

**FALTA DE ENGAJAMENTO ENTRE CIDADÃOS E GOVERNOS: UMA  
BARREIRA ENFRAQUECENDO A PARTICIPAÇÃO SOCIAL NAS  
ESTRATÉGIAS DE GOVERNANÇA DIGITAL NA ADMINISTRAÇÃO  
PÚBLICA BRASILEIRA**

*THE LACK OF ENGAGEMENT BETWEEN CITIZENS AND GOVERNMENTS: A  
BARRIER UNDERMINING SOCIAL PARTICIPATION IN BRAZILIAN PUBLIC  
ADMINISTRATION DIGITAL GOVERNANCE STRATEGIES*

**FÁBIO PINHEIRO DOS SANTOS**

PONTIFÍCIA UNIVERSIDADE CATÓLICA DO RIO GRANDE DO SUL (PUCRS)

**EDIMARA MEZZOMO LUCIANO**

PONTIFÍCIA UNIVERSIDADE CATÓLICA DO RIO GRANDE DO SUL (PUCRS)

**ROSIANE ALVES PALACIOS**

PONTIFÍCIA UNIVERSIDADE CATÓLICA DO RIO GRANDE DO SUL (PUCRS)

**LILIANA DA SILVA BARCELLOS**

**Nota de esclarecimento:**

O X SINGEP e a 10ª Conferência Internacional do CIK (CYRUS Institute of Knowledge) foram realizados de forma remota, nos dias 26, 27 e 28 de outubro de 2022.

**Agradecimento à órgão de fomento:**

This study was financed in part by the Coordenação de Aperfeiçoamento de Pessoal de Nível Superior - Brasil (CAPES) - Finance Code 001.

ANOS  
SINGEP

## **FALTA DE ENGAJAMENTO ENTRE CIDADÃOS E GOVERNOS: UMA BARREIRA ENFRAQUECENDO A PARTICIPAÇÃO SOCIAL NAS ESTRATÉGIAS DE GOVERNANÇA DIGITAL NA ADMINISTRAÇÃO PÚBLICA BRASILEIRA**

### **Objetivo do estudo**

Este artigo visa identificar barreiras para a adoção de objetivos estratégicos relacionados à participação social na Administração Pública brasileira presentes na recém-lançada Política Brasileira de Governança Digital.

### **Relevância/originalidade**

Os resultados obtidos podem servir como referência para a definição de estratégias que possam mitigar os efeitos das barreiras estruturais e culturais que influenciam a eficácia das práticas de governo d-governança no governo.

### **Metodologia/abordagem**

Foi realizada uma pesquisa exploratória qualitativa através da análise de documentos e entrevistas semiestruturadas com gestores de TICs de organizações públicas.

### **Principais resultados**

Um conjunto de 25 diferentes barreiras à participação social foi identificado e depois agrupado em quatro categorias, classificadas como barreiras estruturais ou culturais, de acordo com a literatura. Posteriormente, estas barreiras foram distribuídas em três dimensões (individual, organizacional e estratégica).

### **Contribuições teóricas/metodológicas**

Os resultados permitiram discutir os resultados obtidos por Meijer (2015) and Melitski et al (2011) no cenário brasileiro. A falta de envolvimento dos cidadãos nas questões governamentais e a falta de iniciativas governamentais são as barreiras mais citadas.

### **Contribuições sociais/para a gestão**

A principal contribuição aos profissionais é que os resultados podem contribuir para uma melhor compreensão dos aspectos que envolvem a adoção da d-governança através de agentes públicos.

**Palavras-chave:** Governança digital, e-participação, Participação social, Organizações Públicas, Barreiras

*THE LACK OF ENGAGEMENT BETWEEN CITIZENS AND GOVERNMENTS: A  
BARRIER UNDERMINING SOCIAL PARTICIPATION IN BRAZILIAN PUBLIC  
ADMINISTRATION DIGITAL GOVERNANCE STRATEGIES*

**Study purpose**

This article aims to identify barriers for the adoption of strategic goals related to social participation in the Brazilian Public Administration present in the recently launched Brazilian Digital Governance Policy.

**Relevance / originality**

The results obtained can serve as a reference for the definition of strategies that can mitigate the effects of structural and cultural barriers that influence the effectiveness of d-governance practices in government.

**Methodology / approach**

To this end, a qualitative exploratory research was conducted through document analysis and semi-structured interviews with ICT managers from public organizations.

**Main results**

A set of 25 different barriers for social participation was identified and then grouped into four categories, classified as structural or cultural barriers according to the literature. Posteriorly, these barriers were distributed in three dimensions (individual, organizational and strategic).

**Theoretical / methodological contributions**

The results made it possible to discuss the outcomes obtained by Meijer (2015) and Melitski et al (2011) in the Brazilian scenario. The lack of citizens' involvement in government issues and the lack of governmental initiatives are the most cited barriers.

**Social / management contributions**

The main contribution to practitioners is that the results may contribute to a better understanding of the aspects that involve the adoption of d-governance through public agents.

**Keywords:** Digital Governance, e-participation, Social participation, Public Organizations, Barriers

## 1 Introduction

Information and Communication Technologies (ICT) play an essential part in supporting the sharing and integration of information among government and other external stakeholders (Pereira, et al., 2017). Organizations in the public sector are increasingly using the democratic potential of ICT to promote citizen engagement in their organizational processes.

