

OPEN GOVERNMENT AND DIGITAL GOVERNMENT IN MEXICO AND NUEVO LEÓN: A COMPARATIVE ANALYSIS OF ADVANCES AND SETBACKS (2018–2024)

DANIEL MARTÍN LEYVA CORDERO & CARLOS GÓMEZ DÍAZ DE LEÓN

Faculty of Political Science and International Relations
Autonomous University of Nuevo Leon

<https://doi.org/10.37602/IJREHC.2025.7110>

ABSTRACT

This article comparatively examines the implementation of Gobierno Abierto [Open Government, OG] and Gobierno Digital [Digital Government, DG] in Mexico and in the state of Nuevo León between 2018 and 2024. Based on a mixed-methods approach—integrating documentary analysis of legal frameworks, action plans, and institutional metrics, along with the review of statistical indicators and digital platforms—the study evaluates the progress and limitations at both levels of government. The findings show that while OG has faced regulatory setbacks in transparency and participation, DG has consolidated digitalization strategies with uneven results in interoperability, open data, and citizen experience. Nuevo León stands out for initiatives such as Llave NL and innovative municipal platforms, compared to a broader federal implementation that nonetheless shows lags in effectiveness and citizen trust. The article concludes that OG and DG are complementary but not equivalent concepts: the former oriented toward democratic co-creation and the latter toward technological efficiency in delivering public value. The research contributes evidence for rethinking public policies that better articulate both dimensions, identifying opportunities for improvement in transparency, participation, and digitalization as key pillars of a more open and inclusive state.

Keywords: Open Government, Digital Government, Mexico, Nuevo León, Public Participation.

1.0 INTRODUCTION

Over the past decade, the concepts of Gobierno Abierto [Open Government, OG] and Gobierno Digital [Digital Government, DG] have emerged as central pillars of public sector modernization worldwide. In the face of growing challenges and citizens' demands for greater transparency and efficiency, OG has gained prominence as a new governance model that fosters more horizontal interactions between governments and society (Instituto Nacional de Transparencia, Acceso a la Información y Protección de Datos Personales [INAI]). In 2011, the Alianza para el Gobierno Abierto [Open Government Partnership, OGP] was launched as a multilateral initiative aimed at promoting more effective and open governments. Mexico, as one of the eight founding countries of the OGP, assumed a leading role, eventually chairing the organization in 2014–2015 (INAI, 2020).

Prior to this wave of interest in OG, the digital transformation of public administration had already become a strategic priority in governmental agendas both nationally and internationally. From the early efforts to articulate e-government at the beginning of the 21st

century under President Fox's Agenda del Buen Gobierno [Good Government Agenda] (Gómez, 2016, p. 114) and the Public Management Reforms of the 1990s, international organizations such as the OECD (OECD, 1997, p. 137) and the IDB emphasized that the adoption of digital technologies is not only vital to bringing government closer to citizens and generating public value but also to optimizing internal processes, ensuring greater efficiency in service delivery, and fostering transparency in public management (Economic Commission for Latin America and the Caribbean [ECLAC], 2025).

This article focuses on the empirical implementation of OG and DG principles in Mexico during the 2018–2024 period, comparing the federal level (Gobierno de la República [Federal Government]) with the state level (Gobierno de Nuevo León [Government of Nuevo León]). This comparison seeks to clarify to what extent both levels of government have incorporated—and differentiated—the agendas of openness and digitalization into their public policies. This raises key questions: Are open government and digital government the same in practice? Is there real alignment between the theoretical-normative discourse and the actions implemented? These questions are pertinent given that OG and DG strategies are often promoted simultaneously and even overlap, potentially generating conceptual and practical confusion (Oszlak, 2013).

Based on the above, the aim of this article is to critically analyze the implementation of OG and DG principles at the federal level in Mexico and in the state of Nuevo León between 2018 and 2024, contrasting theoretical frameworks with observed realities. The study seeks to identify convergences and divergences between OG and DG, assessing whether digital initiatives have effectively promoted government openness and, conversely, whether OG policies have leveraged available digital tools. It also presents the advances and setbacks observed at both levels of government. The research adopts a mixed-methods design with both quantitative and qualitative instruments and techniques, drawing on official data sources as well as theoretical analyses of recent developments in both fields and discursive analyses of official reports, as relevant. The following sections address the theoretical framework of both concepts as the basis for this critical analysis.

2.0 BACKGROUND

2.1 Open Government

The term Gobierno Abierto [Open Government, OG] can be traced back at least to the mid-20th century. In 1957, Wallace Parks first used the expression open government when referring to the principle of publicity of government information and the public's right to know (as cited in Instituto Nacional de Transparencia, Acceso a la Información y Protección de Datos Personales [INAI], 2017). This emphasis on transparency and accountability laid the conceptual foundations of OG. Decades later, the concept regained momentum globally with President Barack Obama's 2009 initiative. In his presidential memorandum Transparency and Open Government, Obama outlined three pillars for modern OG: transparency, public participation, and cross-sector collaboration (Obama, 2009, as cited in INAI, 2017). These principles were reinforced through the Open Government Directive, later issued by Peter Orszag (2009, as cited in INAI, 2017), which defined clear guidelines for the U.S. public administration. Since then, these principles—often explicitly including accountability—have been recognized as the normative basis of OG at the international level.

Several authors and institutions have proposed definitions of OG. In general terms, OG can be understood as a new form of governance in which authorities and citizens co-create public solutions within a framework of transparency and collaboration (INAI, 2017). For example, Mexico's National Institute for Transparency defines OG as "a new form of governance that allows public problems to be solved through effective collaboration between authorities and citizens" (INAI, 2017, p. 8). Such collaboration is grounded in fundamental principles such as transparency, public participation, accountability, and open innovation (INAI, 2017). In the same vein, the Open Government Partnership (OGP) proposes concrete commitments around transparency, civic participation, public accountability, and the use of technology and innovation for governmental openness (Open Government Partnership [OGP], 2022). These elements seek to transform the state–society relationship, consolidating a more horizontal, collaborative, and citizen-oriented management approach (INAI, 2017).

In academia, the breadth and conceptual complexity of the term are noteworthy. Cruz-Rubio (2015) carried out one of the most systematic efforts to define what OG is (and is not). This author characterizes OG as a "political-administrative philosophy, a new paradigm, or model of socio-political interaction" that—based on the values of transparency, participatory democracy, citizen empowerment, accountability, open data, and the use of technology, and conceiving government as a collaborative platform—serves as a strategy for the design, implementation, and evaluation of public policies, transforming the traditional logic of public management toward a more open, collaborative, and citizen-centered approach. Although extensive, this definition reflects the multidimensional nature of OG: it is not limited to the dissemination of information but entails rethinking how the State and society interact, moving toward a more open, participatory model centered on public value (INAI, 2017).

