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Analysis of the Role of Business Processes in Enhancing Strategy, Policy, and Performance in the Private and Public Sectors: A Literature Review

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ABSTRACT

This study aims to conduct a systematic literature review of recent research addressing the implementation and development of business processes within the public and private sectors. 150 articles from various databases were collected and screened using inclusion and exclusion criteria, resulting in 50 relevant articles selected for further analysis. The analysis involved classifying the articles based on functional business areas and contributions to organizations, namely strategy, performance, and policy, as well as identifying the challenges and success factors in business process implementation. The findings reveal that strategic contributions are the primary focus of the literature, particularly in the areas of operations management, digital transformation, and technological innovation. The main challenges identified include the integration of advanced technologies, organizational readiness, and supply chain coordination. On the other hand, the success factors found include digital technology adoption, strengthening of organizational capabilities, and transformational leadership. This study provides both theoretical and practical contributions to understanding the dynamics of modern business processes and serves as a reference for the development of more adaptive and sustainable organizational strategies and policies in the digital era.

Keywords: *business process, organizational strategy, digital transformation, systematic literature review, success factors, implementation challenges*

Introduction

Over the past few decades, businesses have undergone significant changes driven by social, economic, technological, and political factors. These changes have impacted customer lifestyles and significantly altered organizational operational processes [1]. An organization or company consists of a series of organized and interconnected business processes and activities, which require efficient and effective process management to achieve strategic targets and goals [2]. Due to the dynamic nature of business, organizations/companies tend to evolve through growth, transformation, or market expansion [2]. In the midst of globalization and increasing competition, business processes have become a critical element in enhancing performance, strategy, and policies within companies. Additionally, organizational structure has proven to have a significant impact on operational and financial performance. Therefore, both information systems and organizational structure are expected to make a positive contribution to improving company performance through business processes [1].

Constraints in business processes include factors such as a lack of resources and knowledge. Moreover, technological advancements across different countries can influence the digital transformation outcomes of business processes within companies [3]. In previous studies, one of the issues frequently encountered by companies in Germany was the lack of understanding in managing data [4]. Based on research conducted with 90 respondents from 30 medium-sized companies, key success factors relevant to digital transformation were identified [4]. Companies need to make significant investments in technology and training for employees to improve their skills and capabilities, which can hinder the effective implementation of new systems (Fernandes et al., 2021). Furthermore, in recent years, several issues related to economic activities, financial management, and high-risk sectors within companies have been uncovered through both external audits and internal inspections [5]. Therefore, a study conducted in several companies, particularly in China, focused on designing AI-based financial management optimization to enhance accounts receivable management in an integrated mode, adopting AI-based financial management optimization designs to meet the needs of corporate accounts receivable management [5].

In another study, an analysis of business processes in both the private and public sectors revealed several factors that hinder both sectors, which could disrupt business processes and potentially lower the performance of both government and private sector companies [6].

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In this study, we conducted a systematic literature review from various sources. The data from the selected journals and their respective quantities are as follows:

Table 1. Data Source Journal

No.	Publisher Platform	Quantity
1	Emerald	14
2	Wiley Online Library	5
3	ScienceDirect	6
4	Springer	1
5	Taylor & Francis	3
6	MDPI	20
7	IEEE Xplore	1
	Total	**50**

Source: Author (2025)

Table 1.1 shows the data from international journals sourced from Google Scholar, with a total of 50 journals selected for their relevance to the research. The focus of this research is on the role and implementation of business process applications in enhancing strategies, policies, and performance, particularly in the private and public sectors.

Research Methods

Time and Place of Research

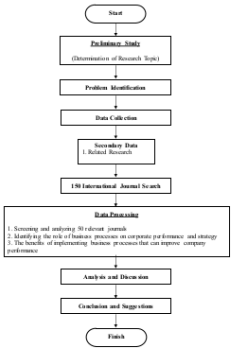
The research was conducted from October 2024 to January 2025. This study is a literature review of international journals obtained from Google Scholar. In the systematic search for journals, the researcher successfully collected 150 journals related to the research topic.

Research Object

In determining the research object, the initial step was selecting the topic of "Business Processes" with a literature review methodology to understand the context and current developments in the field of business processes. Further research was conducted on existing journals, and the research target was defined. Out of the 150 journals collected, the focus was on the role of business processes within companies. The researcher then filtered and analyzed the 50 most relevant journals to identify the benefits of business process implementation and how these processes could enhance performance and strategy in companies. Through this approach, the study aims to provide in-depth insights into the contribution of business processes to performance and strategy in both the private and public sectors.

Research Procedure

The research procedure follows a systematic flow from start to finish. The steps taken in this research include preliminary studies, problem identification, data collection, data processing, analysis and discussion, and conclusions and recommendations. The following flowchart illustrates the research procedure:



Source: Author, 2025

Figure 1. Research Flowchart

The flowchart outlines the steps carried out in this research. Below is a detailed explanation of each stage:

1. Preliminary Study

The preliminary study is a step taken when we want to identify the variables and the population/sample to be studied, assuming that the available data is insufficient for the purpose of the research.

2. Literature Review
   The literature review is a series of activities related to the method of collecting reference data, reading, noting, and processing research materials.
3. Problem Identification
   Identifying the research problem is the first step in the research process. The researcher needs to outline the problem identification so that the research issue becomes clearer within the background.
4. Problem Formulation
   This step involves identifying real-world problems and comparing them with existing literature to form a clear problem statement and identify suitable solutions.
5. Research Objective
   The research objective is a scientific activity centered around analysis, carried out systematically and consistently, aimed at revealing the truth.
6. Data Collection
   Data collection begins after determining the research topic, starting with the search for 150 journals on Google Scholar.
7. Secondary Data
   The secondary data in this research is obtained indirectly from journals and relevant research data.
8. Data Processing
   Data processing is carried out using Microsoft Excel to classify the data.
9. Analysis and Discussion
   Analysis and discussion are key stages in the research process to resolve issues and draw conclusions and recommendations.
10. Conclusions and Recommendations
    Conclusions and recommendations are the final stages in the research, where the findings are summarized, and recommendations for future action are made.

