Brazil's Over-Centralised Governance of Digital Transformation

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Abstract
This article analyses governance of Brazil's Digital Transformation Strategy (E-Digital) through a new public governance (NPG) lens. Based on the analysis, the author finds that governance of E-Digital is too centralised, with too much decision-making power resting with state actors at the federal level, led by the Presidency. This analysis of the Brazilian experience aims to contribute towards understanding the modalities necessary for democratic, sustainable governance of digital transformation in Global Southern contexts.

Keywords
digital transformation, Brazil, E-Digital, governance, new public governance (NPG)

1. Introduction

While Brazil scores well in terms of digitisation of government services, occupying seventh position among the 198 countries of the World Bank's GovTech Maturity Index 2020 (Dener et al. 2021), its progress towards digital transformation across all sectors of the economy and society is uneven. Internet access in the country is still unequal, with about 90% of the low-income population connected exclusively by cell phone (CETIC, 2021).

The Brazilian Digital Transformation Strategy (E-Digital) was launched in 2018.[1] Coordinated by the Ministry of Science, Technology, and Innovation (MCTI), E-Digital has the ambitious purpose of coordinating public policies capable of guaranteeing the adoption of technology for an economically developed, fair, and solidarity-based society. In all, about 100 initiatives have been established by E-Digital. Because it is the central public policy strategy in the context of Brazilian digital transformation, it is important to understand and evaluate E-Digital's governance model.

There is insufficient knowledge regarding the governance modalities that best support digital transformation (Chantillon, 2021), and most research in this area covers countries with high technological performance, such as Australia, the Republic of Korea, or Denmark (see Nielsen & Jordanoski, 2020). This article aims, among other things, to encourage more examination of digital transformation policy and implementation in Global Southern contexts.

In this article, I analyse Brazil's governance of digital transformation through a new public governance (NPG) lens. In their recent article on NPG, Pereira and Ckagnazaroff (2021) characterise this mode of governance as:

> a type of governmental institutional arrangement which, in articulating economic-financial, institutional-administrative and socio-political dimensions, establishes partnerships with civil society and the market through deliberative processes, and seeks innovative solutions to social problems. (Pereira & Ckagnazaroff, 2021, p. 112)

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[1] See Decree No. 9.319 of 21 March 2018, at http://www.planalto.gov.br/ccivil_03/_ato2015-2018/2018/decreto/D9319.htm. E-Digital was updated on 17 November 2022 by the Ministry of Science, Technology, and Innovation (MCTI), after the finalisation of this article (see https://www.gov.br/mcti/pt-br/acompanhe-o-mcti/transformacaodigital).

As Pereira and Ckagnazaroff (2021) point out, NPG is associated with democratic inclusion that allows civil society and private sector actors to contribute to public policies in a partnership process in the search for solutions to social problems. The ideal NPG approach is one in which multiple actors contribute and influence the public policy decision-making system, and consequently contribute to the delivery of public services.

In this article, governance structure is understood to be the set of mechanisms used to direct, evaluate, and monitor the management and conduct of public policies and services, taking into account the interests of society and stakeholders. Governance structures are organised by rules, roles, and forms of articulation between decision instances, forming a multifaceted system of inter-organisational and intersectoral relationships (Jessop, 1993).

Section 2 of this article provides more detail on the NPG framework, section 3 describes the governance structure of Brazil's E-Digital strategy, section 4 evaluates the patterns of governance of E-Digital, and section 5 provides conclusions.

2. New public governance (NPG)

The transition from the hierarchical and bureaucratic approach of public management[2] to the systemic approach of the NPG demands a new form of organisation from the state: an institutional arrangement based on relationships within and outside the government that configure structures according to national contexts (Pereira & Ckagnazaroff, 2021). According to Pereira and Ckagnazaroff (2021), public governance can be analysed in terms of the following dimensions: (1) main values related to governance, such as integrity, transparency, and efficiency; (2) the structure of the institutional system that is responsible for promoting interaction to obtain results, through networks, power, and coordination; and (3) processes of evaluating and monitoring the results of public policies.