It is worth emphasizing that the principles of OG are not merely theoretical but have been institutionalized in international frameworks. The OGP itself, founded in 2011 with Mexico as a founding member, is an international collaboration framework where governments assume concrete openness commitments (action plans) and undergo independent evaluations (OGP, 2022). Likewise, in 2015 the International Open Data Charter was adopted, establishing six principles for publishing government data: open by default, timely and comprehensive, accessible and usable, comparable and interoperable, oriented toward improved governance and civic engagement, and toward inclusive development and innovation (International Open Data Charter, 2015). These principles complement the OG agenda by providing concrete standards for proactive disclosure. In short, OG, as a paradigm, is supported by a robust normative and conceptual framework—transparency, participation, collaboration, accountability, and open data—that guides public policies toward more democratic management co-produced with society.

2.2 Digital Government

The concept of Gobierno Digital [Digital Government, DG] emerged from the evolution of gobierno electrónico [e-government] of the late 20th century into more comprehensive approaches during the 2010s. Initially, e-government focused on the digitalization of administrative procedures and public services, leveraging information technologies to improve administrative efficiency and provide online services to citizens and businesses (Economic Commission for Latin America and the Caribbean [ECLAC], 2025). In this early paradigm, the

orientation was primarily internal: the use of ICTs to optimize existing government processes and to offer electronic services, with the goal of achieving efficiency and convenience (ECLAC, 2025).

However, by the 2010s, it became evident that the e-government approach alone was insufficient to transform the State–society relationship. This gave rise to DG, conceived as a new stage in which digital technology is integrated from the very design of public policies to achieve a more agile, open, and citizen-driven state (Organisation for Economic Co-operation and Development [OECD], 2019). According to the OECD, the transition entails moving “from e-government as a driver of internal operational efficiencies to digital government that enables more integrated and citizen-driven approaches” (OECD, 2019, p. 3).

Various definitions underscore this shift in emphasis. The OECD defines DG as the use of digital technologies as an integral part of government modernization strategies, aimed at generating public value and bringing government closer to citizens (OECD/Inter-American Development Bank [IDB], 2023). Similarly, the IDB and other international organizations highlight that DG not only involves adopting technological tools but also implies the cultural and organizational transformation of the public sector to focus on citizens, use data for decision-making, and foster innovation.

A significant contribution of the DG literature is the identification of key dimensions or guiding principles. The OECD has outlined six core dimensions of DG: digital by design, data-driven, open by default, user-driven, government as a platform, and proactiveness (OECD/IDB, 2023). These dimensions provide a conceptual framework for assessing the digital maturity of a government.

Given the affinity of several of these six DG principles identified by the OECD/IDB (2023)—digital by design, data-driven, open by default, user-driven, government as a platform, and proactiveness—with those of OG (e.g., open by default, collaboration, citizen-centered approaches), it is pertinent to examine the relationship between DG and OG. There is consensus that both agendas are complementary and mutually reinforcing: DG provides technological tools that enhance transparency, participation, and collaboration (OECD/IDB, 2023; Open Government Partnership, 2023). However, they are conceptually distinct. As Oszlak (2013) notes, “open government transcends e-government in one crucial respect: while e-government is a matter of management, open government is a matter of power” (p. 8). The latter involves the complementary exercise of non-governmental institutions in governance functions.

Therefore, both concepts share complementary objectives but are not synonymous. While OG emphasizes democratic values and the co-creation of the public, DG is conceived as an instrumental means serving the ends of OG, focusing on technological and process innovation to generate public value more efficiently (Oszlak, 2013; Wilson & Mergel, 2022).

3.0 METHODOLOGY

This research adopted a qualitative, documentary–comparative approach aimed at critically analyzing the implementation of the Gobierno Abierto [Open Government, OG] and Gobierno Digital [Digital Government, DG] agendas in Mexico and the state of Nuevo León during the

2018–2024 period. Secondary sources and institutional public data were prioritized in order to identify patterns, divergences, and levels of progress between the two levels of government.

Although secondary quantitative data (such as indicators and statistics) were incorporated, these were not subjected to rigorous statistical analysis; rather, they served to complement and contextualize the qualitative analysis through visualizations and numerical contrasts that strengthened descriptive inferences.

3.1 Information Sources

The research was based on the analysis of three types of documents:

- Normative and strategic documents: laws, decrees, OG action plans, national and state-level digital policies.
- Institutional reports and indicators: published by INAI, the Plataforma Nacional de Transparencia [National Transparency Platform, PNT], federal and state open data portals, as well as international reports (OECD, OGP, ECLAC).
- Specialized literature: academic articles, technical guidelines, and studies on OG and DG.

The documents were intentionally selected under a thematic relevance criterion, considering their value for answering the research questions. This procedure aligns with the theoretical sampling suggested by Creswell and Creswell (2023) for documentary studies.

3.2 Analytical Procedure

A comparative matrix was constructed based on the theoretical pillars of OG (transparency, participation, and collaboration) and DG (OECD, 2019; Índice de Desarrollo Digital Estatal [State Digital Development Index, IDDE], 2024), further breaking down sub-dimensions such as digital services, interoperability, open data, and cybersecurity.

Based on this matrix, the following steps were carried out:

- Identifying the presence and level of implementation of each principle/pillar in documents, platforms, reports, and official websites.
- Contrasting findings between the federal and state levels, considering qualitative evidence (political discourse, actions, legal frameworks) and quantitative evidence (number of datasets, use of digital tools, IDDE indicators).
- Analyzing divergences and implementation gaps for each pillar, assessing the structural or political factors that explain such differences.

This methodological approach made it possible to triangulate information, increase the validity of findings, and provide a more comprehensive view of the degree of implementation of the Open Government and Digital Government agendas during the 2018–2024 period in Mexico and in the state of Nuevo León. The following section presents the results of the comparative analysis between the theory and practice of both constructs at each level of government.

