

THE TEN COMMANDMENTS OF EXCELLENT DIGITAL GOVERNMENT*

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Abstract: How to achieve a Digital Government of excellence in the satisfaction of citizen's needs? This article proposes "ten commandments" for this difficult humanist mission. They are the orders and limits for a Digital Government in favor of the citizens, based on studies of comparative law and the best international experiences on the subject.

Keywords: digital government; excellence; commandments; technology; humanism; citizens.

INTRODUCTION

Excellence is a habit, as Aristotle said¹. A daily commitment; a constant dedication to doing your best; in giving your maximum in the achievement of your main objective of existence.

Digital Government is a new form of administration that uses information and communication technologies to digitally transform administrative activity for the benefit of citizens.² It is a complex phenomenon that requires

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¹ Aristotle. *Ética à Nicômaco*. Translated by Mário da Gama Kury. Brasília: Editora Universidade de Brasília, 1985, 35.

² Our concept is based on those presented by: Bellocchio, Lucía, and Alfonso Santiago. "Estado digital de Derecho." *A&C – Revista de Direito Administrativo & Constitucional* 20 (80) (April–June): 87–102. 2020, 96-98; Bekkers, Victor, and Vincent Homburg. "The Myths of E-government: Looking Beyond the Assumptions of a New and Better Government." *The Information Society* 23 (5) (October). 2007, 04; Gutiérrez, Rubén Martínez. "El Procedimiento administrativo electrónico en los ordenamientos peruano y español." *Revista De Derecho Administrativo* 9: 95–113. 2010, 95-96; Homburg, Vincent. "ICT, E-Government and E-Governance: Bits e Bytes for Public Administration." In *The Palgrave Handbook of Public Administration and Management in Europe*, edited by Edoardo Ongaro and Sandra Van Thiel. London: Palgrave Macmillan. 2017, 350; Ingram, George, and Meagan Dooley. "Digital Government: Foundations for Global Development and Democracy." *Brookings Global Working Paper* no. 163 (December). 2021, 07-12; International Telecommunication Union. *ITU E-Government Implementation Toolkit*. Geneva: ITU, 1. Accessed July 13, 2022. https://www.itu.int/dms_pub/itu-d/opb/str/D-STR-GOV.E_GOV-11-2010-PDF-E.pdf. 2009, pp.04-09; Ndou, Valentina Dardha. "E-

a governmental habit of excellence in using technology to better serve the citizens.

In other words, the central objective of Digital Government is the citizen. Digital government only exists and is justified to the extent that it is geared towards better serving human beings. This government must be obsessed with meeting the needs of the citizens better. Digital must serve the human being, that is the “golden rule” or the central commandment of Digital Government.

In this sense, an excellent Digital Government is one that habitually uses digital technologies in favor of the citizens. Technologies are humanist tools for the government to do its best, making the most of the fundamental rights of all citizens. A technological government that excels at serving human beings.

Otherwise, we just have a mediocre and reckless technological government. An unnecessary luxury; a piece of junk or, much worse, a Technological Leviathan extremely capable of violating and annihilating various fundamental rights of citizens and the foundations of a Democratic Rule of Law.

In this article, we list the "ten commandments" of an excellent digital government. These commandments are limits, "safety belts", concrete orders that must be obeyed so that Digital Government fulfills its real purpose in realizing citizens' fundamental rights and the qualitative public interest.

I. THE TEN COMMANDMENTS OF DIGITAL GOVERNMENT EXCELLENCE

For each commandment, we propose some concrete measures for its realization.

They are not just generic and abstract recommendations, as is the case with most international documents on the regulation of new technologies. For example, it's not enough to say that technology must respect the dignity of the human person - that's obvious. We must think about effective measures and how to operationalize the law to be possible in the ecosystem of digital

Government for Developing Countries: Opportunities and Challenges.” *The Electronic Journal on Information Systems in Developing Countries* 18 (1): 1–24. 2004, 03-04; OECD. *Digital Government Index: 2019 Results*. OECD Public Governance Policy Papers no. 03. Paris: OECD Publishing. Accessed July 21, 2022. <https://bit.ly/3Okh6F2>. 2019; OECD. *The E-Leaders Handbook on the Governance of Digital Government*. OECD Digital Government Studies. Paris: OECD Publishing. Accessed July 20, 2022. <https://bit.ly/3v9eval>. 2021; OECD. *The OECD Digital Government Policy Framework: Six Dimensions of a Digital Government*. OECD Public Governance Policy Papers, 8–38. Accessed July 15, 2022. <https://bit.ly/3Jr0Wcg>. 2020.

relationships.³

Having said that, let's move on to the commandments.

A. Respecting human beings

The first, obvious and main commandment of an excellent digital government is to respect human beings.

This includes, at the very least: i) the principle of *citizen centrality*; ii) the non-delegability of intrinsically human administrative decisions; iii) the human supervision of automatic administrative decisions; iv) the imposition of a beneficial purpose for technologies and v) the prohibition of the *social score* or any other technique that reifies the human being.⁴

We repeat, the digital government of excellence must be obsessed with better serving the citizen, technology must be a humanist tool. The dehumanization of the Administration and the reification of the citizens is not acceptable. The citizen is the focus; he is no longer a piece of data (*input*) to be put into the system to obtain a result (*output*) from the machine.

Thus, technology cannot be used as a way of distancing the government from the citizens. A totally artificial and automatic Public Administration that provides "blind" and standardized solutions, disregarding the pain and joy of each human being, is not possible. The complexity of the facts of life cannot always be simplified into algorithms. Machines do not yet have the

³ This pertinent criticism of the generalism of the proposals for technological regulations comes from: VALLE, Vanice. *Por um Direito ainda relevante na vida digital*. Conjur, 10 de fevereiro 2022. Conjur, February 10, 2022. Available at: <https://bit.ly/3oHoaSd> Accessed on 10/02/2022

⁴ Brazil. Bill No. 2338/2023. *Provides for the use of artificial intelligence*. Available at: <https://legis.senado.leg.br/sdleg-getter/documento?dm=9347622&ts=1698248944548&disposition=inline> Accessed on November 23, 2023; Cerrillo Martínez, Agustí. "El impacto de la inteligencia artificial en el derecho administrativo ¿nuevos conceptos para nuevas realidades técnicas?" *Revista General de Derecho Administrativo* 50. Accessed February 26, 2022. <http://laadministracionaldia.inap.es/noticia.asp?id=1509574>. 2019; European Commission. *Ethical Guidelines for Trustworthy AI*. Brussels: European Commission. Accessed January 23, 2022. <https://op.europa.eu/en/publication-detail/-/publication/d3988569-0434-11ea-8c1f-01aa75ed71a1/language-pt/format-PDF>. 2019; European Commission. *Berlin Declaration on Digital Society and Value-Based Digital Government*. December 8. Accessed November 14, 2023. <https://digital-strategy.ec.europa.eu/en/news/berlin-declaration-digital-society-and-value-based-digital-government>. 2020; Freitas, Juarez, and Thomas Bellini Freitas. *Direito e Inteligência Artificial: em defesa do humano*. Belo Horizonte: Fórum. 2021, 57; Portugal. *Guia para Inteligência Artificial ética, transparente e responsável na Administração Pública*. Agência de Modernização Administrativa. Accessed November 13, 2023. <https://bo.tic.gov.pt/api/assets/etic/c5c06777-1e6c-4b2a-ab9d-053a168808b9/>. 2020; Russell, Stuart, and Peter Norvig. *Artificial Intelligence: A Modern Approach*. 4th ed. New Jersey: Pearson Education. 2021, 39.

sensitivity, empathy, creativity and intuition of human beings.

