of "electronic power" (structure and institutions of power, politics, state action, etc.), digital governance can lead to better legitimation of power, to more democracy, transparency, trust, participation, and efficiency. Nevertheless, it can also lead to a more elitist and technocratic government, to bureaucracy and manipulation, which are obviously undesirable outcomes.

So what is required? Richard Susskind[45] identifies five dimensions of feasibility: technical possibility, jurisprudential soundness, commercial viability, organizational suitability, and strategic fit. Yet, recalling Herbert L. A. Hart's description[46] of the "open texture" of the rule of law, any opening of the legal order to ICTs will not remove from the system the presence of authoritarian rules, corruption, oppression, and terror.

Beyond the technical aspects (for example, infrastructure, equipment, programs), digital governance can be defined as a set of practices or activities of various types, ranging from political decisions, national legislation, international actions to public services—using ICTs—for citizens at the local level.

Such practices may be not only decisions taken at high levels of government or general regulations, but also information and services available to individuals, groups, communities related to possible public support, employment opportunities, online payments, and so on. In other

[43] Westin, Alan F. "Prologue: Of Technological Visions and Democratic Politics." In *Information Technology in a Democracy*, edited by Alan F. Westin. Cambridge, MA: Harvard University Press, 1971, 7.

[44] Faleiros Júnior, José Luiz de Moura. *Administração Pública Digital: Proposições para o Aperfeiçoamento do Regime Jurídico Administrativo na Sociedade da Informação*. 2nd Edition. Indaiatuba: Foco, 2024, 257.

[45] Susskind, Richard. *Transforming the Law: Essays on Technology, Justice and the Legal Marketplace*. Oxford: Oxford University Press, 2000, 170.

[46] Hart, Herbert L. A. *The Concept of Law*. 2nd ed. Oxford: Clarendon Press, 1961, 124.

words, "electronic government" can be defined as the production and provision of services (including information) within the government and between the government and the public.

In the broader definition, attention is paid not only to practices for improving access to and delivery of services (which are ideals clearly tied to the constitutional principle of efficiency, the leitmotif of Law No. 14,129/2021), but also to a wider objective: improving relations between governmental institutions and citizens. Technology is only a new and powerful instrument of policy, decision-making, state administration, and governance. It can therefore be evaluated from the standpoint of its applicability, suitability, effectiveness, and efficiency—everything not only in the technical sense but also in the political sense.

On the other hand, citizens and the facilitation of their lives and activities (for example, in business) may be the point of reference. Under democratic political regimes, ideally, "electronic government" should mean less management and more administration by the government (at all levels and agencies) and more citizen participation, denoting a very important integrative function[47].

When one thinks of "digital governance", therefore, one imagines the State not only as provider of more efficient public services but also as a central part of the democratic process. The application of electronic instruments (or, in other words, ICTs) in politics, administration, and management has proved extremely useful and efficient, at least in certain fields such as identifying, recognizing, and documenting the needs of various social groups who consume public services. One can also point to improved efficiency as well as transparency and trust, which make all procedures and other information public, to information policy (that is, publications of various reports, official documents, projects, and plans to be debated) and to citizen participation through the use of interactive media.

Owing to the integration of bureaucratic work and network work, Public Administration institutions have the potential to meet demands presented to them much better if multiple visits to these institutions, innumerable data presentations, and corruption-triggering situations are eliminated. Obviously, administrative efficiency is envisaged in the subsequent stages of development of the matter.

Interactivity is one possible path to reach such a level, but its success depends on satisfying certain technological, organizational, and legal conditions: for example, some necessary connections between an institution's intranet system and the Internet as an external system, the validation of electronic signatures, the implementation of fully interactive multifunctional

[47] Bittencourt Neto, Eurico. *Concertação Administrativa Interorgânica: Direito Administrativo e Organização no Século XXI*. São Paulo: Almedina, 2017, 301.

portals, and so forth.

Personalized portals that provide integrated services are part of a sequence of evolutionary stages of "electronic government" and have not only a technological dimension. The successive changes transfer communication between citizens and the Public Administration to virtual space (time and physical space are no longer important). Later changes also render internal structures and the competence pattern of public institutions meaningless. Moreover, these processes are accompanied by a growing depersonalization of the figure of the "public agent"—something that is seen, in Law No. 14,129/2021, through the concept of "self-service" defined in article 4, item II ("citizens' access to a public service provided digitally, without the need for human mediation").