Table 1 Comparative Analysis: Open Government (Theory vs. Federal Practice 2018–2024)

Theoretical Principle	Theoretical Definition	Federal Practice Implementation 2018–2024 (OPEN GOVERNMENT)	Correspondence
Transparency	Assesses whether obligated entities make information public in accordance with the guidelines and standards established by the applicable regulations. El Colegio de México (2024).	In 2023, the Transparency component averaged 0.60 (0.69 from Government and 0.51 from Citizens), very close to 2021 (0.61; 0.68 and 0.53, respectively); the overall Open Government Index was 0.46, and proactive transparency 0.27, below 0.38 in 2021.	Intermediate–high: solid performance in Active Transparency (0.67) and AI-G (0.82), but lacking evidence of national leadership.
Access to Information	Measures whether obligated entities respond to access-to-information requests in compliance with the requirements set by law. El Colegio de México (2024).	In 2023, access to information from government averaged 0.82, above 2021 (0.80); by obligated entity type, the Legislative and Judicial branches reached 0.92 and 0.91, while unions scored 0.54.	High with disparities: strong performance in AI-G (0.82), with peaks in Legislative (0.92) and Judicial (0.91), but lagging in unions (0.54); no evidence of national leadership.
Citizen Participation	Rates the opportunities for people to influence the activities of obligated entities through contact via different channels. El Colegio de México (2024).	In 2023, the Participation dimension averaged 0.32, below 2021 (0.35); 40.6% of obligated entities publish information on real participation mechanisms, while 59.4% do not.	Low: limited performance in participation (0.32), declining from 2021 (0.35), with fewer than half of obligated entities offering open mechanisms (40.6%).
Intersectoral Collaboration	Involves co-creation with social actors in	Mexico did not prepare a Fifth National Open Government Plan (2022–	Institutional breakdown: structured collaboration was dismantled.

Theoretical Principle	Theoretical Definition	Federal Practice Implementation 2018–2024 (OPEN GOVERNMENT)	Correspondence
	the design of public policies and services (OGP, 2019).	2024). The Tripartite Technical Secretariat was dissolved, and federal co-creation spaces were canceled. OGP recognized this as a “significant setback.”	
Accountability	A collective action instrument designed to ensure transparency, combat corruption, and dismantle impunity (SFP, 2021).	In 2023, the SFP carried out 2,544 oversight actions and 887 follow-ups; from January to June, 62,586 complaints were received. In public procurement, PAF reported 108 actions in the same period, after 119 in 2022. Between Sept. 2022 and June 2023, 1,762 sanctions were recorded, and 394 cases of serious offenses were referred to the TFJA. In 2022, complaints totaled 74,052, with 119 procurement oversight actions. In 2021, 190 such actions were reported; in 2020, 214; in 2019, 157. As baseline, in 2018–2019 SFP received 25,051 complaints and issued 2,434 sanctions, 732 of which were disqualifications.	Intermediate–high institutionalization: active oversight and sanctioning processes exist, but with signs of declining procurement oversight and incomplete consolidation in handling serious offenses.
Integrity and Public Ethics	Involves regulatory frameworks and values that govern public conduct in line with the	In 2023, evaluation in ethics and integrity averaged 84.5 points, the highest since 2019. In this field, the 32 State Control Bodies and ~310 ethics committees in the Federal Public Administration function as	Implemented and measured: documented progress in training, regulations, and evaluations shows consolidation in ethics and integrity.

Theoretical Principle	Theoretical Definition	Federal Practice Implementation 2018–2024 (OPEN GOVERNMENT)	Correspondence
	common good (OECD, 2016).	collegiate bodies to promote integrity and prevent conflicts of interest. The Federal Public Administration Code of Ethics was published on Feb. 8, 2022, and in Jan. 2023, the <i>Guide for Developing Codes of Conduct</i> was issued, requiring each institution to design or update its own code in line with the federal framework.	
Open Data	Availability of public data in reusable formats as a basis for transparency (Open Data Charter, 2015).	In 2023, the Open Data component showed a widespread lag: most public institutions fail to publish open data. The federal level scored 0.43, well above the national average of 0.08; however, the “Timely” attribute reached only 0.07 (7%). That same year, the National Transparency System launched the National Open Data Policy, requiring processes and standards to be defined and, above all, developing capacities in obligated entities.	Initial implementation with low quality: limited adoption (average 0.08; most do not publish) and relatively higher federal performance (0.43) but with minimal attributes (Timely 0.07). The new National Open Data Policy requires processes, standards, and capacity-building for improvement.

Table 2 Comparative Analysis: Open Government (Theory vs. State Practice, Nuevo León 2018–2024)

Theoretical Principle	Theoretical Definition	Implementation in Nuevo León (OPEN GOVERNMENT)	Correspondence
Transparency	Assesses whether obligated entities make information public in accordance with the guidelines and standards established by the applicable regulations. El Colegio de México (2024).	In transparency, Nuevo León scored 0.42 (MGA 2023). In Government Transparency it reached 0.91, while Active Transparency remained at 0.63, showing lags in updating and publishing information. As contextual reference, the national AI-G average is 0.82. In addition, the state has an effective <i>Ley de Transparencia y Acceso a la Información Pública</i> [Law on Transparency and Access to Public Information].	Mixed–moderate: solid institutional framework, but overall medium performance and setbacks in active transparency.
Access to Information	Measures whether obligated entities respond to access-to-information requests in compliance with the requirements set by law. El Colegio de México (2024).	In 2023, in the measurement of Access to Information from the Government Perspective, Nuevo León scored 0.91 (2nd place), standing out for responding within the legal timeframe without extensions. It also has the <i>Ley de Transparencia y Acceso a la Información Pública</i> [Law on Transparency and Access to Public Information] and the <i>Ley de Participación Ciudadana</i> [Citizen Participation Law], which guarantee the right of access to information and governmental openness.	High: consistent performance with responses within deadlines and no extensions, supported by a robust legal framework.
Citizen Participation	Rates the opportunities for people to influence the activities of obligated entities through contact via different channels.	It scored 0.27 in participation (MGA 2023), below the national average (0.32). Nevertheless, noteworthy are the creation of the Secretariat of Citizen Participation, the First Special Program of Citizen Participation 2022–	Mixed: low index, but relevant institutional efforts.

Theoretical Principle	Theoretical Definition	Implementation in Nuevo León (OPEN GOVERNMENT)	Correspondence
	El Colegio de México (2024).	2027, and the involvement of 864 people in the PAL public consultation.	
Intersectoral Collaboration	Entails co-creation of policies among government, civil society, and other actors (OGP, 2019).	In 2022, the <i>Coalición Nuevo León Abierto</i> [Open Nuevo León Coalition] was created as a permanent multisectoral space. It involved 65 social groups, held 22 public meetings, and engaged 401 people in co-creation roundtables.	High: Nuevo León is a pioneering case in subnational OGP co-creation.
Accountability	Requires public evaluation, citizen oversight, and sanctioning mechanisms (INAI, 2017).	The Action Plan includes quarterly monitoring mechanisms, bimonthly meetings, and a public dashboard at <i>nlabierto.org</i> . INAI acts as an independent evaluator. Nuevo León joined the Open Government Partnership and is implementing four commitments of its 2022–2024 Action Plan; the plan promotes collaborative governance and OG principles to rebuild citizen trust, with digital channels that facilitate information exchange and strengthen accountability.	High: channels and a formal commitment to periodic accountability exist.
Integrity and Public Ethics	Involves regulatory frameworks and values that govern public conduct in line with the common good (OECD, 2016).	OG was incorporated into the Special Program of Citizen Participation, training courses were delivered in collaboration with ECLAC, and San Pedro implemented a citizen management and anti-corruption program.	Present: integrated into programs and institutional training.