The underlying principle of this approach is the idea that it is not technology alone that will determine the success of these initiatives but rather how the ICT artifacts will be employed to achieve government strategic objectives (Panagiotopoulos, Moody, & Elliman, 2012). The main key for the achievement of expressive results in the use of ICTs in governments is the capacity to manage the interactions of the organizational and technical aspects (Scholl, Kubicek, Cimander, & Klischewski, 2012).

The focus of electronic government (e-government) efforts is to deliver services more efficiently and effectively (Greenberg & Newell, 2013; Tassabehji, Hackney, & Popovič, 2016), attenuating the excessive dependence on the government intermediation between services and citizens. However, with the changes in citizens' profiles and the opening of governments combined with the emergence of digital technologies, digital governance (d-governance) arises (Greenberg & Newell, 2013). The use of ICTs to provide convenient information, government services, and citizen participation (Kalsi & Kiran, 2015). It goes beyond electronic services, provided citizens can participate in decision-making processes through online interactions. Digital governance is promoted by greater transparency and citizen participation through online tools co-created by governments and societies.

It has been some time since digital governance discussion and initiatives are common in several countries as a promise of a more citizen-centered government instead of a service-centered one (Saxena, 2005), or even narrower views such as process-centered or civil-servant-centered ones. The promotion of citizen-centered digital government actions results in the enrichment of the debate on public issues and assists participatory decision-making and collective intelligence (Smith & Martín, 2020). Conversely, some of these initiatives have not yet achieved the expected benefits because they focus essentially on the use of technology, leaving governance, and the needs of citizens in secondary place (Cardullo & Kitchin, 2019). In a more participatory model, interaction is considered to be constitutive of democracy itself, where the formation of opinions and political actions based on forums, groups, or new virtual communities promote the development of civil society (Chadwick, 2003).

The research is based on the presumption that ICTs, like all organizational resources, must be focused on value creation. In the public sector, where investments must generate the highest public value to citizens (Meijer, 2015), d-governance acquires even more pronounced importance for the generation of public value by the use of ICT assets aligned with the defense of public interests. In this scenario, it is observed that more open and transparent governments provide a new paradigm of innovation in public administration, which is built around three concepts: transparency, participation, and collaboration (Estévez-Ortiz et al., 2016). In this way, participatory and interactive technologies (such as social media tools reinforced by mobile connectivity or digital TV) help citizens and governments to synchronously interact in order to improve decision-making and increase productivity (Al-Aufi, Al-Harthi, AlHinai, Al-Salti, & Al-Badi, 2017). D-governance is a way to improve government's effectiveness through co-creation with citizens who have the possibility to propose, debate, and vote to contribute to public management (Smith & Martín, 2020) – however, governments are not fast to adopt new technologies to d-governance (Meijer, 2015).

Several examples can be mentioned of how attempts to transform the public sector have failed in the last few decades due to rigid norms, bureaucracy and complexities of actions, showing that ICT-enabled changes are questioned through existing institutional practices (Tassabehji et al., 2016). In this context, it is noted that public managers are working to ensure that the transformation introduced by d-governance adoption improves the relationship between government and citizens (Melitski, Carrizales, Manoharan, & Holzer, 2011). However, there are major obstacles to the success of technology implementations in government actions, such as project and system failures and human and cultural issues (Melitski et al., 2011). Thus, in order to overcome the different barriers to d-governance, public managers need to think on different strategies in the different phases of a project (Meijer, 2015)**Erro! Fonte de referência não encontrada.**

Aligned with this global trend, the Brazilian Federal Government recently launched the Digital Governance Policy (DGP), which aims to guide all initiatives related to the use of ICT in the relationship between the federal government and citizens. This policy is a way to increase the effectiveness of the initiatives and the generation and benefits for the whole society by expanding access to government information, improving public services, and increasing social participation (Brasil, 2016a). Three of the 10 listed strategic objectives referred to social participation. The objective of this study is to identify barriers to the adoption of strategic goals related to social participation in the Brazilian DGP, which is applied to the whole federal administration. The research question is related to which are the barriers to DGP adoption in the Brazilian scenario.

Considering the fact that public organizations are using the potential of ICTs to promote citizen engagement in their organizational processes, enabling new forms of communication between governments and citizens (Janssen, Rana, Slade, & Dwivedi, 2017), it is important to identify and understand which are the barriers to social participation in the entire cycle of public policy development.

There is a need for a better understanding of the difficulties in involving citizens in government processes, as systematic research on the barriers to Digital Governance adoption is still scarce (Meijer, 2015; Savoldelli, Codagnone, & Misuraca, 2014). It is important to emphasize that having access to the Internet or e-government technological apparatus will not necessarily ensure that all governments adopt e-government (Margetis, 2020). There are structural and cultural barriers that influence the relationship between strategies and the adoption of digital governance. In Brazil, studies indicate the predominance of government sites focused on delivering public services to citizens, however, there are no effective tools for citizen participation (Sampaio, 2010). The research gaps that drive this study are the lack of publications on the barriers to d-governance adoption in public organizations (Meijer, 2015) especially considering the global south context, and on the understanding of citizen participation difficulties in the government policies conception (Saxena, 2005).

## 2 Digital Governance and Social Participation

### 2.1 The use of new ICTs to promote social participation

The literature has indicated potential benefits that a government can leverage through the use of ICTs in order to improve its relationship with citizens, such as: providing up-to-date information on government events and projects; alert and direct people in the event of natural disasters, such as floods or disease outbreaks; commercialize their services to the public and make them more accessible; and encourage the co-production of services by collecting relevant comments from participating citizens (Al-Aufi et al., 2017). The use of ICT by governments is

related to the expansion of democratic practices when providing public services in the online mode (Cunha & Miranda, 2013). In this sense, social media, with its information dissemination, relationship development, and conversation and connectivity functionalities, has rapidly penetrated government organizations (Chen, Xu, Cao, & Zhang, 2016).