Digital government is still at a developmental stage, accumulating experience and improving its operation. Furthermore, in some countries—especially in Scandinavia[48]—it is already well grounded in the organization of the public sphere and in politics[49]. However, in others, it is still a little-explored concept[50]. This is the problem of transition economies, for there are many challenges faced by Public Administration and by public organizations in all countries that try to use ICTs to better serve societies.

In summary, one can say that there are at least four groups of challenges to the full implementation of digital government: legal issues, accessibility problems, economic questions, and social problems. Legal issues in digital government involve matters such as privacy, authentication, taxation, electronic validations, electronic voting, and the presence of algorithmic management techniques in the courts, and so forth[51]. The accessibility problem goes beyond the scarcity of Internet access—an undeniable fundamental right, albeit implicit and marked by complex systematization—because it enters the question of the fallibility of government applications in more advanced countries, with good technical infrastructure and a high level of computer knowledge, regarding their limitation mainly to groups of citizens with physical, cognitive, hearing, and visual disabilities. These applications must be friendly and inclusive to allow these citizens proper participation. A more difficult issue to resolve—in the context of digital

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[48] Pierre, Jon, and B. Guy Peters. *Governing Complex Societies: Trajectories and Scenarios*. New York: Palgrave Macmillan, 2005, 138.

[49] Jacobsson, Bengt, Jon Pierre, and Göran Sundström. *Governing the Embedded State: The Organizational Dimension of Governance*. Oxford: Oxford University Press, 2015, 23.

[50] Grönlund, Åke. "What's in a Field? Exploring the E-Government Domain." *Social Science Computer Review* 21 (1), 2005: 55–72, 62.

[51] Faleiros Júnior, José Luiz de Moura. "Transparência ativa, governo digital e acesso à informação." In *Direito e Disrupção: Neurotecnologia, Crimes Cibernéticos, Inteligência Artificial, Blockchain*, edited by Camila Pintarelli and Marcelo Fonseca Santos, 299–314. São Paulo: Thomson Reuters Brasil, 2025, 308.

government (or digital governance, in the broader sense)—is what should be done with a generally rather large social margin or with socially excluded people (for example, former prisoners, the permanently unemployed, the homeless, the very poor, illegal migrants, among others). Obviously, the solution cannot, in these cases, be purely techno-organizational; inclusive public policies are required[52].

The growth of digital government in Europe and worldwide is costly, which also makes it an economic issue. Until recently, fascination with the use of ICTs in Public Administration outweighed the return on investment. Digital government, as a certain benefit for the use of resources by citizens (always limited), must prove economic validity and effectiveness, in addition to evident feasibility.

Social issues have already been unfolded from the aforementioned accessibility and are also related to the financial dimension. It is unnecessary to add that the adoption of digital-government applications requires learning, computer literacy, and broad digital education. Moreover, it is expected that broadly understood and implemented digital government will facilitate inclusion, participation, and, ultimately, democracy. This also has important political significance.

Digital government cannot, therefore, represent only modes for providing public services more quickly and efficiently. Indeed, it must have the power to give citizen groups and individuals not only some satisfaction through the primacy of public transparency. It is essential that they be guaranteed citizen or community identity, some opportunities to act and interact with other people, to allow the sharing of experiences. Groups and individuals are no longer separated and closed, since the Internet gives them an opportunity to function within the system of "connected intelligence", driven by governance[53].

Digital government, strengthened by proper governance for the application of ICTs in the activities of Public Administration and with multifaceted impacts, will improve what could be expected from a mere "electronic-government" structure, for it will also broaden digital democracy by consolidating the citizen as a source of legitimacy for public actions and policies throughout the process, since, beyond efficiency, administrative consensualization must also be paramount[54]. In other words, by effectively

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[52] Zacher, Lech W. "E-Government in the Information Society." In *Electronic Government: Concepts, Methodologies, Tools, and Applications*, edited by Ari-Veikko Anttiroiko. Hershey/New York: Information Science Reference, 2008, 25.

[53] Okot-Uma, Rogers W. O. *Electronic Governance: Re-Inventing Good Governance*, 2002. https://bit.ly/35shcnA (accessed May 26, 2025).