Theoretical Principle	Theoretical Definition	Implementation in Nuevo León (OPEN GOVERNMENT)	Correspondence
Open Data	Availability of public data in reusable formats as a basis for transparency (Open Data Charter, 2015).	In 2021, Nuevo León was below the state average in the Open Government Index, showing local heterogeneity. In 2023, proactive transparency was low (0.23: 86% with no update date, only 6.1% up to date, and 63.2% with no feedback mechanisms). MGA 2023 warns that open data publication depends on governmental discretion; in that measurement, the state ranked 6th with 0.12 in overall value. Meanwhile, initiatives such as “Participation through Innovation with Open Data – dataLABNL with Open Government” seek to activate collaboration and civic use of data, with potential to raise openness if updating and standardization are consolidated.	Moderate in transition: mixed performance; below the state average, with low proactive transparency and open data, but with innovation initiatives (dataLABNL).

Table 3 Comparative Analysis: Digital Government (Theory vs. Federal Practice 2018–2024)

Theoretical Principle	Theoretical Definition	Federal Implementation (DIGITAL GOVERNMENT)	Correspondence
1. Digital by Design	Measures efforts to institutionalize DG in State operations, enabling public sector institutions to use digital tools and data coherently and strategically to transform processes	In 2023, Mexico ranked among the top 5 in “Digital by Design” (OECD–IDB DGI) for institutional coordination, cybersecurity, and capacity development. The <i>Estrategia Digital Nacional</i> (EDN) 2021–	High: strong alignment (top 5 in “Digital by Design,” EDN, and procurement platform), but lagging in monitoring.

Theoretical Principle	Theoretical Definition	Federal Implementation (DIGITAL GOVERNMENT)	Correspondence
	and services (OECD/IDB, 2024).	2024 and the SFP promoted the digitalization of records and a standardized procurement platform. Main gap: Monitoring (follow-up and impact evaluation).	
2. User-Driven	Evaluates governments' ability to center the design and delivery of policies and public services on users and their needs. Specifically examines consistent approaches to involve users in policymaking and service design, as well as strategic measures to address the digital divide.	User-Driven (2023): Mexico 0.50 (8th place). Progress in standards/guidelines for user-centered service design and public participation, with digital inclusion approaches. Persistent gaps in Implementation and Monitoring, and in the digital divide (affordability, literacy, accessibility). Internet users: 75.6% (2021), 78.6% (2022), 81.2% (2023), 83.1% (2024).	Moderate with implementation and monitoring gaps: advances in standards and inclusion, but the digital divide persists despite rising user percentages.
3. Data-Driven	Evaluates governments' progress in developing the necessary foundations to facilitate access to and sharing of data across the public sector.	Data-Driven (2023): Mexico 0.47 (6th place). Strategic priority with data strategy and standards; progress in governance, access, and sharing, but needs to strengthen Strategic Approach and policy tools.	Moderate with strategic gaps: mid-level performance (0.47; 6th), with data strategy and standards, but lacking strong focus and policy tools.
4. Government as a Platform	Measures the availability of common building blocks—guidelines, tools, data,	In 2023, Mexico scored 0.62 (4th place), with broad coverage of digital identity—including cross-border services—and	High: strong performance (broad digital identity—including cross-border—and investment/procurement

Theoretical Principle	Theoretical Definition	Federal Implementation (DIGITAL GOVERNMENT)	Correspondence
	infrastructure, and software—that enable public sector teams to deliver and ensure consistent processes and services across the sector.	frameworks/actions to manage technology investments, such as value-proposition mechanisms and procurement adapted to digital projects.	frameworks adapted to digital projects).
5. Open by Default	Evaluates openness beyond open data publication, including efforts to foster the use of technologies and data to engage and interact with different stakeholders (OECD, 2019).	Mexico scored 0.46 (7th place). Progress in open data policies with provision of high-quality datasets, promotion of open-source software in government, and transparency about digital/ICT project progress. All aligned with EDN 2021–2024, derived from the <i>Plan Nacional de Desarrollo</i> (PND) 2019–2024, which promotes inclusive transformation and social participation.	Moderate with implementation gaps: aligned progress (EDN/PND, open data policies, OSS), but mid-level performance showing lags in coverage and effective use.
6. Proactiveness	Anticipates citizens’ needs and responds quickly, simplifying interactions with users and avoiding burdensome bureaucratic processes (OECD, 2019).	In 2023, Mexico scored 0.50 (6th place). The “once-only” principle is recognized, but mechanisms remain incipient, limiting simplification and responsiveness. In parallel, the SFP (art. 37 <i>Ley Orgánica de la Administración Pública Federal</i> , LOAPF) reinforced internal control with a preventive approach, improved management, ethics, and professionalization of the	Moderate with institutional support: mid-level performance; SFP strengthens internal control and management, but mechanisms remain immature for simplifying procedures and improving responsiveness.

Theoretical Principle	Theoretical Definition	Federal Implementation (DIGITAL GOVERNMENT)	Correspondence
		public service, along with citizen participation, transparency, and accountability.	

4. COMPARATIVE ANALYSIS: Digital Government (DG) (Theory vs. State-Level Practice 2018–2024)

Theoretical Principle	Theoretical Definition	State Implementation (DG, 2018–2024)	Correspondence
Digital by Design	Measures efforts to institutionalize digital government within the functioning of the State so that public-sector institutions can use digital tools and data coherently and strategically to transform processes and services. (OCDE/BID 2024).	In 2023, Nuevo León obtained a score of 81 in the <i>Digitalization of people and society</i> pillar of the IDDE, ranking second nationally in the <i>Leader</i> category. At the municipal level, Monterrey implements the budget program “Gobierno Digital Eficiente” (Efficient Digital Government), coordinated by the Secretaría de Innovación y Gobierno Abierto, aimed at improving perceived efficiency and satisfaction in the use of digital platforms. It also promotes an Open Data policy through a portal with information in open, reusable, machine-readable formats for citizens, academia, the private sector, and specialists.	High: strong performance in “Digitalization of people and society”; Monterrey drives “Gobierno Digital Eficiente” with improvements in satisfaction and Open Data.

