Diagnosing BPM Governance: A Case Study of Facilitators, Barriers, and Governance Elements in a Hierarchical Public Instituition

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Keywords: BPM Governance, Public Institution, Case Study, Governance Elements, Facilitators, Barriers.

Abstract: Context: BPM initiatives improve processes and adaptability, with governance as a key factor. Problem: BPM governance in hierarchical public organizations faces structural challenges. Objective: This study examines BPM governance in a Brazilian public institution. Method: A case study evaluated objectives, roles, decision-making, facilitators, and barriers. Results: We identified 8 facilitators and 8 barriers. Core areas showed more process maturity, while key challenges included lacking prioritization methodology and inconsistent performance indicators. Conclusions: This research expands BPM knowledge by analyzing governance in hierarchical institutions.

1 INTRODUCTION

Business Process Management (BPM) initiatives aim to identify and improve organizational work procedures (Beerepoot et al., 2023). These interventions vary in complexity, sometimes requiring significant procedural changes that reshape an organization's operations and value chain (Harmon and Trends, 2010).

However, BPM implementation in public organizations presents challenges, with many projects failing or remaining incomplete (Syed et al., 2018). These institutions often exhibit hierarchical structures (Santos et al., 2024), rigid processes (Syed et al., 2018), and low BPM maturity (Dutra et al., 2022). Additional obstacles include cultural rigidity, bureaucratic resistance (Santos et al., 2024), and misalignment between strategic goals and BPM initiatives (Santana et al., 2011)(Valenca et al., 2013). Limited resources and skills further hinder the advancement of BPM efforts (Jurczuk, 2021).

Effective BPM governance is crucial for success (Hernaus et al., 2016)(Jurczuk, 2021), ensuring alignment between organizational objectives, roles, and responsibilities while fostering accountability and continuous improvement (Santana et al., 2011). Public organizations, in particular, require robust governance mechanisms to navigate hierarchical barriers and promote collaboration (Jurczuk, 2021). Governance also aids in managing cross-functional activities, enhancing process integration, and transitioning from unstructured to structured BPM (Hernaus et al., 2016).

This article argues that before initiating a BPM intervention, it is essential to assess the specific organizational context, especially in terms of governance. We present a case study investigating BPM governance competencies in key sectors of a hierarchical Brazilian public institution. Conducted by a Business Process Management Office (BPMO) within a research and development project, the study examines governance elements proposed by Valença et al. (Valenca et al., 2013), including objectives, roles, responsibilities, methodological standards, decision-making processes, and evaluation mechanisms.

By linking these governance elements to facilitators and barriers, this study contributes to the understanding of BPM governance in hierarchical public institutions. The findings offer practical insights for implementing structured and effective BPM practices.

In addition to this introductory section, this paper is divided into the following sections: Section 2 presents the theoretical background and related works; Section 3 presents the research method; Section 4 highlights the general results; Sections 5 and 6 present the details of the results according to the Research Questions based on the BPM governance elements; Section 7 discusses the main findings; and, finally, Section 8 concludes the paper.

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Correa, G., Vilela, J. and Peixoto, M.
Diagnosing BPM Governance: A Case Study of Facilitators, Barriers, and Governance Elements in a Hierarchical Public Instituition.
DOI: 10.5220/0013347900003929
In *Proceedings of the 27th International Conference on Enterprise Information Systems (ICEIS 2025) - Volume 2*, pages 851-858
ISBN: 978-989-758-749-8; ISSN: 2184-4992

2 BACKGROUND AND RELATED WORK

2.1 BPM Governance

BPM governance establishes frameworks to ensure effective BPM implementation aligned with organizational objectives (Jurczuk, 2021). It defines guidelines, structures, and resources to facilitate collaboration in BPM initiatives (Kirchmer, 2009). Governance also involves setting metrics, roles, and responsibilities for managing business processes (Jurczuk, 2021).

Since BPM governance lacks a universal approach (Jurczuk, 2021), we adopt the elements proposed by Valença et al. (Valenca et al., 2013): objectives, organizational structure, roles and responsibilities, activities, infrastructure, methodological standards, decision-making, and control and evaluation mechanisms.

