Local open government: Key issues in Contagem, Brazil

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ABSTRACT

This study aims to analyze the key issues of open government in Contagem, Brazil, using a bibliometric analysis approach. Research data were collected from Google Scholar using Publish or Perish and analyzed with VOSviewer through co-occurrence techniques on keyword units with the full counting method. The findings revealed three major dimensions within the discourse: normative, policy, and local practice. The normative dimension underscores transparency and accountability in digital platforms. The policy dimension demonstrates the institutionalization of open government principles in urban planning and social programs. The local practice dimension reflects contextual adaptation by emphasizing inclusivity, sustainability, and smart governance. Moreover, the five core commitments of Contagem—digital participation through Decidim, the Integrity Plan, the establishment of CPRAC-C for administrative conflict resolution, a mobile application for georeferencing third-sector services, and the enhancement of the Transparency Portal—illustrate the city's serious efforts to integrate OGP values at the local level. Nevertheless, several challenges remain, including limited and uneven citizen engagement, fragmentation of participatory instruments, digital divides, and the risk of symbolic implementation of the law. This study concludes that Contagem represents both opportunities and constraints in the execution of local open government, underscoring the need to strengthen inclusiveness, operational integrity, and integration of participatory mechanisms. Reinforcing these aspects would not only consolidate Contagem's position within Brazil, but also enable it to serve as a model for participatory and sustainable urban governance in Latin America.

Keywords: Contagem; key issues; open government

1. INTRODUCTION

The concept of an open government is not new. Recent breakthroughs in ICT, global sociopolitical upheavals, and data-driven governance have altered the concept's understanding and implementation (Shao & Saxena, 2019; Wirtz et al., 2019). Governmental openness originated in ancient Athenian democracy but gained popularity with the Visigothic legal system in Sweden, which allowed public access to government papers (Moon, 2020; Wang & Shepherd, 2020). Traditional approaches to open government highlight the right to information as a method for increasing openness and governmental accountability. However, political dynamics and bureaucratic obstacles frequently impede its execution. The digital revolution, particularly the development of web technologies, has expanded the scope of information dissemination, enabling data to be distributed more rapidly, extensively, and across geographical boundaries (Gascó-Hernández, 2014; Khurshid et al., 2022).

Since the early 21st century, open government has evolved into a strategic agenda in many countries, paralleling the influence of New Public Management (NPM) reforms of the 1980s (Safarov, 2019; Zhao et al., 2022). Currently, policy orientation has shifted toward the notion of *sustainable open government*, leveraging artificial intelligence to enhance transparency, citizen participation, and accountability (Afandi et al., 2024; Gil-Garcia et al., 2020). These initiatives are no longer confined to Western democracies but have expanded to Asia and Africa (Prastya et al., 2021).

The establishment of the Open Government Partnership (OGP) in 2011 was a watershed moment for cross-border collaboration. The United States, South Africa, Brazil, the Philippines, Indonesia, the United Kingdom, Mexico, and Norway initiated this (Aboalmaali et al., 2020; Bonina & Eaton, 2020). The OGP has created a collaborative platform for national, local, and civil society to enhance transparent, inclusive, and accountable governance (Lnenicka & Saxena, 2021; Noushin et al., 2020). The OGP's core principles of transparency, public engagement, and accountability have been translated into concrete policies, such as budget transparency, public contract access, natural resource governance, civil rights protection, and responsive and inclusive public services (Gao et al., 2021; Ruijer et al., 2020).

Contagem, a major industrial city in Minas Gerais, Brazil, is an OGP local member currently executing a Local Action Plan. This action plan encompasses five key commitments: enhancing the transparency portal to facilitate public access to government data; establishing the Chamber for Prevention and Resolution of Administrative Conflicts (CPRAC-C) to address administrative disputes through non-litigation mechanisms; developing a mobile application for the georeferencing of third-party services; empowering citizen participation in budgeting through the Decide Contagem platform; and strengthening these initiatives to demonstrate Contagem's attempts to increase openness, citizen engagement, and accountability in municipal government. Therefore, the purpose of this study is to examine the key concerns surrounding open government in Contagem.

2. METHOD

This study uses bibliometric analysis to identify the important concerns regarding open government in Contagem, Brazil. Bibliometric analysis is used to quantify, evaluate, and display the corpus of scientific literature on a certain topic of study (Kulsum et al., 2022). This strategy helps researchers detect research trends, collaborative patterns, and evolving topics (Donthu et al., 2021; Gaviria-Marin et al., 2019; Moral-Muñoz et al., 2020). Research data were gathered from scholarly literature indexed in Google Scholar using the Publish or Perish program with the term "Open Government Contagem," limited to review papers, from 2011 to 2025, which corresponds to Brazil's participation in the OGP.