Theoretical Principle	Theoretical Definition	State Implementation (DG, 2018–2024)	Correspondence
User-Driven	Assesses the government’s ability to center the design and delivery of public policies and services on users and their needs. It specifically examines a coherent approach to involving users in policy-making and service design, as well as strategic measures to address the digital divide.	Monterrey redesigned citizen services with a CRM that centralizes reports from 072, chatbot, hearings, and offices; the explicit goal is to improve user experience, provide case traceability, and avoid duplicates, with interoperability among areas to speed up responses. In addition, the Plan de Acción Local (Local Action Plan, PAL) installed a co-creation methodology (public consultation, dialogues, working tables, and open review) and ensured inclusion — 864 people from 23 municipalities and 401 participants in co-creation tables— strengthening user participation in solution design.	Moderate with implementation/monitoring gaps: listening and co-design mechanisms exist, but case management still depends on internal interoperability and continued outcome measurement.
Data-Driven	Assesses progress in developing the foundations needed to facilitate access to and sharing of data across the public sector.	The state ecosystem incorporates initiatives to use data in management: San Pedro adopted an Open Data strategy for decision-making and Monterrey promotes “Gobierno Digital Eficiente” together with a portal of reusable Open Data. In GovTech challenges, the municipality requires	Moderate: there are guidelines and concrete uses, but governance and tools for systematic data sharing at the state scale need consolidation.

Theoretical Principle	Theoretical Definition	State Implementation (DG, 2018–2024)	Correspondence
		interoperability and traceability as technical criteria, reinforcing data exchange among public systems.	
Government as a Platform	Measures the availability of common building blocks—guidelines, tools, data, infrastructure, and software—that enable public-sector teams to deliver and ensure coherent processes and services across the sector.	Monterrey created the Secretaría de Innovación y Gobierno Abierto and a one-stop digital window, and enabled projects with a process-oriented approach and procurement adapted to technology pilots (GovTech LATAM program). The GovTech challenges prioritize platform components (interoperability, case tracking, catalogs, and adoption criteria), standardizing common building blocks for services.	Moderate–High: structures, one-stop window, and pilots with platform criteria exist; the challenge is scaling and standardizing across more agencies.
Open by Default	Assesses openness beyond publishing Open Data, including efforts to use technologies and data to communicate and engage with different actors. (OCDE, 2019).	The PAL provides digital accountability and tracking channels (periodic monitoring, communications, and a public dashboard), strengthening open publication and information sharing. At the state and municipal levels there are Open Data efforts (e.g., San Pedro’s strategy and Monterrey’s portal), though practice is uneven and requires	Moderate: frameworks and channels exist, but the coverage and quality of openness vary across obligated entities.

Theoretical Principle	Theoretical Definition	State Implementation (DG, 2018–2024)	Correspondence
		consolidating updating and standardization.	
Proactivity	When the State anticipates citizens' needs and can respond quickly to them, simplifying interaction with users and avoiding bureaucratic, cumbersome processes (OCDE, 2019).	The redesign of request intake and case management (CRM, traceability, alerts, and removal of duplicates) seeks to anticipate and accelerate attention, while the PAL sustains periodic monitoring to adjust actions. Nonetheless, inter-institutional coordination and sustainability challenges persist to extend proactivity across the entire state administration.	Moderate with institutional support: processes and follow-up exist, but mechanisms are still incipient to simplify end-to-end procedures and improve responsiveness.

5.0 RESULTS

The comparative analysis between the Federal Government of Mexico and the Government of the state of Nuevo León reveals significant differences in the adoption and implementation of the principles of Gobierno Abierto [Open Government, OG] and Gobierno Digital [Digital Government, DG] during the 2018–2024 period. Based on qualitative and quantitative evidence, advances, setbacks, and institutional tensions are identified that make it possible to assess the degree of compliance with these public management models oriented toward transparency, participation, innovation, and the strategic use of technology (OCDE, 2016; El Colegio de México & INAI, 2024; OCDE/BID, 2023).

5.1 Open Government

The joint analysis of the principles of OG at the federal and state levels (Nuevo León) reveals differentiated patterns of progress, as well as relationships of complementarity and contrast between both spheres.

In transparency, the federal government showed an intermediate–high performance (0,60 in 2023) with solid results in Proactive Disclosure (0,67), while Nuevo León stood at 0,42, with a high “government value” (0,91) but lags in updating (0,63) (El Colegio de México & INAI, 2024). The main difference lies in the fact that, although both levels have consolidated

regulatory frameworks, the federal sphere presents a better overall average, while the state sphere exhibits a robust framework but with irregular publication practices.

In access to information, both the federal level and Nuevo León show outstanding performances (0,82 and 0,91, respectively). However, the difference is qualitative: at the federal level there are marked disparities among branches and sectors, whereas in Nuevo León the service is characterized by timeliness and homogeneity in responses, supported by a more consistent local legal framework (El Colegio de México & INAI, 2024).

In Public Participation, shared weaknesses are observed: the federal average fell to 0,32 in 2023, while Nuevo León obtained 0,27. Both cases reflect the low real incidence of citizens in public decisions; nevertheless, the state has created a Secretaría de Participación Ciudadana (Secretariat for Public Participation, first mention) and specific programs, which denotes incipient efforts at institutionalization (El Colegio de México & INAI, 2024).

Intersectoral collaboration marks a clear divergence. At the federal level, there was a setback due to the dissolution of the Secretariado Técnico Tripartita (Tripartite Technical Secretariat, first mention) and the absence of a fifth Plan Nacional de Gobierno Abierto (National Open Government Plan, first mention). In contrast, Nuevo León promoted the Coalición Nuevo León Abierto (Nuevo León Open Coalition, first mention) in 2022, a Co-creation space made up of government, civil society, and the local oversight body, described by the OGP as an innovative effort to build an openness community (Open Government Partnership, 2022). The coalition held 22 public meetings and had the participation of 65 organizations, while the Instituto Nacional de Transparencia (INAI) serves as an independent observer and oversees quarterly progress (Open Government Partnership, 2022). These actions position the state as a pioneer in subnational collaboration.

Regarding Accountability, both levels show active structures. The federation records a considerable volume of oversight actions and sanctions, although with a decrease in reviews of public procurement. For its part, Nuevo León's Plan de Acción 2022–2024 (2022–2024 Action Plan, first mention) establishes mechanisms for periodic monitoring and evaluation, with quarterly updates and bimonthly meetings supervised by INAI (Open Government Partnership, 2022).

In integrity and public ethics, federal results reflect a higher degree of consolidation (84.5 points in 2023, the highest average since 2019), with regulatory frameworks and active committees throughout the Federal Public Administration. Nuevo León, by contrast, is advancing partially, incorporating training and local programs, but still without quantitative indicators that would allow its scope to be compared to the federal level.

Finally, in Open Data, both levels exhibit structural weaknesses. At the federal scale, the level of openness reached 0,43, above the national average (0,08), but with a minimum value for the "Timely" characteristic (0,07). In Nuevo León, Proactive Disclosure in 2023 was lower (0,23), with 86% of information not updated (El Colegio de México & INAI, 2024). The International Open Data Charter defines Open Data as digital information that can be used, reused, and redistributed freely by anyone (Open Data Charter, 2015) and highlights its potential to foster transparency, Accountability, and innovation (Open Data Charter, 2015). However, these principles are not yet fully reflected in practice, as the federation depends on the

implementation of the National Open Data Policy, and the state is experimenting with projects such as dataLABNL.