In terms of the NPG framework, a country's governance of digital transformation can be evaluated in terms of the degree to which the institutional arrangement allows: the power of the state to shift to other actors; networks of actors to form and articulate towards a goal; and knowledge and information to be coordinated in the search for solutions (Pereira & Ckagnazaroff, 2021).

According to Nielsen and Jordanoski (2020, p. 288), governance models of cooperation and intergovernmental coordination tend to be neglected as a success factor for national digital transformation strategies. Strong governance models, with clear roles and responsibilities of all institutions and with formal intersectoral decision-making bodies, are able to foster intergovernmental coordination and cooperation. Likewise, high levels of inclusion of all sectors of society at all levels of government, including civil society and private actors, can increase the chances for success in implementation of digital transformation strategies.

In recent years, Brazil has been promoting notions of public governance in order to establish mechanisms for evaluating the degree to which government policy implementation and service delivery are generating public value. Article 2 of Brazil's Decree No. 9.203 of 2017 on Public Governance specifies that public value constitutes the products and results generated by public-interest state responses to societal demands.

In the same way, the updating of government ecosystem strategies for digital transformation signals the unbalanced appropriation of governance models, in most cases disconnected from the guidelines of the Public Governance Policy of the Brazilian government, and from solid principles of solid public governance, such as openness and transparency, inclusion, participation, gender equality, and diversity (OECD, 2020b).

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[2] See, for example, Osborne (2010), for a discussion of evolution from new public management (NPM) to NPG.

It can be argued that, in addition to government efforts to promote digital transformation strategies, a governance structure capable of contributing to the good performance of public policies must have the following attributes: (1) inclusion of multiple actors in positions with access to power; (2) forums and collegial settings that guarantee the discussion of the problems and challenges of under-represented groups; (3) networks between the local and global, private and public actors, under formal coordination; and (4) training of transformational leaders to coordinate networks for a solid digital transformation strategy.

3. Governance structure of Brazil's E-Digital

In terms of the March 2018 Decree that established Brazil's E-Digital framework, E-Digital is the core component of the country's National System for Digital Transformation (SinDigital), with SinDigital composed of E-Digital and "its thematic axes and its governance structure".[3] The focus of this article is on the "governance structure" set out in the Decree.

The governance of, and decision-making structure for, E-Digital are coordinated by the Civil House of the Presidency of the Republic. The Civil House acts as the coordinator of E-Digital, and holds the presidency of the Interministerial Committee for Digital Transformation (CITDigital), the powerful committee that monitors, evaluates, and directs E-Digital. The Civil House of the Presidency also has the power to choose many of Interministerial Committee's members, who come from the following bodies:
- Civil House of the Presidency
- Ministry of Foreign Affairs
- Ministry of Economy
- Ministry of Education
- Ministry of Communications
- Ministry of Science, Technology, and Innovation (MCTI)
- General Secretariat of the Presidency
- Office of Institutional Security of the Presidency.

The Executive Secretariat of the Interministerial Committee is led by E-Digital's core ministry, the MCTI, which means that the MCTI has a leading role in the implementation, monitoring, and updating of the strategy.[4]

The Interministerial Committee is responsible for establishing the priority actions of E-Digital; maintaining the coherence of the initiatives of different bodies; sharing information on the impact of sectoral initiatives; monitoring and evaluating the results of E-Digital; articulating and monitoring government, state, and municipal programmes; and issuing recommendations, updates, reviews, and deliberations on E-Digital.

The 2018 Decree establishing E-Digital also provides for the Advisory Council for Digital Transformation, mandated to ensure "permanent dialogue" between the state and non-state actors (i.e., actors in the private sector, the scientific community, and civil society). This Advisory Council is intended to be a multisectoral technical entity that provides institutionalised participation by non-state actors in terms of evaluating, implementing, and updating E-Digital. The council's role is to review E-Digital's evaluation and implementation reports, to make proposals on the actions envisaged in E-Digital, and to recommend measures for periodic updating. The council is chaired by a member of the Civil House of the Presidency, who also serves on the Interministerial Committee, and includes representatives of the private sector and civil society, including non-governmental organisations (NGOs) and academia. In addition, the Interministerial Committee has the prerogative to decide on the composition of the Advisory Council.