That's why, initially, we must limit the scope of digital. A 100% digital government is not yet possible in most countries. That would be inhumane. Digital still doesn't exclude face-to-face activities. Firstly, because of the huge digital exclusion of part of the population, which requires complementary face-to-face administrative activity. Secondly, due to factual impossibilities, certain administrative activities can still only take place in person, such as surgery in a public hospital or the arrest of an offender.

Furthermore, certain administrative decisions, especially discretionary ones and those that could affect the hard core of human dignity, cannot be delegated to machines. This is a ban on excellent digital government. Every time we have an impact that is irreversible or difficult to reverse, or decisions that could create risks to the life or physical integrity of individuals, there must be a final human decision.⁵ The machine alone cannot have the power to define public interest, nor can it decide between who lives and who dies in a pandemic or a war, for example.

We must always remember that machines are fallible. Therefore, automated decisions must be supervised by humans to guarantee respect for fundamental rights and the possibility of reversing the decision. It is essential that the Digital Government establishes human control of the public manager over the technologies and the inclusion of routines for training and validating artificial intelligence learning mechanisms.⁶

If automation fails and does not carry out a binding administrative act, for example, the public manager has the duty to correct and carry out the act, because the failure of artificial intelligence does not justify the administrative omission.⁷

Furthermore, the imposition of a beneficial purpose for technologies is based on the principle of non-maleficence. The technologies used by the government must be proven to be beneficial to human beings.⁸ This requires, for example, that a constant technological impact assessment is carried out; that the State does not hire or use technologies with a very high risk to human beings and that the machine with artificial intelligence allows human

⁵ In this sense, article 11 of Bill no. 2338/2023 aims to regulate artificial intelligence in Brazil. Brazil. Bill No. 2338/2023. *Provides for the use of artificial intelligence*. Available at: <https://legis.senado.leg.br/sdleg-getter/documento?dm=9347622&ts=1698248944548&disposition=inline> Accessed on November 23, 2023

⁶ See: Portugal. *Guia para Inteligência Artificial ética, transparente e responsável na Administração Pública*. Agência de Modernização Administrativa. Accessed November 13, 2023. <https://bo.tic.gov.pt/api/assets/etic/c5c06777-1e6c-4b2a-ab9d-053a168808b9/>. 2020.

⁷ This example is from: Freitas, Juarez, and Thomas Bellini Freitas. *Direito e Inteligência Artificial: em defesa do humano*. Belo Horizonte: Fórum. 2021, 13-19.

⁸ Russell, Stuart, and Peter Norvig. *Artificial Intelligence: A Modern Approach*. 4th ed. New Jersey: Pearson Education. 2021, 39.

confirmation of its decisions and can be switched off if it loses control.

According to Article 5 of the European Artificial Intelligence regulation (EU AI Act), the use of manipulative or deceptive techniques aimed at distorting the behavior of a person or a group of people, impairing their decisions and causing them significant harm is prohibited.

According to Professor Stuart Russel, AI must be demonstrably beneficial to human beings. To this end, he suggests that the machine's objective should be to satisfy our preferences. Ideally, however, the machine should not know in advance what all human preferences are (uncertain goals). As a result, machines will act with caution, will ask humans for permission and confirmation of their actions and will allow themselves to be switched off.⁹

Finally, any technique that reifies human beings must be prohibited. This practice is unacceptable in a Democratic State governed by the Rule of Law.

In this sense, the social score system used by China turns citizens into a score based on their social behavior and can deny public services and exclude people with a low score. It is inhumane to assign precise values to all social actions, life becomes an "eternal job interview", the citizen becomes a grade, a number, a score.¹⁰

Systems like this cannot be used by the Digital Government.¹¹

B. Respecting legality

The second commandment is to respect legality, understood here in its broadest sense, that is, as juridicity, as respect for the law as a whole.

This includes, at least, subordination to constitutional norms; the legal reserve and administrative law by *design*.

Disruptive technologies must be compatible with all administrative law.¹² The rules of computerized systems are not more important than the

⁹ Russell, Stuart. *Human Compatible: Artificial Intelligence and the Problem of Control*. New York: Penguin Publishing Group. 2019, 18-25.

¹⁰ These are pilot projects being tested in Chinese cities. Citizens are classified by points. If you commit an infraction, evade taxes, get fined, disobey a police officer, throw garbage on the ground, default on a loan, etc.: you lose points. If you donate blood, do voluntary work, etc., you gain points. Citizens with a high score are given preference in public services. If you have a low score, you won't get any benefits, you may be prevented from accessing services and you may be included on a public blacklist. European Union Agency for Fundamental Rights (FRA). *Getting the Future Right: Artificial Intelligence and Fundamental Rights*. Luxembourg: Publications Office of the European Union. 2020.

¹¹ The EU AI ACT, for example, considers the social scoring system to be an unacceptable risk and bans this type of technology. See: European Parliament. *EU AI Act: first regulation on artificial intelligence*. Available at: <https://www.europarl.europa.eu/news/en/headlines/society/20230601STO93804/eu-ai-act-first-regulation-on-artificial-intelligence> Accessed on 23/11/2023.

¹² After all, the Public Administration is subject to the Law as a whole, whatever its

legal system, the algorithm is not worth more than the law, technologies must respect the rule of law and the guarantee and realization of fundamental rights.¹³

The legal reserve means, in this context, that only the law can oblige citizens to relate to the Administration by digital means. It is a legal reservation for the external relationship of the Administration, since only the law can create obligations for citizens.¹⁴ Only the law can, for example, authorize the controversial delegation of discretionary administrative decisions to the machine.

Legal design must also be considered. In other words, the principles and rules of administrative law must be embedded in the machine code to avoid illegal conduct. It is the government's duty to ensure that the system is designed to respect administrative law, that the programmer works together with a legal expert who can facilitate this "translation" of legal rules into the algorithm.

In Denmark, the most digital country in the world according to the United Nations, this is called the principle of "administrative law by design", programmable administrative law. For this to work, the public authority must assess and certify whether the technology complies with the legislation; whether it is transparent and controllable, if not, the technology will not be applied.¹⁵

A. Guaranteeing digital due process of law

The third commandment involves guaranteeing due process of law in digital media.