Thus, social media offers governments a new approach to create transparency and accountability, increase opportunities for participation and collaboration in decision making, or improve public services (Guillamón, Ríos, Gesuele, & Metallo, 2016). E-participation is defined as the use of ICT to support democratic decision-making, allowing the dialogue between governments and citizens using a range of ICT tools (Zheng, 2017).

In relation to the promotion of ICTs to change the relationship between government and citizens, e-participation can be defined from a variety of perspectives, including civic engagement and citizen participation (Jung, Park, Wu, & Park, 2015). In this context, these terms can sometimes be interchangeable. For example, when citizen involvement is initiated and controlled by the government to improve or gain support for decisions, programs, or services or as the government attempts to involve citizens in the decision-making process and administrative management. It is defined as services that allow users to create an online profile and generate content in a collaborative way, social media tools have the potential to connect citizens directly to government actors and other citizens in real-time (Mergel, 2016).

A variety of new technological tools are available for the development of e-government (Nam, 2016). The main intentions of governments when creating or adopting government electronic tools are to increase efficiency and effectiveness (Glyptis et al., 2020). With the development of recent technological tools, there is the possibility that e-government evolves into a d-governance system, where citizens can participate in the processes of decision-making through online interactions (Greenberg & Newell, 2013). In this way, d-governance is driven by greater transparency and promoted by citizen participation through online technological tools developed in conjunction with society.

In this scenario, the ubiquitous and prevalent form of Web 2.0, which is the second generation of Web access and use, characterized as participative, disseminated, and integrated, has the potential to change both the way the government provides services and its relationship with the public. In this context, a set of popular Web 2.0 technologies, such as social networks (Facebook), wikis, blogs, microblogs (Twitter), social voting (e.g., IdeaFactory and IdeaStorm platform), and multimedia sharing platforms (YouTube and Flickr) can promote open and user-oriented governance (Nam, 2016).

In this scenario, in recent years, there has been a considerable growth of e-government projects using ICTs to assist governments in providing online information delivery and delivery services. New technologies promote interconnectivity between government and citizens, companies, employees, and others, as well as encourage the transition, decentralization, and internal and external accountability in public administration (Guillamón et al., 2016).

It is important to stress that the tools for participation demand that new forms of public management be thought out, thinking of the citizen as an integral part of the elaboration of the political agenda and its execution and not only the matter of government actions (Cunha & Miranda, 2013). Corroborating this understanding, in the era of Government 2.0, advanced ICT applications facilitate civic engagement in the formulation of public policies and decision-making through social media where they can facilitate the reciprocal relationship between public organizations and their managers with citizens more than other web-based platforms (Jung et al., 2015).

However, social media is a group of Internet-based applications that rely on the ideological development and technological foundations of Web 2.0 to enable stakeholders and government to communicate, collaborate and engage in governance (Chen et al., 2016).

According to the authors, social media is reshaping public governance, generating new opportunities for building government-citizen relations and providing public services, public involvement, and government transparency.

## 2.2 Digital Governance

Digital governance is the way governments use ICTs to provide information and government services to citizens, improve the quality of ICT services and provide greater opportunities for citizen participation. It involves a new style of leadership and a new way of making public policy and investment decisions (Kalsi & Kiran, 2015). Thus, d-governance has evolved as a model of governance that enhances the potential of the public sector to use appropriate technologies to improve governance relations – both internal and external – on various government levels. Its objectives are to promote democracy, the right of expression, and human dignity, support economic development, and encourage efficient and effective delivery of services to the society (Saxena, 2005). Digital governance is the use of ICTs to create public value through the collaboration of society and provide suitable information and citizen participation (Kalsi & Kiran, 2015). Some common characteristics for the conceptualization of d-governance, namely: (i) the use of ICTs to support public services and democracy; (ii) a governance model; (iii) functions that empower citizens; (iv) networks and relationships; (v) the use of ICTs to improve governance; and (vi) the relationship between state and citizens mediated by technology (Bannister & Connolly, 2012). The concepts of electronic government, digital government, electronic governance and digital governance are used by several researchers as synonymous (Guimarães & Medeiros, 2005; Heckert & Aguiar, 2016). In this research, the terms electronic government and digital governance will be used, along with the definition of digital governance described by Kalsi & Kiran (2015), which is described as the use of ICTs to provide convenient information and citizen participation. Table 1 groups the main concepts of digital governance and the sources.