5.2 Digital Government

The comparative analysis of the implementation of Gobierno Digital [Digital Government, DG] in Mexico (federal level) and in Nuevo León (state level) during 2018–2024 reveals significant progress, albeit with differences in institutional maturity and consistency.

Under the “Digital by Design” principle, Mexico ranks among the top five in the Índice de Gobierno Digital de la OCDE-BID (OECD-IDB Digital Government Index), with strengths in institutional coordination, cybersecurity, and capacity building, although lags persist in monitoring and impact evaluation (OCDE & BID, 2023). At the state level, Nuevo León reached 81 points in the Digitalización de las personas y la sociedad pillar of the IDDE 2023, occupying second place nationally in the Líder category (Centro México Digital, 2024). In addition, Monterrey implements the Gobierno Digital Eficiente program, aimed at improving citizen satisfaction in the use of platforms and consolidating a portal of reusable Open Data (Gobierno del Estado de Nuevo León, 2022).

For “User-Driven,” Mexico scores 0.50 (8th place in 2023), with advances in service-design standards and digital inclusion approaches, although Implementation Gaps remain in monitoring, as do inequalities in affordability and digital literacy (OCDE & BID, 2023). In Nuevo León, Monterrey redesigned citizen services with a CRM system and chatbot that centralize reports and provide traceability, while the Plan de Acción Local (Local Action Plan, PAL) 2022–2024 incorporated public consultations and co-creation roundtables with 864 people from 23 municipalities (Open Government Partnership, 2023).

Regarding “Data-Driven,” Mexico stands at 0.47 (6th place), with strategy and norms for data governance, but it still needs to strengthen policy tools (OCDE & BID, 2023). In Nuevo León, municipalities such as San Pedro apply Open Data strategies for decision-making, and Monterrey reinforces Interoperability in its programs, with portals of reusable information and traceability criteria in its GovTech challenges (Gobierno del Estado de Nuevo León, 2022).

In “Government as a Platform,” Mexico stands out with 0.62 (4th place) thanks to progress in digital identity—including cross-border identity—and procurement mechanisms adapted to digital projects (OCDE & BID, 2023). At the state level, Monterrey and San Pedro have developed portals and interoperable systems, though with less structural coverage than at the federal level (Gobierno del Estado de Nuevo León, 2022).

The “Open by Default” principle shows a medium performance in Mexico (0.46, 7th place), with Open Data policies and promotion of free/open-source software, but limited use of these tools (OCDE & BID, 2023). In Nuevo León, Proactive Disclosure and Open Data remain at low levels (0.23 and 0.12 in 2023), although initiatives such as dataLABNL seek to activate citizen collaboration through data-driven innovation (Gobierno del Estado de Nuevo León, 2023).

Finally, in “Proactivity,” Mexico reaches 0.50 (6th place), with regulatory advances (the “once-only” principle and strengthened internal control by the SFP) but still-incipient mechanisms to

simplify procedures (Secretaría de la Función Pública, 2024). In Nuevo León, proactivity is oriented toward municipal programs such as Gobierno Digital Eficiente, which seek to increase satisfaction in citizen interaction, although limitations persist in anticipating needs and simplifying administrative processes (Gobierno del Estado de Nuevo León, 2022).

6.0 DISCUSSION

Speaking about Gobierno Abierto [Open Government, OG] and Gobierno Digital [Digital Government, DG] in Mexico and in Nuevo León is not merely an exercise in tallying scores; it is about acknowledging an uncomfortable paradox. Ambitious frameworks are designed and platforms are announced; however, Public Value dissipates when data arrive late, participation has no incidence, and services continue to ask people for information the State already holds. This gap—reiterated between 2018 and 2024—is not a technical anecdote but a governance problem: rules that do not oblige, metrics that do not correct, and routines that do not learn (El Colegio de México & INAI, 2024; OCDE & BID, 2023).

In transparency and access, the discourse sounds convincing, but practice is fragile. Publishing is not the same as being transparent when updates are erratic and metadata are opaque. The result is a “fiction of openness”: there are portals, yet finding, cross-referencing, and reusing information for public decision-making or social oversight is difficult. The lesson is stark: without accountable stewards, verifiable calendars, and sanctions for noncompliance, transparency becomes a ritual, not a guarantee (El Colegio de México & INAI, 2024; Open Data Charter, 2015).

Public Participation, presented as OG’s flagship, often operates with baby teeth. It convenes, listens, documents... and, frequently, changes nothing. When mechanisms do not alter agendas, budgets, or regulations, they produce civic fatigue and institutional cynicism. The subnational coalition in Nuevo León is a promising counterweight, but its sustainability will depend on a simple, exacting premise: that each commitment has a responsible party, a deadline, and a consequence if unmet (Open Government Partnership, 2022; El Colegio de México & INAI, 2024).

Intersectoral collaboration exhibits another tension: at the federal level, anchors of coordination unravel; at the state level, Co-creation pacts are being tested. Innovating from the local is desirable, but without multilevel articulation it leads to islands of excellence that do not scale. If working groups do not share standards, APIs, and metrics, each advance dies within its own pilot. Cooperation without Interoperability is just conversation (Open Government Partnership, 2022; OCDE & BID, 2023).

In Accountability and integrity, the machinery exists—audits, committees, codes—but its public effect dissipates if findings do not close the loop with visible corrections. Professionalizing and preventing are necessary; measuring and correcting are inescapable. As long as reports celebrate activities rather than resolving priority risks (procurement, public works, purchasing), public perception will not change—and rightly so (Secretaría de la Función Pública, 2024).

DG adds its own knot: sound Digital by Design without a genuine User-Driven focus. Mexico ranks among the top five in Digital by Design but shows lags in monitoring and evaluation

(OCDE & BID, 2023). In Nuevo León, the push for digitalization (81 points in the 2023 IDDE; second place nationally) coexists with operational limitations: programs like Gobierno Digital Eficiente and CRM solutions in Monterrey improve the citizen experience, yet their impact remains conditioned by internal Interoperability and the lack of systematic outcome evaluation (Centro México Digital, 2024; Gobierno del Estado de Nuevo León, 2022).

Open Data condenses the most visible contradiction: datasets are released that are neither timely nor documented and, for that reason, are scarcely used. At the federal level, the average level of openness is 0.43, with a minimum in timeliness (0.07). In Nuevo León, Proactive Disclosure (0.23) and Open Data (0.12) remain low, despite data-innovation initiatives such as dataLABNL (El Colegio de México & INAI, 2024; Gobierno del Estado de Nuevo León, 2023). The Charter warned in 2015: openness must come with quality, timeliness, and purpose; anything else is noise (Open Data Charter, 2015).