To this end, the digital government of excellence must, first and foremost,

source. On the principle of legality, see: Otero, Paulo. *Manual de Procedimento Administrativo*. Vol. 1. Coimbra: Almedina. 2019, 136-153.

¹³ Brega, Jose Fernando Ferreira. "Governo Eletrônico e direito administrativo." PhD diss., Faculdade de Direito, Universidade de São Paulo (USP). 2012, 69-70.

¹⁴ Casado, Eduardo Gamero, and Severiano Fernández Ramos. *Manual Básico de Derecho Administrativo*. 13th ed. Madrid: Editorial Tecnos. 2016, 384; Otero, Paulo. *Manual de Procedimento Administrativo*. Vol. 1. Coimbra: Almedina. 2019, 492-495.

¹⁵ In Denmark, to guarantee the principle of administrative law by design, there is an impact assessment of good administration. That is, the public authority must map cases and processes that have occurred and identify which legislation applies to the cases; understand how the program works and the possibilities for control and then make sure that the design and programming comply with the legislation indicated. A legal expert should be present at all stages of the program's development. Motzfeldt, Hanne Marie, and Ayo Naesborg-Andersen. "Developing Administrative Law into Handling the Challenges of Digital Government in Denmark." *The Electronic Journal of e-Government* 16 (2): 139-40. Accessed March 28, 2022. <https://academic-publishing.org/index.php/ejeg/article/view/658/621>. 2018.

implement the principle of parity of guarantees between the physical and digital environments. In other words, digital government cannot mean a reduction in citizens' procedural and contentious rights and guarantees.¹⁶

This means that digital administrative decisions, even if automated, must ensure, at the very least, the right to fair hearing; human judgment or supervision; clear reasoning and the possibility of appeals.¹⁷

In this sense, the European AI regulation (EU IA Act) stipulates in its Article 85 that "without prejudice to other administrative or judicial remedies", any person may lodge a complaint with the competent market surveillance authority about any violation of this AI regulation.

Article 14, meanwhile, stipulates that human supervision of high-risk AI systems is mandatory to minimize threats to fundamental rights. This human supervisor must understand the system and its risks and have the power to decide not to use it; to ignore, annul or reverse its results; to intervene in its operation or interrupt the system by means of an off button.

Similarly, reading Articles 13, 15 and 50 of the regulation together, it becomes clear that AI systems must be designed and developed with transparency in mind. This means that those affected should be informed that they are dealing with an A.I.; that they should be informed of the level of accuracy and robustness of the results and that these results should be in a machine-readable format. In addition, Article 86 establishes the right to an algorithmic explanation for citizens affected in their fundamental rights by a high-risk AI system.

The logic of speed and efficiency cannot mean automatic violations of fundamental rights, setting aside fair procedures. A "Kafkaesque administrative procedure" against the citizen is unacceptable. It is not acceptable for the administration to carry out, for example, an automatic, silent, obscure punishment without the right to a prior defense.

It is therefore important to establish jurisdiction to define which public body or entity is competent to respond to and control automated administrative decisions.¹⁸ We cannot return to the historical phase of state irresponsibility just because the decision was made by the machine. Some public agent must be competent to respond in cases of machine failures and

¹⁶ Otero, Paulo. *Manual de Procedimento Administrativo*. Vol. 1. Coimbra: Almedina. 2019, 492-495.

¹⁷ According to Frank Pasquale, these are the four non-negotiable axes of due process involving algorithmic decisions. Pasquale, Frank. "Inalienable Due Process in an Age of AI: Limiting the Contractual Creep toward Automated Adjudication." In *Constitutional Challenges in the Algorithmic Society*, edited by Giovanni Gregorio et al. Cambridge: Cambridge University Press. 2022, 45-48.

¹⁸ Torrijos, Julián Valero. "Las garantías jurídicas de la inteligencia artificial en la actividad administrativa desde la perspectiva de la buena administración." *Revista Catalana de Dret Públic* 58. 2019, 87-93.

violations.

It may also be necessary to create or adapt specific legal instruments to protect rights in the digital sphere, such as the digital popular action provided for in the Portuguese Charter on Human Rights in the Digital Age (Law No. 27/2021).¹⁹

A. Achieving digital equality and education

The fourth commandment involves achieving digital equality and education. This encompasses at least two pillars: i) non-discrimination and ii) digital inclusion.

The prohibition of discrimination means that the digital government cannot use any technology that could lead to unlawful discrimination against citizens.

According to Article 5 of the EU AI Act, technologies that exploit people's vulnerabilities in order to substantially distort their behavior and predictive policing techniques based solely on profiling or assessing their personality traits and characteristics are inadmissible.²⁰

In addition, the principle of technological neutrality must be ensured, no one can be harmed or benefited by technical problems, the Administration must give preference to free and easily accessible software to serve the generality of users.²¹

After all, new inventions should serve to "enlighten man, so needy and suffering"²², as the Bahian master Gilberto Gil warned, and not to discriminate against him and exclude him from society.

That's why it's the government's duty to invest in digital education and inclusion. No one should be left behind.

This involves equal access to an open and free Internet (such as access to wi-fi in public spaces); the provision of equipment needed to access the Internet (computer, smartphone, tablets, etc.); the use of accessible technologies for all people (the elderly and disabled, for example); the

¹⁹ Article 21 of the aforementioned Portuguese Charter states that the defense of the rights provided for in this law will take place through popular action "duly adapted to the reality of the digital environment". Portugal. *Lei n° 27/2021: Carta Portuguesa de Direitos Humanos na Era Digital*. Accessed November 23, 2023. <https://diariodarepublica.pt/dr/detalhe/lei/27-2021-163442504>. 2021.

²⁰ European Union. *Regulation (EU) 2024/1689. Artificial Intelligence Act*. Accessed June 23, 2024. https://eur-lex.europa.eu/legal-content/PT/TXT/?uri=OJ:L_202401689. 2024.

²¹ Otero, Paulo. *Manual de Procedimento Administrativo*. Vol. 1. Coimbra: Almedina. 2019, 492-495.

²² The expression is an excerpt from a song by the great Bahian master and artist Gilberto Gil. See: Gil, Gilberto. *Queremos Saber*. Baarn: Polygram, 1976, 3 min 25 seconds.

training and digital education of citizens and civil servants so that they can use digital media with confidence and in a self-determined way²³; digital communication using simple language and even ensuring face-to-face service for citizens as an alternative to digital service.²⁴

The importance of projects such as Academia Portugal Digital, a tool that aims to assess and self-diagnose digital skills and provide free online courses to improve citizens' digital skills, stands out. The tool offers various options to help test, improve and certify users' digital level.²⁵

In this context, inclusive digital education requires the provision of equipment (computer, smartphone, tablet, etc.), access to the internet and mastery of digital tools. Digital learning is essential for the complete formation of the individual and the realization of the fundamental right to education.²⁶

E. Ensuring digital transparency

The fifth commandment consists of ensuring digital transparency. This commandment encompasses: i) the right to information on administrative automation; ii) algorithmic explainability; iii) open data and open source; iv) transparency by design and v) a balance between confidentiality and data transparency.