[54] Cristóvam, José Sérgio da Silva, and Thanderson Pereira de Sousa. "Democracia, Participação e Consensualização no Marco do Governo Digital no Brasil." In *Direito Público e Tecnologia*, coordinated by Daniela Copetti Cravo, Eduardo Jobim, and José Luiz de

participating in the elaboration, restructuring, and decision-making processes, the citizen attains empowerment and, consciously, is a partner and co-responsible with the Public Administration in the improvement of public actions and policies[55]. Thus, citizen participation becomes an important social value under the democratic lens.

III. SOME PERSPECTIVES: THE MERITS OF LAW NO. 14.129/2021

It is unnecessary to add that digital government can have very different structures for its functioning and performance. Indeed, its applications vary from country to country, from region to region, from continent to continent. All possible differences and specificities—in political and legal systems, historical traditions, the level of social and political activism of citizens, knowledge of their rights and opportunities, and skills in using ICTs—have an influence. In addition, technical infrastructure and its (also financial) accessibility need to be considered, and digital-governance strategies must be oriented toward objectives such as social (and digital) inclusion and citizen participation on a meaningful scale. And although these objectives are political, ICTs can help a great deal, for they represent a historic opportunity to make democracy inclusive and participatory.

For this reason, the most important feature for implementing digital governance must be the learning process of all those involved: authorities and the public, public administrations, public-sector organizations, and the various stakeholders. In that process, new knowledge and new technologies need to be absorbed and applied deliberately and appropriately.

This requires new skills, effective digital education, a proactive attitude on the part of citizens, and technological engagement. Therefore, a digital-government program cannot mean only improving efficiency and increasing the speed of service delivery to citizens. It is a broader change that affects the relationship between the State and citizens.

Historically, the partners in these relationships were not equals. The new role and growing significance of information are making this situation more balanced and advantageous on the citizens' side. In fact, information systems are more widely available. Thanks to radio, television, computers, networks, and even the new generations of mobile phones, the information disseminated becomes an important form of popular control over political and administrative power. ICTs make it possible to share knowledge about the

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Moura Faleiros Júnior. Indaiatuba: Foco, 2022, 277-282.

[55] Brega, José Fernando Ferreira. "Perspectivas sobre a Lei do Governo Digital no Brasil." In *Direito Público e Tecnologia*, coordinated by Daniela Copetti Cravo, Eduardo Jobim, and José Luiz de Moura Faleiros Júnior. Indaiatuba: Foco, 2022, 235-236.

political process and administrative procedures with citizens[56]. Increasingly rapid information, greater transparency in decision-making, and, above all, more interactive procedures simply mean more democracy through governance, more space for civil society. These elements contribute to legitimizing power and increasing popular participation. Therefore, the information society can—normatively—be characterized by digital governance, digital government, and interactive democracy.

It is unnecessary to add, however, that current practice is far from the desired ideal. The principles of good governance, such as openness, participation, reliability, efficiency, and consistency, require appropriate information policies. According to Lech Zacher[57], when carried out in an integrated manner, digital governance is called "integrated governance" (i-governance in English). This name reflects the integration of technology, information, procedures, and people on the basis of three subsystems: digital government, digital democracy, and digital business.

The first subsystem mainly includes the structures, applications, and procedures (that is, technical and organizational guidance) for the provision of public services. The second, however, is strongly politically oriented, since it is connected not only through communication and access to state decision-making processes but also through the availability of public services and the possibilities of choice. Citizens empower political actors, being able to interact with political power and the Public Administration and to take part in decision-making processes[58].

In turn, the third aspect—concerning business—indicates a "commercial" orientation of public action. The relationships and information flows relating to the exchange of information and the provision of services are multiple here. They can be classified as follows: (i) government to government (or public institution to public institution); (ii) government to citizen (or public institution to citizen, consumers, other stakeholders); (iii) citizens to government (or citizens, clients, stakeholders of public institutions); (iv) government to business (or public institutions to private companies); (v) business to government or private companies to public institutions[59].

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[56] Van Aelst, Peter, and Stefaan Walgrave. "New Media, New Movements? The Role of the Internet in Shaping the 'Anti-Globalization' Movement." In *Cyberprotest: New Media, Citizens and Social Movements*, edited by Wim Van de Donk, Brian D. Loader, Paul G. Nixon, and Dieter Rucht. London: Routledge, 2004, 105.