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[3] See Article 1, Decree No. 9.319 of 21 March 2018 at http://www.planalto.gov.br/ccivil_03/_ato2015-2018/2018/decreto/D9319.htm
[4] See https://www.gov.br/mcti/pt-br/acompanhe-o-mcti/transformacaodigital for the MCTI's E-Digital update on 17 November 2022, which occurred after the drafting of this article.

Arrangements have been modified since 2018 by several amendment decrees.[5] Civil society, the scientific community, and the private sector are now represented by a council with only an advisory role in relation to the Interministerial Committee of E-Digital. The overall impact of the amendment decrees has been to further centralise control of E-Digital in the Interministerial Committee.

Thus, E-Digital's governance at the strategic level is centralised in the Civil House, linked to the Presidency of the Republic. Despite the existence of decision-making bodies to facilitate cooperation and coordination, all decisions and documents must be considered by the Presidency. The head of the Interministerial Committee, the main body of power and information, is appointed by the Civil House.

Given the cross-cutting nature of E-Digital's activity axes, the Interministerial Committee can institute technical support activities through specific committees or technical chambers that will act in the monitoring and follow-up of E-Digital axes. According to the Committee's Monitoring Reports,[6] there are, for example, committees to discuss the regulatory environment for start-ups; e-commerce and exports; and the internet of things (IoT).

The Interministerial Committee is mandated to ensure dialogue among its Executive Secretariat, its other members, and the other bodies involved in digital transformation initiatives. The Interministerial Committee determines the composition of the non-state advisory council (comprising civil society, the scientific community, and the private sector). Therefore, even though information circulates between the Interministerial Committee and the non-state representatives comprising the advisory council, the power of implementation lies clearly with the federal government and related state bodies.

Among the state actors, while the responsibilities are shared between different actors in the implementation of E-Digital, there is a clear imbalance of power between those actors positioned close to the apex of power in the Presidency, and those farther from the apex who are at the forefront of execution. Since 2018, decision-making power and relevant information have been concentrated in the Interministerial Committee. Altogether, seven meetings[7] of the Interministerial Committee were held between May 2018 and March 2020 to discuss and deliberate on the creation of committees and subcommittees; to update or reassess the composition of the Advisory Board; to update E-Digital; and to establish the Digital Government Strategy 2022–2026. Work Plans were prepared for 2018–2019 and 2021–2022, and there were three reports, in 2018, 2019, and 2020, on the implementation of E-Digital.

The question then arises: How is the E-Digital governance structure impacting the performance of Brazil's ecosystem for digital transformation?

4. Over-centralisation of digital transformation governance

The governance structure of Brazil's E-Digital strategy is, as we have seen above, highly centralised in a few actors at the federal level. Multiple actors can provide technical support and monitor the strategy, but for the most part their roles are only advisory. There are, for example, no formal incentives for cross-cutting or decentralised

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[5] Decree No. 10.332 of 2020 instituted the Digital Government Strategy for 2020 to 2022. Decrees No. 9.804 of 2019 and No. 10.782 of 2021 changed the discipline of the governance structure and the implementation definitions of E-Digital, altered the recreation of the Ministry of Communications, and altered the powers of the MCTI.

[6] See, for example, https://www.gov.br/mcti/pt-br/acompanhe-o-mcti/transformacaodigital/arquivosestrategiadigital/citdigital_relatorio-de-acompanhamento-2020-rev-12-2020.pdf

[7] The reports from all Interministerial Committee meetings between May 2018 and March 2022 can be found in the E-Digital repository: https://www.gov.br/mcti/pt-br/acompanhe-o-mcti/transformacaodigital/estrategia-digital-repositorio. The repository also makes available all government degrees and resolutions by advisory structures linked to E-Digital.

policy initiatives, such as for smart cities, technology in agriculture, or IoT, to be adopted at the non-federal level by municipalities or states.