It is the right of every citizen to be informed when an administrative activity uses automation or artificial intelligence. All automated administrative processing must include, at the risk of nullity, the obligation

²³ Article 3 of the Portuguese Charter on Human Rights in the Digital Age guarantees free internet points in public places and the creation of social tariffs for economically vulnerable customers. Article 11 states that "Everyone has the right to education for the acquisition and development of digital skills". See: Portugal. *Lei n° 27/2021: Carta Portuguesa de Direitos Humanos na Era Digital*. Accessed November 23, 2023. <https://diariodarepublica.pt/dr/detalhe/lei/27-2021-163442504>. 2021.

²⁴ Brazil. *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*. Accessed November 23, 2023. https://www.planalto.gov.br/ccivil_03/_ato2019-2022/2021/lei/14129.htm. 2021; European Commission. *Berlin Declaration on Digital Society and Value-Based Digital Government*. December 8. Accessed November 14, 2023. <https://digital-strategy.ec.europa.eu/en/news/berlin-declaration-digital-society-and-value-based-digital-government>. 2020; Otero, Paulo. *Manual de Procedimento Administrativo*. Vol. 1. Coimbra: Almedina. 2019, 492-495; Portugal. *Lei n° 27/2021: Carta Portuguesa de Direitos Humanos na Era Digital*. Accessed November 23, 2023. <https://diariodarepublica.pt/dr/detalhe/lei/27-2021-163442504>. 2021.

²⁵ Portugal. *Portugal Digital Academy*. Available at: <https://academiaportugaldigital.pt/> Accessed on November 23, 2023.

²⁶ Zockun, Carolina Zancaner, Flávio Garcia Cabral, Leandro Sarai, and Maurício Zockun. *Manual de direito Administrativo digital*. (Coleção PUC). Almedina Brasil. Kindle edition, 245. 2024.

to explicitly mention automation or the use of A.I.

In this sense, French legislation on the subject follows, more precisely, Article 4 of the Law for the Digital Republic (*Loi n° 2016-1321 du 7 octobre 2016*) and Article L311-3-1 of the *Code des relations entre le public et l'administration*.²⁷ Similarly, the United States Executive Order on artificial intelligence established the duty to use a watermark indicating that an activity used artificial intelligence.²⁸

But this is not enough to guarantee transparency. In addition to knowing that the administrative decision used algorithms, the citizen has the right to understand how this algorithm works, what data was used, what algorithmic "step by step" was to make the decision, ensuring, at the end, an administrative decision with clear, intelligible grounds, subject to appeal and human intervention.²⁹

In this sense, France has a whole legislative framework to ensure the algorithmic explicability. The Administration has a duty to explain the main features of its algorithmic application, if requested to do so by the citizen.³⁰

Furthermore, digital government must prioritize the use of open data and open source. This means digital data that is accessible to the public, structured in an open, machine-processable format, with an open license that allows it to be freely used, consumed or processed by any individual or legal entity.

An excellent example is Estonia's Open data Portal, a digital platform that offers the public and businesses a single point of access to unrestricted public sector data, with permission to reuse and redistribute this data for commercial and non-commercial purposes³¹

²⁷ These laws are available, respectively, at: <https://www.legifrance.gouv.fr/jorf/id/JORFTEXT000033202746> and https://www.legifrance.gouv.fr/codes/texte_lc/LEGITEXT000031366350/2023-11-24/ Accessed on 24/11/2023.

²⁸ It is worth noting that this executive order was revoked on the first day of Donald Trump's presidency in the United States on January 20, 2025. Technology has never been so political and politics has never depended so much on technology. The White House. *Executive Order on the Safe, Secure, and Trustworthy Development and Use of Artificial Intelligence*. October 30, 2023. Available at: <https://www.whitehouse.gov/briefing-room/presidential-actions/2023/10/30/executive-order-on-the-safe-secure-and-trustworthy-development-and-use-of-artificial-intelligence/> Accessed on November 25, 2023.

²⁹ Finck, Michèle. "Automated Decision-Making and Administrative Law." In *The Oxford Handbook of Comparative Administrative Law*, edited by Peter Cane, Herwig Hofmann, Eric Ip, and Peter Lindseth. United Kingdom: Oxford University Press. 2020, 669-670.

³⁰ In this sense, for example, article 4 of the Law for the Digital Republic (*Loi n° 2016-1321 du 7 octobre 2016*) and article L311-3-1 of the *Code des relations entre le public et l'administration*. These laws are available respectively at: <https://www.legifrance.gouv.fr/jorf/id/JORFTEXT000033202746> and https://www.legifrance.gouv.fr/codes/texte_lc/LEGITEXT000031366350/2023-11-24/. Accessed on 24/11/2023

³¹ European Commission. *Digital Public Administration factsheet 2023 - Estonia*.

Similarly, the technologies used by the Administration must be designed to be transparent (transparency by design). In other words, programmers must limit the number of variables that the machine will analyze, making it possible to break down the steps taken by the algorithm to arrive at a given result. Artificial intelligence will not necessarily be a black box; it is possible to create an explainable algorithmic model. It is up to the government to regulate and encourage technology companies to be transparent, and not to hire opaque technologies.³²

Finally, there must be a balance between confidentiality and transparency in digital administrative activity.³³

Algorithmic transparency will not always be appropriate; secrecy is also important for the protection of intellectual property, commercial and industrial secrets, privacy and personal data, national security and the secrecy of justice, among others.³⁴ In the search for this balance, this complement between secrecy and transparency,³⁵ we can define the following "golden rule": transparency is the rule, secrecy is the temporary and proportional exception in favor of other fundamental rights.³⁶

F. Ensuring cybersecurity and privacy protection

National Interoperability Framework (NIFO). Available at: https://joinup.ec.europa.eu/sites/default/files/inline-files/DPA_Factsheets_2023_Estonia_vFINAL.pdf Accessed on October 11, 2023

³² Vogl, Thomas M., Cathrine Seidelin, Bharath Ganesh, and Jonathan Bright. "Algorithmic Bureaucracy: Managing Competence, Complexity, and Problem Solving in the Age of Artificial Intelligence." *SSRN Electronic Journal*, January, 6–7. Accessed April 13, 2022. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3327804. 2019; Ward, Jacob. *The Loop: How Technology Is Creating a World without Choices and How to Fight Back*. New York: Hachette Books. 2022, 122-123.

³³ Otero, Paulo. *Manual de Direito Administrativo*. Vol. 1. Coimbra: Almedina. 2019, 492-495; Otero, Paulo. *Manual de Procedimento Administrativo*. Vol. 1. Coimbra: Almedina. 2019, 119-121.