2.2 Related Work

Several studies explore BPM governance challenges and elements. (Jurczuk, 2021) and (Mbengo and Lumka, 2024) highlight barriers in state-owned enterprises, such as cultural rigidity and governance deficiencies. (Doebeli et al., 2011) and (Doyle and Seymour, 2020) examine governance integration in corporations, focusing on roles and decision-making. (Hernaus et al., 2016) and (de Boer et al., 2015) emphasize structured governance as key to BPM maturity.

In Brazil, (Santana et al., 2011) and (Valenca et al., 2013) analyze BPM governance in public institutions, identifying cultural and organizational challenges. Our study builds on these findings by applying governance frameworks to hierarchical public organizations, offering insights into overcoming BPM barriers in this context.

3 RESEARCH METHOD

Research Design and Case Selection. This qualitative research uses a case study to examine BPM governance elements, facilitators, and barriers in a Brazilian hierarchical public institution.

At the time of the study, the institution had low BPM maturity and was beginning BPMO activities. It operates in human resources and processes within a Brazilian federative state, serving the general population. The workforce exceeded 8,000 employees, with over 6,000 in core areas (direct public service) and around 2,000 in administrative roles (supporting internal sectors).

This study is guided by the following Research Questions (RQs): RQ1: What elements of BPM governance are implemented within the public organization? RQ2: What are the key facilitators and barriers to BPM governance in the institution, and what actions can be suggested to ensure successful implementation

Research Steps. The BPM governance diagnosis followed eight stages: Literature review, Organizational analysis, Data collection planning, Sample selection, Questionnaire development, Data collection, Analysis, and Results dissemination.

Managers and technical teams were selected based on organizational charts and consultations, identifying 24 potential managers. The BPMO manager invited them to a one-hour workshop on Process Management, with 13 attending. The workshop was chosen due to institutional constraints and BPMO discussions.

The study focused on a public institution with unique BPM challenges. Given the BPMO's early-stage development, quick data collection was crucial. A questionnaire, detailed in our supplementary material[1], was completed during the workshop. It covered BPM Governance elements (e.g., roles, responsibilities, control, evaluation) (Rosemann and vom Brocke, 2014) (Jurczuk, 2021), along with inputs on the department's value chain, training needs, BPMO scope, and participant feedback.

The Organizational Structure element was not assessed since the institution already had a process office.

Before the research, two pilot workshops were conducted to test question clarity and timing. Participants were selected based on availability, tenure, and commitment to BPM. Their responses were excluded from the final analysis, and they did not join the official workshop.

To accommodate availability, the workshop was held on two dates, following this structure: 1. Opening by the BPMO manager. 2. Presentation of objectives and agenda. 3. Questionnaire completion by participants. 4. Final discussion on BPM. 5. Conclusion and acknowledgments.

The analysis of the closed-ended questions was conducted using statistical methods to provide a descriptive analysis of frequencies and percentages based on the total number of respondents.

For the open-ended questions, a qualitative analysis was conducted following the principles of the-

[1]https://doi.org/10.5281/zenodo.14858817

matic analysis. To this end, a separate file was created for each of the seven open-ended questions, where all responses were listed and the coding process was applied. After the coding phase, a table was created in each file to associate the identified codes with the corresponding themes. The results are presented in Section 4.

Threats to Validity. We identified potential threats to validity and implemented strategies to mitigate them. *Internal Validity:* To minimize response bias, we ensured anonymity and confidentiality, emphasizing the importance of honest answers. *External Validity:* As the study focused on a single institution, we avoided broad generalizations and suggested future research with multiple case studies. *Construct Validity:* We based our instruments on established literature and conducted a pilot test to ensure clarity. *Reliability:* A strict data collection protocol and double coding improved consistency. *Ethical Considerations:* We adhered to ethical principles, ensuring informed consent and data privacy.

These measures collectively strengthened the validity and reliability of our research outcomes.

4 OVERVIEW OF WORKSHOP RESULTS

This section presents the results of each of the 19 questions from the questionnaire applied to thirteen workshop participants.

Participants' Work Areas (Question 1). Seven participants (53.8%) reported belonging to the administrative area, while six (46.2%) were part of the core area.

Generation of Sector Demands. Participants were asked who generates the service demands delivered by their sector (Question 2). The highest number of responses indicated that internal sectors of the institution generate demands (11 responses), followed by society (9 responses), regulatory bodies (8 responses), and other entities (6 responses).

Relationship Between Sector Objectives and the Strategic Plan. Another aspect analyzed was how the results delivered align with the objectives of the institution's Strategic Plan (Question 3). Eight participants (61.5%) stated that the results directly contribute to achieving the goals outlined in the strategic plan, followed by four (30.8%) who responded that they contribute indirectly but do not feed the indicators for the established goals, and one (7.7%) who responded that the results contribute both directly and indirectly.

Management Activities Performed. The assignment of individuals responsible for managing the services provided by the respondents' sectors was also investigated (Question 4). If affirmative, participants were asked to provide examples of the main management activities performed by these managers.

Decision-Making for Service Prioritization. Participants were questioned about methods of prioritizing the services provided by their unit (Question 5). If affirmative, they were asked to indicate which organizational needs are considered for decision-making. Figure 1 presents the main organizational needs for decision-making, with the highest number of responses pointing to the urgency of the demand, cited by 12 participants.

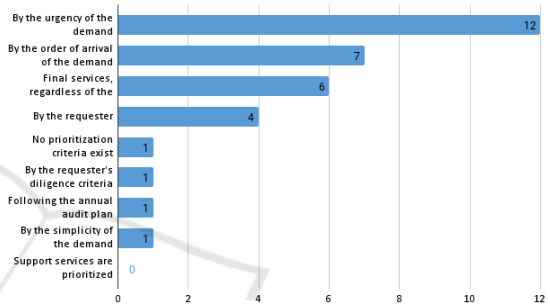

Figure 1: Decision-making for service prioritization.

Sequence of Activity Execution. The most selected response to Question 6 was "There are defined and documented sequences (in physical or digital format)," as shown in Figure 2.

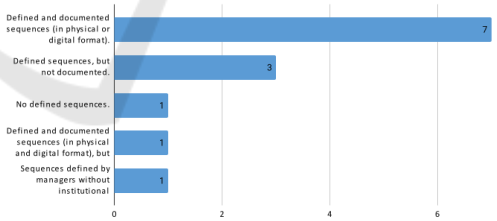

Figure 2: Sequence of Activity Execution.

Initiative for Process Flow Standardization. The most selected response to Question 7 was "The flows are standardized internally within the unit and adjusted as needed," as shown in Figure 3.

Main Tools and Systems Used. The tools and systems were classified into four themes identified during the coding process: - *Internal Tool:* Tools developed, acquired for corporate use, or customized by the institution. - *External Tool:* Free tools available to the general public. - *Document:* Artifacts generated by the institution's work processes. - *Not Specified:* Internal or external tools.

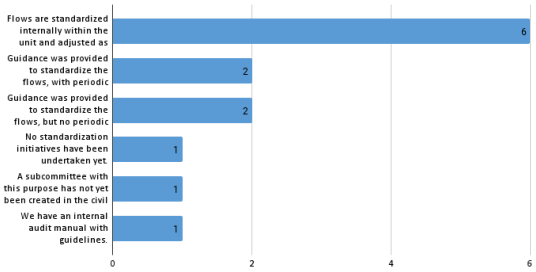

Figure 3: Initiatives for Flow Standardization.

As a result, 55.0% reported using internal tools, 25.0% external tools, 15.0% documents, and 5.0% of respondents did not specify.

Training in Tool Usage. Most participants (7) indicated that learning and improvement occur spontaneously, while 5 reported that training is usually provided to enhance tool usage, as shown in Figure 4.

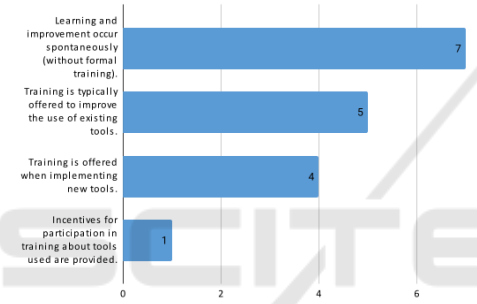

Figure 4: Training in Tool Usage.

Indicators for Monitoring Results. Most participants (38.5%) indicated that indicators are monitored based on pre-established goals, while 30.8% noted that indicators are not usually monitored despite the existence of goals, as shown in Figure 5.

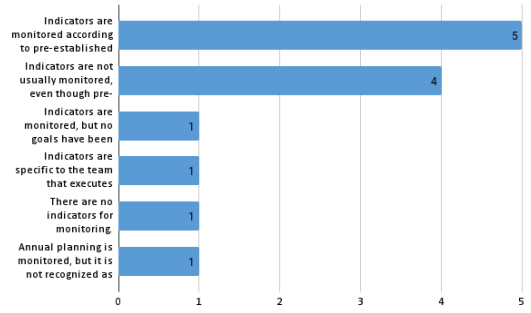

Figure 5: Indicators for Monitoring Results.

Measurement of Unit Results in the Institution. Participants reported varying frequencies for measuring unit results, with the most common being monthly (5 participants), followed by annually (4 participants), as shown in Question 11.

Main Challenges in Service Delivery. The primary challenge identified in Question 12 was the *"Lack of integration with other areas involved in the services provided,"* reported by 69.2% of participants, as shown in Figure 6.

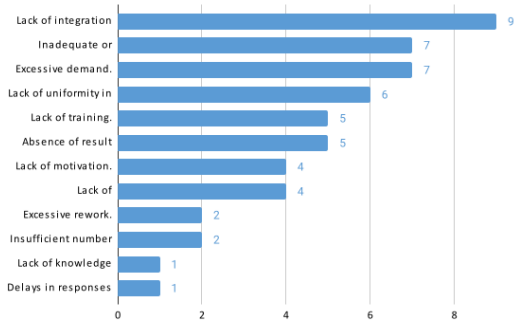

Figure 6: Main Challenges in Service Delivery.

Improvements to Be Introduced in the Institution's Units. The most suggested improvements in Question 13 were **Standardization** (9 participants) and **Training** (6 participants), followed by recommendations for **New tools**, **Recognition**, and **Redistribution**, among others.

Understanding of the Term "Business Process Management." Most participants (11) defined BPM as *Definitions of flows and standards*, while others highlighted *Improvement in outcomes*, *Bottleneck identification*, and *Sector efficiency*.

Means of Acquiring BPM Knowledge. The primary sources of BPM knowledge reported in Question 15 were **Practical experience** (9 participants) and **Digital media content** (7 participants), followed by **Professional training** and other less frequent methods. The level of experience and details of practical knowledge were not assessed.

Business Process Management Initiatives in the Institution. In response to Question 16, most participants reported being **Unaware** or having **Defined an internal tool** (4 each), while fewer cited **First contact through BPMO** or **Having knowledge** (2 each).

Dissemination of the Business Process Management Culture in the Institution. The main strategies suggested in Question 17 were **Training and events**, **Communication**, **Sponsorship and partnerships**, **Awareness**, **New tools**, and **Practical demonstrations in departments**.

Benefits of Business Process Management. The key benefits highlighted in Question 18 were **Activity standardization** (13 participants), **Process flow definition** (10 participants), **Process automation** (11 participants), and **Support for assigning responsibilities** (6 participants).

Additional Suggestions and Comments. In Question 19, participants offered suggestions grouped into three themes: **Praise for the initiative**, **Awareness and training**, and **Careful selection of initial departments**.

5 ELEMENTS OF BPM GOVERNANCE

In the following, conclusions from the initial diagnostic results are presented for each BPM Governance element.

Objectives. The governance element "Objectives" refers to the intentions and goals established by the organization regarding BPM initiatives. It was observed that some participants confused business processes with the organization's internal processes. However, it is believed that there is a notion of business processes in the form of procedures and workflows. Overall, it was concluded that most responses align with the objectives anticipated for a BPM initiative and that the units recognize the need for Process Management to bring efficiency and control to their activities. The main conclusions are presented as follows: Provide Continuous Improvement; Ensure transparency and clarity; Facilitate management for procedural efficiency; Identify bottlenecks; Increase process efficiency; Define and monitor indicators; Prioritize process modeling; Create process flow standards; Propose tools to support workflows and activity execution; In the administrative area, responses highlighted activity and demand monitoring, while the core area emphasized top-down determination.

Regarding sector demands (Question 2), responses from the core area primarily indicated that they contribute directly to achieving the stipulated goals, with 5 out of 13 responses. In the administrative area, responses were divided between contributing directly to achieving the stipulated goals and contributing indirectly without feeding the indicators for the stipulated goals, each with two responses.

Roles and Responsibilities and Activities. The "Roles and Responsibilities" element relates to the functions and duties focused on executing BPM initiatives, while the "Activities" element corresponds to tasks and routines associated with the roles involved in BPM initiatives. Based on these definitions, it was observed that the organization does not have clearly defined roles for Business Process Management. However, individuals responsible for service management were identified in the core sectors.

Additionally, evidence suggests that the core area is more mature in defining and monitoring workflows compared to the administrative area. Actions in the core area aimed at documenting and standardizing work procedures to ensure knowledge management were identified. These conclusions and evidence were drawn from responses to Question 4, with some listed as follows: Conclusions for the Elements: 1- Roles and Responsibilities and 2- Activities- Managers direct how service management should be conducted; Internal sector managers, general coordination, and technical advisory roles have well-defined responsibilities; The Head of the Secretariat is responsible for unit management; The type of service or process class determines responsibility and workflow; Defining and verifying adherence to workflows is a specific role; Workflow definitions exist in the core area; Core area staff have well-defined responsibilities; Demands originate both internally and externally; There is auditing of staff actions and expense monitoring; Staff can be reallocated to support units based on indicators; Some sectors face high demand, while some administrative sectors lack formal assignments.

As expected, of the 6 respondents from the core area, 5 mentioned society as the source of demands, characterized as external demands. In the administrative area, although society was mentioned (5 responses), the majority of responses concentrated on internal institutional sectors, with 7 responses (internal demands).

Methodological Standards and Infrastructure. The "Methodological Standards" element pertains to the use of theoretical models, techniques, notations, reference models, and standardized descriptions of activities. Meanwhile, the "Infrastructure" element encompasses the technical and non-technical foundations required for BPM practices, including physical structure, software tools, staff, and other resources used in BPM initiatives.

The conclusions regarding these two elements are listed as follows: Conclusions for the Methodological Standards and Infrastructure Element- Adoption of new tools; Training on existing tools; Some areas have procedure manuals; Use of systems as a standard work practice; Core area staff receive guidance on procedure workflows; There is training and formal artifacts in the core area.

Another aspect investigated in the process management diagnosis concerned the assessment of IT support in core processes. For this purpose, an inventory of systems used by the institution was conducted. These systems were classified as either critical or supporting tools/systems. To avoid identifying the institution based on the systems used, their names will not be mentioned in this study.

Decision-Making Process. The ”Decision-Making Process” element encompasses the criteria and decision boundaries for prioritizing and defining goals. The conclusions and evidence related to this element are listed as follows: Conclusions for the Decision-Making Process Element - Imbalance between workforce and operational volume. Monitoring of the status and criticality of processes in the core area exists. Demands are analyzed and prioritized.

There are indications of an imbalance between the number of staff and operational capacity, suggesting the need for a reallocation of staff based on demand. Other criteria used for prioritization include criticality (processes stalled for more than 100 days) and the urgency of the demand, where services delivering core outcomes are prioritized, even if they are more complex.

Control and Evaluation. The ”Control and Evaluation” element addresses indicators, metrics, and additional forms of monitoring for BPM initiatives. The conclusions and evidence related to this element are listed as follows: Conclusions for the Control and Evaluation Element-The supervisor must be contacted whenever there are issues with processes to be completed; Monitoring of the status and criticality of processes in the core area exists; Processes in the core area are monitored, and full compliance is tracked; Well-defined and monitored indicators are in place.

It was observed that participants from the core area expressed concern about monitoring work procedures. This conclusion may be related to the fact that the core area is obligated to meet the goals established by superior bodies. One participant mentioned: “We are conducting meetings aimed at achieving the established goals, striving for efficiency and transparency in management.”

A BI tool was specifically mentioned by one participant as an improvement to be introduced in their area to deliver better results, as indicated in Question 13. It is important to highlight that there are indications that the institution’s administrative area lacks well-defined indicators. This is evident from responses by participants in the administrative area emphasizing the need for standardization and clear goals, such as: ”Definition of goals, follow-up meetings to monitor results, management support.” Additionally, one participant responded ”never” to Question 11 (”How often are the results delivered by this unit measured?”). Regarding monitoring frequency, it was concluded that the majority of the core area measures their results on a monthly basis.

Scope. The ”Scope” element was an additional aspect evaluated, encompassing knowledge of BPM initiatives within the public organization, as well as strategies for disseminating BPM within the institution. The conclusions and evidence related to this element are listed as follows: Conclusions for the Scope Element- Four departments were identified with process management initiatives;

Both administrative and core areas linked BPM to existing tools, with some departments using BPM initiatives, yet responses also revealed a lack of awareness about them; Regarding dissemination strategies: - Training and events; - Sponsorship and partnerships; - New tools; - Communication; - Awareness; - Demonstrating the practical application of BPM in departments. Both areas provided similar responses, such as training, better dissemination, and events to help spread the BPM culture; The administrative area emphasized the careful selection of the area to receive BPM activities, while the core area stressed spreading the BPM culture in specific locations.

It was observed that most participants lack knowledge of BPM initiatives in the institution. The results demonstrate that responses included: *Unaware* (4 participants), *Defined an internal tool* (4 participants), *First contact through BPMO* (2 participants), and *Have knowledge* (2 participants). Additionally, the strategies for dissemination most frequently suggested by participants included: *Training and events* and *Communication*.

6 KEY FACILITATORS AND BARRIERS TO BPM GOVERNANCE

As a result of the interviews with participants from the organization, a list of facilitators and barriers was developed, comprising 18 variables: 9 facilitators and 9 barriers.

Facilitators. The facilitators of a BPM initiative are factors that reflect the organization’s strengths and should be leveraged to ensure the initiative’s success. These factors can be used to consolidate the Business Process Management initiative and, in some cases, to eliminate obstacles. In the context of the institution investigated in this study, 9 facilitators were identified and are listed as follows: Facilitators of BPM governance at the studied institution - (F1) Focus on results; (F2) Knowledge sharing among the institution’s sectors; (F3) Cooperation exists between the court’s sectors and occasional training actions; (F4) Openness to listening to people; (F5) Presence of a department dedicated to disseminating process management; (F6) Maturity in the core area regarding the standardization and monitoring of workflows; (F7) Activities, de-

mands, processes in the core area and their compliance are monitored, including auditing of staff actions and expense control; (F8) People management in the institution is guided by indicators; (F9) No significant differences were observed between the administrative and core areas regarding the definition of BPM.

Barriers. The barriers to a BPM initiative are factors that reflect weaknesses or challenges to be addressed by the organization. In the context of the institution, 9 barriers were identified, as listed as follows: Barriers to BPM governance at the studied institution - (B1) High operational workload; (B2) Need for improvements in staff redistribution; (B3) Isolated initiatives for workflow standardization; (B4) Redundancy of assignments; (B5) Lack of training and unfamiliarity with system usage; (B6) Some sectors face high demands, while others in the administrative area lack formal assignments; (B7) Concentration of workflow monitoring on magistrates, creating potential bottlenecks; (B8) Need for recognition policies, team integration, and result tracking; (B9) In the administrative area, there is a highlighted need for greater staff integration.

Based on the results, it is therefore necessary to standardize activities, introduce new tools, train employees, and, above all, ensure that the work is guided by producing clear and objective communication of the measures adopted by the institution.

Suggested Actions. Based on the collected data and team insights, a set of actions has been proposed to enhance BPM governance by addressing barriers (B) and leveraging facilitators (F). Each action connects to multiple elements, reflecting key institutional dynamics.

Key actions include: Institutionalizing tools used (B5, F7); Optimizing task distribution based on competencies and training (B2, B4, B6, F8); Diversifying and mandating relevant training (B5, F3, F8); Expanding access to online courses and offering incentives for instructors (B5, F2, F3, F4); Encouraging recognition and competence management (B8, F8, F9); Defining knowledge management mechanisms and multipliers (B3, B5, F2, F5); Establishing a methodology for prioritizing internal and external demands (B3, B7, F6, F7); Encouraging staff suggestions for projects (B8, F4); Improving BPMO communication and dissemination (B9, F5); Organizing BPM events and training sessions (B5, B8, F3, F5).

An analysis of these actions shows they address most barriers, particularly operational workload (B1), lack of training (B5), and task redistribution (B2, B6). However, some barriers, such as workflow monitoring concentration on magistrates (B7), require further exploration.

7 DISCUSSION

Comparison of Facilitators Across Studies. The findings align with and extend BPM governance literature in public organizations (Santana et al., 2011)(Alves et al., 2014)(Jurczuk, 2021)(Doyle and Seymour, 2020), emphasizing the interconnected roles of facilitators and barriers.

Analyzing **Facilitators** reveals shared and context-specific factors. Universal elements like **top management support** and **team motivation** highlight leadership's role, while unique facilitators reflect organizational culture.

For instance, **cooperation with process clients** is specific to Santana et al. (Santana et al., 2011), whereas Alves et al. stress **financial resources** and **payment schedule adherence** (Alves et al., 2014). Our study adds **workflow standardization maturity** and **knowledge sharing** as key operational facilitators, reinforcing the need for tailored BPM strategies in public institutions.

Comparison of Barriers Across Studies. The comparison of **barriers** to BPM governance reveals both common and context-specific challenges. While **resistance to change** and **lack of methodology** are widespread issues, other barriers stem from unique organizational constraints.

A key barrier is **resistance to change** (Santana et al., 2011; Alves et al., 2014; Doyle and Seymour, 2020; Jurczuk, 2021), linked to cultural norms and disruption fears. Another is the **lack of formalized methodologies** (Alves et al., 2014; Jurczuk, 2021), stressing the need for standardized BPM frameworks.

Additional barriers include **insufficient BPM training** (Santana et al., 2011; Doyle and Seymour, 2020), **bureaucracy** (Santana et al., 2011), and **competition with non-BPM activities** (Alves et al., 2014). Our study adds **high operational workload** and **workflow monitoring on magistrates**, reflecting judicial system constraints.

The alignment of these barriers highlights the need for tailored solutions, such as automation for workload challenges and governance adjustments to integrate BPM into strategic planning.

8 CONCLUSIONS AND FUTURE WORK

This document presented the workshop results on BPM practices and competencies within the institution, conducted with 13 staff members from core and administrative areas.

The following points were observed: **Training was highly requested by participants:** Greater dissemination of BPM concepts, improved use of existing tools, and better result delivery. **Need for adopting new tools:** It remains unclear whether new tools are needed or if better training on current tools would suffice. Institutionalizing internal communication tools is also necessary. **Contributions of BPMO to the institution:** Standardizing process flows to prevent task duplication and introducing workflow support tools. **Core areas appear more mature than administrative areas:** Core areas show greater standardization and workflow monitoring. **Establishing a methodology for prioritizing service execution:** Developing a priority-setting methodology and ensuring accessibility of the prioritization table. **Interest in recognition policies and integration of staff:** Demand for recognition policies, team integration, results tracking, and staff reallocation improvements.

Future work includes analyzing organizational culture to assess its influence on BPM adoption and identify ways to enhance integration.

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