Proactivity is another critical point. Mexico has advanced with the “once-only” principle and strengthened internal control by the Secretaría de la Función Pública (SFP, Secretariat of Public Administration, first mention), but still lacks robust mechanisms to simplify procedures and anticipate needs (OCDE & BID, 2023; Secretaría de la Función Pública, 2024). In Nuevo León, proactivity is reflected in local programs aimed at raising citizen satisfaction; nevertheless, the capacity for anticipation and administrative simplification remains limited (Gobierno del Estado de Nuevo León, 2022).

The breaking point is clear. If OG and DG are to stop being “good intentions with a dashboard,” they must bind themselves to five operational commitments: (1) data governance with accountable stewards and calendars; (2) participation with verifiable incidence (what changed, when, and why); (3) auditing that prioritizes risks and publishes corrections; (4) a common platform of reusable digital services; and (5) impact metrics oriented to people’s lives (time, costs, accessibility). Without that anchoring, the next measurement will once again celebrate the same thing: visible efforts, elusive results (OCDE & BID, 2023; Open Government Partnership, 2022; Centro México Digital, 2024).

Based on the findings, several evaluation criteria can be set to assess the degree of success in implementing OG and DG:

- **Effective Transparency:** Although platforms and datasets exist at both levels, quality, updating, and accessibility remain key challenges. Transparency is not limited to publishing information but to its real utility for the public (Open Data Charter, 2015).
- **Meaningful Participation:** Low active participation indicates that many mechanisms are merely consultative and do not generate policy co-production processes. Institutionalization has not been sufficient to achieve impact.
- **Accountability:** The increase in audits and sanctions reflects progress, but the perception of corruption remains high—especially at the state level (ONU, 2022)—which suggests the need to strengthen the links between institutional oversight and public trust.
- **Efficiency and Digital Inclusion:** Digital platforms have facilitated certain procedures, but the user experience is still uneven and the digital divide persists, particularly among vulnerable groups (INEGI, 2024).

Innovation from the Local Level: Some state-level advances, such as the interoperability of Tramitanl (?? options: “Nuevo León’s state transactions/permits platform”; “state one-stop portal for procedures”) and the Datos NL initiative (?? options: “Nuevo León’s Open Data initiative”; “state data innovation program”), offer replicable models. This reinforces the idea that subnational governments can function as “innovation laboratories” within a multilevel governance system (Gobierno del Estado de Nuevo León, 2023).

6.0 CONCLUSIONS

The comparative analysis between the Federal Government of Mexico and the state of Nuevo León (2018–2024) confirms an asymmetric implementation of Gobierno Abierto [Open Government, OG] and Gobierno Digital [Digital Government, DG]. I identify relevant institutional advances but also persistent lags in data quality and timeliness, the real incidence of participation, and genuinely human-centred design. The constant is not a lack of norms or platforms, but the distance between design and execution; that is where the transformative potential of both agendas erodes.

In general terms, I observe that both levels have incorporated basic frameworks, processes, and capacities—which explains acceptable performance in transparency and digital coordination; however, operational bottlenecks persist: irregular information updates, weak documentation and standardization, and indicators that privilege activity over impact. Until that gap is closed, openness and digitalization will continue to yield fragmentary results.

In OG, the federal sphere maintains an intermediate–high performance in transparency and an active oversight structure; Nuevo León, for its part, compensates with collaborative arrangements and a subnational co-creation architecture that opens windows for monitoring and dialogue. The shared weak point is participation with low incidence: there is more consultation than decision-making with the public; without responsible parties, deadlines, and traceability, participation risks becoming ritual.

Intersectoral collaboration accentuates the divergence: at the federal level, coordination spaces were disarticulated; at the state level, co-creation mechanisms and periodic monitoring were innovated. The lesson is clear to me: islands of local excellence do not scale without interoperability rules, public timelines, and comparable metrics.

In Open Data, both levels show structural weaknesses. At the federal level, data timeliness is low; at the state level, Proactive Disclosure drags on with outdated information. Opening without timeliness, documentation, or demand-driven prioritization produces visible but scarcely reusable portals. The operational conclusion is simple: fewer datasets, but better ones—with accountable stewards, verifiable calendars, and feedback mechanisms that demonstrate use and impact.

In DG, the federal sphere stands out in Digital by Design, albeit with lags in monitoring and evaluation. In Nuevo León, the push for digitalization coexists with operational limits: programs such as Gobierno Digital Eficiente and CRM solutions with traceability in Monterrey improve the experience, but their impact depends on greater internal Interoperability and systematic evaluation of results. At both levels, Proactivity remains the major challenge: the

once-only principle is recognized, but rarely translates into services that anticipate life events and eliminate redundant requests.

Based on the above, I propose five levers to close the gap between announcement and outcome:

- Data governance with clear roles, update calendars, and consequences for noncompliance.
- Participation with consequences, where each commitment has a responsible party, a deadline, and public traceability of changes.
- Accountability that corrects, prioritizing risks and publishing corrective actions, not just findings.
- A shared digital platform, with common enabling services (identity, payments, notifications, e-signature) and Interoperability to avoid duplication and scale solutions.
- Impact metrics in everyday life (time, costs, accessibility, satisfaction), above activity indicators.

In public policy, the next step is not to add principles, but to manage for results: dashboards with time series and public targets, periodic independent reviews, and institutional learning cycles that connect evidence with decision-making. In academic terms, this study offers a situated reading of the multilevel conditioning of OG and DG and a replicable evaluative framework centred on data timeliness, participatory incidence, and service proactivity.

Therefore, moving toward more open and digital governments does not depend on multiplying laws or portals, but on turning principles into verifiable routines: data that arrive on time, participation that moves the needle, audits that correct, and services that find people before they seek out the State. Only then will advances cease to be episodic and become sustained Public Value.