³⁴ Anastasopoulos, L. Jason, and Andrew B. Whitford. "Machine Learning for Public Administration Research, with Application to Organizational Reputation." *Journal of Public Administration Research and Theory* 29 (3) (July). 2019, 507; Villagrasa, Oscar Capdeferro. "La inteligencia artificial del sector público: desarrollo y regulación de la actuación administrativa inteligente en la cuarta revolución industrial." *Revista de los Estudios de Derecho y Ciencia Política* 30 (March). 2020, 09-10.

³⁵ According to Chevallier, there is an intrinsic relationship between light and dark, transparency and opacity. Chevallier, Jacques. "Le mythe de la transparence administrative." In *Information et transparence administratives*. Paris: PUF. 1988, 251.

³⁶ In Bobbio's words, in literal translation: "public character is the rule, secrecy the exception, and even then, it is an exception that should not make the rule any less valid, since secrecy is justified only if it is limited in time, and in this respect it does not differ from all measures of exception". Bobbio, Norberto. *Il future della democrazia*. Torino: Einaudi Tascabili, 1984, 25.

The sixth commandment involves ensuring cybersecurity and the protection of citizens' privacy.

All citizens have the right to navigate safely in the digital world, and it is up to the Public Administration to implement public policies that guarantee the protection of citizens, networks and information systems, through mechanisms that increase digital security.

The widespread acceptance of digital government depends on trust, so it must be ensured that citizens and businesses can rely on reliable and verifiable digital government applications and services.³⁷

This involves, at the very least, permanent public investment in cybersecurity; the creation of a public structure focused on the issue; measures to ensure the integrity, fidelity, authenticity and conservation of data; the establishment of legal obligations and responsibilities for the government and technology companies; the use of cutting-edge security technology (such as cryptography, blockchain networks and the cloud) and the training of citizens to understand the risks and security measures when navigating the digital world.

In this context, article 15, item 5, of the EU AI Act states that high-risk AI systems must be "resistant to attempts by unauthorized third parties to alter their use, results or performance by exploiting system vulnerabilities." It also states that measures must be adopted to prevent, detect, resolve and control, as well as respond to cyber-attacks.

In Estonia, a global benchmark on the subject, there are: the Cybersecurity Act establishing various obligations for technology companies (security measures, risk management and assessment and incident reporting)³⁸; a public cloud that serves as a backup and data protection (public data is stored in a high-security center in Luxembourg); encryption and the KSI blockchain system to protect the entire system and even a national cyber battle that takes place annually so that all citizens can point out flaws in the system and learn about cybersecurity.³⁹

Likewise, digital government must face the enormous challenge of guaranteeing citizens' privacy and protecting their personal data. This includes, for example, the right to informational self-determination, the right to protection against abusive geolocation and the establishment of strong

³⁷ In this sense, see: European Commission. *Berlin Declaration on Digital Society and Value-Based Digital Government*. December 8. Accessed November 14, 2023. <https://digital-strategy.ec.europa.eu/en/news/berlin-declaration-digital-society-and-value-based-digital-government>. 2020.

³⁸ See §§ 7 to 10 of the Cybersecurity Act. Estonia. *Cybersecurity Act*. Approved on 09.05.2018. Available at: <https://www.riigiteataja.ee/en/eli/523052018003/consolide>. Accessed on November 11, 2023.

³⁹ e-Estonia. "E-estonia Programme for Cyber Security." Accessed November 25, 2023. <https://e-estonia.com/programme/cyber-security/>

legal restrictions on facial recognition systems and the categorization of people.

Regarding informational self-determination, citizens are the true owners of their data and therefore have the fundamental right to completely control the use of their personal data. This includes the right to access, rectify, update, understand the purpose of and consent to the use, restrict processing, cancel the sale or sharing and determine the deletion of data.⁴⁰

In this regard, Denmark has the consent portal, a platform that allows citizens to have an overview of how their personal data is used by public authorities and private companies, making it possible to manage their consents.⁴¹ Estonia has the personal data usage monitor (a set of applications that allows citizens to control the use of their data) and the anonymizer (an application for anonymizing personal data, with the aim of increasing security and privacy).⁴²

The right to protection against abusive geolocation is guaranteed, for example, by Article 17 of the Portuguese Charter on Human Rights in the Digital Age. This right involves protecting citizens against the collection and processing of information and data about their location without their consent or without due legal authorization.⁴³

In addition, the European regulation on artificial intelligence places strong restrictions on facial recognition systems. According to Article 5, facial recognition is, as a rule, prohibited, as it is an unacceptable risk to human privacy. Exceptionally, it may be allowed for specific issues involving national security and provided there is: an impact assessment on fundamental

⁴⁰ Maurer, Hartmut. *Derecho administrativo alemán*. Translated by Maria José Bobes Sánchez et al. México: Universidad Autónoma de México, Instituto de Investigaciones Jurídicas, no. 637. 2012, 466; European Parliament. *Regulation 2016/679. General Data Protection Regulation*. April 27, 2016. Available at: <https://eur-lex.europa.eu/legal-content/PT/TXT/?uri=CELEX%3A02016R0679-20160504&qid=1532348683434> Accessed on November 25, 2023; Portugal. *Guia para Inteligência Artificial ética, transparente e responsável na Administração Pública*. Agência de Modernização Administrativa. Accessed November 13, 2023. <https://bo.tic.gov.pt/api/assets/etic/c5c06777-1e6c-4b2a-ab9d-053a168808b9/>. 2020.

⁴¹ Danish Agency for Digital Government. *Visions and Recommendations for Denmark as a Digital Pioneer*. Digitaliserings Partnerskabet. Accessed November 13, 2023. <https://en.digst.dk/media/24796/visions-and-recommendations-for-denmark-as-a-digital-pioneer-danish-government-digitisation-partnership.pdf>. 2021.

⁴² European Commission. *Digital Public Administration factsheet 2023 - Estonia*. National Interoperability Framework (NIFO). Available at: https://joinup.ec.europa.eu/sites/default/files/inline-files/DPA_Factsheets_2023_Estonia_vFINAL.pdf Accessed October 11, 2024.

⁴³ Portugal. *Lei n.º 27/2021: Carta Portuguesa de Direitos Humanos na Era Digital*. Accessed November 23, 2023. <https://diariodarepublica.pt/dr/detalhe/lei/27-2021-163442504>. 2021.

rights and prior judicial or administrative authorization.⁴⁴

Similarly, Article 5 of this European regulation prohibits, as a rule, A.I. systems that inflict emotions and use biometric data to categorize people based on their political opinions, trade union membership, religious or philosophical beliefs, race, sex life or sexual orientation.

It is therefore unacceptable for the digital government to be a Big Brother that uses its omnipresent surveillance on citizens.

G. Making administrative integration and simplification a reality

The seventh commandment consists of the digital government's duty to effect administrative integration and simplification.

This includes: i) digital cooperation between the different public administrations; ii) a common and unified public sector for the citizen; and iii) the prohibition of data duplication (*once-only rule*) or any other unnecessary bureaucracy to achieve public interest.