Table 1 – Digital Governance definitions

Digital Governance Definition	Author
Use of ICT to create public value through the collaboration of society.	Chen et al. (2016)
Use of ICT to support public services, government administration, democratic processes and relations among citizens, civil society, the private sector, and the state.	Bannister (2010) and Dawes (2008)
Use of ICTs to provide convenient information, government services and citizen participation.	Kalsi & Kiran (2015)
Use of ICTs by public managers to carry out their activities of supervision, planning, organization and coordination on various government levels.	(Nawafleh, Obiedat, & Harfoushi, 2012)
Use of ICTs by the government to promote improvements in service delivery, transparency and public accountability in order to guarantee the quality of life of citizens.	Zamora, Barahona, & Palaco (2016)
Use of ICTs by the public sector aiming to improve information and service delivery, encouraging citizen participation in the decision-making process, and making governments more responsible, transparent, and effective.	(UN Department of Economic and Social Affairs, 2016)

Dawes, (2008) studied the development of d-governance in the United States of America related to technology adoption, policy development, and implementation priorities. Based on that, she describes that it can be found in the following five objectives:

- a) Construction of a political framework – Statutes and policies that legitimize d-governance and establish political goals and rules for the use of information by the actors involved;
- b) Improvement of public services – Improvements in services with a citizen, customer, or company-oriented approach, which seeks government information or services;
- c) High quality and cost-effective in government operations – Professional and technical improvements in public management through the search for efficiency, adequate infrastructures, investments, organizational innovation, and performance evaluation;
- d) Citizen involvement in the democratic process – Through the use of technologies, enabling greater interaction with the public in accessing information and public consultations;
- e) Administrative and Institutional Reform – Emphasis on accountability, transparency and trust of society in governance processes, defining the roles of government, citizens and society.

Researching the barriers to the adoption of electronic services, Savoldelli et al. (2014) observed that in the context of the European Union, barriers can be grouped into three types: economic-technological, managerial-organizational, and political-institutional. Thus, Meijer (2015) defines barriers to the innovation of d-governance as characteristics – real or perceived – of legal, social, technological, or institutional contexts that work against the development of governance, because they impede demand, acting as a disincentive or obstacle for users to become involved with d-governance, impede supply, acting as a disincentive or obstacle for public sector organizations to offer d-governance, and restrict efforts to reconfigure access to information, people and public services in an ICT-enabled way. In addition to this definition, Meijer (2015) points out the following categorization for them: (i) governance barriers, which encompass organizational, inter-organizational, financial, and technological barriers; (ii) government cultural barriers; (iii) citizens' structural barriers, such as digital exclusion; and (iv) cultural barriers on the citizens' side. The author points out that citizens' image of government can be a major barrier, especially if they do not trust the government. It also highlights citizens' lack of interest and non-perception of utility as major cultural barriers.

In this context of lack of confidence in the government, Janssen et al. (2017) report that studies have shown that citizen confidence in governments has declined a lot in recent decades, with technologies being considered the key to improving government–public relations through the d-governance. However, while e-government has the potential to improve transparency and accountability, e-services will only be adopted if citizens feel they are trusted. Thus, it is perceived that trust is important in the context of electronic services to help users overcome perceptions of uncertainties and risks, which may inhibit citizen participation in the d-government technologies (Janssen et al., 2017).

Thus, there are significant political, economic and technical barriers to the development of a government as a learning organization in which information flows freely between civil servants and citizens. Sophisticated data sharing by government agencies threatens resistance to individual privacy, especially as citizens become more aware (Chadwick, 2003). Table 2 shows the barriers according to Meijer (2015).

Table 2 –Barriers to Digital Governance

Barrier	Government	Citizens
Structural	Legal restrictions, lack of funding, lack of staff and technical skills,	Lack of technological facilities, limited knowledge and skills, lack of time and lack

	lack of support from managers and top management and technological constraints.	of integration with innovation in daily routines.
Cultural	Resistance to change, fear that innovation will weaken the robustness of government and attachment to bureaucracy.	Lack of interest, little confidence and negative image of the government, with no perceived utility, and resistance to technologies.

Source: Meijer, (2015)

In the analysis of individual, organizational and strategic barriers, Melitski et al. (2011) identified that (i) individual barriers include personnel issues, such as lack of training, education or motivation; (ii) organizational barriers occur when there are insufficient resources, coordination constraints, lack of communication and when the group culture is not taken into account; and (iii) strategic barriers involve policies and other external constraints that may inhibit success. Technical barriers, on an individual level, are issues of information failure and data integrity, while organizational-level technical barriers include the complexity and integrity of project systems (including hardware and software). At the strategic level, technical barriers include infrastructure needs, system integration, information architecture, and alignment between the strategic objectives and the main technologies used, as can be seen in Table 3.

Table 3 - Individual, organizational, and strategic barriers

Individual	Organizational	Strategic
Lack of training Personnel without proper qualification Lack of a proper number of government employees	Lack of support from managers Lack of planning Lack of internal communication plan The high complexity of projects	Lack of political support Exaggerated submission to the defined goals Lack of necessary infrastructure

Fonte: Melitski (2011)

It is possible to observe that organizational management barriers are the most common, as identified by the study participants. At the organizational level, critical organizational barriers include lack of support, planning, communication, and resources. Interestingly, out of the 11 barriers to success identified, only two were of a technical nature: overly complex projects and lack of infrastructure (Melitski et al., 2011).

### 3 Research Method

This research is characterized as a cross-sectional exploratory research, which has a qualitative focus due to the data collection and analysis techniques used during the research procedures, especially considering the definitions presented by Hernández-Sampieri et al. (2006). The exploratory strategy was selected in order to enhance the familiarity with the subject and create more suitable propositions to future studies. The data collection was performed through document analysis and semi-structured interviews.

Document analysis was used in order to examine and understand the Digital Governance Policy created by the Brazilian Federal Government (BFG) in 2016. Moreover, this analysis has the intention to identify the expectations and strategies aiming to achieve the DGP goals.

Interviews were performed with 11 civil servants in charge of IT Management in several

Brazilian government offices or state-run companies, aiming to identify the aspects involved in the DGP, more specifically the adoption barriers. The results of the document analysis were the basis for the elaboration of the interview scripts. The use of semi-structured interviews contributed to obtain more accurate and detailed answers from the interviewees and also avoid the misinterpretation that governance is just based on best market practices adoption.