The obtained literature was exported in RIS format and then handled in Mendeley for duplication removal, metadata completeness (including keywords), and topical relevance screening based on the focus of the study. The next step was to perform a bibliometric analysis using VOSviewer with the following analytical settings: type of analysis—co-occurrence; unit of analysis—keywords; and

counting method—full counting. This method assisted the visual mapping of keyword associations, allowing for the discovery of important themes in the Contagem's material of Contagem. See Figure 1

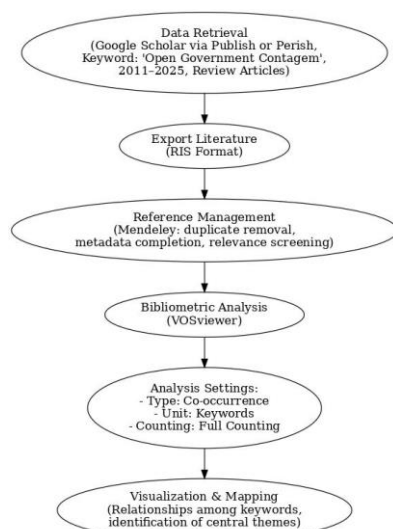**Figure 1. Research Methodology Flowchart**

Source: Author's data processing (2025)

3. RESULT AND DISCUSSION
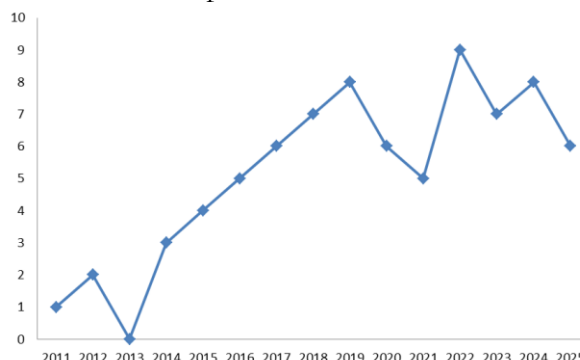
The trajectory of publications on open government in Contagem, Brazil, from 2011 to 2025 (Graph 1) reveals a pattern that closely mirrors the city's socio-political and institutional dynamics. During the initial phase from 2011 to 2013, the number of publications remained limited, reaching a nadir of zero in 2013. This lack of scholarly attention can be attributed to the fact that open government has not yet taken root as a salient policy agenda at the municipal level. As Michener and Bersch (2013) argue, governmental openness in Brazil during the early 2010s was largely fragmented and heavily contingent upon the initiatives of individual local administrations.

The continuous growth between 2014 and 2019 indicates a time of strong institutionalization. This development correlates with Brazil's status as a founding member of the Open Government Partnership and the subsequent drive for municipalities, including Contagem, to expand participatory channels and public transparency systems (Peixoto & Fox, 2016). The increase in publications over this period indicates increasing scholarly interest in assessing the efficiency of citizen involvement forums, financial openness, and the use of information technology in municipal governance.

However, the decrease in publications between 2020 and 2021 may be attributed to the COVID-19 pandemic, which significantly impacted face-to-face participation activities at the local level. According to Wampler et al. (2021), several Brazilian towns, including Contagem, failed to maintain participatory forums throughout the pandemic, despite efforts to adapt using digital platforms. Another contributing cause was the greater national political instability, which harmed the government's commitment to the openness agenda.

The highest number of publications in 2022 indicates an academic response to the rebirth of digital and participatory projects in Contagem. This increase is consistent with the results of Mendonça and Maia (2022), who stated that Brazilian towns are increasingly attempting to incorporate digital technology to promote public discourse and transparency. Nonetheless, the oscillations observed between 2023 and 2025 indicate either saturation of the research topic or a theme shift toward emerging problems such as smart governance, sustainable governance practices, and the interaction of technology and social inclusion.

From a local perspective, the publishing pattern highlights a proportionate link between academic interest and municipal policy commitment. Academic productivity grew as governance innovations were enhanced; however, when political or institutional hurdles occurred, scholarly production decreased. This tendency may be used as an indirect indicator of the viability of the open government agenda in Contagem, while also providing policymakers with a solid foundation for ensuring the relevance and continuation of openness efforts in the future.

Graph 1. Publication Trends

Source: Author's data processing (2025)

Network visualization (Figure 2) reveals three overarching dimensions—normative, policy, and local practice—which, when applied to the case of Contagem, Brazil, demonstrate how open government is not limited to abstract ideas but finds tangible expression at the municipal level. The normative dimension (green cluster) highlights the importance of transparency and public involvement through digital means. In Contagem, this is evident in the municipal government's attempts to create digital platforms that improve fiscal transparency and public participation. This idea is consistent with Brazil's national position as a founding member of the Open Government Partnership (OGP), which has emphasized since its formation that substantive democracy must be supported by accountability and participation (Meijer et al., 2012). In this way, Contagem is a local incarnation of the global principles of open government, where public engagement is actively encouraged through inclusive digital channels.

The policy dimension (blue cluster) is closely tied to the institutionalization of openness in the design of public policies. In Contagem, openness is integrated into environmental policies, urban planning, and social programs. Transparency in budgeting processes and mechanisms for public consultation provide citizens with opportunities to influence municipal policies. This aligns with the scholarly consensus that open government can only function effectively when the principles of transparency and participation are embedded in the policy-making cycle. In other words, the practices observed in Contagem demonstrate that open policies are not a mere formality but operate as mechanisms for redistributing power between the state and society.

The policy dimension (blue cluster) is directly related to the institutionalization of transparency in the creation of public policy. Contagem incorporates openness into environmental policies, urban development, and social programs. Transparency in budgeting procedures and platforms for public participation enable residents to influence the direction of municipal policy. This is consistent with the scholarly agreement that open government can only work successfully when openness and engagement are included into the policy-making process (Nam, 2012; Piotrowski, 2017). In other words, the activities witnessed in Contagem show that open policies are more than just a formality; they function as means for dispersing power between the state and society.