Interoperability is one of the keys to digital government. It is the government's duty to guarantee integration and reuse between the databases and applications of the various public sectors, creating a compatible technological network that allows equipment and programs to interoperate with each other and with citizens.⁴⁵ This involves a single digital platform, in which the Administration acts as if it were a common public sector, even if there are internal organizational divisions between entities and public bodies.

The lack of interoperability is holding back the progress of a mature Digital Government. Without communication and integration between public sectors, we have at most "digital islands", a few isolated digital initiatives which, taken together, do not represent significant improvements in the lives of citizens. That's why individualized digital approaches don't work; they generate, at best, a facade of digitalization.

An excellent example of interoperability is Estonia. In this country, there is a national identification card (e-ID) with a microchip containing all the citizens' encrypted personal data. With this card, using a reader or even a cell phone, Estonian citizens can access all the services on the government portal in an integrated and coherent way.⁴⁶

In Italy, the public connectivity system is provided for in the Digital

⁴⁴ European Union. *Regulation (EU) 2024/1689. Artificial Intelligence Act*. Accessed June 23, 2024. https://eur-lex.europa.eu/legal-content/PT/TXT/?uri=OJ:L_202401689. 2024.

⁴⁵ Casado, Eduardo Gamero, and Severiano Fernández Ramos. *Manual Básico de Derecho Administrativo*. 13th ed. Madrid: Editorial Tecnos. 2016, 406-407; Otero, Paulo. *Manual de Direito Administrativo*. Vol. 1. Coimbra: Almedina. 2019, 492-495.

⁴⁶ On Estonia's digital identity, see: <https://e-estonia.com/solutions/estonian-e-identity/id-card/> Accessed on 09/11/2024.

Administration Code, consisting of a national system that guarantees interoperability between the information systems of Italian public administrations.⁴⁷

In Austria, there is a "*one-stop principle*", which means that citizens have access to the government through a single digital platform (which in Austria's case is oesterreich.gv.at), without having to go looking for the agency or place responsible to meet their demands.⁴⁸ The country also adopts the "*no-stop principle*", which means proactive public services, meaning that even if the citizen doesn't request them, the services are offered proactively in advance.⁴⁹

In the European Union there is the European interoperability platform project provided for in the *Interoperable Europe Act Proposal*. This platform aims to achieve cross-border integration through a community platform and a one-stop shop for European interoperability solutions.⁵⁰

Furthermore, digital government has a duty to simplify and make life easier for citizens, to remove any kind of excessive formalism or bureaucracy that is useless for the public interest.

Bureaucracy was the pillar of the analog government that distrusted the citizens. A "digital" government that has too much bureaucracy can only be considered "digital in appearance", it is mediocre or only nominally digital.

In this way, excellent digital government allows citizens to resolve their issues with the government at the click of a button on their cell phone's digital platform. It provides a unique digital identity so that citizens have access to personalized, proactive public services based on every life event. It guarantees electronic signatures, payments via apps and digital notaries to avoid unnecessary formalities in authenticating and issuing documents. It prohibits the duplication of data and ensures that citizens only need to provide information to the government once in their lifetime (once-only rule), as this information will be available to all public entities on the interoperable platform.⁵¹

⁴⁷ See articles 73, 75 and 76 of Italy's Digital Administration Code. Italy. Decreto Legislativo 7 marzo 2005, n. 82. Codice dell'amministrazione digitale. Available at: <https://www.normattiva.it/uri-res/N2Ls?urn:nir:stato:decreto.legislativo:2005-03-07;82> Accessed on November 25, /2023.

⁴⁸ Digital Austria. "One-stop-shop Principle." Accessed November 14, 2024. https://www.digitalaustria.gv.at/eng/insights/E-Gov-A-Z_EN/Digitally-networked-services/One-stop-shop-principle.html

⁴⁹ Digital Austria. "No-stop-shop Principle." Accessed November 14, 2024. https://www.digitalaustria.gv.at/eng/insights/E-Gov-A-Z_EN/Digitally-networked-services/No-stop-shop-principle.html

⁵⁰ European Commission. *Interoperable Europe Act Proposal*. Brussels, 18.11.2022. Available at: https://commission.europa.eu/publications/interoperable-europe-act-proposal_en Accessed January 4, 2023.

⁵¹ See the Digital Administration implemented in Estonia: European Commission.

Estonia, in fact, takes the once-only rule so seriously that public sectors are prohibited by law from collecting duplicate data and, if there are databases with repeated data, they must be merged to avoid repetition.⁵² For example, if a citizen has changed their address and has notified a public sector, that sector must share this information with all public entities, and this must be included in the single digital platform, preventing the citizen from having to present their new proof of residence to the Public Administration once again.⁵³

H. Investing in sustainable and innovative technological development

The eighth commandment is the duty of the Digital Government of Excellence to invest in sustainable technological development based on innovation.

This includes the duty to invest in green technologies; to carry out efficient public-private collaboration and to adopt administrative experimentalism capable of encouraging constant innovation in public administration.

The principle of sustainability requires digital administrative action to preserve future generations. An administrative responsibility directed towards the future and intergenerational equity. Investment in technology cannot represent a selfish administrative stance, based only on the here and now. In the light of proportionality, excellent digital government must consider the future effects of its actions.⁵⁴

Protecting the environment must therefore be a permanent concern of the digital government of excellence. It is not enough to constantly invest in technologies; they must be "green", they must represent greater environmental well-being for society, an ecologically balanced environment for present and future generations.

In this context, Internet of Things sensors monitor the quality of the

Digital Public Administration factsheet 2023 - Estonia. National Interoperability Framework (NIFO). Available at: https://joinup.ec.europa.eu/sites/default/files/inline-files/DPA_Factsheets_2023_Estonia_vFINAL.pdf Accessed January 4, 2023.

⁵² See § 43 of the Estonian Public Information Act. Estonia. *Public Information Act. Approved on 15/11/2000*. Available at: <https://www.riigiteataja.ee/en/eli/ee/503012019004/consolide/current> Accessed January 4, 2023.

⁵³ In practice, implementing this "once only" rule is a major challenge for the digital administration. It requires a single platform and a high level of interoperability between public entities. That's why, when establishing these administrative duties, we always must consider that the implementation of digital administration is a complex and gradual phenomenon.

⁵⁴ On this principle, see: Otero, Paulo. *Manual de Procedimento Administrativo*. Vol. 1. Coimbra: Almedina. 2019, 260-264.

environment and help with environmental public policy; cloud computing reduces the amount of physical infrastructure and allows teleworking, reducing the amount of waste and the consumption of electricity and water; artificial intelligence automates processes, reducing the use of paper and facilitating basic sanitation, urban cleaning and public transportation through autonomous electric or hydrogen vehicles that reduce air and noise pollution.

Japan, for example, uses smart floors that convert people's footsteps into electricity. A simple walk on the street can generate electricity for important areas of Tokyo, such as trains and subway stations. Technology enables renewable and clean energy, combining innovation and environmental sustainability.⁵⁵

Moreover, a digital government that doesn't invest in innovation tends to fail through obsolescence.

The only way for governments to survive in the digital age is to embrace change and create a culture of innovation in which people and organizations experiment, learn and develop.⁵⁶

In this sense, the Public Administration must invest in public-private collaborations that give it access to new ideas, new technologies, new solutions to technical problems, constituting a true innovation laboratory.⁵⁷ Furthermore, the regulation of new technologies must be balanced: flexible so as not to impede innovation, but also strict enough to prohibit techniques that are extremely dangerous to citizens' fundamental rights.⁵⁸

Estonia, for example, has the Digital Testbed Framework, which enables innovative cooperation with the private sector. A company, university or individual developer can create digital solutions to government technical problems and post them on the platform. There is also Accelerate Estonia, a national testbed for citizens and companies to experiment, validate and solve

⁵⁵ Time of India. *How Japan is changing footsteps into electricity*. Available at: <https://timesofindia.indiatimes.com/etimes/trending/how-japan-is-changing-footsteps-into-electricity/articleshow/115922458.cms> Accessed January 4, 2023.

⁵⁶ This is one of the UN's recommendations in its latest report on Digital Stewardship. United Nations. *E-Government Survey 2022: The Future of Digital Government*. New York: Department of Economic and Social Affairs, 176. Accessed January 4, 2023. <https://publicadministration.un.org/egovkb/en-us/>. 2022.

⁵⁷ In its digital government law, Brazil established the innovation laboratory as a space open to the participation and collaboration of society to develop innovative ideas, tools and methods for public management. See article 4, item VIII and article 44 of Law 14.129/2021. Brazil. *Lei nº 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*. Accessed November 23, 2023. https://www.planalto.gov.br/ccivil_03/_ato2019-2022/2021/lei/14129.htm. 2021.

⁵⁸ Hueso, Lorenzo Cotino. "Riesgos e impactos del big data, la inteligencia artificial y la robótica. Enfoques, modelos y principios de la respuesta del derecho." *Revista General de Derecho Administrativo* 50 (February). 2019, 31-33.

global problems.⁵⁹

In Singapore, on the other hand, there is the Centre of Excellence (CentEx) for ICT and Intelligent Systems, where specialized engineering expertise will be developed to support the government. In this place of excellence and innovation, managers and civil servants increase their capabilities in technology, acquiring fundamental knowledge to support the innovations of Digital Government.⁶⁰

Similarly, sandbox regulation is an excellent example of administrative experimentalism that fosters public innovation. It means a regulatory environment for testing new technologies, a space in which regulators, technology experts and users can interact in a safe environment to test innovative solutions and identify the obstacles that arise when implementing them. In other words, before the new technology is put on the market, it will be tested and validated in an experimental environment.⁶¹

In this sense, Articles 57 to 61 of the EU AI Act regulate the testing environments for the regulation of artificial intelligence. The regulation establishes the obligation for each European member state to create at least one testing environment for AI regulation at national level, which will be operational by August 2, 2026. This environment must, above all, promote innovation and identify risks to fundamental rights.⁶²

Furthermore, there must also be incentives for innovation within the public sector.

We defend the creation of legislation that authorizes innovation and administrative experimentation and the granting of prizes and financial bonuses to civil servants who innovate to improve society. If civil servants are not encouraged to innovate, either for fear of being held accountable or for lack of financial reward, the administration will remain obsolete and dependent on innovations from the private sector.

After all, it won't always be the private sector that innovates and develops digital technology for the government. Sometimes, the government

⁵⁹ European Commission. *Digital Public Administration Factsheet 2023 – European Union. National Interoperability Framework (NIFO)*. Accessed October 10, 2023. https://joinup.ec.europa.eu/sites/default/files/inline-files/DPA_Factsheets_2023_EU_vFinal_0.pdf. 2023.

⁶⁰ Smart Nation Singapore. “CentEx.” Accessed November 25, 2024. <https://www.smartnation.gov.sg/initiatives/centex/>.

⁶¹ European Commission. *Digital Public Administration Factsheet 2023 – European Union. National Interoperability Framework (NIFO)*. Accessed October 10, 2023. https://joinup.ec.europa.eu/sites/default/files/inline-files/DPA_Factsheets_2023_EU_vFinal_0.pdf. 2023.

⁶² European Union. *Regulation (EU) 2024/1689. Artificial Intelligence Act*. Accessed June 23, 2024. https://eur-lex.europa.eu/legal-content/PT/TXT/?uri=OJ:L_202401689. 2024.

centralizes this action and develops the necessary technology on its own. In Brazil, for example, we have the modern digital inspection systems developed by the Federal Revenue Service and the instant payment system (called PIX) created by the Central Bank of Brazil.⁶³

Digital government of excellence combines innovation, technology and sustainability.

I. Adopt preventive measures

The ninth commandment involves the establishment of a series of preventive measures by the Digital Government of Excellence.

Allowing the unbridled development of technologies, without effective preventive state control, is akin to "a child playing with a bomb"⁶⁴. The Administration must act with technological prevention and precaution in favor of fundamental rights and human beings.

This includes, for example, regulation by *design*, by education and by experimentation; differentiating technologies by risk levels; carrying out tests and impact assessments; requiring certificates and technical documentation from technology companies; banning technologies with unacceptable risks and not hiring companies that don't follow the legal parameters.

Preventive regulation can be by design (designing, internalizing constitutional and legal values in the machine codes); by education (companies and citizens must be educated about the importance of technology respecting fundamental rights) and by experimentation (as with *sandbox* regulation, before the technology is deployed on the market, it must be tested and validated by the Administration).⁶⁵

In this context, the European regulation on artificial intelligence differentiates technologies by levels of risk: unacceptable, high or limited.⁶⁶ This European approach is extremely interesting, as it aims to tailor state regulation to the specific type of technology being regulated and its

⁶³ Zockun, Carolina Zancaner, Flávio Garcia Cabral, Leandro Sarai, and Maurício Zockun. *Manual de direito Administrativo digital*. (Coleção PUC). Almedina Brasil. Kindle edition, 245. 2024.

⁶⁴ According to Nick Bostrom, the unbridled use of artificial intelligence is extremely dangerous. According to the professor of philosophy at Oxford University, "we are like children playing with a bomb". Bostrom, Nick. *Superintelligence: Paths, Dangers, Strategies*. Oxford: Oxford University Press. 2014, 297.

⁶⁵ Simoncini, Andrea, and Erik Longo. "Fundamental Rights and the Rule of Law in the Algorithmic Society." In *Constitutional Challenges in the Algorithmic Society*, edited by Giovanni Gregorio et al. Cambridge: Cambridge University Press. 2022, 40-41.

⁶⁶ European Union. *Regulation (EU) 2024/1689. Artificial Intelligence Act*. Accessed June 23, 2024. https://eur-lex.europa.eu/legal-content/PT/TXT/?uri=OJ:L_202401689. 2024.

corresponding risk to fundamental rights.

Thus, according to Article 5 of the European regulation, techniques that manipulate behavior, exploit people's vulnerability, use the social scoring system or perform facial recognition are unacceptable as a rule.

Techniques that involve certain fundamental rights and public services (education; health; employment; public security; elections; border control; water, electricity, gas and light supply, etc.) are high risk and must be documented and with automatic recording of events; allow for human supervision and risk management, and must be tested and evaluated before entering the market.⁶⁷

On the other hand, techniques with limited risk, such as *chatbots*, must meet minimum transparency requirements (warning citizens that they are using artificial intelligence, for example).⁶⁸

In this sense, the precautionary principle creates a duty for the digital government of excellence to avoid unacceptable/high risks for human beings. Administrative inertia in the face of technologies with a very high risk of violating fundamental rights is unacceptable. The digital government of excellence is obliged to adopt measures to avoid or mitigate technological risks that could directly harm the interests of the community. This is a preventive and prudent technological state.⁶⁹

Likewise, it goes without saying that public authorities cannot contract technology companies that do not follow legal parameters or develop technologies with unacceptable risks. The principles of prevention and precaution must be applied when dealing with disruptive technologies that pose strong threats to citizens' fundamental rights.

⁶⁷ The high-risk technologies are listed in Annex III of the European regulation. The regulation contains a series of preventive measures, namely: automatic recording of events to ensure auditability and traceability of the technology; maintaining sufficient transparency to understand the result and be used well; high level of robustness, security and accuracy; adequate risk assessment and mitigation systems; high quality of the data sets that feed the system to minimize risks and discriminatory results; recording of activities to ensure traceability of results; detailed documentation that provides all the necessary information about the system and its purpose for the authorities to assess its compliance; clear and adequate information for the user; appropriate human supervision measures to minimize risk. European Union. *Regulation (EU) 2024/1689. Artificial Intelligence Act*. Accessed June 23, 2024. https://eur-lex.europa.eu/legal-content/PT/TXT/?uri=OJ:L_202401689. 2024.

⁶⁸ European Union. *Regulation (EU) 2024/1689. Artificial Intelligence Act*. Accessed June 23, 2024. https://eur-lex.europa.eu/legal-content/PT/TXT/?uri=OJ:L_202401689. 2024.

⁶⁹ It is worth pointing out that it is impossible to achieve zero risk, which is why the precautionary principle must be interpreted based on proportionality, allowing reasonable, tolerable or acceptable risks and not preventing technological innovation. On the precautionary principle, see: Otero, Paulo. *Manual de Procedimento Administrativo*. Vol. 1. Coimbra: Almedina. 2019, 265-271.

J. Adopt repressive measures

Finally, the tenth and last commandment involves the adoption of repressive measures by the Digital Government of Excellence.

This includes, at the very least: i) the invalidation of illegal digital administrative acts; ii) the creation of independent national authorities to supervise and punish technology companies and public officials and iii) the application of significant sanctions such as heavy fines, full compensation, a ban on contracting, a ban on receiving public incentives and subsidies, withdrawal from the market, loss of public office, all without prejudice to civil, administrative and criminal liability.

In this context, a digital administrative act tainted by an insanitary defect must obviously be invalidated. This will be the case with a digital administrative decision that is not substantiated (*black box*); that does not allow for an adversarial process and a full defense; that automates discrimination and social exclusion; that violates human privacy; that is based on digital elements collected illegally or unlawfully; that reifies and dehumanizes the citizen.⁷⁰

Furthermore, it is the digital administration's duty to create strong, independent national authorities, such as regulatory agencies, to oversee and sanction technology companies. It must also create new leaders responsible for the government's technology policy, such as the *chief data officer* and the *chief information officer*. The digital government of excellence must exercise due to economic regulation of *big tech*, without bowing down, without becoming a hostage, without being captured by economic interests.⁷¹

In this way, various sanctions can be imposed to crack down on the misuse of disruptive technologies.

Article 99(3) of the European regulation on artificial intelligence provides for a significant fine of up to 35 million euros or an amount equivalent to up to 7% of a private company's worldwide annual turnover, whichever is

⁷⁰ Torrijos, Julián Valero. "Las garantías jurídicas de la inteligencia artificial en la actividad administrativa desde la perspectiva de la buena administración." *Revista Catalana de Dret Públic* 58. 2019, 87-93.

⁷¹ Auby, Jean-Bernard. "Administrative Law Facing Digital Challenges." *European Review of Digital Administration & Law – ERDAL* 1, no. 1 (2020), 12; Cath, Corinne. "Governing Artificial Intelligence: Ethical, Legal and Technical Opportunities and Challenges." *Philosophical Transactions A* (The Royal Society Publishing, 2018), 02-06. Available at: <https://royalsocietypublishing.org/doi/10.1098/rsta.2018.0080> Accessed on February 9, 2022; OECD. *The OECD Digital Government Policy Framework: Six Dimensions of a Digital Government*. OECD Public Governance Policy Papers, 8–38. Accessed July 15, 2022. <https://bit.ly/3Jr0Wcg>. 2020.

greater.⁷² The Brazilian bill on artificial intelligence, in turn, in addition to the fine, provides for the publication of the sanction; a ban on data processing and the temporary or definitive suspension of the use of the technology.⁷³

It's important to note that sanctions should be aimed at both private companies and the public administration itself in the event of infractions. In more serious situations, such as the intentional use of technology to embezzle public funds or to violate the hard core of human dignity, we can stipulate the loss of public office, without prejudice to the civil, administrative and criminal liability of the offending public official.

III. CONCLUSION

These are the ten commandments for an excellent digital government.

By habitually complying with these commandments, digital government will be increasingly humanistic and focused on better satisfying the citizen.

Thus, the digital government of excellence is one that, at the very least, respects the human being, the legal system and due process; that is inclusive, transparent, secure, integrated, sustainable and innovative and that adopts preventive and repressive measures to ensure digitalization that is favorable to the human being and their fundamental rights.

Clearly, these are not easy commandments to fulfill. The challenges are enormous. The implementation of digital government is a complex, gradual phenomenon that depends on the peculiarities of each country.

But without these commandments, digital government becomes dispensable, mediocre or, worse, a technological Leviathan.

Therefore, these commandments are essential to avoid "accidents" and violations of fundamental rights by this form of public management.

These commandments are essential for maximizing your benefits, controlling your risks and achieving the full potential of your possibilities. For a digital government of excellence!

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⁷² European Union. Regulation (EU) 2024/1689, Artificial Intelligence Act. Accessed June 23, 2024. <https://eur-lex.europa.eu>.

⁷³ Brazil. Bill No. 2338/2023. *Provides for the use of artificial intelligence*. Available at: <https://legis.senado.leg.br/sdleg-getter/documento?dm=9347622&ts=1698248944548&disposition=inline> Accessed on November 23, 2023.

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