Data and Information

The data and information used in this research are secondary data.

Secondary Data

Secondary data for this research is obtained from various institutions, including literature studies on data published officially in online databases such as Google Scholar.

Population and Sample

Population

The population in this research consists of academic articles (journals) relevant to the research topic and can be used as a source of information. Therefore, the population for this business process research is 150 academic journals.

Sample

The sample in this literature study consists of a selected group of academic journals that are specifically chosen from the population for deeper analysis. The sample includes 50 relevant academic journals that have been analyzed according to the research criteria.

Research Type

The research type used in this study is a literature review. The focus of the research is to collect business process journals, then analyze and synthesize information from various literature sources such as articles, journals, and previous research reports. The goal is to understand and conduct further research on business processes, identify gaps in existing research, and provide a theoretical foundation for further studies.

Data Collection Method

The data collection method in this research is as follows:

1. Identifying relevant sources such as journals, research reports, and other documents.
2. Searching for business process journals through academic platforms or databases like Google Scholar, Sciencedirect, MDPI, Wiley Online Library, IEEE Xplore, etc.
3. Using appropriate keywords to search for business process literature to find more specific information.
4. Collecting 150 business process journals and filtering them based on relevance, quality, and source credibility.

5. Reading and analyzing the collected literature and selecting 50 of the most relevant journals based on the main topic of business processes to identify issues and analyze successes, as well as how business processes can improve performance, strategy, and policies in companies. The synthesized information will then be used to build arguments or conclude findings from existing research.

Data Processing Techniques

In this research, data processing is carried out by reviewing journals/literature that involves deep analysis of each journal. Each journal is evaluated based on specific criteria, such as relevance, methodology, and contribution to the understanding of business processes. The collected data will then be analyzed to identify patterns, trends, and gaps in previous research, which will be used to build a strong theoretical framework and provide recommendations for more effective business process development. The stages are as follows:

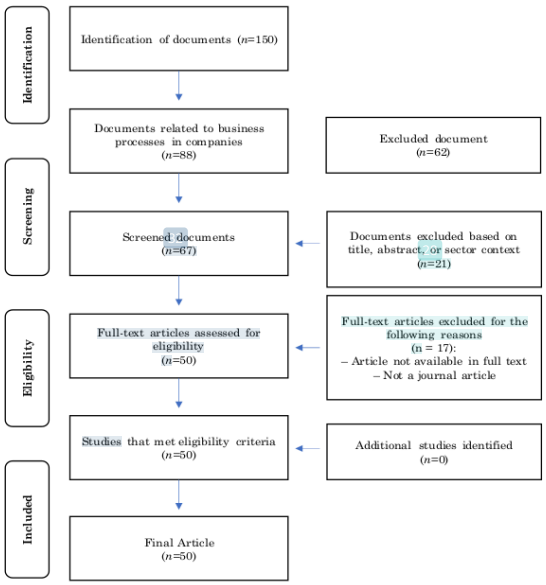
1. Conducting an international journal search as a preliminary step to analyze the business process criteria for both the private and public sectors.
2. Translating the international journals and categorizing their contents into a table based on categories like author names, company sector criteria, methods, results, barriers, and limitations of the journal.
3. Searching for results on the role of business processes in improving performance, strategy, and policies in business process implementation.
4. Classifying categories based on results (performance, strategy, and policy) from the journals using their respective Key Performance Indicators (KPIs).
5. Processing the collected data and then creating a Venn diagram based on the results of the literature review.

Results and Discussion

Data Collection

Literature Screening

The systematic literature review conducted resulted in the selection of studies using inclusion and exclusion criteria. A total of 150 articles from various databases were screened based on keyword relevance, titles, and abstracts, and then grouped, resulting in the selection of 50 articles.



Source: Author, 2025

Figure 2. Article Selection Flowchart

Figure 4.1 shows the process of document selection from databases for research support. The first step in this process resulted in 150 international articles, which were then subjected to an initial screening, where 62 articles were excluded due to their irrelevance to the field of business processes in companies, leaving 88 articles within the research topic. Out of these 88 articles, 21 were further excluded because their titles and abstracts did not align with the research focus, resulting in 67 articles for the next stage. The remaining 67 articles underwent a more in-depth analysis to assess their content and quality. In the subsequent screening phase, 17 articles were excluded due to the lack of supporting data necessary for the research. Finally, 50 documents that met the required criteria were selected for article analysis. No additional articles were added, so the total number of articles used for the final synthesis remained 50.
Below is the table displaying the article search data from Google Scholar, including the number of articles taken from each platform:

Table 2. Literature Database Search Results

Platform	Total Articles Collected	Articles Selected for Analysis
MDPI	45	20
Emerald	24	14
Sciencedirect	25	10
Wiley Online Library	15	5
Springer	5	3
Taylor & Francis	6	4
IEEE Xplore	5	4
Total	**150**	**50**

Source: Author's data, 2025

Table 4.1 shows the number of articles obtained and ultimately selected from various publisher platforms. Of the total 150 articles collected, only 50 were chosen after undergoing the selection process. MDPI contributed the largest number of articles, with 45 articles obtained, 20 of which were selected for analysis. Emerald contributed 24 articles, with 14 selected. Other platforms, such as Sciencedirect, Wiley Online Library, Taylor & Francis, Springer, and IEEE Xplore, contributed smaller numbers, with selected articles varying accordingly. This process reflects a stringent selection based on specific criteria to ensure that only relevant and high-quality articles were used.