The local practice dimension (red cluster) is best shown in the instance of Contagem. Keywords like inclusiveness, sustainability, and wise governance highlight the city's effort to contextualizing openness based on the specific needs of its citizens. For example, projects involving waste management information disclosure and environmental sustainability demonstrate that openness is valued not only administratively, but also in terms of public service delivery, which has a direct influence on residents. The implementation of smart governance in Contagem demonstrates how digital technologies are linked

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with social inclusion principles, therefore promoting open government as a solution to handle the complex difficulties of major metropolitan areas (Janssen et al., 2012).

Thus, the clustering findings depicted in the network map are not abstract representations of reality, but rather reflect active behaviors on the ground. Contagem highlights how the three main pillars of open government—normative, policy, and local practice—converge within a single municipal governing arena. This reinforces the argument that open government is inherently multi-level: it originates from global values, is institutionalized through national and local policies, and ultimately materializes in context-specific everyday practices that respond to citizens' needs.
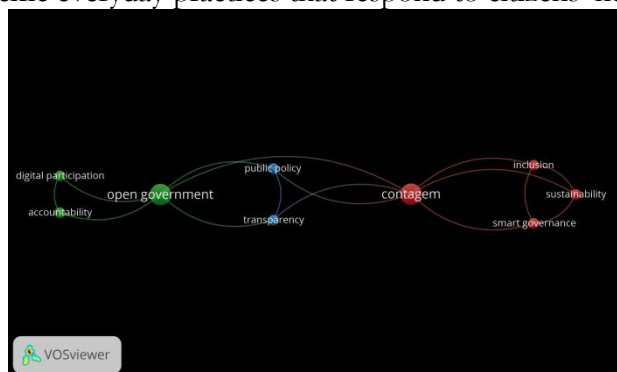

Figure 2. Network Visualization

Source: Author's data processing (2025)

The overlay visualization (Figure 3) demonstrates a significant conceptual transformation in research on open government in Brazil, particularly in the case of the City of Contagem. During the initial period (2014–2016), the primary focus of research remained centered on normative concepts such as *transparency*, *public policy*, and *accountability*. This is consistent with the characteristics of Brazil's early implementation of the Open Government Partnership (OGP), which prioritized public information disclosure, policy integrity, and increased governmental accountability (Meijer et al., 2012; Wirtz & Birkmeyer, 2015). As a result, scholarship at this period was more normative in character, emphasizing adherence to global principles for open government.

During the transitional era (2017-2019), a significant change occurred as Contagem emerged as a new node in the research environment. The inclusion of Contagem in the bibliometric mapping reflects a shift from the normative realm to practical application via city-level case studies. At this point, digital participation became a more prominent issue, reflecting attempts to expand digital democracy and increase citizen involvement in public decision-making processes (Janssen & Helbig, 2018). Contagem was therefore positioned as a contextual laboratory of open government, implementing technology-based participatory initiatives.

In the most recent term (2020-2022), the research focus shifted toward a more strategic orientation, emphasizing themes such as inclusivity, sustainability, and smart governance. Scholarship on Contagem has evolved beyond transparency and accountability to include sustainable development, smart city governance, and inclusive participation for all segments of society (Criado & Gil-García, 2019; Gil-Garcia et al., 2016). Contagem therefore emerges as an important example of how the notion of open government has grown from a normative guideline to a transformational tool that connects openness, digital innovation, and sustainable urban development.
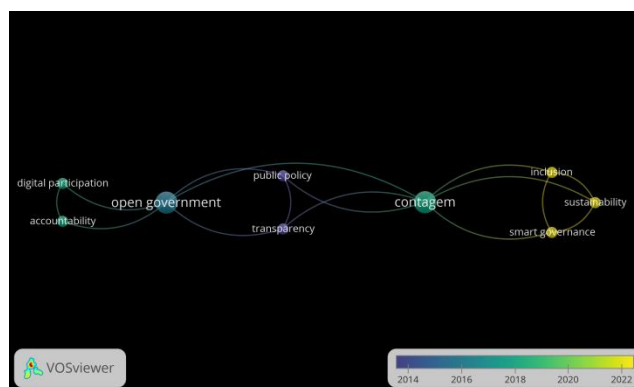
Figure 3. Overlay visualization

Source: Author's data processing (2025)

The density visualization (Figure 4) shows that the conversation on open government in Contagem is organized into two main levels. The first is the conventional layer, which includes terms like digital engagement, accountability, transparency, and public policy. This layer demonstrates that Contagem's open government policies are strongly based in the fundamental values of information sharing, policy openness, and public accountability. This setting is consistent with the literature, which emphasizes that open government was first focused on openness and public information access (Meijer et al., 2012).

The second layer is transformational, as seen by the introduction of buzzwords like inclusivity, sustainability, and smart governance. The emergence of this cluster represents a conceptual shift toward incorporating the sustainability agenda and smart governance frameworks within the larger idea of open government. This growth is consistent with worldwide trends in which open government is increasingly viewed as a strategic tool for enhancing inclusive governance and sustainable development (Wirtz et al., 2019).

