**TEMATIC AREA: Formação, Pesquisa e Prática Docente em Administração**

# UNCOVERING BUSINESS PROCESS MANAGEMENT EDUCATION GUIDELINES: bridging the gap between academia and industry

**Abstract**
The growing demand for skilled professionals in Business Process Management (BPM) has placed increasing pressure on higher education institutions to align training with market needs. Yet, the shortage of appropriate teaching resources and qualified instructors has hindered the advancement of the discipline and its consolidation as a transversal competency. Furthermore, many curricula remain compartmentalized, restricting the adoption of an interdisciplinary and process-oriented perspective. In response, this study explores key trends to support BPM teaching in universities and business schools and proposes six curricular BPM education guidelines to bridge the gap between academia and industry. To achieve this, a co-authorship network mapping of 242 papers was conducted using VOSviewer software, complemented by a systematic literature review (SLR) grounded in a robust qualitative analysis of 14 final papers. The bibliometric analysis identified six clusters of co-authorship that illuminate the challenges and opportunities in advancing BPM education, while the SLR uncovered six guidelines that support curriculum enhancement in universities and business schools, serving as a foundation for best practices in BPM teaching and preparing future BPM professionals. This study contributes to the BPM educator community by mapping and analyzing research clusters that emphasize current challenges and opportunities. In addition, it provides a managerial contribution by supporting curriculum innovation through actionable guidelines designed to equip students with the skills needed to meet organizational demands.

**Keywords:** BPM. Education. Teaching. Academia. Industry.

## 1. INTRODUCTION

The growing demand for skilled professionals in Business Process Management (BPM) has placed increasing pressure on higher education institutions to offer training aligned with the competencies required by the job market (Abdelnabi et al., 2023). In response to this need, several universities and business schools have progressively incorporated BPM education into their curricula over the past decades (Abdelnabi et al., 2023). However, the shortage of appropriate teaching materials and qualified instructors has hindered the advancement of the discipline and limited its establishment as a core transversal competency (Bandara, Abbott, et al., 2018).

Despite efforts to expand BPM education, traditional instructional methods, centered on lecture-based, one-way teaching, still predominate. In contrast, contemporary approaches have increasingly emphasized active student participation in solving complex problems and engaging with real-world business contexts, thereby fostering greater engagement and critical thinking (Chow, 2021). Nevertheless, many curricula remain functionally structured and compartmentalized, limiting the adoption of a systemic and interdisciplinary perspective, which is essential for process-oriented thinking (Pridmore & Godin, 2021).

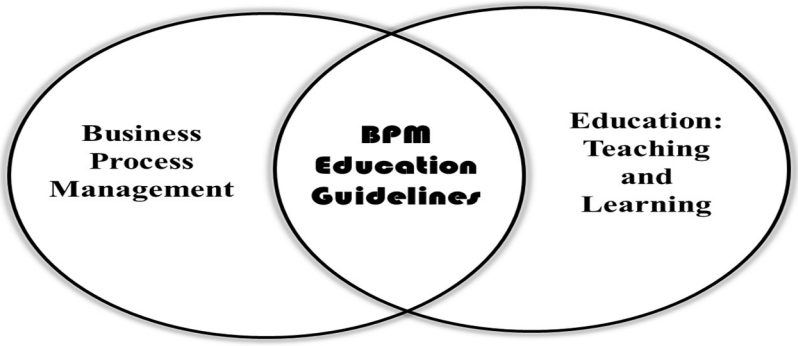
The literature has emphasized the importance of an educational approach that integrates the conceptual foundations of BPM with practical experiences that reflect contemporary organizational challenges (Bandara et al., 2010; Moura et al., 2021; Wiechetek et al., 2017). However, significant gaps remain in the definition of pedagogical strategies, assessment criteria, and mechanisms for bridging academia and the business sector (Bandara et al., 2021; Nobre & Vilela, 2024; Vemuri et al., 2023). The lack of clear guidelines hinders the development of dynamic and adaptable

curricula, ultimately compromising the preparation of professionals capable of operating in complex and constantly evolving environments.

In response to these educational challenges, this study discusses key trends in the literature to support effective BPM teaching in universities and business schools, and advances six curricular BPM education guidelines aimed at bridging the gap between academia and industry. To achieve this, a co-authorship network mapping of 242 papers was conducted using VOSviewer software, with the aim of identifying and analyzing research clusters that highlight the challenges and opportunities in advancing BPM education. In addition, a systematic literature review (SLR), grounded in a robust qualitative analysis of 14 final papers, was conducted to support curriculum enhancement in universities and business schools by uncovering BPM education guidelines that serve as a foundation for guiding best practices in BPM teaching, ultimately intended to prepare future BPM professionals. Differently from previous research on BPM education, this study draws on a bibliometric analysis and a systematic literature review to propose a comprehensive and integrated framework for the effective use of BPM education guidelines.