The respondents came from 10 different government offices and organizations, which perform activities related to the use of ICT on the strategic or middle-management level and present at least five years of experience in IT leadership activities. They were selected by convenience. All the interviews were conducted directly with the interviewees and took an average of 45 minutes. No specific number of interviews was specified. However, data saturation was obtained after nine interviews since no new categories or codes came up.

Respondents were identified as R1 to R11. The interviews were recorded and later transcribed by one of the researchers. After that, data were input on NVIVO® qualitative analysis software. According to Gibbs (2009), the use of a software contributes to a better organization of the *corpus* and increases the codification traceability and, consequently, the quality of the qualitative research.

Considering that the research focus is exploratory and the intention was not to study the Federal Government case, respondents can be considered as experts in the use of ICT in governments, who perceived the studied phenomena from within the government. Data analysis was performed through categorial content analysis, especially considering the definitions presented by Bardin (2016).

## 4 Results and Discussion

### 4.1 Digital Governance Policy and the increasing social participation

The social participation initiatives were identified through document analysis, more specifically the analysis of the DGP. Social participation is considered as the possibility of collaboration of citizens in all steps of the public policy cycle and in the creation and improvement of public services. This policy aims to be a guide for all initiatives related to the use of ICT in the relationship between the federal government and the citizens. The ICT Department, which is part of the Ministry of Planning, Budget, and Management, conducted a discussion and elaborated the policy that was published through Decree 8638 (Brazil, 2016a). This policy is a way to integrate all initiatives related to d-governance in public administration in order to increase the initiative's effectiveness and the generation of benefits for the whole Brazilian society by expanding access to government information, improving digital public services, and increasing social participation (Brazil, 2016b).

According to the document, the necessity of refreshing and repositioning the Brazilian e-government initiatives that started in the early 2000s was the main reason to create the DGP, to be more aligned with technological advancements and society. Thus, the concept of electronic government, which refers to automatize services delivered by the government to society, is expanded to the digital governance concept in which citizens are no longer passive and start participating more actively in the creation of public policies. Citizen participation can happen not only through the Internet but also through other digital platforms, such as Digital TV.

Reference documents in the international scenario were considered, like the recent publication of the Organization for Economic Cooperation and Development (OECD, 2014), which recommends that governments need to develop and implement d-governance strategies focused on the following:

- a) Ensuring greater transparency, openness and inclusiveness of government processes and operations;
- b) Encouraging engagement and participation of public, private and civil society stakeholders in policy making and public service design and delivery;
- c) Creating a data-driven culture in the public sector;
- d) Reflecting a risk management approach to addressing digital security and privacy issues and including the adoption of effective and appropriate security measures to increase confidence in government services.

A set of strategic principles and objectives were identified throughout the document, namely information access, services delivery and social participation. These strategic objectives should respect a set of nine principles that guide the activities of d-governance in public administration, namely focus on the society's necessities, openness and transparency, sharing of the services capability, simplicity, prioritization of digital public services, information security, and privacy, social control and participation, government as an open platform and public services based on innovative solutions. The last three are related to social participation, which is the focus of this research.

The central focus of the policy is to increase the benefits to society and the public value by the operationalization of the mentioned strategies while respecting the principles. Putting into practice one of the principles defined by the policy, the one related to participation, the document was discussed with the society through seminars involving people from several hierarchical levels of the federal government, researchers and academics, civil servants from other levels (from the judiciary and legislative or even from states or municipality) and representatives of business or professional associations.

#### 4.2 Barriers to Social Participation

The barriers to the social participation axis were identified through interviews with civil servants involved in ICT and e-government-related activities. The interview script was developed after the results of the previous step (item 4.1). The first of the three-section interview script was based on three open questions tackling the hindrances to the achievement of the strategic goals related to social participation. The second section inquired the respondents about the level of difficulties in adopting the DGP strategy through the strategic goals as well as the current barriers in the respondent's department. The third section was related to some department and respondent characteristics.

DGP and its strategic axis of social participation aim to foster collaboration in the elaboration of public policies, as well as to encourage the participation of society throughout the cycle of these policies. This involves allowing the direct interaction of citizens with governments to express their demands, monitor policy implementation, and assess their impact. It also pursues the encouragement of the active participation of society in the creation and improvement of accessible public services, considering regional diversities and needs and enabling the direct interaction of citizens with the government to express their needs. In the same way, the social participation axis focuses on continuous improvement of the interaction between government and society through digital, social, and other technologies, considering accessibility for everyone, regardless of their physical, motor cognitive, cultural and social limitations (Brazil, 2016b).

The first strategy was related to fostering collaboration in the public policies cycle. A set of 25 barriers was identified from the data collected and can be grouped into four categories:

- a) (12 evidence) Lack of citizens' involvement by governments (R1, R3, R6, R7, R10, R11);

- b) (6 evidence) Lack of participation initiatives by government and lack of interest in participation by citizens (R2, R3, R4, R5, R9, R10);
- c) (3 evidence) Lack of proper disclosure of information (R4, R7, R11); and
- d) (4 evidence) Government focused on itself (R5, R9, R11).

The lack of citizens' involvement by the government was the barrier with the highest number of evidence in the whole research. This barrier is highly worrisome because it shows that governments are not involving citizens enough in extending the services to citizens. Respondent 6 summarized this aspect: The state must be a hand that goes to the citizen and not contrary (R6). Without efforts from part to part, digital governance is not going to happen. According to Respondent 3, citizens do not feel part of the government (R3).

The next strategy is related to the improvement of the direct and indirect interaction between the government and society. It is focused on continuously improving the interaction between the government and society through digital, social, and other technological means, considering, in all the instruments used, accessibility for all people, regardless of their physical-motor and perceptive, cultural, and social capacities. A set of 18 barriers were identified and assigned to the following four groups:

- a) (7 evidence) Lack of citizens' involvement by governments (R1, R2, R3, R5, R10, R11);
- b) (4 evidence) Lack of proper understanding of the state functions and responsibilities (R2, R8, R9, R10);
- c) (3 evidence) Lack of proper number of civil servants and their limitations to deal with the digital era (R4, R7, R11);
- d) (4 evidence) Inadequate government-citizen communication (R4, R7).

Lack of citizens' involvement by governments was again an important barrier, according to the respondents. It is connected with the lack of proper understanding of the state's functions and responsibilities.

In another approach, Respondents 4 and 7 pointed out that the lack of disclosure of government information is a motivation for government-citizen detachment. As stated by Respondent 7, "If the citizen knows that he/she can participate in government easily, he/she will" (R7). However, in support of Meijer's, Nam (2016) mentions that the image of the government amongst citizens can be an important barrier, especially if they do not trust governments, as well as great cultural barriers of citizens for their lack of interest and non-perception. Respondent 2 states that there is a lack of culture in popular participation and discredit in public institutions. Along the same lines, Respondents 4 and 5 point out the lack of interest of the population in politics and lack of credibility in governments, and the not-so-good image of the government in society, respectively. Thus, it is worth noting that Janssen et al., (2017) affirm that governments have relied heavily on confidence in governments in recent decades. Technologies are considered the key to improving government–public relations through digital government. Thus, while e-government has the potential to improve transparency and accountability, electronic services will only be adopted if citizens feel they are trusted. Thus, it is perceived that trust is important in the electronic context to help users overcome the perception of uncertainties and risks, which may inhibit citizen participation in d-government technologies (Janssen et al., 2017).

On the other hand, individual barriers as identified by Melitski et al. (2011) were found. For Responder 6, the public server ends up being the main barrier, and for Responder 3, there is a lack of technical knowledge about them. In this type of barrier, there are incidences of personal issues, such as lack of training, education, or motivation. Strategic barriers were also found from the answers. According Melitski et al. (2011), strategic barriers involve lack of policies and other external constraints that may inhibit the success of initiatives in d-governance. In this sense, Respondent 9 reports that there is no political will to make this really

happen, and Respondent 7 states that there is a lack of marketing to inform citizens on television that the state has tools to make their life easier.

The next strategy is related to the improvement of the direct and indirect interaction between government and society. It is focused on continuously improving the interaction between government and society through digital, social, and other technological means, considering, in all the instruments used, accessibility for all people, regardless of their physical-motor and perceptive, cultural, and social capacities. A set of 18 barriers were identified and grouped:

- a) (7 evidence) Lack of citizens involvement by governments (R1, R2, R3, R5, R10, R11);
- b) (4 evidence) Lack of proper understanding of the state functions and responsibilities (R2, R8, R9, R10);
- c) (3 evidence) Lack of proper number of civil servants and also their limitations to deal with the digital era (R4, R7, R11);
- d) (4 evidence) Inadequate communication between governments and citizens (R4, R7).

Lack of citizen's involvement by governments was again an important barrier, according to the respondents. It relates to the lack of proper understanding of the state's functions and responsibilities.

In this way, it is verified that without efforts from both parties, d-governance will not be fulfilled. These findings are in agreement with (Meijer, 2015), who defines obstacles to the innovation of Digital Governance as characteristics – real or perceived – of legal, social, technological, or institutional contexts that work against the development of governance, because they impede demand by acting as a disincentive or obstacle for users to become involved with d-governance or impede provision by acting as a disincentive or obstacle for public sector organizations to offer d-governance and restrict efforts to reconfigure access to public information, people and services in an ICT-enabled manner.

## 5 Final Remarks

This exploratory study aimed to identify strategies and barriers to the adoption of d-governance in the Brazilian public administration in relation to the strategic objectives related to social participation. The DGP and its strategy were analyzed, and three strategic objectives related to social participation were identified, namely: fostering collaboration in the public policy cycle, broadening and encouraging social participation in the creation and improvement of public services, and improving direct interaction between the government and the society. These strategic objectives are grouped in one axis called social participation, which is related to the principle of participation and social control.

One of the main barriers is the lack of citizen involvement in government issues, which has 19 pieces of evidence from content analysis. This lack of interest is directly related to the image of public organizations amongst citizens, especially in their experiences in the use of public services and the discredit of politicians. The lack of governmental initiatives is the second most cited barrier. In fact, these two barriers can be considered as a twofold one, due to the lack of cooperation from both parties. This barrier is going to be overcome just when all parties work together as a society, in a more collaborative way. Citizens need to stop being self-centered and think of the greater good. Governments need to stop being self-serving and think of the greater good as well. Permanent participation, active transparency, and the establishment of effective mechanisms for interaction and discussion constitute a good starting point for social participation.