The local context emphasizes Contagem's prominence as a separate node on the visualization map. Its existence suggests that open government procedures in Contagem have distinct qualities that set them apart from other Brazilian towns. As a result, Contagem may be considered as a local laboratory demonstrating how the Open Government Partnership's principles are transformed into more participatory, transparent, and community-responsive municipal policies (Peixoto & Fox, 2016).

Taken together, the visualization highlights that the implementation of open government in Contagem advances along two simultaneous trajectories: maintaining the classical principles of openness and accountability while simultaneously adopting transformative agendas aimed at inclusive, sustainable, and technologically driven governance. This dual trajectory demonstrates that Contagem is not merely following Brazil's national agenda but is actively striving to construct a more progressive model of *smart and sustainable open government*.
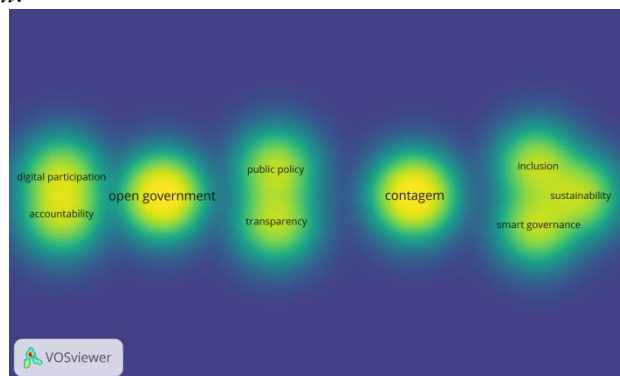

Figure 4. Density visualization

Source: Author's data processing (2025)

Contagem has articulated five commitments under the Open Government Partnership (Open Government Partnership, 2022). The first is to enhance and further develop the System of Popular and Citizen Participation within the Municipality of Contagem, with the aim of broadening popular and democratic engagement in the formulation of public policies. Although the municipality already possesses a wide array of participatory instruments, there remains a pressing need to integrate these mechanisms, to delineate more clearly the specific functions and attributions of each participatory channel, and to explore opportunities for advancing deliberative processes. The institutional design of the municipal system of popular and citizen participation has not yet been fully realized, leaving numerous instruments either underutilized or entirely inoperative—such as the *Talk to the Mayor* program, the Interreligious Council, and the City Council.

In addition to the fact that many councils and other instruments have incomplete appointments or are awaiting regularization, there is currently a lack of a participation governance system with centralization of information, methodological improvement, and monitoring of the fulfillment of demands, evaluation, and accountability of results. The teams are absorbed with numerous daily demands, which limits the planning character of participation and tends to a reactive action subordinated to the janitorial logic.

Establish the Decide Contagem (Decidim) digital platform and combine a number of instruments, procedures, and avenues for involvement to improve public policies, integrate historically underrepresented groups in politics, and affect territorial injustices. The territorial approach, interest group method, and thematic approach are three complementing approaches that we are looking for in this system. All of these strategies ought to work together according to a common systemic logic that aims for cross-cutting convergence of the different strategies rather than rivalry.

By centralizing all channels and participatory processes through the use of the digital platform Decidim, the municipality's relationship with its citizens will become more expansive and well-organized. This will also increase transparency and co-management for the development of a participatory governance system, enabling citizens to participate in politics and decision-making. In addition to serving as a store of each channel's history and memory, the Decidim tool's implementation improves the participation channels by transforming them into a hybrid that combines virtual and in-person procedures, allowing for more consistent deliberative processes.

For instance, the tool will facilitate discussions, promote the participation culture, and enable the consultation of public policy and the broadcast of events and meetings. This commitment relates to the objective of integrating Contagem into the global network of participatory cities and fostering data openness, innovation, transparency, and public involvement. With the goal of qualifying public service, the Decidim tool will facilitate the growth of a government that is more devoted to society and favors the creation of forums for productive discussions.

The second commitment is to develop and implement the Contagem Integrity Plan. At present, the municipality faces a marked deficit in initiatives explicitly aligned with the principles of open government, coupled with the absence of policies designed to promote transparency, foster citizen participation, and institutionalize programs that provide guidance on ethics, morality, integrity, and anti-corruption practices. The degree of involvement and engagement of municipal secretariats with ethics, transparency, integrity, and compliance practices remains limited. Isolated compliance efforts require greater organization and systematization in order to cultivate an institutional culture that enhances both credibility and efficiency in the execution of municipal administration activities. Currently, the municipal code of ethics is scarcely disseminated among public servants, with only a few initiatives and campaigns dedicated to the prevention, detection, and correction of non-conformities. Furthermore, there is a critical need to strengthen monitoring mechanisms and to expand activities aimed at the timely identification of risks and the implementation of effective mitigation measures, while simultaneously advancing transparency across municipal operations.

The Contagem IntegrityPlan-PIC will be developed and standardized. Through an integrity plan developed in accordance with Contagem's reality, we hope to foster a change in the culture of transparency and integrity with all departments, employees, and other stakeholders. This will be achieved

by taking actions that will improve the delivery of services to citizens, spread the integrity culture throughout the Municipal Executive Branch's Public Administration agencies and entities, and increase the sense of ethics, accountability, and integrity. Additionally, we will develop mechanisms for monitoring and improving the execution of activities in accordance with best international practices, which will enable external investments and further development for the city.

With the implementation of the PIC, we expect to act more assertively in the detection and prevention of acts of corruption, irregularities, and deviations of conduct, as well as to develop actions to improve the management of resources, ensuring more transparency and efficiency through the identification of risks, anticipation of problems, and to promote ethical conduct among employees, agents, and third parties, aiming to improve the institution's image, the effective correction of non-conformities, and the construction of a more honest environment. To reestablish the population's trust and participation in public actions; greater effectiveness in the destination of public money; greater engagement of the executive secretariats regarding the resolution of problems, especially those that present the greatest dissatisfaction of the population; restoration of public integrity.

The third commitment is to implement the Chamber for Prevention and Administrative Resolution of Conflicts in Contagem (CPRAC-C). At present, the Municipal Attorney-General's Office of Contagem manages approximately 6,500 lawsuits in addition to a significant number of administrative procedures. A considerable proportion of these cases stem from routine demands initiated by citizens, which substantially increase the workload of the institution. A smaller share involves strategic cases—that is, disputes of considerable political relevance for the municipal public administration. In both instances, the current mechanisms demonstrate low levels of effectiveness, both in the promotion of citizens' rights and in the timeliness of responses to their concerns.

Two-thirds of OGP global members have made commitments regarding Open Justice. Half of these members are in Latin America. In the region, most of Open Justice commitments only cover the actions of the courts, leaving aside other spheres in which is possible to qualify legal processes and their results for the population - for example, the administrative self-composition of conflicts. Since 2010, rules on conciliation and mediation procedures have emerged in Latin America. In Brazil, since 2015, several federal laws have established the foundation for consensual dispute resolution within the public administration. Law No. 13.140/2015 on Mediation regulates the use of mediation as a formal instrument for resolving conflicts, including those involving public entities. Complementarily, Law No. 13.105/2015, the Code of Civil Procedure, institutionalizes alternative dispute resolution (ADR) mechanisms within judicial and administrative processes. These are further reinforced by Law No. 9.784/1999, which governs administrative procedures within the federal public administration and emphasizes principles of legality, efficiency, and citizen participation, as well as by Law No. 12.527/2011, the Access to Information Law, which expands transparency and accountability in state–society relations.

These legal frameworks not only authorize the creation of chambers for resolving disputes between public agencies and individuals but also embed transparency, participation, and accountability as core principles of governance. In this way, they create conditions for building negotiated compromises that advance Open Justice, both within and beyond the actions of the courts, aligning local initiatives in Contagem with broader national commitments to open government.

For this reason, the Contagem City intends to advance in the development of this field with the creation of the CPRAC-C, which will contribute to more effective and speedy access to rights by the population. The City Executive Power of will forward a bill to the City Council for the implementation of the CPRAC-C, in order to promote consensual resolution of disputes in public administration, without the direct involvement of the judiciary. As a result, it is expected to increase the administrative solution of conflicts that have or have not become the subject of lawsuits, with the consequent reduction of response time and distribution of new cases, in adittion to promotion of more effective solutions to strategic conflicts and access to rights by the population.

The commitment will increase the efficiency of access to justice by citizens and the effectiveness of the solution of strategic actions involving different public administration agencies, as well as reduce

the volume of actions on repeated matters. In a broader sense, the commitment will empower citizens to participate more actively in the solution of legal issues which, with the CPRAC-C, will be closer to daily reality and can be more feasible, adequate, and agile, without the necessary interaction with the Judicial Courts.

The CPRAC-C will be a chamber that, in the long term, will contribute to the reduction of conflicts between the Public Administration and the population. In this sense, this commitment will converge with the Brazilian national movement to promote the prevention and consensual resolution of disputes, enabling access to justice and the construction of more effective, responsible, and inclusive institutions. The creation of the CPRAC-C is supported by target 16 - Peace, Justice, and Effective Institutions - of the United Nations (UN) Sustainable Development Goals (SDGs), which aims to promote peaceful and inclusive societies for sustainable development, provide access to justice for all, and build effective, accountable, and inclusive institutions at all levels. This is a commitment that matters to the OGP insofar as access to justice is indispensable for the democratic rule of law.

The fourth commitment is to develop a mobile application for the georeferencing of third-sector institutions, thereby ensuring that citizens have direct access to information regarding the services delivered in partnership with the municipality. At present, the majority of Contagem's population remains largely unaware of the social services provided by civil society organizations in collaboration with municipal authorities, resulting in significant information asymmetry. This condition further generates the risk of political capture of such services by specific groups. On average, the municipality maintains partnerships with approximately 60 civil society organizations, each engaged in diverse activities oriented toward the social sector. Nevertheless, citizens typically learn about these organizations and their services primarily through groups concentrated within particular regional areas of the city. Consequently, the outreach and effectiveness of the activities conducted by the third sector in partnership with the municipal administration remain limited in scope.

Create a user-friendly application that will make it easier to obtain information on civil society groups that have partnered with the municipality. This will include details about the organizations' locations, operations, and activities. Given that more people will be aware of the presence and accessibility of services and activities, the outcomes are anticipated to be more citizen autonomy, less political capture of public projects and services, and service expansion.