The combined analysis of these sources enabled the development of a set of curricular guidelines that emphasize active learning methodologies, interdisciplinary approaches, and alignment with real market demands. This study is structured around the intersection of two central axes: *Business Process Management* and *Education: Teaching and Learning*. This convergence, illustrated in Figure 1, forms the conceptual foundation for uncovering BPM education guidelines designed to bridge the gap between academia and industry, fostering the development of professionals who are better prepared, more critical, and capable of leading organizational transformation.

**Figure 1.** Intersection between two central research axes

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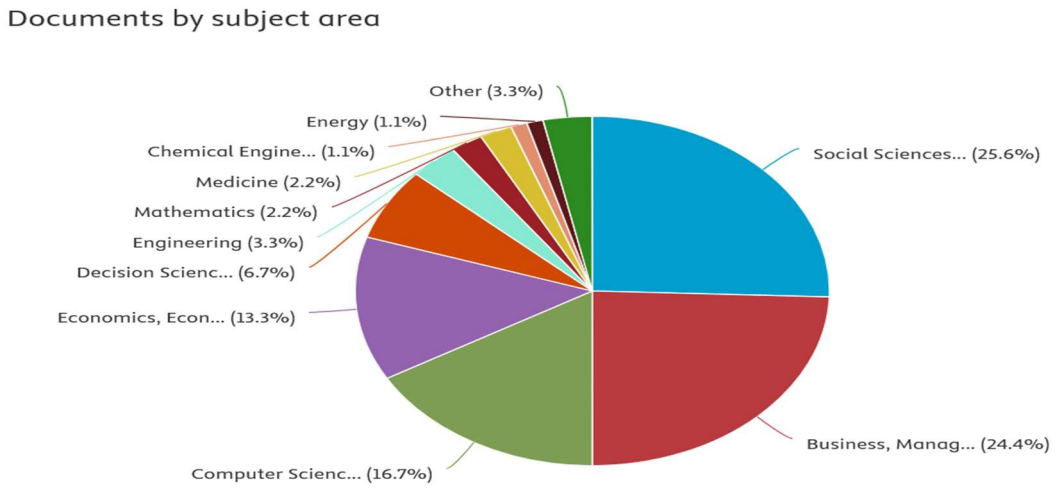
## 2. METHOD

The research process adopted a systematic and transparent approach to the collection, selection, eligibility assessment, and inclusion of studies. The initial data collection was conducted using the Scopus database, focusing on terms located within titles, abstracts, and keywords. The search string strategically combined “business process management” with terms such as “framework”, “model”, or “theory”, and was further linked to “education”, “teaching”, “learning”, or “curriculum”. This combination yielded an initial set of 242 papers in the Data Collection Stage. The rationale behind the use of this specific sequence of keywords and Boolean operators was to ensure the uniqueness and precision of the search, targeting publications that specifically addressed BPM education frameworks and highlighted effective teaching and learning components.

In the first stage of the research, the software VOSviewer was employed to visualize relationships and patterns through co-authorship networks, providing valuable insights into the structural dynamics of the research field (Börner et al., 2007; van Eck & Waltman, 2010). This step aimed to map research collaboration clusters among authors in order to uncover key trends in the literature that support effective BPM teaching.

In the Data Selection Stage, a set of inclusion criteria was applied to narrow the scope of the analysis. Only journal articles published between 2016 and 2025, written in English, and categorized under the fields of Social Sciences or Business, Management, and Accounting were retained. This decision reflects the interdisciplinary nature of BPM education, which requires the integration of organizational theory, pedagogical strategies, and management practices. These two fields were selected because they provide the most relevant theoretical and practical frameworks for examining BPM teaching and learning. Moreover, as shown in Figure 2, they represent the domains with the highest concentration of academic output on this topic, confirming their empirical relevance to the scope of this study.

**Figure 2.** Distribution of papers by research area

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Following the rigorous screening conducted during the Data Selection Stage, 211 papers were excluded, resulting in a final set of 31 journal articles deemed eligible for further examination. These selected studies were essential for identifying recurring patterns and core themes within BPM education frameworks, serving as the empirical foundation for subsequent stages of analysis.

In the Eligibility stage, the dataset was further refined by retaining only those articles that explicitly addressed BPM education frameworks. This step resulted in the exclusion of an additional 26 papers, culminating in a final set of 5 studies. These selected works were subjected to in-depth analysis to extract evidence supporting the formulation of BPM education guidelines, with particular attention to recurring elements and best practices identified across the proposed frameworks.

Finally, in the Inclusion stage, it was observed that the five studies selected in the Eligibility stage lacked specific elements that demonstrated an explicit focus on supporting student learning and development within BPM education. To address this

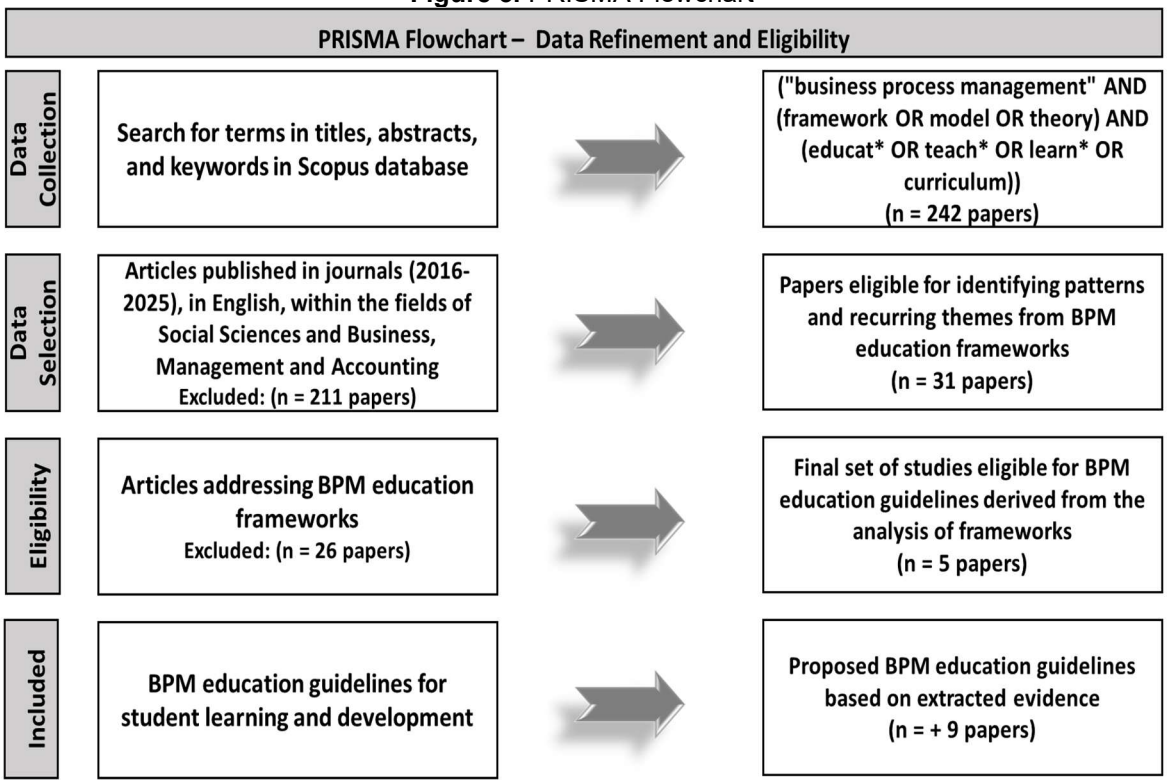
gap, additional studies not captured during the initial Data Collection stage were identified and incorporated based on the following inclusion criteria:

(i) relevance to the topic of BPM education;
(ii) being cited more than once by the five core articles from the Eligibility stage;
(iii) originating from the BPM Educators Forum of the BPM Conference and demonstrating alignment with the objectives of this study.

Following these criteria, a set of nine additional studies was selected through an in-depth qualitative analysis. These studies served to complement the five core articles previously identified and contributed to a more comprehensive understanding of BPM education practices. This final step ensured triangulation of findings and integration of both foundational and complementary perspectives, which collectively supported the formulation of actionable BPM education guidelines

The entire methodological trajectory is illustrated in the PRISMA flowchart (Figure 3). Through this rigorous multi-stage process, the study ensured methodological robustness and culminated in the development of a novel framework based on the final set of 14 papers, uncovering BPM education guidelines that contribute to bridging the gap between academia and industry.

**Figure 3.** PRISMA Flowchart

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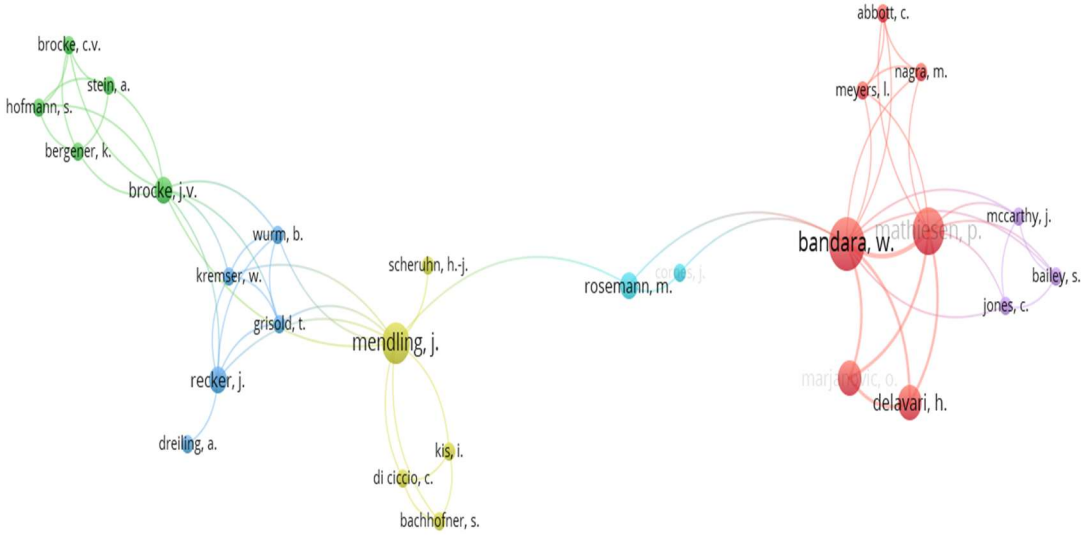
## 3. RESULTS AND DISCUSSIONS

In a co-authorship network, researchers are connected based on the number of joint publications they have produced (Van Eck & Waltman, 2014). Such networks provide valuable insights into the structural dynamics and collaborative patterns within a research field (Börner et al., 2007; van Eck & Waltman, 2010). To identify and analyze author clusters that reveal key challenges and opportunities in advancing BPM education, a mapping of 242 papers was conducted. Figure 4 displays an overview of

the main author clusters identified among the 513 authors in the sample. Using VOSviewer software, a co-authorship network of 27 interconnected authors was generated, enabling the identification of six major collaboration clusters that inform the thematic and intellectual structure of BPM education research.

**Figure 4.** Co-authorship Network




**Source:** Research data from VOSviewer.

**1) Light Blue Cluster:** This cluster is led by Michael Rosemann and Jamie Cornes. Their research emphasizes the importance of embedding BPM education within real-world contexts to facilitate a deeper understanding of BPM's role in driving organizational transformation. They advocate for a holistic educational approach that bridges theoretical frameworks with practical applications, highlighting experiential learning through real-life case studies as a means to develop critical thinking and problem-solving skills among students (Bandara et al., 2005; Rosemann et al., 2025).

The key implication for practice is the need for adaptive learning environments that prepare future professionals to navigate the challenges of digital transformation. For theory, this cluster reinforces the relevance of connecting BPM conceptual foundations with applied experiences. However, a notable challenge is ensuring that BPM education continuously evolves to incorporate emerging technologies and innovative BPM methodologies, avoiding the risk of curricular obsolescence.

**2) Yellow Cluster:** The Yellow Cluster is led by Jan Mendling, Claudio Di Ciccio, and H. J. Scheruhn. Their contributions stress the necessity for BPM education to evolve beyond static process modeling, integrating dynamic process management, routine dynamics, and process analytics. They propose educational approaches that enhance students' ability to interpret, visualize, and manage the ongoing evolution of business processes in digital and complex environments (Bachhofner et al., 2017; Grisold et al., 2022).

For practice, the implication is the promotion of curricula that foster strong analytical and adaptive skills, preparing students to manage volatility and continuous change in organizational processes. Theoretically, their work expands the scope of BPM education by emphasizing dynamic process understanding. Nevertheless, a persistent challenge is maintaining educational materials that remain current with rapid technological advancements and shifting business process trends.

**3) Dark Blue Cluster:** This cluster is led by Thomas Grisold, Jan Recker, and Waldemar Kremser. Their research focuses on enhancing BPM education by incorporating the management of process dynamics and addressing cognitive challenges related to learning process modeling. They highlight the importance of moving beyond technical training to foster deeper conceptual understanding and adaptive capabilities in BPM learners (Grisold et al., 2022; Recker, 2010; Wurm et al., 2023).

The implications for practice include designing curricula that balance the mastery of process modeling languages with the development of dynamic thinking, ensuring students can both represent and adapt processes effectively. For theory, this suggests a reorientation of BPM education toward the cultivation of flexible, resilient cognitive skills. A continuing challenge lies in reconciling the structured teaching of modeling standards with the need for more fluid and critical thinking about business processes.

**4) Green Cluster:** Led by Jan vom Brocke, Armin Stein, and Kathrin Bergener, this cluster emphasizes the significance of agile communication skills within BPM education, particularly for international and interdisciplinary contexts. Their research highlights the necessity of integrating soft skills – such as negotiation, adaptability, and cross-cultural communication – into BPM curricula alongside technical expertise (Bergener et al., 2012; Mendling & Brocke, 2018).

Practically, this cluster advocates for experiential learning formats, like international seminars and collaborative projects, to cultivate essential interpersonal competencies in future BPM professionals. From a theoretical perspective, it calls for an expansion of BPM education frameworks to systematically include communication and cultural intelligence. A key challenge remains the effective assessment and integration of these soft skills into formal BPM education programs, which are often already dense and technically focused.

**5) Red Cluster:** This cluster is led by Wasana Bandara, Olivera Marjanovic, and Peter Mathiesen. Their work critically examines the alignment between BPM education and the practical demands of the industry. They argue that BPM education must be more closely aligned with industry expectations to better prepare students for complex and evolving professional environments (Bandara, Abbott, et al., 2018; Mathiesen et al., 2013).

For practice, this suggests the urgent need for continuous dialogue between academia and industry to ensure curriculum relevance and employability of graduates. Theoretically, their research highlights the existing gap between academic preparation and market needs, proposing stakeholder-driven curriculum updates. However, maintaining a balance between academic depth and the agility required by dynamic industry landscapes remains a persistent and challenging task.

**6) Purple Cluster:** The Purple Cluster is led by John McCarthy, Stuart Bailey, and Christine Jones. They emphasize the need for BPM education to address not only private sector dynamics but also the complexities inherent in public organizations, such as regulatory compliance, stakeholder diversity, and public accountability (Bandara, Bailey, et al., 2018; Delaney et al., 2017).

From a practical perspective, their work implies the necessity of broadening BPM curricula to include public sector-specific content, thereby preparing students for a wider range of professional contexts. For theory, this cluster contributes by extending BPM application frameworks beyond commercial enterprises. Yet, the traditional underrepresentation of public sector challenges in BPM education constitutes a

significant gap that must be addressed to better equip graduates for careers across all organizational sectors.

The six clusters identified in this study converge on a central theme: the integration of practical elements of BPM into educational curricula to enable students to engage meaningfully with real-world organizational challenges. This shared emphasis underscores the importance of a multidisciplinary approach that blends theoretical foundations with applied learning, thereby supporting the holistic development of future BPM professionals (Leyer & Moormann, 2017).

Building on this perspective, BPM expertise has increasingly been recognized as a critical competency that must be cultivated early in academic training (König et al., 2024). However, the complexity of real-world BPM issues often surpasses the conventional scope of existing curricula, highlighting the need for continuous curricular updates. In this context, educators must also pursue ongoing professional development to effectively address contemporary BPM challenges and ensure that students are adequately prepared for the dynamic demands of their future professional environments (Lippe et al., 2024).

## 4. LESSONS LEARNED FOR EDUCATORS

To deepen the understanding of how BPM education is being operationalized in academic settings, this study conducted an in-depth qualitative analysis of fourteen carefully selected papers. These studies were chosen for their relevance and explicit focus on supporting student learning and development within the context of BPM education. Table 1 presents these fourteen articles, highlighting both their stated objectives and the corresponding BPM education goals. Together, these contributions provide valuable insights for educators seeking to design more effective and practice-oriented BPM learning environments.

**Table 1.** Overview of Studies and Educational Goals in BPM

| Author | Paper | Purpose | BPM Education Goals |
|---|---|---|---|
| Bandara et al. (2018) | Developing Enterprise-wide Business Process Management Capability: A Teaching Case from the Financial Sector. | To illustrate the ongoing development of E-BPM capability and governance challenges in embedding BPM within organizations. | • Explore the long-term journey of BPM capability development in education.<br>• Examine real organizational challenges to enrich BPM curricular content. |
| Bandara et al. (2020) | Building 'holistic' Business process modelling skills for IS graduates. | To provide pedagogical support through a rich teaching case that fosters basic to advanced process modelling and management skills. | • Enhance BPM teaching through structured real-life modelling cases.<br>• Develop modelling and management skills aligned with organizational needs. |
| Chow (2021) | Teaching Business Process Management with a Flipped-Classroom and Problem-Based Learning Approach with the Use of Apromore. | To report the application of a flipped-classroom and problem-based learning approach supported by BPM software. | • Integrate flipped-classroom and PBL strategies in BPM instruction.<br>• Engage students in tool-supported, hands-on BPM problem-solving. |
| Classe et al. (2019) | The Play Your Process Method for Business | To propose a serious game design method aimed at fostering | • Use serious games to teach process dynamics and complexity. |

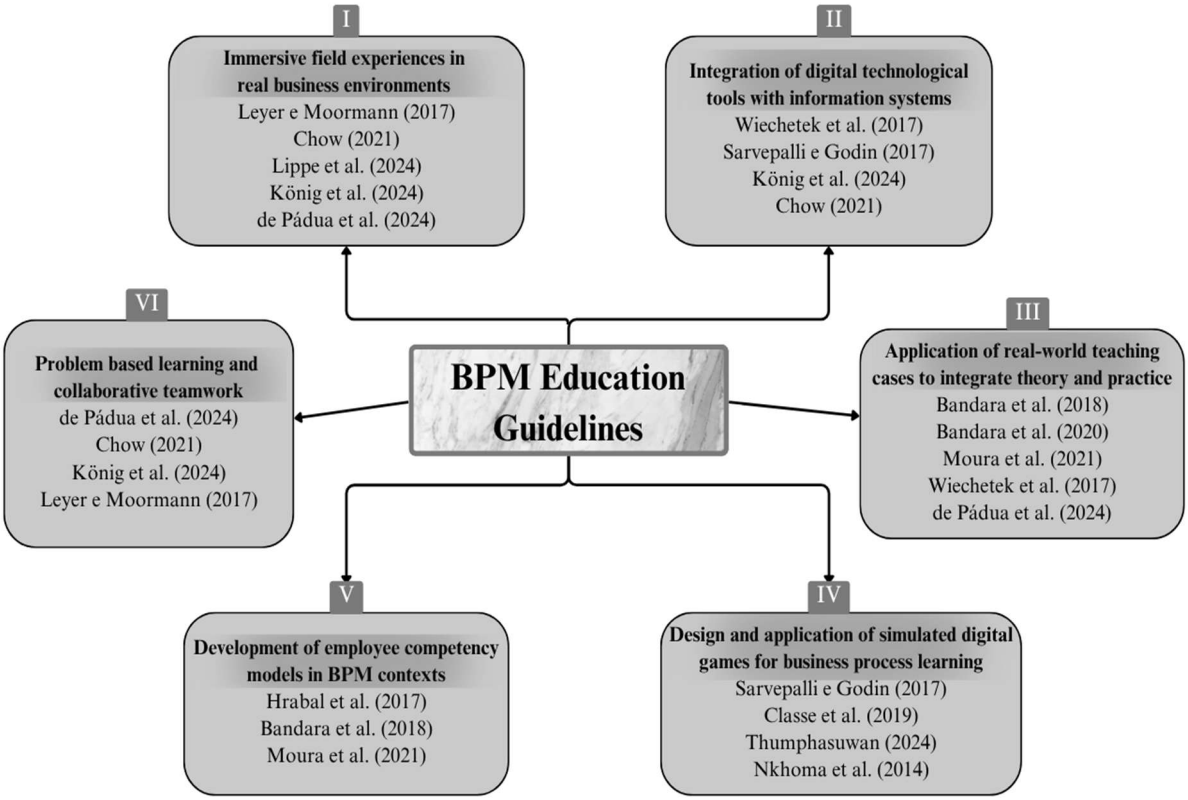
| | | | |
|---|---|---|---|
| | Process-Based Digital Game Design. | process understanding and reflection on BPM challenges. | • Stimulate critical thinking and reflection on BPM practices. |
| de Pádua et al. (2024) | Fostering BPM Learning Through PBL: Development and Application of an Educational Framework. | To develop and apply a BPM educational framework using Project-Based Learning with graduate students in administration. | • Implement a BPM education framework using project-based learning.<br>• Support student collaboration on real BPM challenges. |
| Hrabal et al. (2017) | Teaching business process management: Improving the process of process modelling course. | To examine BPM education practices in Czech universities and present a case study of curriculum improvement. | • Improve BPM course structures based on curricular evaluation.<br>• Adapt BPM teaching practices to institutional and regional needs. |
| König et al. (2024) | From Design to Evaluation: Students Experiencing the BPM Lifecycle Hands-on. | To present a course structure guiding students through the BPM lifecycle using a scenario-based learning approach. | • Teach BPM lifecycle through structured scenario-based coursework.<br>• Foster understanding of BPM phases in educational settings. |
| Leyer e Moorman n (2017) | Action learning approach to teaching business engineering methodology. | To explore the contribution of action learning elements to Business Engineering education. | • Introduce action learning techniques into BPM education.<br>• Encourage reflective learning in business process redesign. |
| Lippe et al. (2024) | Enabling BPM Competencies Through Real-Life Student Consulting Projects. | To discuss a practice-oriented project management approach used to engage students in real-world BPM experiences. | • Provide BPM students with consulting-based, practice-oriented learning.<br>• Strengthen student engagement with real BPM project environments. |
| Moura et. al. (2021) | IT-CMF and BPM Critical Capability: Improving Software Development Lab on academic context. | To diagnose BPM maturity and improve processes in a higher education software lab using the IT-CMF framework. | • Use IT-CMF to support BPM maturity analysis as a teaching tool.<br>• Foster experiential learning in process improvement strategies. |
| Nkhoma et al. (2014) | Towards an understanding of real-time continuous feedback from simulation games. | To analyze the impact of real-time feedback on simulation game performance, student attitudes, and learning engagement. | • Enhance BPM learning with real-time simulation feedback.<br>• Promote student motivation and engagement in BPM through gamification. |
| Sarvepalli e Godin (2017) | Business Process Management in the Classroom. | To describe a paper-based simulation game used to teach BPM in an undergraduate Information Systems course. | • Simulate BPM scenarios using paper-based classroom games.<br>• Build foundational BPM modelling and decision-making competencies. |
| Thumpha s-uwan (2024) | Using the Business Digital Simulation Game of MonsoonSIM in the Business Process Management Course. | To apply digital game-based learning through MonsoonSIM to enhance understanding of integrated organizational activities. | • Apply digital game-based learning to teach BPM integration.<br>• Reinforce cross-functional BPM understanding through simulation. |

| | | | |
|---|---|---|---|
| Wiechetek et al. (2017) | Business Process Management in Higher Education. The Case of Students of Logistics. | To outline the design and implementation stages of a BPM course for logistics students at a Polish university. | • Design BPM instruction tailored to applied fields like logistics.<br>• Guide students through structured BPM course development stages. |

**Source:** Created by the authors

Building upon the five core studies and nine complementary works included in the final sample, this study synthesizes a set of six BPM education guidelines. The resulting guidelines serve as a foundation for guiding best practices in BPM education, grounded in academic literature and shaped by the contributions of key authors. A framework of these six guidelines is provided in Figure 5 to support educators in designing effective BPM curricula.

**Figure 5 –** Framework for BPM Education Guidelines




**Source:** Created by the authors

The BPM education guidelines serve as a strategic framework for educators, designed to improve BPM teaching and learning outcomes and to reinforce the alignment between academic knowledge and industry requirements. The key lessons derived from the analysis of these six BPM education guidelines are presented below, offering critical insights for advancing BPM education in both theoretical and practical dimensions:

**I. Immersive field experiences in real business environments:** Providing students with immersive, hands-on experiences within actual organizational settings strengthens their ability to understand, manage, and optimize business processes (de

Pádua et al., 2024). These field-based learning opportunities go beyond classroom theory, extending students' competencies through direct engagement with local firms and contributing to the professionalization and process maturity of regional business communities (Lippe et al., 2024).

Unlike classroom simulations or cases, these experiences often involve real-time problem-solving, stakeholder interaction, and the adaptation of BPM concepts to specific organizational contexts. A key challenge is designing projects that are both pedagogically structured and organizationally meaningful, offering measurable value to participating companies while ensuring that student learning outcomes are achieved.

**II. Integration of digital technological tools with information systems:** Integrating digital platforms and BPM tools (such as process modeling software, dashboards, and automation solutions) into classroom practice helps students visualize, simulate, and analyze business processes more effectively (Wiechetek et al., 2017). Digital tools also enhance the visual representation and modeling of processes, providing students with a clearer and more interactive understanding of BPM concepts (Sarvepalli & Godin, 2017).

Challenges in integrating digital tools with information systems involve selecting platforms that accurately reflect the complexity of real business environments. These tools also contribute to more effective BPM education in universities and business schools by offering students exposure to practical scenarios and the technological challenges professionals face when managing business processes.

**III. Application of real-world teaching cases to integrate theory and practice:** Distinct from immersive fieldwork, this guideline focuses on the classroom-based use of well-designed teaching cases that simulate authentic business situations. These structured narratives foster constructivist learning by helping students develop analytical reasoning and apply process analysis techniques (Bandara et al., 2020). When grounded in academic knowledge, they support the practical transfer of BPM concepts and promote organizational improvement(de Pádua et al., 2024).

The primary challenge lies in selecting and integrating real company cases that reflect both the complexity and nuance of BPM practice. When incorporated effectively into the curriculum, these cases enrich classroom discussions, support experiential learning, and strengthen the bridge between academic instruction and real-world application.

**IV. Design and application of simulated digital games for business process learning:** Simulated business games recreate organizational environments that prepare students for strategic decision-making across functional areas such as operations, marketing, logistics, and sales (Tumphasuwan, 2024), allowing them to apply classroom knowledge to solve real business problems (Nkhoma et al., 2014). These digital games can also simulate business processes, helping organizations innovate through interactive methods that enhance understanding of process flows and integrate the entire BPM cycle (Classe et al., 2019).

The main challenge in this area lies in developing robust simulation frameworks capable of mapping process flows and identifying operational inefficiencies. Well-designed gamified environments add value to BPM education by enhancing learners' abilities to experiment, adapt, and reflect on complex business process scenarios.

**V. Development of employee competency models in BPM contexts:** Competency models in BPM education should be tailored to the functional demands of different organizational roles and continuously adapted to support process

improvement efforts (Hrabal et al., 2020). From BPM technical and methodological principles, students can develop competency-based frameworks as tools for people management in real organizations (Hrabal et al., 2020). Job descriptions and role specifications help students understand end-to-end business processes and organizational structures (Bandara, Abbott, et al., 2018).

Challenges in this guideline focus on the practical aspects of managing human resources in the context of BPM, including the design of frameworks that reflect essential skills and knowledge for each position. Effective implementation requires establishing training and development programs aligned with BPM goals to ensure appropriate employee placement and sustained performance.

**VI. Problem based learning and collaborative teamwork in BPM education:** Through problem-based learning, students are expected to develop a deep understanding of the problem by working in teams, engaging in a collaborative and negotiation-driven process to arrive at a solution (König et al., 2024). Problem-based learning in BPM encourages students to engage in team discussions about process management issues and opportunities, fostering active participation in knowledge construction (Chow, 2021).

The challenge in applying problem-based learning and collaborative approaches lies in fostering meaningful group interactions and preparing students to tackle real-world BPM problems in diverse, interdisciplinary teams. Encouraging collaboration and peer-to-peer learning creates an environment where students can co-create BPM solutions in realistic and dynamic business contexts.

Understanding and applying the BPM Educational guidelines enables educators in universities and business schools to better prepare future BPM professionals. These guidelines not only promote experiential learning and encourage critical reflection on the theoretical knowledge acquired throughout the course (Lucey, 2023), but also foster active learning environments. This shift allows students to go beyond traditional lecture-based instruction, engaging in more dynamic and participatory forms of knowledge construction (Krain, 2010; Mebert et al., 2020).

## 5. FINAL CONSIDERATIONS

This research has examined key trends in the literature to support effective BPM teaching in universities and business schools and advances six curricular BPM education guidelines aimed at bridging the gap between academia and industry. In contributing to the advancement of BPM teaching and learning, the clusters identified in this study share a common emphasis on integrating both practical and theoretical BPM elements into educational curricula. This integration enables students to engage with real-world organizational challenges by combining diverse pedagogical components that foster the comprehensive development of future process professionals. Furthermore, the BPM education guidelines uncovered in this study empower educators in universities and business schools to go beyond traditional BPM curricula by fostering active learning environments that better prepare students for the demands of their future careers.

Unlike previous studies related to BPM education, this article builds on a bibliometric analysis and a systematic literature review to propose a comprehensive and integrated framework for the effective use of BPM education guidelines. This framework promotes the incorporation of practical, active, and self-directed learning approaches, thereby contributing more effectively to bridging the gap between academia and industry. These guidelines promote experiential learning through

immersive experiences in real business environments, the use of authentic company case studies, and the integration of digital technological tools. They also encourage pedagogical strategies such as problem-based learning and collaborative teamwork, the use of simulated digital games, and the development of competency models aligned with BPM-related roles, all of which contribute to preparing students for the complex demands of professional practice.

Therefore, this study presents a novel framework of BPM education guidelines as a reference model to assist educators in strengthening students' knowledge in the BPM field. It contributes socially by mapping and discussing research clusters that highlight the role of key authors advancing knowledge in BPM education. Moreover, it offers a managerial contribution by supporting the expansion of university and business school curricula through practical guidelines designed to prepare future BPM professionals to meet organizational demands.

Nevertheless, this study is not without limitations. One key constraint is that the effectiveness of the proposed framework has not yet been tested in real educational environments focused on BPM teaching. In addition, the BPM education guidelines presented here have not been formally validated by subject-matter experts. Future research could address these gaps by empirically validating the framework and further exploring how BPM education guidelines can serve as a foundation for guiding best practices in BPM teaching. Such studies may also propose new or complementary guidelines to advance the field and support the continuous improvement of BPM education.

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