Some strategic initiatives can be used to address the identified barriers, such as training public servants and raising awareness of the real purpose of public organizations. An organizational governance and ICT structure would contribute to reducing complexity through collaborative decision-making and the possibility of avoiding redundant initiatives that contribute to higher transaction costs and complexity. Also, an organizational restructuring to reduce the hierarchical levels and thus reach a more horizontal structure would contribute to faster decision making, reducing the complexity within the possibilities of a public organization. Initiatives of open government would greatly contribute to placing the citizens at the center of the process, not the public servant or the processes, which would contribute to a rethinking of the structures and hierarchical levels and even of the formalization necessary and adequate for a public organization that serves the citizens.

In this way, it will be possible to bridge the existing political, economic, and technical barriers to the development of a government as a learning organization in which information flows freely between civil servants and citizens. However, it is important to envisage that the sharing of information by government agencies, the asynchronous interaction between government–citizens, and the constant monitoring of government actions threaten long-standing functional silos in public organizations, especially as citizens become more aware.

The main academic contribution of this study is the identification of the barriers that influence the relations between the strategies and the adoption of d-governance related to social participation. The main contribution to practitioners is that the results may contribute to a better understanding of the aspects that involve the adoption of d-governance through public agents. Moreover, the results obtained can serve as a reference for the definition of strategies that can mitigate the effects of structural and cultural barriers that influence the effectiveness of d-governance practices in government.

A study limitation is that the interviews were conducted exclusively with the public administration agents of the direct administration in Brazil. It is important to expand the research scope to other branches of the Brazilian public administration as well as to know the citizens' point of view, as a way to identify the impact of cultural variables that might hinder or strengthen DGP adoption. Studies that deepen the comprehension of the strategies identified as enabling the adoption of d-governance in public administration are also suggested as future research, as well as the impact of Web 3.0 on governments, citizens, and e-governance.

## References

- Al-Aufi, A. S., Al-Harthi, I., AlHinai, Y., Al-Salti, Z., & Al-Badi, A. (2017). Citizens' perceptions of government's participatory use of social media. *Transforming Government: People, Process and Policy*, 11(2), 174–194. <https://doi.org/10.1108/TG-09-2016-0056>
- Bannister, & Connolly. (2012). Defining e-Governance. *e-Service Journal*, 8(2), 3–25. <https://doi.org/10.2979/eservicej.8.2.3>
- Bardin, L. (2016). Análise de Conteúdo. São Paulo: Edições 70. *São Paulo: Edições 70*, p. 279.
- Brazil. *DECRETO Nº 8.638, DE 15 DE JANEIRO DE 2016.* , (2016).
- Brazil. (2016b). *EGD - Estratégia de Governança Digital da Administração Pública Federal*. Retrieved from <http://www.sisp.gov.br/egd/wiki/download/file/EGD>

- Cardullo, P., & Kitchin, R. (2019). Being a 'citizen' in the smart city: up and down the scaffold of smart citizen participation in Dublin, Ireland. *GeoJournal*, 84(1).  
<https://doi.org/10.1007/s10708-018-9845-8>
- Chadwick, A. (2003). Bringing E-Democracy Back in: Why it Matters for Future Research on E-Governance. *Social Science Computer Review*, 21(4), 443–455.  
<https://doi.org/10.1177/0894439303256372>
- Chen, Q., Xu, X., Cao, B., & Zhang, W. (2016). Social media policies as responses for social media affordances: The case of China. *Government Information Quarterly*, 33(2), 313–324.  
<https://doi.org/10.1016/j.giq.2016.04.008>
- Cunha, M. A. V. C. da, & Miranda, P. R. de M. (2013). O uso de TIC pelos governos: uma proposta de agenda de pesquisa a partir da produção acadêmica e da prática nacional. *Organizações & Sociedade*, 20(66), 543–566. <https://doi.org/10.1590/s1984-92302013000300010>
- Dawes, S. S. (2008). The Evolution and Continuing Challenges of E-Governance. *Public Administration Review*, 68, S86–S102. <https://doi.org/10.1111/j.1540-6210.2008.00981.x>
- Estévez-Ortiz, F. J., García-Jiménez, A., & Glösekötter, P. (2016). An application of people's sentiment from social media to smart cities. *Profesional de la Informacion*, 25(6), 851–858.  
<https://doi.org/10.3145/epi.2016.nov.02>
- Gibbs, G. (2009). *Análise de dados qualitativos*. Porto Alegre: Artmed.
- Glyptis, L., Christofi, M., Vrontis, D., Giudice, M. Del, Dimitriou, S., & Michael, P. (2020). E-Government implementation challenges in small countries: The project manager's perspective. *Technological Forecasting and Social Change*, 152(September 2019).  
<https://doi.org/10.1016/j.techfore.2019.119880>
- Greenberg, S., & Newell, A. (2013). Transparency Issues in E-Governance and Civic Engagement. *Digital Democracy*, 1753–1773. <https://doi.org/10.4018/978-1-4666-1740-7.ch087>
- Guillamón, M. D., Ríos, A. M., Gesuele, B., & Metallo, C. (2016). Factors influencing social media use in local governments: The case of Italy and Spain. *Government Information Quarterly*, 33(3), 460–471. <https://doi.org/10.1016/j.giq.2016.06.005>
- Guimarães, T. de A., & Medeiros, P. H. R. (2005). A relação entre governo eletrônico e governança eletrônica no governo federal brasileiro. *Cadernos EBAPE.BR*, 3(4), 01–18.  
<https://doi.org/10.1590/s1679-39512005000400004>
- Heckert, C. R., & Aguiar, E. L. de. (2016). Governança digital na administração pública federal: uma abordagem estratégica para tornar o governo digital mais efetivo e colaborativo - a ótica da sociedade. *IX Congresso de Gestão Pública - Consad*, 18.
- Hernández-Sampieri, S. (2006). Análisis de datos cuantitativos. In *Metodología de la investigación* (p. 270–335).
- Janssen, M., Rana, N. P., Slade, E. L., & Dwivedi, Y. K. (2017). Trustworthiness of digital

government services: deriving a comprehensive theory through interpretive structural modelling. *Public Management Review*, 20(5), 647–671.