With the development of the application, the Municipality will make it more accessible and expand the reach of information about the services provided in partnership with civil society organizations. Although digital exclusions are a challenge, internet access, especially on smartphones, is an important open government tool. Citizens, by accessing this information, will be able to take greater advantage of the activities offered by the entities, strengthening social protection factors and ensuring a reduction in social vulnerability. The open government has the important role of giving transparency to the actions of the municipality toward its taxpayers. This commitment is just one of the steps to be followed to make available in a digital way total access to the population to the services offered by the third sector, besides guaranteeing the improvement in the management of public resources.

The fifth commitment is to enhance both the usability and the substantive content of the Transparency Portal of the Municipality of Contagem. Although the current portal formally complies with legislative requirements, the information it provides is presented in a manner that is excessively complex, thereby hindering accessibility and comprehension by citizens. The search functions operate inefficiently, while a considerable amount of data is not made available in open format. This situation underscores the need for systematic improvements in the organization and presentation of information, as well as in the integration of the portal with internal municipal systems in order to facilitate timely updates. Moreover, adjustments to the portal's layout are required to improve usability and ensure greater accessibility. Against this backdrop, the commitment is designed to study, propose, and implement reforms so that the Transparency Portal may more effectively fulfill its role as a public space dedicated to the dissemination of information and the promotion of transparent governance.

The Municipality of Contagem still provides a large number of services in an analogical way, requiring citizens to use traditional tools to request services and follow up on actions. It is necessary to

redesign processes, along with computerization. In the Transparency Portal, the information is segmented according to the characteristics of the internal systems, making it difficult to locate and understand the data, requiring prior knowledge of the logic of each information system of origin, which makes it very difficult for the citizen who is not an expert in each area to assimilate and find the content of the information.

Develop a portal that more efficiently meets the legislation and the population, improving the search mechanisms, improving usability, presentation and delivery of data, using a clear and easy to interpret language, with more graphic resources and a better offer of open data, making the content more accessible to citizens and strengthening the Transparency Portal as an important instrument of social control. Implementing new features and improvements, we hope to consolidate the Transparency Portal as a tool that allows citizens to inspect and ensure the correct application of public resources, in an increasingly efficient way, expanding the interest and involvement of citizens in government actions, strengthening social control and data transparency.

The commitment to improve the Transparency Portal's usability and content is based on the principles of transparency, technology, and innovation, ensuring greater accessibility to public data, expanding the forms of inspection, instigating the interest and more active participation of society, enabling the development of better public policies and greater effectiveness and quality in the application of public resources, in order to build a transparent public administration, prioritizing the interests and needs of citizens. See Table 1

Table 1. Open Government Commitments of Contagem

No	Commitment	Core Challenges	Actions	Expected Outcomes
1	Enhancing and Expanding the System of Popular and Citizen Participation (Decidim)	Participatory instruments remain underutilized; limited engagement from business sectors and legislative representatives; absence of an integrated governance system for participation	Deployment of the Decidim digital platform; integration of multiple participation channels (in-person and virtual); adoption of territorial, interest-group, and thematic approaches	Broader and more inclusive citizen engagement; strengthened transparency and accountability; consolidation of participatory democratic culture
2	Designing and Implementing the Contagem Integrity Plan (PIC)	Lack of comprehensive transparency and integrity policies; weak engagement of municipal secretariats in ethics and compliance practices; limited dissemination of the code of ethics	Formulation of the Contagem Integrity Plan (PIC); promotion of an institutional culture of integrity; establishment of mechanisms for detecting and preventing corruption	Organizational culture shift towards transparency; more effective corruption prevention; increased public trust and service efficiency
3	Establishing the Chamber for Prevention and Administrative Resolution of Conflicts (CPRAC-C)	Excessive judicial workload (6,500 cases); slow and ineffective judicial processes; limited access for citizens to non-litigious dispute resolution	Drafting and submission of legislation to establish CPRAC-C; institutionalization of consensual administrative dispute resolution mechanisms	Reduced judicial burden; more agile and accessible conflict resolution; enhanced citizen access to justice and institutional effectiveness
4	Developing a Mobile Application for Georeferencing Third-Sector Institutions	Citizens lack awareness of services provided by civil society organizations (CSOs); information asymmetries foster risks of political capture; limited reach of social services	Development of a user-friendly mobile application providing georeferenced information on CSO services and activities	Expanded access to social services; increased citizen autonomy and reduced political capture; strengthened social protection and reduced vulnerabilities
5	Improving the Usability and Content of the Transparency Portal	Portal complies with legal requirements but remains difficult to navigate; information not always available in open data formats; poor usability,	Redesign of the Transparency Portal with improved usability, clearer language, advanced search tools, and better open data integration	Strengthening of the Portal as a tool for social oversight; enhanced citizen participation in monitoring public resources; improved public policy design and

		complex presentation, and inadequate search functions		service delivery

Source: Author's data processing (2025)

4. CONCLUSION

This study reaffirms that open government is not merely a global agenda promoted through the Open Government Partnership (OGP), but has also acquired significant local relevance, as evidenced by its implementation in the City of Contagem, Brazil. Historically, the evolution of open government has progressed from the mere right to access information toward a paradigm of *sustainable open government*, underpinned by digital technologies and artificial intelligence. Through five core commitments—increasing citizen participation through Decidim, integrating ethical governance through the Integrity Plan, institutionalizing deliberative forums through the CPRAC-C, innovating with a geo-referencing application for disaster response and urban management, and improving the Transparency Portal—the case of Contagem demonstrates how the principles of transparency, accountability, and public participation are operationalized.

The results show how seriously the municipal administration has committed to bridging the gap between the local requirements of its residents and the global OGP objective. However, a number of obstacles stand in the way of their effective implementation, such as poor and relatively exclusive participation, disparities in the population's digital literacy, and the possibility that regulations will just become procedural or symbolic. The entire potential of open government to promote cross-sectoral policy integration is also limited by the incomplete linkage across participatory mechanisms.

To consolidate the open government agenda, the municipal administration must promote more inclusive participation, integrate participatory mechanisms into policymaking processes, and ensure the operationalization of the Integrity Plan. In addition, the CPRAC-C should be popularized, the Transparency Portal redesigned with user-centered features, and the geo-referencing innovation expanded through multisectoral collaboration. These measures are critical not only for positioning Contagem as a pioneer within Brazil, but also for establishing it as a model of learning for open government practices across Latin American cities.

Ethical approval

Not Applicable.

Informed consent statement

Not Applicable.

Authors' contributions

SAA contributed to conceptualization. RE contributed to theoretical framework development; Literature analysis; Writing – original draft preparation. The both of them collaborate in doing data curation, Methodology (bibliometric analysis with VOSviewer), Visualization interpretation, Writing – review & editing; Policy contextualization.

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Statement of Disclosure

The authors declare no conflicts of interest.

Notes on Contributors

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REFERENCES

Aboalmaali, F. S., Daneshfard, K., & Pourezzat, A. A. (2020). A Pattern to Recognition of Triggering Element of Open Government Implementation in Iran's Public Organizations (Case Study: Ministry of Interior). *Journal of Public Administration*, *12*(1), 145–174. https://doi.org/10.1080/01900692.2020.1645684

Afandi, S. A., Erdayani, R., & Afandi, M. (2024). Open Parliament: Study from Indonesia and Philippines. *Journal of Governance and Social Policy*, *5*(1), 126–147. https://doi.org/10.1016/j.giq.2024.101855

Bonina, C., & Eaton, B. (2020). Cultivating Open Government Data Platform Ecosystems through Governance: Lessons from Buenos Aires, Mexico City and Montevideo. *Government Information Quarterly*, *37*(3), 1–15. https://doi.org/10.1016/j.giq.2020.101479

Criado, J. I., & Gil-García, J. R. (2019). Creating public value through smart technologies and strategies: From digital services to artificial intelligence and beyond. *International Journal of Public Sector Management*, *32*(5), 438–450. https://doi.org/10.1108/IJPSM-07-2019-0178

Donthu, N., Kumar, S., Mukherjee, D., Pandey, N., & Lim, W. M. (2021). How to Conduct a Bibliometric Analysis: An Overview and Guidelines. *Journal of Business Research*, *133*(1), 285–296. https://doi.org/10.1016/j.jbusres.2021.04.070

Gao, Y., Janssen, M., & Zhang, C. (2021). Understanding the evolution of open government data research: towards open data sustainability and smartness. *International Review of Administrative Sciences*, *89*(1), 59–75. https://doi.org/10.1177/00208523211009955

Gascó-Hernández, M. (2014). Open government: Opportunities and challenges for public governance. *The Spanish Journal of Public Administration*, *161*(1), 11–33. https://doi.org/10.1016/j.giq.2014.06.003

Gaviria-Marin, M., Merigó, J. M., & Baier-Fuentes, H. (2019). Knowledge management: A global examination based on bibliometric analysis. *Technological Forecasting and Social Change*, *140*(12), 194–220. https://doi.org/10.1016/j.techfore.2018.07.006

Gil-Garcia, J. R., Zhang, J., & Puron-Cid, G. (2016). What makes a city smart? Identifying core components and proposing an integrative and comprehensive conceptualization. *Information Polity, 21*(1), 61–87. https://doi.org/10.3233/IP-150362

Gil-Garcia, R., Gasco-Hernandez, M., & Pardo, T. (2020). Beyond Transparency, Participation, and Collaboration? A Reflection on the Dimensions of Open Government. *Public Performance & Management Review*, *43*(3), 483–502. https://doi.org/10.1016/j.giq.2020.09.001

Janssen, M., Charalabidis, Y., & Zuiderwijk, A. (2012). Benefits, Adoption Barriers and Myths of Open Data and Open Government. *Information Systems Management*, *29*(4), 258–268. https://doi.org/10.1080/10580530.2012.716740

Janssen, M., & Helbig, N. (2018). Innovating and changing the policy-cycle: Policy-makers be prepared! *Government Information Quarterly*, *35*(4), 99-115. https://doi.org/10.1016/j.giq.2018.09.001

Khurshid, M. M., Zakaria, N. H., Arfeen, M., Rashid, A., Shehzad, S. U. N., & Faisal, H. M. (2022). Factors Influencing Citizens' Intention to Use Open Government Data—A Case Study of Pakistan. *Big Data and Cognitive Computing*, *6*(31), 1–22. https://doi.org/10.1016/j.giq.2022.101698