Keyword-Based Journal Search

The following are the keywords chosen for the search to obtain the desired results that help answer the research questions.

Table 3. Article Search Keywords

Parameter	Meaning	Keywords Used
Population	Research field or area	"business process" OR "business process automation" OR "business process management" OR "process digitalization"
Intervention	Tools, technologies, or methods used to address the problem	"Business Process Management" OR "Workflow Automation" OR "Process Mining" OR "Enterprise Architecture"
Outcome	Impact or benefits for the organization or workers	"process efficiency" OR "cost reduction" OR "productivity improvement" OR "regulatory compliance"
Context	Environment or system where the tools or technology is applied	"ERP" OR "CRM" OR "Supply Chain Management" OR "E-Government" OR "digital transformation"

Source: Author's data, 2025

Table 3 explains that research on business processes typically uses certain keywords to facilitate the search for relevant information. Keywords such as "business process", "business process automation", and "process digitalization" were used to define the research area or field. For interventions, terms like "Business Process Management", "Workflow Automation", and "Process Mining" refer to tools, methods, or technologies used to solve problems or enhance processes. The outcomes of these interventions are measured through their impact on "process efficiency", "cost reduction", and "productivity improvement", indicating the tangible benefits for organizations or workers. The research also considers the context or environment in which these technologies are applied, such as "ERP", "CRM", "Supply Chain Management", or "E-Government", as the results of using such technologies may vary depending on the setting or system used.

Publication Sources and Numbers

The following diagram illustrates the number of articles collected from different journal publishers:

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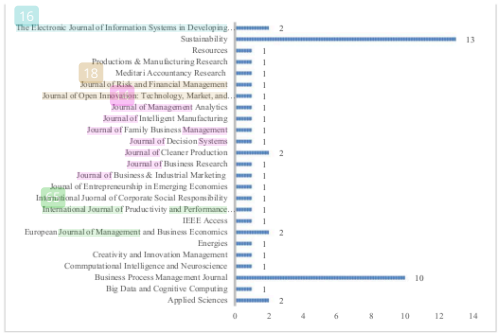


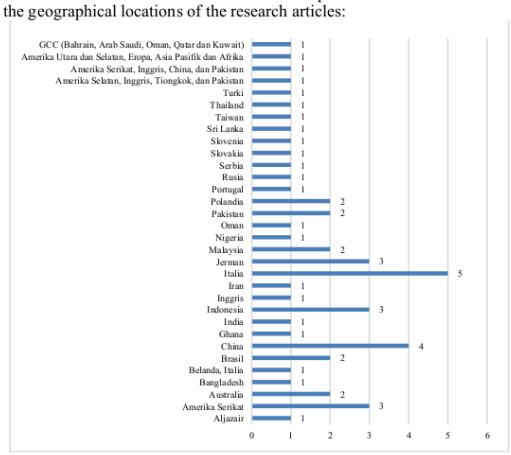
Source: Author's data, 2025

Figure 3. Journal Publisher Diagram

Figure 2 above is a diagram showing the number of articles collected from various journal publishers. The journal *Sustainability* was the dominant source, contributing 13 articles, followed by *Business Process Management Journal*, which contributed 10 articles. Other journals, such as *The Electronic Journal of Information Systems in Developing Countries*, *Journal of Cleaner Production*, *European Journal of Management and Business Economics*, and *Applied Sciences*, each contributed 2 articles. Meanwhile, most of the other journals contributed only 1 article, indicating that although the articles analyzed came from a variety of journals, only a few journals served as the main sources for this research.

Research Object and Publication Year

The selected 50 articles were derived from various companies across different countries. The diagram below *illustrates* the geographical locations of the research articles:



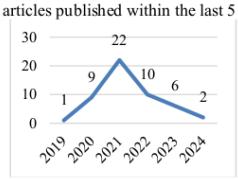
Source: Author's data, 2025

Figure 3. Research Object by Country

Figure 3. above shows the diagram based on the countries or regions of the articles analyzed. Italy was the most frequent country of research, with 5 occurrences, followed by China with 4, and Germany, Indonesia, and the United States, each with 3 occurrences. Countries like Malaysia, Pakistan, Poland, Brazil, and Australia were each represented twice in the articles. Meanwhile, countries such as the UK, Iran, India, Russia, Nigeria, and several other European and Asian countries were only mentioned once. Some articles also covered multiple regions, such as GCC (Bahrain, Saudi Arabia, Oman, Qatar, etc.), and combinations of North America, Europe,

Asia Pacific, and South Asia. This indicates that the research in these articles had a broad and diverse geographic scope.

This research focuses only on articles published within the last 5 years, specifically from 2019 to 2024.



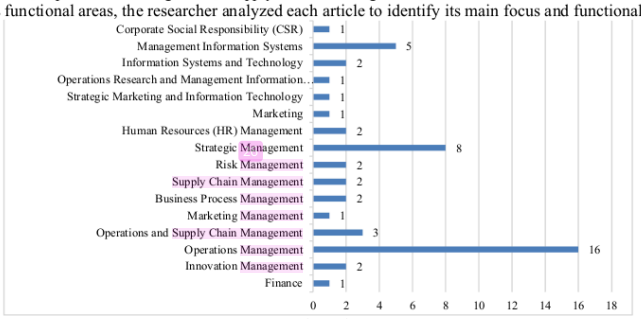
Source: Author's data, 2025

Figure 4.: Publication Trends by Year

Figure 4 above illustrates the number of publications by year that were selected for analysis. In 2019, only one article was used, followed by 9 articles in 2020. In 2021, the highest number of articles (22) were selected, marking the peak of relevant articles for the topic, title, abstract, and research content. However, the number decreased in 2022 to 10 articles, then further dropped to 6 articles in 2023, and only 2 articles were selected in 2024. This pattern shows a sharp increase early on, followed by a gradual decline in recent years, in the number of articles that were analyzed.

Classification of Articles Based on Business Functional Areas

In the business field, there are several common functional areas, such as Finance, Innovation Management, Operations Management, Supply Chain Management, and others. To collect data based on business functional areas, the researcher analyzed each article to identify its main focus and functional area.



Source: Author's data, 2025

Figure 5. Business Functional Area Classification

Figure 5. illustrates the distribution of studies according to business functional categories. The diagram shows that Operations Management is the most frequently analyzed area, with a total of 15 studies. This indicates a strong focus on operational management topics within a business context, such as service-based economic strategies, approaches to customer engagement, and the use of digital platforms to enhance service innovation and customer experience in the healthcare sector [7]. Additionally, operational process efficiency in the oil and gas industry in the Arctic region is highlighted, demonstrating the use of digital technologies for automation, risk management, and productivity improvement on oil fields [8].

The Strategic Management category includes 8 studies, aligning with research on business model changes as part of long-term strategic decision-making and service-oriented strategies to enhance company competitiveness amidst digital transformation challenges [9]. In the Management Information Systems category, 5 studies focus on digital transformation in government (e-government) within the Guangdong-Hong Kong-Macao Greater Bay Area, highlighting digital governance development and transformation strategies with macro-level business, technology, and public policy implications [10].

Other functional areas include Finance, which is evolving from traditional financial accounting to intelligent, technology-based management accounting [5]. Operations and Supply Chain Management, Risk Management, Business Process Management, and Supply Chain Management each include 2–3 studies. Areas such as Marketing and Corporate Social Responsibility (CSR) are represented by only one study each. This distribution reflects that most research articles focus on operational and strategic topics, while other areas, such as marketing or CSR, remain underexplored.

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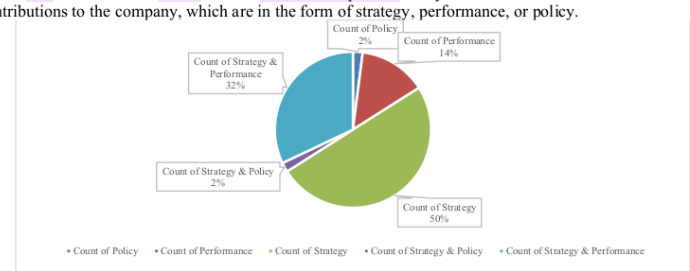
Results and Classification of Business Processes

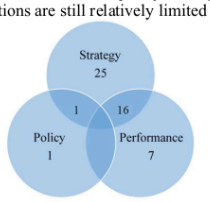
The classification of the results of business process analysis in the articles is based on the main contributions to the company, which are in the form of strategy, performance, or policy.



Source: Author's data, 2025

Figure 6. Classification Based on the Main Contribution of Business Processes

Figure 6. shows that the majority of the studies contribute in the form of strategy (50%), reflecting the literature's focus on long-term planning and strategic decision-making within companies. About 32% of the articles reflect a combination of strategy and performance, indicating that many studies not only outline strategic directions but also measure the impact on company performance. Meanwhile, 14% of the articles focus exclusively on performance, emphasizing the effectiveness and efficiency of business processes. The remaining contributions are split evenly, with 2% each on policy, strategy & policy, and policy & performance, highlighting that formal policy contributions are still relatively limited in the analyzed literature.



Source: Author's data, 2025

Figure 7. Classification of Research Results by Article Publisher

The Venn diagram above shows the distribution of publications based on the three main topics: Strategy, Policy, and Performance. There are 25 publications on Strategy, 7 on Performance, and only 1 on Policy. Additionally, 16 publications discuss both Strategy and Performance, while 1 publication addresses both Strategy and Policy. However, no publications simultaneously discuss all three topics: Strategy, Policy, and Performance in one study. This indicates that the most common combination of topics examined together is Strategy and Performance, suggesting a trend among researchers to link strategic planning with performance outcomes.

Challenges in Business Process Implementation

The following are some challenges encountered in the implementation of business processes in the public sector:

Table 4. Challenges in Business Process Implementation in the Public Sector

No.	Authors	Sector	Challenges
1	Ai et al. (2023), Chen et al. (2021) [10]	Government	Challenges in promoting and managing digital government transformation, including infrastructure, technology adoption, and organizational readiness.
2	Elbashir et al. (2022), Al-Matari et al. (2022) [11], [12]	Government	Strengthening business process capabilities through information technology, such as business intelligence and accounting information systems, to improve management control and organizational resilience.
3	Idogawa et al. (2023), Elapatha & Jehan (2020) [13], [14]	Government	Challenges in change management and business process reengineering, including resistance to change, reorganization planning, and implementation strategies.

4	Plugge et al. (2021), Abane & Brenya (2021) [15], [6]	Government	Difficulties in aligning service models and organizational environment, including service orientation in the public sector and the impact of organizational conditions on performance.
5	Siderska (2021) [16]	Government	Challenges in adopting process automation (Robotic Process Automation) to maintain operational continuity during emergencies, such as the COVID-19 pandemic.

Source: Author's data, 2025

Table 4 highlights digital transformation in government as a major challenge, as many government agencies still face limitations in digital infrastructure and human resources readiness. According to Ai et al. (2023), this challenge requires a systemic approach to integrate technology into governance. Meanwhile, Chen et al. (2021) emphasize the role of governments in facilitating digital changes in small businesses, which also reflects the internal challenges govemments face in driving digitalization.

In terms of business process capabilities through IT, Elbashir et al. (2022) highlight the role of business intelligence systems in enhancing managerial control, while Al-Matari et al. (2022) emphasize the role of dynamic accounting information systems as a critical link in building organizational resilience in the public sector.

Change management and business process reengineering challenges are rooted in organizational structure and bureaucratic culture. Idogawa et al. (2023) examined key success factors in business process changes, while Elapatha & Jehan (2020) highlighted barriers to implementing Business Process Reengineering (BPR) in public services, including employee resistance and lack of managerial support.

Adjusting to service orientation and organizational environment is also an important challenge. Plugge et al. (2021) emphasized the need for revitalizing service approaches in government organizations, while Abane & Brenya (2021) discussed how an unfavorable organizational environment can hinder performance management effectiveness.

The adoption of process automation in the public sector, particularly in exceptional circumstances like a pandemic, was explored by Siderska (2021). This study showed that adopting technologies such as Robotic Process Automation (RPA) requires high technical and organizational readiness to ensure the continuity of public services.

In addition, several challenges in the implementation of business processes were identified in the private sector, as shown in the following table:

Table 5. Challenges in Business Process Implementation in the Private Sector

No.	Authors	Sector	Challenges
1	Amini & Alimohammadlou (2021), Goel et al. (2022), Reffad & Alti (2023) [17], [18], [19]	Private	Complexity of integrating advanced technologies (such as AI, semantic optimization, and interpretive models) into existing systems and business processes.
2	Ge et al. (2021), AlNuaimi et al. (2020), Alsheyadi et al. (2024), Fonseca et al. (2021) [20], [21], [22]	Private	Supply chain coordination and selecting the right contracts amid market dynamics, including challenges in green processes and circular economy models.
3	Brunk et al. (2020), Zabukovšek et al. (2023), Wyrtki et al. (2021) [23], [24], [25]	Private	Challenges in using contextual data and aligning IT with business strategy to drive innovation and sustainability.
4	Md. M. Alam et al. (2021), Paunović et al. (2023), Malik et al. (2021), Abrokwah-Larbi & Awuku-Larbi (2024) [26], [27], [28]	Private	Barriers in developing internal business processes, such as the adoption of e-wallets, authentic leadership, innovation in family businesses, and AI use in marketing.
5	Aydiner et al. (2019), Ahmed et al. (2022), Zeng (2022), Plugge et al. (2021) [29], [30], [15]	Private	Benefits and risks of implementing information systems and business analytics, including risk management, accounting, and service models.
6	Queiroz et al. (2020), Wamba-Taguimdje et al. (2020), Fernandes et al. (2021), Samylovskaya et al. (2022) [31], [32], [33]	Private	Readiness for smart systems and Industry 4.0, including resource extraction digitalization and predictive maintenance.
7	Er & Nurmadewi (2021), Garcia-Garcia et al. (n.d.), Guo & Xu (2021), Stalmachova et al. (2021) [34], [35], [36]	Private	Challenges in digital transformation and adaptation in SMEs, including technology readiness, digital quality control, and pandemic impacts.
8	Pieroni et al. (2021), Fu et al. (2022), Huang et al. (2021), Wolniak et al. (2021), S. M. S. Alam & Islam (2021) [9], [1], [37]	Private	Sustainability and environmental responsibility (CSR) challenges in adopting circular economy models and building green corporate image.
9	Al-Matari et al. (2022) [12]	Private	Effectiveness of business learning through simulations, especially through serious games in economic education and ERP systems.
10	Al-Anqoudi et al. (2021), Pilipczuk (2021) [38], [39]	Private	Profession and organizational structure changes due to digitalization, particularly in the role of business process managers and machine learning implementation.

11	Schiavone et al. (2020) [7]	Private	Redesigning service experience in co-creation processes, challenging because it involves multiple stakeholders in service sectors like healthcare.

Source: Author's data, 2025

Table 5. reflects the complexity of integrating advanced technologies, such as machine learning and semantic optimization, into existing business processes. Amini & Alimohammadlou (2021), Goel et al. (2022), and Reffad & Alti (2023) highlight the challenges faced by private companies in adapting to these advanced technologies. Additionally, supply chain coordination and selecting appropriate contracts remain critical challenges, particularly in green processes and the adoption of circular economy models (Ge et al., 2021; Fonseca et al., 2021).

The use of contextual data and aligning IT with business strategies are also key areas of concern, as outlined by Brunk et al. (2020) and Zabukovšek et al. (2023), emphasizing the need for businesses to innovate and promote sustainability. Other challenges include internal business process development, such as slow adoption of digital wallets and leadership issues (Md. M. Alam et al., 2021), as well as risks and benefits of information systems (Aydiner et al., 2019; Ahmed et al., 2022).

The readiness for Industry 4.0 and digital transformation in SMEs, particularly in manufacturing and food sectors, are discussed by Fernandes et al. (2021) and Er & Nurmadewi (2021), focusing on technological adaptation, digital quality control, and the impact of the pandemic.

Finally, corporate social responsibility (CSR) and environmental sustainability challenges are emphasized by S. M. S. Alam & Islam (2021), highlighting the need for companies to integrate green initiatives into their business models for competitive advantage.

Success Factors in Business Process Implementation

In addressing the various challenges in business process implementation, the articles analyzed reveal several successes achieved by companies in both the public and private sectors. These successes are categorized based on the contributions to the company in the form of strategy, performance, or policy.

Table 6. Success Factors in Business Processes in the Private Sector

No.	Authors	Sector	Success Factors
1	Amini & Alimohammadlou (2021), Plugge et al. (2021), Garcia-Garcia et al. (n.d.), Fonseca et al. [17], [15], [22]	Private	Integration of Business Process Management (BPM), ERP, and business process redesign
2	Brunk et al. (2020), Al-Anqoudi et al. (2021), Reffad & Alti (2023), Wamba-Taguimdje et al. (2020) [23], [38], [32]	Private	Technological innovation and artificial intelligence for business optimization
3	AlNuaimi et al. (2020), Fu et al. (2022), Huang et al. (2021), Wolniak et al. (2021) [21], [40], [37]	Private	Sustainability and corporate social responsibility (CSR, green supply chain)
4	Malik et al. (2021), Abdulkader et al. (2020), Paunović et al. (2023), Pilipczuk (2021) [28], [41], [39]	Private	Organizational strategy, adaptive culture, and transformative leadership
5	Queiroz et al. (2020), Goel et al. (2022), Bazan & Estevez (2022), Fernandes et al. (2021) [31], [18], [42]	Private	Digital transformation and adoption of Industry 4.0 technologies
6	Al-Matari et al. (2022), Md. M. Alam et al. (2021), Wengler et al. (2021), Stalmachova et al. (2022) [12], [43], [36]	Private	Organizational learning, business resilience, and adaptive innovation

Source: Author's data, 2025

The analysis of the literature, encompassing various studies in the private sector, reveals six main groups of success factors for business processes. Each group reflects strategic and operational elements that are key to the successful management and development of business processes. In Group 1, the focus is on the integration of Business Process Management (BPM), Enterprise Resource Planning (ERP), and business process redesign. Studies by Amini & Alimohammadlou (2021), Plugge et al. (2021), Garcia-Garcia et al. (n.d.), and Fonseca et al. (2021) consistently emphasize that combining structural approaches like Interpretive Structural Modeling (ISM) with system-based approaches such as ERP or digital quality control systems can create efficiencies and effectiveness in business process transformation. This highlights that systematically mapping and reengineering processes is fundamental to continuous improvement efforts.

In Group 2, the role of innovative technologies and artificial intelligence (AI) in improving business performance is emphasized. Research by Brunk et al. (2020), Al-Anqoudi et al. (2021), Reffad & Alti (2023), and Wamba-Taguimdje et al. (2020) concludes that the application of technologies such as deep learning, machine learning, and algorithm-based optimization in production and operational systems directly impacts process efficiency, demand prediction, and adaptability to dynamic market changes.

Group 3 focuses on sustainability and corporate social responsibility (CSR) as key drivers of long-term business success. Studies by AlNuaimi et al. (2020), Fu et al. (2022), Huang et al. (2021), and Wolniak et al. (2021) emphasize the importance of green supply chain strategies, waste management, energy efficiency, and collaboration with external stakeholders in creating added value. Success is not only measured by internal efficiency but also by the company's ability to address environmental and social challenges strategically.

Group 4 includes organizational strategy, adaptive culture, and transformational leadership as success factors. Research by Malik et al. (2021), Abdulkader et al. (2020), Paunović et al. (2023), and Pilipczuk (2021) demonstrates that authentic leadership, organizational values, and innovation driven by company culture promote resilient and innovative organizations. Leadership that supports collaboration and flexibility in decision-making is key to facing significant business changes.

In Group 5, the focus is on digital transformation and the adoption of Industry 4.0 technologies as crucial factors. Studies by Queiroz et al. (2020), Goel et al. (2022), Bazan & Estevez (2022), and Fernandes et al. (2021) reveal that the application of Internet of Things (IoT) and process automation enables efficiency, accuracy, and rapid responses to market demands. Digital transformation also strengthens supply chain integration and operational monitoring in real-time.

Finally, Group 6 highlights the importance of organizational learning, business resilience, and adaptive innovation in facing market dynamics and crises such as the COVID-19 pandemic. Studies by Al-Matari et al. (2022), Md. M. Alam et al. (2021), Wengler et al. (2021), and Stalmachova et al. (2021) show that organizations capable of rapid learning, adjusting strategies, and utilizing information systems dynamically are more resilient and competitive.

Table 7. Success Factors in Business Processes in the Public Sector

No.	Authors	Sector	Success Factors
1	Ai et al. (2023), Chen et al. (2021), Elapatha & Jehan (2020) [10], [14], [3]	Government	Digital transformation and technology-based governance, relying on the integration of IT in public service systems and governance.
2	Elbashir et al. (2022), Plugge et al. (2021) [11], [15]	Government	Utilization of Business Intelligence management information systems and service orientation to improve managerial control and decision-making in public organizations.
3	Abane & Brenya (2021), Idogawa et al. (2023) [6], [13]	Government	Change management and a supportive organizational environment, determined by the readiness of the organization to face business process changes and organizational culture factors.
4	Siderska (2021), Reffad & Alti (2023), Zeng (2022) [16], [19], [5]	Government	Automation and adoption of cutting-edge technologies like RPA, IoT, Cloud ERP, to enhance efficiency and sustainability of public processes during critical situations like the pandemic.
5	Al-Matari et al. (2022) [12]	Government	Strengthening business process capabilities through dynamic accounting systems and simulation-based education, enhancing organizational resilience and improving public sector HR competencies.

Source: Author's data, 2025

The first success factor in business process implementation in the public sector is the full implementation of digital transformation in governance. This can be seen in the research by Ai et al. (2023), Chen et al. (2021), and Elapatha & Jehan (2020), which shows that digital technologies can improve efficiency, transparency, and citizen engagement in public services. Digital transformation helps governments optimize services through integrated information systems, fostering innovation in decision-making, and enhancing citizen participation. For instance, Chen et al. (2021) emphasize the importance of policy support and infrastructure to ensure effective digital transformation of small business services under government facilitation.

Next, Elbashir et al. (2022) and Plugge et al. (2021) show that management information systems, including business intelligence and service orientation, are critical in supporting managerial control and improving performance in government agencies. Business Intelligence (BI), for instance, allows real-time data collection and analysis that supports data-driven decision-making. Plugge et al. (2021) also highlight that service-oriented business models promote flexibility and collaboration across government units.

Idogawa et al. (2023) and Abane & Brenya (2021) identify that the ability of government institutions to manage change and create an internal environment that supports innovation and adaptation is a key factor in the success of business process management implementation. The research by Abane & Brenya (2021) on local government in Ghana shows that supportive organizational environments, such as bureaucratic structures, leadership, and work culture, can strengthen performance management systems.

Another key success factor is the utilization of automation and technologies such as Robotic Process Automation (RPA), Internet of Things (IoT), and Cloud ERP. Research by Siderska (2021), Reffad & Alti (2023), and Zeng (2022) emphasizes that automation is crucial, especially in crisis situations like the COVID-19 pandemic. These technologies ensure that services continue to operate efficiently with minimal physical interaction, improving resource management and public service quality.

Finally, Al-Matari et al. (2022) highlight that business process capabilities can be enhanced through the implementation of dynamic accounting systems and simulation-based education, such as ERP serious games. In the public sector context, this means strengthening organizational resilience through improved internal information systems and enhancing HR competencies through educational approaches.

Role and Implementation of Business Processes

Below is the role and implementation of business processes:

Table 8. Role and Implementation of Business Processes

No.	Authors	Sector	Performance	Policy	Strategy	Role	Implementation
1	Amini & Alimohammadlou (2021) [17]	Private	✓	✓	✓	Integration of quantitative and qualitative methods in modeling	Application of ISM and SEM for business system analysis
2	Ge et al. (2021) [20]	Private		✓		Evaluation of outsourcing contract options	Cost adaptation as the basis for business decision-making
3	AlNuaimi et al. (2020) [21]	Private		✓		Green Business Process Management in the oil and gas sector	Investment in BPM systems & sustainability board
4	Bazan & Estevez (2022) [42]	Private		✓		Digitalization in the context of Industry 4.0	Integration of system architecture and digital infrastructure
5	Brunk et al. (2020) [23]	Private		✓		Process prediction using deep learning	Use of CS-LSTM for accurate business activity predictions
6	Md. M. Alam et al. (2021) [26]	Private	✓		✓	Development of services based on customer needs	Application of e-wallets for convenience & transaction accountability
7	Paunović et al. (2023) [27]	Private	✓			Business process innovation	Innovation as a response to market changes
8	Malik et al. (2021) [28]	Private	✓		✓	Role of HR in process optimization	Strengthening workforce skills in digital systems
9	Abdulkader et al. (2020) [41]	Private	✓		✓	Operational management optimization through digital systems	Improved process efficiency and data-driven decision-making
10	Abrokwah-Larbi & Awuku-Larbi (2024) [44]	Private	✓		✓	Strategic marketing and IT integration	Application of information systems to enhance operational performance
11	Schiavone et al. (2020) [7]	Government	✓		✓	Digital transformation in the public sector	Application of technology for public service & innovation
12	Aydiner et al. (2019) [29]	Private	✓		✓	Use of ISM for operational process improvement	Implementation of information systems for efficiency
13	Ahmed et al. (2022) [30]	Private	✓		✓	Digitalization in the context of risk mitigation	Risk-based decision support system
14	Phuge et al. (2021) [45]	Private	✓		✓	Digital strategy to enhance customer service	Use of digital strategies for personalized services
15	Ai et al. (2023) [10]	Government		✓	✓	Strengthening public sector technology infrastructure	Application of information systems in government

16	Sohns et al. (2023) [46]	Private	✓		✓	Data-based operations and innovation	Operational optimization with digital and adaptive approaches
17	Elbashir et al. (2022) [11]	Government			✓	Integration of ISM in public sector strategic planning	Use of big data for public policy strategies
18	Idogawa et al. (2023) [13]	General		✓		Optimization of public service operations	Efficiency-based business processes for public services
19	Queiroz et al. (2020) [31]	Private		✓		Digitalization of the value chain	ERP and BPM systems in digital transformation
20	Wamba-Taguimdje et al. (2020) [32]	Private		✓		Digital supply chain integration	Application of digital technology for supply chain management
21	Elapatha & Jehan (2020) [14]	Government	✓			Government operational efficiency	Optimization of work processes and bureaucracy through electronic systems
22	Er & Nurmadewi (2021) [34]	Private	✓			HR and technology collaboration	Implementation of technology and strengthening HR capacity
23	Siderska (2021) [16]	Private		✓		Process automation in business	Implementation of robotic process automation (RPA) technology
24	Al-Matari et al. (2022) [12]	Private		✓		Decision-making support through ISM	Implementation of information systems in strategic and operational management
25	Abane & Brenya (2021) [6]	Government		✓		Government process digitalization	Implementation of BPM in public service sector
26	Chen et al. (2021) [3]	Government		✓		Data-driven public policy formulation	Use of big data in national development strategies
27	Alsheyadi et al. (2024) [47]	Private	✓			Supply chain efficiency through digital integration	Implementation of integrated systems for logistics and distribution management
28	Guo & Xu (2021) [48]	Private	✓			Use of ISM for business process accuracy	Data integration for strategic decision-making
29	Siagian et al. (2021) [49]	Private	✓			IT integration in operations and logistics management	Supply chain process optimization with IT support
30	Fonseca et al. (2021) [22]	Private		✓		Digital business strategy	Implementation of strategic systems for innovation and competitive advantage

31	García-García et al. [35]	Private	✓			Operational process optimization	Improvement of operational efficiency and effectiveness
32	Er & Nurmadewi (2021) [34]	Private		✓		Support for innovation through technology	Integration of IT systems for innovation
33	Wengler et al. (2021) [4]	Private	✓		✓	Marketing and performance management support	Marketing strategies that drive performance
34	Reffad & Alti (2023) [19]	Government		✓		Technology as a management tool	Process optimization through IT systems
35	Zeng (2022) [5]	Private	✓		✓	Resource control and financial management	Efficient financial management practices
36	Fernandes et al. (2021) [33]	Private	✓		✓	Operational efficiency and productivity enhancement	Process improvement in operations
37	Samylovskaya et al. (2022) [8]	Private	✓		✓	Operations driving innovation	Refinement of operational processes
38	Stalmachova et al. (2023) [36]	Private	✓		✓	Strategy for aligning processes with customer satisfaction	Customer-centric strategy development
39	Zabukovšek et al. (2023) [24]	Private	✓		✓	Strategy for technology adoption and development	Integration of strategy and technology
40	Fu et al. (2022) [1]	Private	✓		✓	Supply chain and performance optimization	Digitalization and supply chain efficiency
41	S. M. S. Alam & Islam (2021) [43]	Private		✓		CSR strategy for reputation and performance	Implementation of CSR through corporate strategy
42	Wolniak et al. (2021) [37]	Private		✓		CSR as part of managerial processes	CSR implementation for sustainability
43	Pieroni et al. (2021) [9]	Private		✓		Strategy as a driver for innovation	Aligning innovation with strategy
44	Al-Matari et al. (2022) [12]	Private		✓		HR as a strategic asset	Managing HR to improve performance
45	Wyrtki et al. (2021) [25]	Private		✓		Innovation as a competitive advantage	Implementation of innovation systems in companies
46	Al-Anqudi et al. (2021) [38]	Private		✓		Operations as a source of innovation	Adaptive and innovative operational processes
47	Huang et al. (2021) [40]	Private		✓		Supply optimization for efficiency	Logistics and distribution management
48	Ahmed et al. (2022) [30]	Private		✓		Risk identification and mitigation	Integration of risk management in processes

49	Pilipczuk (2021) [39]	Private	✓	Business processes as a foundation for innovation	Process optimization and digitalization
50	Goel et al. (2022) [18]	Private	✓	Production as a key component of efficiency	Production system improvements

Source: Author's data, 2025

In Table 8. business processes serve as a framework for enhancing the efficiency, effectiveness, and reliability of organizational operations. Research by AlNuaimi et al. (2020), Schiavone et al. (2020), and Wamba-Taguimdje et al. (2020) indicates that effective operational process management directly contributes to organizational performance. Moreover, business processes also play a strategic role in innovation. Studies by Bazan & Estevez (2020), Chen et al. (2021), and Siagian et al. (2021) highlight that business processes provide a foundation for creating and launching new innovations, including products, services, and work systems. Brunk et al. (2020), Plugge et al. (2021), and Al-Matari et al. (2022) emphasize that business processes enable technology integration to improve efficiency and transparency in information management and decision-making.

Additionally, business process management plays a crucial role in synchronizing supply chain activities. This is evident in research by Alsheyadi et al. (2024), Ge et al. (2021), and Siagian et al. (2021), which stress the importance of coordinating processes to support logistics and distribution performance. Research by Malik et al. (2021), Idogawa et al. (2023), and Er & Nurmadewi (2021) highlights the role of business processes in shaping and managing HR competencies, ensuring that workflows align with workforce capabilities and productivity. With efficient implementation of processes, organizations can improve company profits and customer satisfaction, as shown in studies by Schiavone et al. (2020), Paunović et al. (2023), and Plugge et al. (2021).

Conclusion

The findings of this research, based on the discussion, are summarized as follows:

Business Process Implementation in the Public and Private Sectors, the implementation of business processes in both the public and private sectors has significant potential to enhance efficiency, innovation, and service quality. However, both sectors face challenges: In the public sector, digital transformation is hindered by inadequate infrastructure, a lack of skilled human resources, and a bureaucratic culture resistant to change. Governments also struggle with redesigning work processes and aligning service models with public needs, especially during crises. In the private sector, challenges include integrating advanced technologies like AI and IoT, aligning business strategies with information systems, and adapting to market changes and sustainability demands. Many companies also struggle with aligning internal processes with organizational culture, particularly in innovation, leadership, and data utilization.

Despite the challenges, the success of business process implementation in both the public and private sectors depends on an organization's readiness to change, manage technology, and commit to continuous learning and adaptation. In the public sector, success is evident in digital transformation efforts such as the implementation of management information systems, process automation with RPA, and the use of big data for more transparent decision-making. Many agencies have also adapted their internal processes and structures to become more technology-driven and responsive. In the private sector, success is seen in the adoption of technologies like ERP, AI, and data-driven management systems, improving efficiency, competitiveness, and innovation, while also enhancing customer relationships and embracing sustainability. Companies with adaptive work cultures and transformational leadership have proven to be more resilient to market changes and crises. Overall, success is not just about the final outcome, but also about the ability to continuously learn and evolve, demonstrating that transformation is possible with the right investments in people, technology, and strategies.

Business processes are not just technical procedures but crucial foundations supporting an organization's strategy, policy, and performance. Strategically, they help organizations set clear directions and gain competitive advantages through digitalization, technology integration, and service innovation. In terms of policy, business processes bridge regulations and their implementation, making services more transparent and accessible in the public sector. In terms of performance, effective business processes directly enhance productivity, cost efficiency, and customer satisfaction. Organizations adopting modern management systems, like ERP and business intelligence, work more efficiently and adaptively. Overall, business processes link planning, execution, and results, enabling organizations to be strategic, effective, and future-ready.

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