BIBLIOGRAPHIC REFERENCES

1. Centro México Digital. (2024). Índice de Desarrollo Digital Estatal 2024 (IDDE). <https://mexicodigital.centro.org.mx>
2. Cívica Digital. (s.f.). Chatbots para Gobierno: Sam Petrino - San Pedro Garza García. Recuperado el 5 de agosto de 2025, de <https://www.civica.digital/chatbots>
3. Comisión Económica para América Latina y el Caribe (CEPAL). (2025). Desde el gobierno digital hacia un gobierno inteligente. <https://biblioguias.cepal.org/c.php?g=1241017&p=9081903>
4. Comisión Económica para América Latina y el Caribe (CEPAL). (2025). Los datos abiertos de gobierno. En Desde el gobierno digital hacia un gobierno inteligente. <https://biblioguias.cepal.org/gobierno-digital/gobierno-inteligente-datos-abiertos>
5. Cruz-Rubio, C. (2015). Qué es (y qué no es) gobierno abierto. *Eunomía. Revista en Cultura de la Legalidad*, 9, 37–56. <https://e-revistas.uc3m.es/index.php/EUNOM/article/view/2475/1359>
6. El Colegio de México & INAI. (2024). Métrica de Gobierno Abierto 2023. Instituto Nacional de Transparencia, Acceso a la Información y Protección de Datos Personales. https://colmex.shinyapps.io/metrica_gobierno_abierto_2023/

7. El Colegio de México. (2024). Métrica de Gobierno Abierto 2023: Reporte de resultados. El Colegio de México. https://colmex.shinyapps.io/metrica_gobierno_abierto_2023/
8. Gobierno de Monterrey (2022) Evaluación de diseño – “Gobierno Digital y Eficiente 2022.. https://www.monterrey.gob.mx/pdf/portaln/2022/5_Dise%C3%B1o_Gobierno_Digital_Eficiente.pdf
9. Gobierno del Estado de Nuevo León. (2022). Plan de acción – Nuevo León (Estado), México, 2022–2024. Open Government Partnership. <https://www.opengovpartnership.org/es/documents/action-plan-nuevo-leon-state-mexico-2022-2024/>
10. Gobierno del Estado de Nuevo León. (2023). Opinared, Tramitanl y plataformas digitales institucionales. <https://nl.gob.mx>
11. Gobierno del Estado de Nuevo León. (2023). Tercer Informe de Gobierno 2022–2023. <https://www.nl.gob.mx>
12. Instituto Nacional de Estadística y Geografía (INEGI). (2021). Encuesta Nacional de Calidad e Impacto Gubernamental. <https://planestrategico.conl.mx/gobierno-eficaz-y-transparencia>
13. Instituto Nacional de Estadística y Geografía (INEGI). (2024). Estadísticas sobre disponibilidad y uso de tecnologías de la información en los hogares 2023.
14. Instituto Nacional de Transparencia, Acceso a la Información y Protección de Datos Personales (INAI). (2017). Gobierno Abierto (Cuadernos de Transparencia N.º 24). <https://archivos.juridicas.unam.mx/www/bjv/libros/12/5673/6.pdf>
15. Instituto Nacional de Transparencia, Acceso a la Información y Protección de Datos Personales (INAI). (2020). El ABC del Gobierno Abierto. <https://www.itaih.org.mx/MicroS-GobiernoA/pdf/ElABCdelGobiernoAbierto.pdf>
16. International Open Data Charter. (2015). International Open Data Charter. https://opendatacharter.org/wp-content/uploads/2023/12/opendatacharter-charter_F.pdf
17. Laboratorio GovTech LATAM (BID Lab). (s. f.). Nuevos modelos de relación digital con la ciudadanía: Gobierno de Monterrey, México. Recuperado el 29 de septiembre de 2025, de <https://www.govtechlatam.org/retos/nuevos-modelos-de-relacion-digital-con-la-ciudadania>
18. Laboratorio GovTech LATAM (BID Lab). (s. f.). Monterrey (ciudad): Ecosistema y equipo – Secretaría de Innovación y Gobierno Abierto. Recuperado el 29 de septiembre de 2025, de <https://www.govtechlatam.org/ciudades/monterrey>
19. OCDE. (2019). Índice de Gobierno Digital OCDE 2019. https://administracionelectronica.gob.es/pae_Home/dam/jcr:e06fdf81-8ddf-4b86-a7fe-3a75ef69ea99/digital-government-index-2019-highlights-es.pdf
20. OCDE/BID. (2023). Índice de Gobierno Digital de América Latina y el Caribe 2023. https://www.oecd.org/content/dam/oecd/es/publications/reports/2024/11/2023-oecd-idb-digital-government-index-of-latin-america-and-the-caribbean_5a9af6c4/7dc415b7-es.pdf
21. Open Data Charter. (2015). Carta Internacional de Datos Abiertos. <https://opendatacharter.org/es/la-carta/>

22. Open Government Partnership (OGP). (2019). Plan de Acción de México 2019–2022 (versión revisada). <https://www.opengovpartnership.org/documents/mexico-action-plan-2019-2022-revised/>
23. Open Government Partnership (OGP). (2022). Plan de acción – Nuevo León (Estado), México, 2022–2024. <https://www.opengovpartnership.org/es/members/nuevo-leon-state-mexico/>
24. Open Government Partnership. (2023). Plan de acción – Nuevo León (Estado), México, 2022–2024. <https://www.opengovpartnership.org/es/documents/plan-de-accion-nuevo-leon-estado-mexico-2022-2024>
25. Organización para la Cooperación y el Desarrollo Económicos (OCDE). (2016). Open Government: The Global Context and the Way Forward. OECD Publishing. <https://doi.org/10.1787/9789264268104-en>
26. Organización para la Cooperación y el Desarrollo Económicos [OCDE]. (2019). The path to becoming a data-driven public sector. <https://www.oecd.org/gov/the-path-to-becoming-a-data-driven-public-sector-e547ee61-en.htm>
27. Oszlak, O. (2013). Gobierno abierto: hacia un nuevo paradigma de gestión pública (Colección de documentos de trabajo sobre e-Gobierno N.º 5). Red de Gobierno Electrónico de América Latina y el Caribe (Red GEALC). <https://www.oas.org/es/sap/dgpe/pub/coleccion5rg.pdf>
28. Plan de Acción Gobierno Abierto Nuevo León (2022–2024). <https://www.opengovpartnership.org>
29. Secretaría de la Función Pública (SFP). (2019). Primer Informe de Labores 2018–2019. Gobierno de México. <https://www.gob.mx/sfp>
30. Secretaría de la Función Pública (SFP). (2020). Segundo Informe de Labores 2019–2020. Gobierno de México. <https://www.gob.mx/sfp>
31. Secretaría de la Función Pública (SFP). (2021). Tercer Informe de Labores 2020–2021. Gobierno de México. <https://www.gob.mx/sfp>
32. Secretaría de la Función Pública (SFP). (2022). Cuarto Informe de Labores 2021–2022. Gobierno de México. <https://www.gob.mx/sfp>
33. Secretaría de la Función Pública (SFP). (2023). Quinto Informe de Labores 2022–2023. Gobierno de México. <https://www.gob.mx/sfp>
34. Secretaría de la Función Pública (SFP). (2024). Sexto Informe de Labores 2023–2024. Gobierno de México. <https://www.gob.mx/sfp>
35. Wilson, C., & Mergel, I. (2022). Overcoming barriers to digital government: mapping the strategies of digital champions. *Government Information Quarterly*, 39(3), 101681. <https://doi.org/10.1016/j.giq.2022.101681>