Enhancing Efficiency in Outsourcing Workforce through Business Process Management for Digital Transformation

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ABSTRACT

The growing use of outsourced workforces in large organizations increases the need for effective governance, transparency, and process integration in outsourcing contract management. However, many organizations still rely on manual, fragmented, and non-standardized processes that lead to delays, data inconsistencies, and operational risks. This study aims to analyze and redesign outsourcing contract management processes using a business process management approach to support structured digital transformation. This research adopts a qualitative case study methodology, employing structured interviews with key stakeholders, direct observation, and internal document analysis. Six core processes were examined: man-power planning, recruitment and selection, onboarding, performance management, contract renewal, and exit management. existing processes were modeled using BPMN and analyzed through value-added analysis and RACI matrix to identify inefficiencies and role concentration. Based on the findings, a redesigned process model was developed, emphasizing process standardization, system integration, and phased digitalization. The results indicate that business process management-based digitalization can improve efficiency, accountability, and cross-unit coordination, supporting smart governance in outsourcing management within an emerging-market context.

Keywords*: Business Process Management, Digital Transformation, Outsourcing Contract Management, Smart Governance.*

INTRODUCTION

In today's dynamic global business environment, outsourcing has evolved from a cost-saving tactic to a strategic imperative for achieving operational excellence and competitive advantage. As organizations increasingly focus on core competencies, they rely on strategic partnerships to provide specialized external expertise. A study by Adepoju et al. (2022) and Charles and Ochieng (2023) reveals that the development of strategic outsourcing is driven not only by cost-reduction motives but also by market uncertainty and the need for business transformation. Statista Research Department (2024) reinforces this trend by projecting significant growth in the global Business Process Outsourcing (BPO) industry, which is estimated to reach US$0.41 trillion by 2025. In Indonesia, the BPO market potential shows promising development, with a projected value of US$1.93 billion in the same year and an annual growth rate of 6.90% until 2029, which is expected to increase the market volume to US$2.52 billion. This growth is driven by the increasing demand from companies to enhance operational efficiency and reduce costs through the implementation of outsourcing across various business functions.

However, behind this rapid growth, several systemic challenges in outsourcing management have begun to surface. Research findings by Teixeira et al. (2024) and Egbumokei et al. (2024) indicate that most companies still rely on manual processes, which are prone to inefficiencies, particularly in contract management and

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interdepartmental coordination. These findings are consistent with Nyikadzino et al. (2022) and Gao's (2024) report, which highlights the low success rate in the implementation of digital systems in the HR domain, where only 3.2% of organizations have achieved full transformation. This situation is further complicated by disparities in regulations and operational practices, as seen in the case of PT XYZ, where 30% of its workforce consists of outsourced employees who face challenges in process standardization and data integration (Nilakantan, 2023; Namadi, 2023; Kumar et al., 2025).

The academic discourse, as advanced by Veronica and Surja (2022), Khang et al. (2023), and Khan et al. (2024), has provided theoretical foundations regarding the importance of an integrated approach to outsourcing management. They emphasize the crucial role of information technology and digitized systems in overcoming operational challenges. Nevertheless, the specific application of Business Process Management (BPM) in the context of outsourced workforce management remains relatively limited, creating a significant knowledge gap (Popoola et al., 2024; Rocco et al., 2024; Richter, 2025). This situation is exacerbated by the lack of comprehensive studies that integrate business process aspects, labor regulations, and technological solutions into a unified framework (Uygun et al., 2023; Akbari, 2024; Wang et al., 2024).

PT XYZ, as a case study in this research, represents the real challenges faced by the industry. The company experiences a gap between dynamic operational needs and the capabilities of the existing system, particularly in recruitment, performance management, and the extension of outsourcing contracts. These critical processes still rely on conventional methods, which not only hinder productivity but also increase the risk of administrative errors. This condition becomes more urgent to address, considering regulatory changes through the omnibus law, which provides greater flexibility in outsourcing practices.

Based on the identified problems, this study aims to develop an outsourcing management model that integrates the BPM approach with digital systems. The primary objective is to create more efficient work mechanisms through process standardization, automation of routine tasks, and enhanced collaboration among stakeholders. By utilizing the Devil's Quadrangle framework, this study not only proposes technical solutions but also ensures a balanced consideration of time, cost, quality, and flexibility in business processes. This integrated approach positions outsourcing management as a governance mechanism that supports transparency, accountability, and coordinated decision-making across organizational units. The significance of this research lies in its dual contributions. At the academic level, the findings enrich the literature on the application of BPM in human resource management, particularly in the context of outsourcing, which remains underexplored. From a practical perspective, the results provide a structured reference for organizations seeking gradual and measurable digital transformation initiatives. Furthermore, the proposed model is designed to be adaptable to other organizations with similar characteristics and challenges, thereby contributing to broader improvements in organizational efficiency and national industry competitiveness.

LITERATURE REVIEW

Business Process Management and Digitalization

Business process management is a structured approach to analyzing, designing, implementing, monitoring, and continuously improving business processes to enhance efficiency, transparency, and value creation, while aligning processes with organizational strategic objectives (Ezmigna et al., 2023; Mariya et al., 2024; Abbasi et al., 2025). BPM follows a lifecycle consisting of process identification, discovery, analysis, redesign, implementation, and monitoring. In the discovery phase, processes are documented using AS-IS models, often represented with Business Process Model and Notation (BPMN) (Dumas et al., 2018). Process analysis identifies inefficiencies by classifying activities into Value-Adding (VA), Business-Value-Adding (BVA), and Non-Value-Adding (NVA) using value-added and lean waste analysis (Womack & Jones, 2003). The redesign phase

converts AS-IS into TO-BE models by eliminating non-value-adding activities and optimizing performance dimensions based on the Devil's Quadrangle (time, cost, quality, and flexibility) (vom Brocke et al., 2014). The redesigned process is then implemented through deployment and training, followed by continuous monitoring for ongoing improvement.

Previous studies by Mejri et al. (2024) and Iden et al. (2025) demonstrate the effectiveness and flexibility of BPM across various domains. BPM implementation in an energy company with unstructured processes significantly improved efficiency and process visibility through the integration of automation and analytics, achieving a 96% reduction in processing time (Teixeira et al., 2024). An assessment mechanism proposed by Tsakalidis et al. (2019) enables evaluation of BPMN model feasibility for transformation into data-centric workflows, highlighting BPM's applicability for optimizing complex and ad hoc processes. In the healthcare domain, BPMN has been applied to model the clinical AI development lifecycle, demonstrating that BPMN diagrams can serve as generic and adaptable blueprints across multiple use cases (Arshad et al., 2025). Furthermore, the integration of BPMN with the Standard–Do–Check–Act (SDCA) cycle and Lean tools has been shown to effectively reduce non-value-adding activities and support continuous improvement, even in newly established organizations (Castro & Teixeira, 2020). These studies indicate that BPM is not merely a process improvement tool, but a comprehensive managerial strategy capable of integrating people, information systems, and technology (Taherdoost & Madanchian, 2023; Moreira & Dallavalle, 2024). In the context of outsourcing workforce management, BPM provides a suitable framework for addressing challenges related to process delays, data duplication, limited system integration, and reliance on manual procedures.

Efficiency of Outsourcing Contract Management Process

Efficiency in outsourcing contract management is increasingly defined by how well organizations can structure, monitor, and optimize the entire contract lifecycle, from drafting and approval to execution and renewal. In many organizations, inefficiencies arise due to fragmented communication, manual documentation, and a lack of standardized governance across stakeholders. Modern outsourcing arrangements, therefore, require integrated management approaches that emphasize coordination between client and vendor systems, ensuring that service agreements are consistently monitored and aligned with performance expectations. Digital governance mechanisms also enable organizations to reduce administrative delays while improving transparency and accountability in outsourced operations (Sharmin & Chowdhury, 2025).

From an operational perspective, efficiency is further enhanced through the adoption of digital workflow systems that automate repetitive contract-related tasks such as approval routing, compliance checks, and renewal notifications. These technologies reduce human error and improve processing speed, while centralized contract repositories ensure that all stakeholders access consistent and updated information. Data-driven approaches such as process monitoring and analytics support organizations in identifying bottlenecks and improving decision-making accuracy throughout the contract lifecycle. As a result, outsourcing contract management becomes more agile, responsive, and aligned with organizational performance objectives, particularly in environments characterized by high regulatory and operational complexity (Mendling et al., 2020).

RESEARCH METHODS

This study employs a qualitative case study approach by applying the Business Process Management (BPM) framework to analyze and redesign the outsourcing workforce management system at PT XYZ. BPM is widely recognized as a systematic management approach for discovering, modeling, analyzing, measuring, and improving business processes to enhance organizational efficiency and performance. The research procedure is organized into three main phases.

The first phase focused on data collection using methodological triangulation to enhance the credibility and validity of the findings. Data were obtained through semi-structured interviews with seven purposively selected informants: HR managers, operational supervisors, and vendor representatives, each with at least three years of relevant experience, as well as direct observation and analysis of internal documents. These sources provided a comprehensive understanding of the outsourcing workforce management system, including its procedures, coordination mechanisms, and constraints. Each interview lasted 45–60 minutes and followed a guide covering recruitment, contract management, performance evaluation, and coordination processes.

The second phase involves process analysis, where qualitative data were examined using thematic analysis through coding, categorization, and pattern identification to uncover key inefficiencies. The current workflow was then documented using AS-IS process mapping in Business Process Model and Notation (BPMN), supported by Bizagi Modeler to ensure clarity and consistency. This modeling enabled visualization of activities, decision points, and involved actors, providing a structured representation of the existing process and facilitating the identification of inefficiencies and bottlenecks. To further assess performance, value-added analysis was applied to distinguish between value-adding and non-value-adding activities, using indicators such as cycle time, number of non-value-adding activities, and frequency of delays. This approach allowed the identification of administrative delays, redundant procedures, and other factors reducing process effectiveness.

The third phase focuses on process redesign through the development of a digital-based TO-BE model. The redesigned process was formulated using the Devil's Quadrangle approach, which balances cost, time, quality, and flexibility when proposing process improvements. The TO-BE model represents the desired future state of the outsourcing management process and incorporates digital solutions intended to improve transparency, streamline coordination, and enhance decision-making efficiency. In the BPM perspective, process redesign aims to align operational activities with organizational goals while ensuring continuous improvement and better performance outcomes.

To ensure the feasibility and practicality of the proposed process model, validation was conducted through focused group discussions with relevant stakeholders, followed by process simulation to assess the applicability of the redesigned workflow. The validation involved five stakeholders, including HR personnel and operational managers, who evaluated the feasibility of the proposed model and provided feedback for refinement. The overall research flow, including problem identification, data collection, AS-IS mapping, process analysis, TO-BE design, and validation with recommendations, is illustrated in Figure 1.

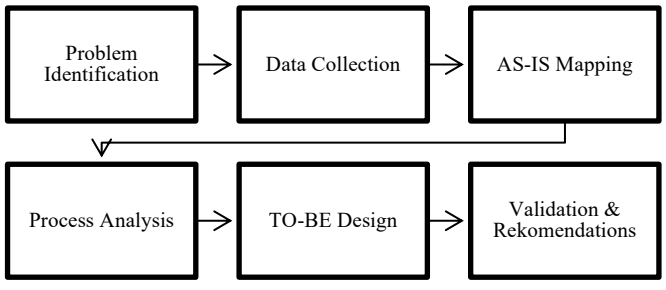


Figure 1. