Benefits and Challenges in BPM Adoption in Organizations: An Analysis of Industry Professionals' Perceptions

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*Abstract. **Research Context:** Business Process Management (BPM) is as a key strategic approach to enhance organizational efficiency and align operations with digital transformation. In the face of constant technological evolution and market demands, organizations are challenged to integrate BPM within increasingly dynamic environments, where people, processes, and technologies must operate in synergy. **Scientific and/or Practical Problem:** It is crucial to understand how BPM is currently perceived, implemented, and evaluated in organizations, considering both the consolidated theoretical foundations of recent decades and the new practices that are emerging in organizational contexts. **Proposed Solution and/or Analysis:** This study investigates the critical success factors, main challenges, and perceived benefits of BPM adoption, based on the perspectives of professionals from both public and private organizations. The focus is on the organizational domain and the interplay between people, processes, and technologies. **Related IS Theory:** The research is grounded in the Socio-technical Systems Theory, which views organizations as interdependent systems composed of social and technical subsystems. This theory supports the analysis of how BPM effectiveness depends on the balanced integration of human, technological, and organizational elements. **Research Method:** A survey was conducted with 62 professionals using a structured questionnaire based on existing literature and adapted from a previous study to capture updated perceptions about BPM practices. **Summary of Results:** Findings show that while BPM is recognized for its strategic value (especially in improving communication, standardization, and organizational alignment)it still faces obstacles such as low maturity, cultural resistance, and lack of performance indicators. Leadership support, team training, and cross-level engagement are highlighted as key enablers of BPM success. **Contributions and Impact to IS area:** This study contributes to Information Systems research by emphasizing BPM as a socio-technical approach and offering theoretical and practical insights into its implementation in organizational settings undergoing digital transformation.*

1. Introduction

Business Process Management (BPM) has become a strategic and essential approach for promoting organizational efficiency, operational performance, and competitive advantage in increasingly dynamic and digitally driven business environments [ABPMP Brasil 2013]. BPM enables alignment between organizational activities and

strategic objectives through the identification, modeling, execution, monitoring, and continuous optimization of processes [vom Brocke et al. 2016].

In recent decades, BPM has evolved from an operational initiative to a recognized strategic capability across various sectors [Langenstein 2024]. Its adoption is driven by the need to integrate departments, eliminate redundancies, standardize workflows, and quickly adapt to market changes. The literature highlights several key benefits, including increased efficiency, cost reduction, improved interdepartmental communication, faster decision-making, and greater role clarity [Stürmer da Rosa 2020, Martín-Navarro et al. 2023, Langenstein 2024].

As digital transformation advances, BPM increasingly incorporates technologies such as Artificial Intelligence (AI), Machine Learning (ML), Robotic Process Automation (RPA), and low-code/no-code platforms [Ladeiras and Machado 2024]. Knowledge-intensive processes are particularly challenging to model and improve [Nunes et al. 2023]. This technological integration broadens the scope of process management, enabling not only task automation but also operational intelligence, proactive issue detection, and enhanced customer experience personalization. According to vom Brocke et al. [vom Brocke et al. 2016], modern BPM should be seen as an adaptive practice that combines human, technical, and organizational capabilities to deliver continuous value.

Despite conceptual and technological advances, BPM adoption still faces persistent challenges. A major barrier noted in the literature is low organizational maturity, manifested by the absence of formal governance, lack of performance indicators, and unclear process objectives [Langenstein 2024, Martín-Navarro et al. 2023]. Cultural resistance, insufficient team training, and lack of senior management engagement also hinder BPM from becoming a cross-cutting practice [Stürmer da Rosa 2020, vom Brocke et al. 2016].

Studies suggest that BPM success depends on the interaction between technical and organizational factors. Martín-Navarro et al. [Martín-Navarro et al. 2023] emphasize that acceptance of BPM systems relies on perceived usefulness, ease of use, and institutional support. Langenstein [Langenstein 2024] reinforces the influence of organizational culture, calling for environments that foster collaboration, learning, and innovation.

Key success factors include alignment with organizational strategy, leadership support, technical team competence, clear metrics, and integration with information technology [Stürmer da Rosa 2020]. The absence of any of these elements often leads to isolated initiatives with limited long-term impact. Therefore, understanding BPM as a broad, strategic, cultural, and technological management approach is critical for effective implementation. Successful BPM adoption demands more than tools, it requires a paradigm shift that places processes at the heart of organizational management.

The motivation for this study stems from the classic work of Pritchard and Armistead [Pritchard and Armistead 1999], which analyzed how BPM was perceived and applied in European companies in the late 1990s. Despite acknowledging BPM's relevance, they identified significant difficulties related to terminology, conceptual standardization, and strategic integration. Since then, the literature has evolved, incorporating new perspectives on how professionals perceive and implement BPM in different sectors and

countries [Martín-Navarro et al. 2023, Langenstein 2024, Stürmer da Rosa 2020].

Organizational culture [Lima et al. 2025], institutional maturity [Vilela and Alves 2025], and the perceived utility of process management systems are decisive factors for the successful adoption of BPM [Correa et al. 2025, Jatoba and Alves 2015]. In the Brazilian context, challenges such as cultural resistance, lack of strategic prioritization, and weak integration with organizational objectives continue to hinder effective implementation [Soso 2020]. As vom Brocke et al. [vom Brocke et al. 2016] argue, understanding the organizational context is crucial to achieving consistent and sustainable BPM results.

This research revisits and updates the contributions of Pritchard and Armistead [Pritchard and Armistead 1999], since we did not find a paper with similar goals as their work, considering the transformations that have occurred over the past two decades. Through a partial replication of their original study, adapted to the current Brazilian context, this work aims to provide updated empirical evidence on how professionals perceive BPM in their organizations.

The general objective of this study is to investigate how professionals in public and private organizations perceive the critical success factors for Business Process Management (BPM). Specifically, it seeks to: (i) identify key success factors in the literature; (ii) conduct a survey with professionals in process, quality, or strategic management roles; (iii) analyze and compare the collected data with the original study; and (iv) highlight convergences, gaps, and improvement opportunities in BPM practice. By achieving these goals, the research contributes to assessing the relevance and evolution of classic findings in the light of contemporary organizational practices and technological advances.

This paper is organized as follows: Section 2 presents Background and related work; Section 3 describes the Research Design; Section 4 presents the Results; Section 5 discusses Conclusions and Future Works.

2. Background and Related Work

2.1. Business Process Management (BPM)

Business Process Management (BPM) is a managerial discipline that aims to align internal organizational processes with strategic objectives by promoting operational efficiency, agility, and value delivery [ABPMP Brasil 2013]. It encompasses a structured set of activities such as identifying, modeling, analyzing, implementing, monitoring, and continuously improving processes.

According to the BPM CBOK v3.0 [ABPMP Brasil 2013], BPM follows a lifecycle composed of seven interrelated stages: (i) strategic planning; (ii) process analysis; (iii) design and modeling; (iv) implementation; (v) monitoring and control; (vi) refinement; and (vii) governance. These phases ensure the integration of BPM with organizational governance and support its role in continuous transformation.

Effective BPM goes beyond technical methods; it requires coordination between people, processes, and technology. Authors like vom Brocke et al. [vom Brocke et al. 2016] and Dumas et al. [Dumas et al. 2018] emphasize that success depends not only on modeling and automation but also on organizational maturity, leadership engagement, and a culture that fosters continuous improvement. In this sense, BPM

is not merely a set of tools but a systemic and strategic approach that supports organizations in adapting to change and delivering sustainable performance [Langenstein 2024].

2.2. Critical Success Factors for BPM

Critical Success Factors (CSFs) are conditions that must be met for BPM initiatives to achieve their expected outcomes. These include organizational and technical aspects such as strategic alignment, leadership support, process governance, continuous training, appropriate technologies, and a culture of collaboration [Syed et al. 2018].

Langenstein [Langenstein 2024] highlight that institutional context and organizational culture are decisive for BPM success. In his study with European managers, he found that unclear roles and lack of strategic alignment were major barriers to adoption. Martín-Navarro et al. [Martín-Navarro et al. 2023] demonstrated that user perceptions about the usefulness of BPM tools, together with institutional support and data quality, play a central role in successful adoption across Latin American and European companies.

Some recognized CSFs [Syed et al. 2018, Martín-Navarro et al. 2023, Langenstein 2024] include:

- **Leadership engagement**: senior management actively promoting BPM;
- **Process governance**: clear definitions of roles, responsibilities, and performance indicators;
- **Continuous training**: capacity-building for employees with a process-oriented mindset;
- **Technological adequacy**: use of tools aligned with organizational goals and maturity;
- **Favorable culture**: openness to change and collaboration across departments.

The absence of these factors often results in isolated initiatives with limited impact and low sustainability over time [Stürmer da Rosa 2020, vom Brocke et al. 2016].

2.3. Related Work

Several studies have explored BPM adoption across different organizational contexts. Martín-Navarro et al. [Martín-Navarro et al. 2023] investigated the determinants for the use of Business Process Management Systems (BPMS), highlighting the role of perceived usefulness, institutional support, and information quality.

Langenstein [Langenstein 2024] emphasized the importance of strategic clarity and leadership in BPM initiatives. His findings show that maturity, culture, and context significantly influence BPM effectiveness in European organizations. Stürmer da Rosa [Stürmer da Rosa 2020] proposed a prioritization method for BPM implementation in higher education institutions, reinforcing the need for contextual adaptation and structured governance. She emphasized criteria such as institutional support and well-defined process selection to ensure success in public educational settings. These studies collectively reinforce the understanding that BPM effectiveness results from the integration of technical and human factors. They provide a contemporary foundation for the replication and extension of the classic study by Pritchard and Armistead [Pritchard and Armistead 1999], whose work continues to inform both research and practice in process management.

3. Research Design

This study is characterized as a partial replication of an empirical work, aiming to investigate the perceptions of professionals from public and private organizations regarding the factors influencing the adoption and effectiveness of Business Process Management (BPM). The research design was inspired by the study of Pritchard and Armistead [Pritchard and Armistead 1999], with methodological adaptations to the current Brazilian context.

In addition to a structured survey as the primary quantitative method, an ad hoc literature review was conducted to map the contemporary use of the original study's concepts and examine how they have been cited and reinterpreted over time. Forward snowballing and a targeted review of recent BPM literature were used to capture the evolution of key concepts and current terminology. This conceptual step ensured that the updated questionnaire preserved the intent of the original instrument while adopting contemporary terms, avoiding conceptual mismatches between 1999 and 2025 and maintaining comparability with current literature.

The methodological process comprised four steps: analysis of the original study, adaptation of the instrument, data collection and processing, and comparative analysis. The adaptations focused on ad hoc minor linguistic updates (e.g., adding terms such as governance or indicators) while preserving the original operational meaning of the questions. As these were minimal adjustments rather than the creation of new constructs, we chose not to link each modification to specific studies.

The survey method was chosen for its ability to collect structured data from a target population and generalize findings based on representative samples [Kasunic 2005]. In this research, the survey captured the perceptions of professionals working in process management, quality, and strategic management. The design of the questionnaire followed Kasunic's guidelines [Kasunic 2005], which recommend a systematic approach that includes clear research objectives, definition of the target population, careful formulation of questions, appropriate response scales, and validation through pre-tests to ensure clarity and reliability.

Following these principles, the instrument was organized into thematic blocks covering: (i) participant profile, (ii) understanding of BPM, (iii) degree of BPM implementation, (iv) perceived benefits, (v) challenges encountered, and (vi) critical success factors. This structure ensured consistency between the collected data and the research objectives, while also enabling comparison with the original findings of Pritchard and Armistead [Pritchard and Armistead 1999].

In the original study, the authors used open interviews and a survey as research methods. In our partial replication, we transformed the qualitative items into closed, objective survey questions to increase reach, reduce interpretive variability, and adapt the instrument to the current Brazilian context, where large-scale in-depth interviews are impractical. As a result, threats to reliability are reduced because each question measures a direct perception rather than a latent construct, and standardized response options limit variability from free interpretation. A pilot test was also conducted to ensure clarity and semantic consistency. Although any adaptation involves some risk, the objective nature of the questionnaire substantially reduces reliability threats compared to the open format

of the original study. In the next sections, we discuss the design of our replication study, following the guidelines of Carver [Carver 2010].

3.1. Type of Replication

Considering the type of replication by methodological similarity [SIGSOFT], we have carried out a **methodological replication** [Dennis and Valacich 2015] since we use the same research questions and the same method but in a different context. Regarding the type of replication by overlap [SIGSOFT], our study is classified as **partial** [Carver 2010] as it maintains the core objectives of the original study, but with changes in the instrument, the sample, and the analysis techniques. Finally, considering the type of replication by participants [SIGSOFT], we adopted an **external replication** [Da Silva et al. 2014] since different authors replicated the study.

3.2. Motivation for Replication

The replication of the study by Pritchard and Armistead [Pritchard and Armistead 1999] is justified by several reasons. First, it is a pioneering and widely cited work that consolidated essential constructs for analyzing process maturity and the outcomes of BPM initiatives. Replicating such a reference allows comparison of contemporary findings with a historical benchmark, thereby strengthening the cumulative nature of knowledge in the BPM field. Second, the constructs assessed by their instrument, such as strategic alignment, role clarity, leadership support, and the use of technology as an enabler, have shown conceptual stability over time. Despite the technological and methodological changes since 1999, these elements remain central to BPM success [Langenstein 2024, Correa et al. 2025] and continue to provide a valid lens for empirical investigation.

Another motivating factor is the scarcity of longitudinal or comparative studies in BPM, particularly in the Brazilian context. This gap limits understanding of how BPM practices evolve in organizations over time. Conducting a replication with a Brazilian sample not only enriches the international literature but also provides original insights into the local organizational reality, where cultural resistance, governance maturity, and strategic alignment present unique challenges and opportunities. Finally, the use of a survey instrument that has been internationally validated increases the reliability of the results and facilitates dialogue with previous research. Methodological replication also provides an opportunity to test the theoretical robustness of the original constructs in environments shaped by new demands, technologies, and management models, thus verifying whether they retain explanatory power or require conceptual refinement.

3.3. Description of the Original Study

The original study aimed to analyze how Business Process Management (BPM) was understood, applied, and evaluated in European organizations. The research was conducted through a structured questionnaire containing both open and closed questions, directed at professionals working in Western European companies. The research questions addressed were: (i) how do organizations understand and apply BPM? (ii) which factors are considered critical to its success? and (iii) what barriers are encountered? The study design combined qualitative and quantitative approaches, with surveys applied both in person and by mail. The participants included professionals from European companies, mainly

located in the United Kingdom. The article, however, did not specify either the number of respondents or the sectors involved. The main artifact was a questionnaire focused on practices, conceptual understanding, critical success factors, and implementation difficulties.

The context of the study is also relevant: it was carried out in the late 1990s, before the widespread digitalization of organizations and the popularization of technologies such as Business Process Management Systems (BPMS), Robotic Process Automation (RPA), and Artificial Intelligence (AI). The key findings included inconsistencies in BPM terminology and understanding, difficulties in achieving strategic alignment, the absence of consolidated standards, and recognition of BPM's importance without clear integration into organizational practice.

3.4. Changes to the Original Study

The following modifications were made in relation to the original study [Pritchard and Armistead 1999], justified by advances in the field and current best practices in empirical research: (i) Reformulation and updating of language and scales; (ii) Replacement of open-ended questions with structured items using a five-point Likert scale; (iii) Inclusion of modern aspects of BPM (such as the use of BPMS, governance, data-driven culture, and automation); (iv) Online application through Google Forms instead of physical distribution; (v) Expansion of the target audience, allowing greater sectoral and geographical diversity; (vi) Adoption of the methodological guidelines proposed by Kasunic [Kasunic 2005], which recommend a systematic process for developing effective surveys, including clear definition of objectives, segmentation of the target population, coherent question formulation, appropriate choice of response scales, and instrument validation. These modifications aim to preserve comparability with the original study without compromising validity or relevance in the current context.

3.5. Survey Structure

The data collection instrument used in this study was a structured questionnaire, developed based on the work of Pritchard and Armistead [Pritchard and Armistead 1999], with the aim of capturing the perceptions of professionals involved with organizational processes. The questionnaire, presented in Table 1, was organized into thematic blocks to align the questions with the research objectives and to facilitate the analysis of the collected data.

Table 1. Distribution of questions by thematic block.

Thematic Block	# of Questions	Objective
Participant Profile	5	Collect information about education, job position, years of experience, and sector of the respondent.
Understanding of BPM	4	Assess participants' conceptual knowledge regarding BPM.
Implementation and Structure	4	Identify the degree of BPM adoption and the existence of formal support structures in organizations.
Benefits and Challenges	3	Verify respondents' perceptions about results and the main challenges faced with BPM.

This structure allowed a more organized and targeted analysis of the data, enabling the identification of patterns, gaps, and opportunities for improvement in BPM adoption within the surveyed organizations.

A pilot test was conducted with two BPM researchers to assess the clarity of the adapted questions, the coherence among thematic blocks, and the understanding of updated terms (e.g., governance, BPMS). Based on this pilot, minor linguistic revisions and the reorganization of two items were carried out, without altering the conceptual structure of the constructs inherited from the original study.

The updated questionnaire was applied online via Google Forms, distributed through social networks and professional groups related to process management, between June 3, 2025, and July 15, 2025. The convenience sample consisted of 62 participants from different sectors and hierarchical levels. The full questionnaire and the answers are available at Zenodo [Vilela and Alves 2026].

4. Results

This section presents the results of the survey answered by 62 professionals working in areas related to process management, quality, and organizational strategy. The purpose of the research was to capture perceptions of BPM, mapping critical success factors, perceived benefits, and barriers faced during implementation. The data analysis was structured according to the thematic blocks of the survey. First, results regarding participant profiles are introduced, followed by findings on BPM knowledge, organizational maturity and implementation, critical success factors, perceived benefits, and, finally, the main barriers reported.

4.1. Participants' profile

Table 2 summarizes the profile of the 62 professionals. Most participants are based in Brazil, with smaller representations from the United States and Germany. Although the study focuses on the Brazilian context, the survey was openly disseminated through professional networks, resulting in a small number of respondents from other countries. These participants account for 8% of the total sample and do not significantly influence the results, which predominantly reflect the Brazilian reality. They were retained in the dataset because no international comparisons were performed, their inclusion does not affect the descriptive analysis, and excluding valid responses could introduce more bias than keeping them.

In terms of sector of activity, technology stands out, followed by government, services, education, industry, and healthcare in smaller proportions. Commercial, energy, and construction sectors were minimally represented. Regarding organizational size, most respondents work in large companies with over 250 employees, while the remainder is distributed across medium-sized, small, and microenterprises. These results indicate that the perceptions gathered are largely shaped by experiences in complex organizations, where governance structures, automation, and process maturity tend to be more advanced.

Concerning prior experience, 40.3% of participants reported involvement in process improvement initiatives as team members and 21% as leaders or coordinators. Another 19.4% followed such initiatives without direct participation, while the same proportion reported no involvement at all. Additionally, 77.4% indicated that their organizations do not have formal quality or excellence programs, with ISO 9001, EFQM, and GPTW being the only models cited. This low adherence suggests that a consolidated culture of quality and excellence is still lacking, which may hinder process maturity and the effective implementation of BPM practices.

Table 2. Profile of participants by country, sector, organization size, and BPM project experience.

Category	Response Option	# of subjects
Country of work	Brazil	58
	USA	3
	Germany	1
Sector	Technology	29
	Government	17
	Services	9
	Education	5
	Industry	4
	Health	3
	Other mixed sectors	3
Organization size	Large (250+ employees)	45
	Medium (50–249)	9
	Small (10–49)	6
	Micro (up to 9)	2
Participation in BPM projects	Yes, as team member	25
	Yes, as project leader	13
	Never participated	12
	Not directly, but followed	12
Participation in any quality or excellence program	Does not participate	48
	ISO 9001	12
	EFQM	1
	GPTW	1

4.2. BPM knowledge

According to our results, presented in Table 3, when asked about their level of knowledge regarding Business Process Management (BPM), most participants reported having either a low (37.1%) or intermediate (32.3%) level of expertise. Only 6.5% indicated a high level of knowledge, and 3.2% considered themselves experts on the subject.

Additionally, 19.4% (12 subjects) of respondents stated that they had no knowledge of BPM at all. These participants were retained because they reflect the organizations reality, in which BPM often coexists with teams that are heterogeneous in terms of maturity and background. As in the original study, one of our research questions is to understand broad organizational perceptions, including professionals working in organizations with BPM initiatives even if they do not possess technical expertise in the area. These respondents contributed only to general descriptive items and not to inferential analysis that require expertise. Retaining them allows the identification of internal communication gaps, which emerged as barriers in the replicated study [Pritchard and Armistead 1999].

These findings reveal that, although most participants demonstrate some degree of familiarity with the concept, in-depth expertise remains limited to a small minority. This suggests a need for broader dissemination and technical training on BPM within organizations, particularly given its strategic relevance and increasing integration with digital technologies. Furthermore, a substantial majority of respondents (91.9%) reported not holding any BPM-related certification, while only 8.1% indicated having some form of certification in the field.

This result points to a significant gap between participants' interest or exposure to the topic and the formalization of knowledge through specific certifications. The absence of certification may be linked to the limited formal requirements imposed by organizations, the restricted availability of accessible training programs, or even a lack of awareness regarding the existence of such certifications. This finding highlights the im-

Table 3. Participants' knowledge, certification, and organizational perception of BPM.

Category	Response Option	# of subjects
Knowledge of BPM	None	12
	Low	23
	Intermediate	20
	High	4
	Specialist	3
BPM Certification	Yes	5
	No	57
Organizational clarity on BPM	Strongly agree	6
	Partially agree	21
	Partially disagree	16
	Strongly disagree	3
	No knowledge	16
Alignment of BPM with strategy	Yes	28
	No	8
	Do not know	26

portance of promoting greater dissemination of recognized training pathways and certification opportunities, which could contribute to advancing organizational maturity and standardizing BPM practices.

When asked whether their organizations clearly understand what Business Process Management (BPM) entails, participants expressed varied perceptions, as illustrated in Table 3.The largest proportion, representing 33.9%, partially agreed with the statement, suggesting the presence of some level of understanding, though possibly limited or confined to specific areas. Only 9.7% fully agreed, indicating that in these organizations BPM is clearly recognized, structured, and disseminated among employees. In contrast, 25. 8% of the participants partially disagreed, suggesting that although there is some exposure to the topic, the organizational understanding of BPM remains superficial or is often misinterpreted. A smaller group, 4.8%, fully disagreed, indicating either a complete lack of institutional understanding or a disregard for process management practices. It is also noteworthy that 25.8% of participants reported not having sufficient knowledge to evaluate the matter, which may reflect both individual unfamiliarity and the absence of internal communication about BPM within their organizations.

This scenario reveals a high degree of variability in conceptual maturity regarding BPM across the surveyed organizations, representing a significant challenge for the consolidation of a process-oriented culture. Institutional ambiguity about BPM may undermine improvement initiatives, hinder cross-departmental alignment, reduce employee engagement, and foster divergent interpretations that compromise standardization and governance. Additionally, the high proportion of professionals unable to assess their organization's understanding of BPM underscores a lack of strategic communication and corporate education on the topic. Organizations seeking to advance in BPM adoption should prioritize awareness-raising, training, and engagement initiatives at all hierarchical levels [Langenstein 2024].

Table 3 also presents participants' perceptions of the degree of alignment between BPM and organizational strategy in their institutions. According to the data, 45.2% of respondents believe BPM is aligned with strategic objectives, suggesting that in these organizations, business processes are structured to support and operationalize the corporate mission, vision, and goals. On the other hand, 12.9% of participants reported that BPM is

not aligned with organizational strategy, which may reflect the presence of isolated process management initiatives disconnected from strategic planning and monitoring. This lack of integration can undermine the potential benefits of BPM, such as continuous improvement, organizational efficiency, and value creation for stakeholders. It is worth noting that 41.9% of participants responded "do not know," suggesting limited institutional visibility regarding the strategic role of BPM. This finding may be associated with both the absence of effective internal communication and insufficient leadership engagement in promoting process-oriented culture as a key element for strategy execution.

The significant proportion of uncertainty among professionals further indicates that, even in organizations that adopt BPM practices, there is little clarity on how these practices connect to broader organizational strategy. This disconnection between tactical and strategic levels represents a critical weakness that organizations must address if they aim to achieve higher levels of process management maturity [5].

4.3. Organizational maturity and implementation

Table 4 presents participants' perceptions regarding the stage of Business Process Management (BPM) development within their organizations. The results show a relatively balanced distribution between early and intermediate stages. A total of 25.8% of participants reported that BPM has not yet been initiated, while an equal proportion placed their organization at the initial stage of implementation.

Table 4. Stage of BPM, process ownership, and performance indicators in organizations.

Category	Response Option	# of subjects
Stage of BPM in the organization	Not initiated	16
	Initial	16
	Partially implemented	15
	Broadly implemented	12
	High maturity	3
Process ownership (formally designated)	Yes, for all processes	12
	Yes, for most processes	20
	Yes, for some processes	12
	No ownership defined	9
	Do not know	9
Performance indicators per process	Yes, for all processes	9
	Yes, for most processes	18
	Yes, for some processes	19
	No indicators	7
	Do not know	9

Similarly, 24.2% indicated that BPM is partially implemented, suggesting that actions are underway but without broad institutional consolidation. On the other hand, 19.4% considered BPM to be widely established, meaning it has been structured across different organizational areas. Only 4.8% indicated that their institution had reached high maturity in BPM, underscoring the low incidence of organizations that have advanced to this stage.

These findings suggest that most organizations represented in the sample are still in the early or transitional stages, pointing to significant potential for further development in BPM adoption. The low proportion of mature organizations reflects the inherent complexity of consolidating this approach, which requires not only technical expertise but also institutional commitment, strategic alignment, governance structures, and a

process-oriented culture [Langenstein 2024]. The fact that more than 75% of participants positioned their organizations at the "not initiated," "initial," or "partially implemented" stages highlights the importance of prioritizing BPM training and dissemination strategies for organizations seeking greater efficiency, integration, and agility.

Table 4 also shows participants' perceptions of whether their organizations formally assign responsibility (to individuals or units) for business processes. The majority (32.3%) reported that their organization designates responsible parties for most processes, while 19.4% stated that formal responsibility exists for all processes. Another 19.4% indicated that only some processes have designated owners. On the other hand, 14.5% of participants reported that their organizations do not have formally designated process owners, while an equivalent proportion (14.5%) stated that they did not know how to respond. This distribution indicates that, although some organizations have already adopted structured process management practices, significant limitations remain regarding the formalization and assignment of responsibilities. The absence of formally defined process owners compromises role clarity, hinders performance monitoring, and weakens the organization's ability to implement consistent improvements [Stürmer da Rosa 2020].

The clear definition of responsibility for processes, commonly also called *process owners* [ABPMP Brasil 2013] is essential to ensure continuous monitoring, more informed decision-making, and alignment of processes with organizational goals. Moreover, the considerable proportion of respondents who indicated not knowing how to answer may reflect either a lack of internal communication or the absence of a formal BPM structure within the organizations analyzed.

Table 4 also describes the participants' perception regarding the presence of performance indicators specifically defined for organizational processes. Most respondents (30.6%) indicated that indicators exist only for some processes, while 29.0% stated that such indicators are present for most processes. Only 14.5% reported that all processes have defined indicators. On the other hand, 11.3% noted that no specific indicators exist in their organizations, and 14.5% declared that they could not provide this information. These results show that although a significant proportion of organizations have some level of monitoring through indicators, the practice is still not widely consolidated. The absence of indicators in certain processes, or the lack of clarity about their existence, may hinder objective performance assessment, making it difficult to identify bottlenecks, failures, and opportunities for improvement. The definition of performance indicators is considered one of the fundamental tools of process management, as it enables continuous monitoring of results, fosters a culture of continuous improvement, and strengthens the integration between strategy and operations. The substantial proportion of organizations that either do not have formal indicators or are unaware of them highlights the need for more effective strategies of standardization, governance, and internal communication.

Table 5 presents participants' perceptions of the organizational elements with which Business Process Management (BPM) is integrated in their institutions. The results show that the most frequently cited integration occurs with project management, information technology (IT)/systems, and corporate governance. These three areas represent the main interfaces of BPM within the surveyed organizations.

The data suggest that BPM in the surveyed organizations tends to be more closely

Table 5. Integration between BPM and organizational areas.

Area	# of subjects
Integration of BPM with organizational areas Project management	37
Information Technology / Systems	32
Governance	25
Quality department or area	19
Business subject matter experts	11
None of the above	10

linked to areas providing technical and strategic support, such as projects, IT, and governance, which may reflect an emphasis on efficiency, digitalization, and structured processes aimed at organizational transformation. On the other hand, the lower integration with business areas or specialists holding tacit knowledge may indicate a misalignment between technical and operational levels, representing a challenge for consolidating BPM as a cross-functional practice [vom Brocke et al. 2016].

The presence of responses indicating a lack of integration reinforces the need to broaden BPM's articulation with different areas of the organization, fostering a more collaborative and systemic approach that is essential for advancing maturity in process management.

4.4. Perceived benefits

The adoption of BPM within organizations can generate significant impacts, both positive and challenging. This section presents the main benefits reported by survey participants, based on their organizational experience. The following subsection will address the difficulties encountered, drawing on additional data.

As shown in Table 6, the three most frequently mentioned benefits were: greater clarity of roles and responsibilities, improved integration across departments, and enhanced operational agility. These results suggest a perception that BPM primarily contributes to strengthening internal organization, fostering cross-departmental coordination, and increasing the efficiency of operational workflows.

Table 6. Perceived benefits obtained from BPM adoption.

Benefit	# of subjects
Benefits of BPM adoption	
Clearer roles and responsibilities	37
Better integration between areas	35
Operational agility	31
Reduction of rework	29
Process digitization	23
Cost or resource reduction	18
Improved customer relationships	14

Other key benefits reported include the reduction of rework and the digitization of processes, indicating that the process-oriented approach is often associated with digital transformation and the elimination of inefficiencies. These results suggest that the main perceived gains from BPM implementation are concentrated on internal management and organizational performance, particularly in clarifying roles, reducing redundancies, and enhancing agility. In contrast, customer-oriented benefits, such as external relationship management and value perception, were less emphasized, which may indicate opportu-

nities to expand BPM beyond operational boundaries, aligning it more closely with user experience and market strategy.

4.5. Main barriers reported

Table 7 highlights the main challenges organizations face in adopting BPM. The most frequently cited barrier was the lack of understanding of what BPM is, underscoring the importance of training and conceptual dissemination among both employees and senior management. Organizational cultural resistance was also identified as a critical factor, as it hinders the acceptance of structural changes and new practices.

**Table 7. Main challenges faced during BPM implementation.**

Challenge	# of subjects
Challenges in BPM implementation Lack of understanding about BPM	32
Resistance from organizational culture	25
Lack of performance indicators	22
Conflicts between departments	21
Lack of support from top management	12
Lack of project sponsor	6

These findings confirm that the greatest challenges lie not only at the technical level but also within cultural, structural, and knowledge management dimensions. A lack of conceptual clarity, insufficient institutional commitment, and difficulties in establishing metrics and responsibilities all emerge as barriers to consolidating a mature process-oriented approach. To mitigate these issues, organizations must invest in training programs, cultural awareness initiatives, process governance strategies, and leadership engagement as key drivers of change.

4.6. Critical success factors

Figure 1 illustrates participants' views on the importance of different factors considered essential to the success of BPM in organizations. This figure is central to the study, as it quantitatively demonstrates which dimensions professionals perceive as indispensable for effective process management, providing an overview of current organizational priorities.

Figure 1. Perceived importance of critical success factors for BPM.
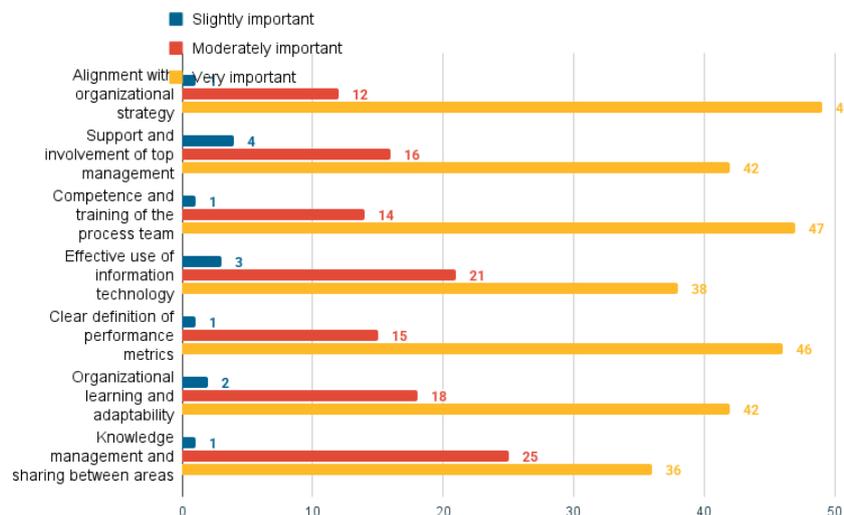
The factor most frequently identified as "very important" was alignment with organizational strategy, with 49 mentions. This result reinforces the need for BPM to be treated not as an isolated or purely operational initiative, but as a mechanism for strategic execution that connects top management's vision to everyday practice. The alignment between processes and organizational objectives is widely recognized in the literature [Dumas et al. 2018] as a cornerstone of BPM maturity, since it ensures that improvement efforts are directed toward what truly adds value to the organization.

Next, the factors "competence and training of the process team" (47 responses) and "clear definition of performance metrics" (46 responses) stood out. This highlights participants' recognition that the technical and methodological qualification of the team is fundamental for the effective execution of BPM initiatives [Ximenes et al. 2022]. Furthermore, the definition of measurable indicators enables continuous monitoring, outcome assessment, and data-driven decision-making, thereby strengthening governance and the sustainability of improvement actions.

Support and involvement from top leadership, mentioned by 42 respondents as very important, also emerged as a key pillar for the institutionalization of BPM. Leadership plays a crucial role in sponsoring, communicating, and consolidating the process-oriented vision as part of the organizational culture. Without leadership engagement, BPM initiatives often lose momentum, remain restricted to technical areas, or suffer discontinuities.

Other factors that received strong recognition as "very important" include organizational adaptability and learning capacity (42 responses), effective use of information technology (38 responses), and knowledge management and sharing across areas (36 responses). These elements reinforce the notion that BPM success is tied not only to structure and processes, but also to an organizational culture that is innovative, collaborative, and oriented toward continuous learning.

Despite the strong emphasis on these factors, it is worth noting that a smaller portion of respondents rated some items as "moderately important" or even "less important." Although these cases represent a minority, they reveal differences in maturity, understanding, or practice among participants, which may be related to their sector of activity, the degree of BPM implementation within their organizations, or the absence of previously observed tangible results.

Overall, the data from Figure 1 confirm that professionals perceive BPM as a multidimensional approach requiring synergy between leadership, strategy, people, technology, and culture. The predominance of responses in the highest category underscores the perception that, for BPM to generate lasting results, it must be implemented in an integrated manner with institutional support, avoiding fragmented or purely technocratic approaches.

4.7. Comparison with the original study

The comparison between the results of this survey and those obtained by Pritchard and Armistead [Pritchard and Armistead 1999] allows for a detailed analysis of the evolution, persistence, and transformation of critical elements for the adoption and success of BPM in organizations. Although separated by more than two decades, the two studies converge

on fundamental points, while also showing distinctions that reflect the technological, cultural, and organizational contexts of their respective periods.

In the original study, 88% of organizations reported using some form of process management, but many still lacked a clear understanding of the BPM concept. This finding resonates with the present survey, where only 9.7% of respondents stated that their organizations fully understand BPM, 33.9% partially agree, and 25.8% declared having no knowledge of the subject. This demonstrates that, despite advances in literature and tools, the lack of conceptual understanding remains a relevant obstacle.

Another point of convergence is the absence of formal performance indicators. Pritchard and Armistead already highlighted this limitation in 1999. In 2025, the issue persists: only 14.5% of respondents reported having indicators for all processes, while 11.3% indicated that no formal indicators exist in their organizations. This scenario reveals shortcomings in governance and in continuous performance monitoring by processes, which is essential for the cycle of continuous improvement.

With regard to critical success factors, both studies emphasize top management support, alignment with organizational strategy, and clarity of roles as central pillars. However, the present research provides quantitative evidence to reinforce these perceptions: 49 respondents considered alignment with strategy to be "very important," 47 attributed the same level of importance to the competence of the process team, and 42 to top management support. These figures confirm, based on a broader and more recent sample, the qualitative findings of 1999.

As for difficulties, the original study identified challenges such as lack of sponsorship, interdepartmental conflicts, and resistance to change. These last two issues are still strongly present in the replication confirming the continued relevance of BPM's historical obstacles. On the other hand, lack of sponsorship was the difficulty least cited.

Nevertheless, some important distinctions emerge. In 1999, technology was not yet a structuring element of BPM practice. Currently, 32 respondents indicated integration between BPM and IT/Systems, highlighting the evolution of process digitalization. Furthermore, factors such as informatization, reduction of rework, and greater operational agility were more frequently mentioned among the benefits in the present study, reflecting the automation and technological maturity achieved by organizations.

Finally, although the number of organizations with formally structured BPM remains limited, there is greater awareness of its importance, suggesting a more favorable environment for future consolidation, provided it is accompanied by robust initiatives in training, governance, and strategic alignment. Despite replicating and updating a seminal study, this research presents limitations that must be considered when interpreting the results. Its cross-sectional design prevents establishing causal relationships between critical success factors and perceived BPM benefits, restricting the analysis to associations. As the data are self-reported and collected through an online questionnaire, there is a possibility of social desirability bias and common method bias, partially mitigated by anonymity and variation in question formulation. The non-probabilistic and convenience-based sample is concentrated on organizations with greater interest in the topic, which may limit generalization to other sectors and contexts. In addition, although the instrument was adapted and semantically validated for the current reality, some of its original

constructs may not fully capture emerging BPM practices associated with more recent technologies, such as intelligent automation and integration with analytics.

4.8. Discussion

The results of this study reflect an ambiguous scenario: on the one hand, BPM is recognized as important and strategic; on the other, its organizational practice remains fragmented, with persistent structural and cultural gaps. The high number of organizations at early maturity stages and the low presence of indicators and formal governance reveal that, although widespread, BPM has not yet consolidated as a cross-functional and sustained practice in most institutions.

The contrast between the declared importance of critical factors such as strategic alignment, leadership support, and the use of metrics, and the concrete difficulty of implementing them, points to the existence of a gap between discourse and practice, as already suggested by the literature [vom Brocke et al. 2016]. This gap may be explained by multiple interconnected factors: limited resources, absence of a process-oriented culture, resistance to change, low technical capacity, and institutional priorities focused on short-term results.

The analysis suggests that capturing more strategic benefits such as innovation, competitive differentiation, and improved customer experience requires additional organizational conditions. Active leadership, cross-functional governance, and integration with data and technology act as enablers, while their absence restricts BPM to tactical gains. In this regard, technology, although present, tends to enhance processes that are already structured but contributes little when applied to fragmented or poorly defined workflows, leading only to the automation of inefficiencies.

The replication also demonstrates that BPM remains anchored in internalist values, aimed at improving efficiency, reducing rework, and enhancing internal organization. This operational emphasis, to the detriment of customer- or innovation-oriented perspectives, may be associated with the predominance of productivity and compliance metrics, which are easier to measure and control than strategic indicators.

It is also observed that critical factors such as top management support and role clarity function as mediators of BPM success: when present, they increase the likelihood that technology and standardization will translate into sustainable gains; when absent, the effect of these initiatives is limited and short-lived. Thus, this study reinforces the continued relevance of Pritchard and Armistead's [Pritchard and Armistead 1999] approach and highlights the need for structural investments. Training, governance, measurement, and a process-oriented culture are indispensable pillars for BPM to evolve from a functional practice into a mature organizational capability, integrated into strategy and capable of generating both internal and external value.

4.9. Threats to validity

This study is subject to some limitations related to internal and construct validity. Data were collected through a self-reported online survey, which may introduce social desirability bias and common method bias. These risks were partially mitigated by ensuring respondent anonymity, using neutral wording, and structuring the questionnaire into dis-

tinct thematic blocks. Regarding construct validity, the instrument was adapted from a well-established study with ad hoc linguistic updates and a pilot test was performed.

Threats to external validity are mainly related to sampling and generalizability. The study relied on a non-probabilistic convenience sample, composed primarily of professionals already exposed or interested in BPM, which may limit the extrapolation of results to organizations with little or no engagement in process management initiatives. In addition, the sample is predominantly Brazilian, with a small number of international respondents; no cross-country comparisons were conducted, and the findings should be interpreted as representative of the Brazilian organizational context. Despite these limitations, the diversity of sectors, organizational sizes, and roles represented in the sample contributes to a broader view of BPM perceptions in practice. Finally, the partial replication approach strengthens validity by enabling comparison with a seminal study, while also acknowledging that contextual, cultural, and technological differences may influence how BPM is perceived and implemented today.

5. Conclusions and Future Work

In the context of constant organizational transformation and increasing demands for efficiency, control, and adaptability, Business Process Management (BPM) has consolidated itself as a fundamental strategic approach. Building on this scenario, the present study sought to update and validate the findings of the classic work of Pritchard and Armistead [Pritchard and Armistead 1999], confronting them with the contemporary reality of Brazilian organizations. By applying a survey directed at professionals in process management, quality, and strategic management, the research captured perceptions regarding BPM maturity, perceived benefits, barriers, and critical success factors.

The results, based on responses from 62 participants, revealed an organizational environment still marked by conceptual ambiguity, early maturity levels, and persistent cultural and structural challenges. Despite advances in BPM visibility and the adoption of technological tools, the practice is not yet consolidated as a cross-cutting approach in many organizations. BPM continues to be perceived primarily as an internal efficiency tool, focused on role clarity, interdepartmental integration, and operational agility. However, dimensions linked to customer experience, innovation, and strategic transformation remain underexplored, which limits BPM's potential as a competitive differentiator.

The findings also confirmed that strategic alignment, top management support, team training, and the use of information technology are widely recognized as critical for BPM success. Nevertheless, their effective presence in organizations is still limited, highlighting a gap between discourse and practice. This reinforces the importance of understanding BPM not simply as a set of tools but as an organizational approach requiring process maturity, cultural adaptation, and integrated governance.

The study contributes to the literature by providing an empirical update of a seminal work, employing standardized methodology, broader geographical coverage, and contemporary analytical tools. By partially replicating the original study, the research identified elements that remain valid more than two decades later, as well as emerging dynamics in the BPM field. From a practical perspective, the results offer updated insights into the factors that most influence the success or failure of BPM initiatives, supporting managers, consultants, and policymakers in designing more effective implementation and monitor-

ing strategies.

Future research can extend this study in several complementary directions. Longitudinal studies following the same organizations over time would allow researchers to observe the evolution of BPM maturity and assess the effects of factors such as leadership changes, digital transformation initiatives, and training programs. Qualitative approaches, including in-depth interviews with managers and document analysis, can deepen the understanding of the perceptions identified in survey results and help explain the underlying reasons behind them. Comparative analyzes across sectors and organizational sizes are also recommended, as these contexts present distinct BPM implementation challenges and relevant contextual variables not addressed in this replication. Finally, cross-regional studies and investigations into BPM's role in emerging themes such as sustainability and digital transformation may further broaden its applicability and relevance within organizational agendas.

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