Kulsum, U., Nurmandi, A., Isnaini, Muallidin, Jafar, M., Loilatu, & Kurniawan, D. (2022). A Bibliometric Analysis of Open Government: Study on Indonesia and Philippines. *Journal of Governance*, *7*(1), 133–143. https://doi.org/10.1080/01900692.2017.1419069

Lnenicka, M., & Saxena, S. (2021). Re-Defining Open Government Data Standards for Smart Cities' Websites: A Case Study of Selected Cities. *Digital Policy, Regulation and Governance*, *23*(4), 398–411. https://doi.org/10.1108/DPRG-12-2020-0174

Meijer, A. J., Curtin, D., & Hillebrandt, M. (2012). Open government: Connecting vision and voice. *International Review of Administrative Sciences*, *78*(1), 10–29. https://doi.org/10.1177/0020852311429533

Mendonça, R. F., & Maia, R. C. M. (2022). Digital platforms and democratic deliberation in Brazil: Lessons from local governments. *Journal of Latin American Studies*, *54*(2), 335–357. https://doi.org/10.3145/epi.2020.ene.03

Michener, G., & Bersch, K. (2013). Conceptualizing the Quality of Transparency. *Politics \& Society*, *41*(4), 529–558. https://doi.org/10.3233/IP-130299

Moon, M. J. (2020). Shifting from Old Open Government to New Open Government: Four Critical Dimensions and Case Illustrations. *Public Performance and Management Review*, *43*(3), 535–559. https://doi.org/10.1080/15309576.2019.1691024

Moral-Muñoz, J. A., Herrera-Viedma, E., Santisteban-Espejo, A., & Cobo, M. J. (2020). Software Tools for Conducting Bibliometric Analysis in Science: An Up-to-date Review. *Multidisciplinar*, *29*(1), 629–635. https://doi.org/10.3145/epi.2020.ene.03

Nam, T. (2012). Suggesting frameworks of citizen-sourcing via Government 2.0. *Government Information Quarterly*, *29*(1), 12–20. https://doi.org/10.1016/j.giq.2011.07.005

Noushin, M. K., Farajollah, R., Mahdi, M., & Mahmoud, S. (2020). A Model for Measuring the Willingness of Policy Makers to Open Government in Iran. *Journal of Public Administration Perspective*, *11*(2), 35–64. https://doi.org/10.1016/j.giq.2020.101491

Open Government Partnership. (2024). *Contagem open government journey*. https://www.opengovpartnership.org/contagem-open-government-journey

Peixoto, T., & Fox, J. (2016). When Does ICT-Enabled Citizen Voice Lead to Government Responsiveness? *World Development*, *79*, 124–139. https://doi.org/10.1016/j.worlddev.2015.11.019

Piotrowski, S. J. (2017). *Transparency and secrecy: A reader linking literature and contemporary debate*. Lexington Books.

Prastya, D. E., Misran, & Nurmandi, A. (2021). A Bibliometric Analysis of E-Democracy On Government Research. *Jurnal Ilmiah Mimbar Demokrasi*, *20*(2), 71–80. https://doi.org/10.1080/01900692.2020.1840325

Ruijer, E., Détienne, F., Baker, M., Groff, J., & Meijer, A. J. (2020). The Politics of Open Government Data: Understanding Organizational Responses to Pressure for More Transparency. *The American Review of Public Administration*, *50*(3), 156–172. https://doi.org/10.1016/j.giq.2020.101449

Safarov, I. (2019). Institutional Dimensions of Open Government Data Implementation: Evidence from the Netherlands, Sweden, and the UK. *Public Performance and Management Review*, *42*(2), 305–328. https://doi.org/10.1080/15309576.2018.1438296

Shao, D. D., & Saxena, S. (2019). Barriers to Open Government Data (OGD) Initiative in Tanzania: Stakeholders' Perspectives. *Growth and Change*, *50*(1), 470–485. https://doi.org/10.3390/su11133607

Wampler, B., Touchton, M., & Pereira, F. (2021). Participatory Governance During the Covid-19 Pandemic: A Case Study of Brazil. *World Development*, *137(1)*, 105-123. https://doi.org/10.1016/j.worlddev.2020.105295

Wang, V., & Shepherd, D. (2020). Exploring the Extent of Openness of Open Government Data – A Critique of Open Government Datasets in the UK. *Government Information Quarterly*, *37*(1), 405-241. https://doi.org/10.1016/j.giq.2019.101405

Wirtz, B. W., & Birkmeyer, S. (2015). Open Government: Origin, Development, and Conceptual Perspectives. *International Journal of Public Administration*, *38*(5), 381–396. https://doi.org/10.1080/01900692.2014.942735

Wirtz, B., Weyerer, J., & Rösch, M. (2019). Open Government and Citizen Participation: An Empirical Analysis of Citizen Expectancy towards Open Government Data. *International Review of Administrative Sciences*, *83*(3), 453–463. https://doi.org/10.1080/01900692.2017.1419986

Zhao, Y., Liang, Y., Yao, C., & Han, X. (2022). Key Factors and Generation Mechanisms of Open Government Data Performance: A Mixed Methods Study in the Case of China. *Government Information Quarterly*, *39*(4), 1717-1731. https://doi.org/10.1016/j.giq.2021.101630