Overall, E-Digital's governance can be said to be yielding only an adequate level of performance. In 2021, it was found that of the 100 actions stipulated by E-Digital, 23 actions had been completed, 60 actions were in progress, and 17 had not yet started (CGEE, 2021, pp. 97–110). Many profound digital inclusion challenges persist—challenges which, generally speaking, are tied to the country's socio-digital inequalities. On E-Digital's Infrastructure and Quality of Access Networks axis, there is still a pronounced imbalance between the regions of the country, especially between the North and Northeast, with regard to fibre optic coverage, access networks in schools, and extension of the mobile network. In E-Digital's Research, Development, and Innovation axis, there are persistent challenges in terms of internet access in public schools, the effectiveness of digital literacy projects, and technical training to enable transition to the digital economy (CGEE, 2021).

Some analyses have found that although E-Digital's structure has the necessary strategic, operational, and implementation scope, its decision-making power and circulation of information are concentrated too narrowly in the hands of government representatives. This diagnosis is reflected in recent assessments (see CGEE, 2021; OECD, 2018, 2020a) of the governance of Brazilian digital transformation, including E-Digital and the Digital Government Strategy.[8]

The governance framework should help the government to achieve its digital transformation goals. According to Chantillon (2021), public administration can create public value when carrying out its governmental activities, as long as governance of the activities includes all stakeholders. The public sector is one of many initiators of value creation processes, but it is not the only one. From this perspective, there is a relative flaw in the traditional view of creating public value in the Brazilian governance structure with regard to digital transformation.

Although governments are touted as the main entrepreneurs of innovation and explorers in the pursuit of public value for society, the public sector must take cognisance of citizens and customers' desire for organisations to adjust their business models. The reconfiguration of the public sector business model requires the incorporation of knowledge and experience of all potential partners—citizens, companies, and other non-state entities (Wirtz et al., 2021).

In other words, true digital transformation is an accumulated process, using emerging technologies and dynamic stakeholder interactions, which results in the systematic reconfiguration of organisations and the most flexible and interactive business model, unlike the centralised model currently driving the Brazilian E-Digital strategy. The inevitable tensions generated by centralised governance and the inability to include stakeholders in decision-making have the potential to negatively influence the implementation of strategic actions. But radical decentralisation is also not the answer to the paradoxes of governance. Digital transformation efforts require both centralised management capabilities, grounded in a blend of hierarchy and unity, and decentralised capabilities grounded in diversity.

Although centralisation and decentralisation may seem to represent opposing approaches to the structure of public organisations, the two can (and must) exist simultaneously—in a necessary coexistence that will sometimes be comfortable and at other times be characterised by paradox and tension. Reform of a public institution may, depending on stage the institution is at in its evolution, require increasing its centralising forces (via hierarchy, unification, and centralised governance), or it may require increased decentralising forces (via devolution, diversification, and sub-national governance) (Witesman, 2020). Centralised and decentralised structures can coexist based on the pursuit of public values.

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[8] See Decree No. 10.332 of 2020, which instituted the Digital Government Strategy for 2020 to 2022.

5. Conclusions

To advance knowledge about the governance factors that can influence the performance of national digital transformation strategies, this article has analysed governance of the E-Digital framework in Brazil. Among other things, this article seeks to contribute to the literature on public management and governance in the Global South (see, for example, Hoque & Zakaria, 2014). Based on my analysis of E-Digital's governance modalities to date, I have made the argument above that E-Digital's governance is over-centralised in the hands of state actors, particularly federal state actors, and even more particularly in the Presidency.

What, then, is the model for a governance structure that supports sustainable digital transformation? The answer to this question depends on the status of the actors who engage in the strategising, operational organisation, and the implementation of public policies for digital transformation. What we do know is that a strong model includes the participation of multiple actors in decision-making, and the circulation of information and power to influence the ecosystem of actors involved with the strategies. Having a governance structure with well-defined rules and decision-making structures does not guarantee effective digital transformation. It is necessary to go further and consider the roles of non-state actors such as private sector representatives, citizens, scientists and academics, who will often have different perspectives and priorities from those of the government—and to allow these actors to serve as resources for optimal decision-making and implementation by public managers. As Pereira and Ckagnazaroff (2021) point out in their discussion of the new public governance (NPG) model, the institutional arrangements of governance must foster networks of interdependencies between public and non-state actors grounded in the need to solve complex problems.

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