[57] Zacher, Lech W. "E-Government in the Information Society." In *Electronic Government: Concepts, Methodologies, Tools, and Applications*, edited by Ari-Veikko Anttiroiko. Hershey/New York: Information Science Reference, 2008, 25.

[58] Henman, Paul. *Governing Electronically: E-Government and the Reconfiguration of Public Administration, Policy and Power*. London/New York: Palgrave Macmillan, 2010, 126-127.

[59] Heeks, Richard. *Understanding E-Governance for Development*. I-Government

Digital governance therefore creates a technical, organizational, and network structure in an information-driven society. Equal opportunities and the empowerment of social actors make the political dimension an unavoidable unfolding of this context and highlight governance for informational control.

There are voices that signal concerns and skepticism about this trend:

> "But if they are so uncertain about the Internet's impact on the health of our own democracy, how confident can they be that the Web can foster democracy in countries that are already running on low energy? Is it really reasonable to believe that Internet users in authoritarian countries, many of whom have little experience with democratic governance, will suddenly begin using the avatar of Thomas Jefferson in cyberspace? Isn't it a bit premature to start touting the benefits of a medium that the West itself still does not know how to incorporate comfortably into its own political institutions?"[60].

Even so, the overall assessment of digital governance is positive, for it makes it possible to serve society better, enabling the rationalization of work, employment, and management in Public Administration and public organizations; it can also be cost-effective; and, above all, it promotes democracy, participation, and popular activism[61].

It needs no proof that the successful implementation of digital-governance principles and procedures depends on many nationally, regionally, and locally differentiated factors and circumstances. There is no doubt that socio-economically more developed countries already possess structural conditions more suited to the implementation of true digital governance. Nevertheless, this does not exclude less-developed legal orders—such as Brazil's—from the possibility of seeking public improvement.

CONCLUSION

In the course of this brief investigation, three conceptual archetypes used by specialized scholarship to address digital transformation and its impacts on state activities were analyzed: "electronic government," "performance government," and "digital government," with the prevailing characteristics of

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Working Paper Series 11. Manchester: Institute for Development Policy and Management, University of Manchester, 2001, 20-25.

[60] Morozov, Evgeny. *The Net Delusion: The Dark Side of Internet Freedom*. New York: PublicAffairs, 2011, 240-241.

[61] Vigoda, Eran. "From Responsiveness to Collaboration: Governance, Citizens, and the Next Generation of Public Administration." *Public Administration Review* 62 (5), 2002: 527–40.

each and their theoretical, historical, and conceptual relevance having been identified.

The models known by the designations "electronic government" and "performance government" are undeniably outdated and prove more pertinent for describing historical moments that have already passed. Although both were important for consolidating a shift in perspective on the relevance of new technologies for the re-signification of Public Law, they have become, today, insufficient to reflect the challenges posed by increasing technological sophistication and expanding communication.

The conceptual archetype that defines the technological influxes upon state activities and that best aligns with the current challenges of this complex and sophisticated relationship is that of "digital government." The nomenclature, as seen, was adopted by the Brazilian legislature in Law No. 14,129 of 29 March 2021, an important normative milestone for structuring the principles, concepts, rules, and precepts aimed at developing the studies in question.

According to the statute, it is no longer merely a matter of replacing mechanical activities with electronic or computer systems, which typifies "electronic government," nor of working strictly with indicators and numbers aimed solely at public efficiency, the main defining element of "performance government." On the contrary, the legislator took care to state in Article 1 that the objectives of "digital government" in Brazil, although driven by the goal of increasing public efficiency, involve more specifically debureaucratization, innovation, digital transformation, and citizen participation.

The combination of these four vectors—of equal "weight"—in the statement of the law's overarching purpose leaves no room for doubt about its real intent: by allowing innovation and consensualization to converge, for instance, there is ample scope for using Information and Communication Technologies to bring citizens closer to the State; likewise, by aligning the precept of debureaucratization with that of digital transformation, the legislator created space to re-signify the simplistic reading once given to the archetype of "electronic government," so that, from now on, priority may be given to effective "digital governance" (even more than mere "digital government"), thus broadening the possibilities for discussing the merits of the law.

That being said, it is concluded that, beyond conceptual differentiation—which is relevant so that each archetype is correctly individualized and the nomenclatures identify equally singular historical moments—it is absolutely indispensable to advance in unpacking the precepts of Law No. 14,129/2021 in order to effectively strengthen the desired public governance based on the digital paradigm.

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