Jung, K., Park, S. J., Wu, W. N., & Park, H. W. (2015). A webometric approach to policy analysis and management using exponential random graph models. *Quality and Quantity*, 49(2), 581–598. <https://doi.org/10.1007/s11135-014-0010-2>

Kalsi, N. S., & Kiran, R. (2015). A strategic framework for good governance through e-governance optimization: A case study of Punjab in India. *Program*, 49(2), 170–204. <https://doi.org/10.1108/PROG-12-2013-0067>

Margetis, I. M. (2020). The Economic, Political and Social Determinants Of Electronic Government Adoption. Kent State University Honors College.

Meijer, A. (2015). E-governance innovation: Barriers and strategies. *Government Information Quarterly*, 32(2), 198–206. <https://doi.org/10.1016/j.giq.2015.01.001>

Melitski, J., Carrizales, T. J., Manoharan, A., & Holzer, M. (2011). Digital governance success factors and barriers to success in prague. *International Journal of Organization Theory & Behavior*, 14(4), 451–472. <https://doi.org/10.1108/ijotb-14-04-2011-b001>

Mergel, I. (2016). Social media institutionalization in the U.S. federal government. *Government Information Quarterly*, 33(1), 142–148. <https://doi.org/10.1016/j.giq.2015.09.002>

Nam, T. (2016). Citizen attitudes about open government and government 2.0: A path analysis. *International Journal of Electronic Government Research*, 12(4), 46–66. <https://doi.org/10.4018/IJEGR.2016100104>

Nawafleh, S., Obiedat, R., & Harfoushi, O. (2012). E-Government Between Developed and Developing Countries. *International Journal of Advanced Corporate Learning (iJAC)*, 5(1), 8–13. <https://doi.org/10.3991/ijac.v5i1.1887>

OECD. (2014). Recommendation of the Council on Digital Government Strategies. *Public Governance and Territorial Development Directorate*, July, 12.

Panagiotopoulos, P., Moody, C., & Elliman, T. (2012). Institutional Diffusion of eParticipation in the English Local Government: Is Central Policy the Way Forward? *Information Systems Management*, 29(4), 295–304.

Pereira, G. V., Cunha, M. A., Lampoltshammer, T. J., Parycek, P., & Testa, M. G. (2017). Increasing collaboration and participation in smart city governance: a cross-case analysis of smart city initiatives. *Information Technology for Development*, 23(3), 526–553. <https://doi.org/10.1080/02681102.2017.1353946>

Sampaio, R. C. (2010). Governança eletrônica no Brasil: limites e possibilidades introduzidos pelo Orçamento Participativo na Internet. *Planejamento e Políticas Públicas*, (33), 123–144. Recuperado de <http://www.en.ipea.gov.br/ppp/index.php/PPP/article/view/156>

Savoldelli, A., Codagnone, C., & Misuraca, G. (2014). Understanding the e-government

paradox: Learning from literature and practice on barriers to adoption. *Government Information Quarterly*, 31(SUPPL.1), S63–S71. <https://doi.org/10.1016/j.giq.2014.01.008>

Saxena, K. B. C. (2005). Towards excellence in e-governance. *International Journal of Public Sector Management*, 18(6), 498–513. <https://doi.org/10.1108/09513550510616733>

Scholl, H. J., Kubicek, H., Cimander, R., & Klischewski, R. (2012). Process integration, information sharing, and system interoperation in government: A comparative case analysis. *Government Information Quarterly*, 29(3), 313–323.

Smith, A., & Martín, P. P. (2020). Going Beyond the Smart City? Implementing Technopolitical Platforms for Urban Democracy in Madrid and Barcelona. *Journal of Urban Technology*, 0(0), 1–20. <https://doi.org/10.1080/10630732.2020.1786337>

Tassabehji, R., Hackney, R., & Popovič, A. (2016). Emergent digital era governance: Enacting the role of the “institutional entrepreneur” in transformational change. *Government Information Quarterly*, 33(2), 223–236. <https://doi.org/10.1016/j.giq.2016.04.003>

UN Department of Economic and Social Affairs. (2016). *UNITED NATIONS E-government Survey 2016*. Recuperado de <http://unpan1.un.org/intradoc/groups/public/documents/UN-DPADM/UNPAN038853.pdf>

Zamora, D., Barahona, J. C., & Palaco, I. (2016). Case: Digital Governance Office. *Journal of Business Research*, 69(10), 4484–4488. <https://doi.org/10.1016/j.jbusres.2016.03.013>

Zheng, Y. (2017). Explaining Citizens’ E-Participation Usage: Functionality of E-Participation Applications. *Administration and Society*, 49(3), 423–442.



# X SINGEP

Simpósio Internacional de Gestão, Projetos, Inovação e Sustentabilidade  
International Symposium on Management, Project, Innovation and Sustainability  
ISSN: 2317-8302



**CYRUS**™ Institute of  
Knowledge  
MAKE A DIFFERENCE

**CIK 10<sup>th</sup> INTERNATIONAL CONFERENCE**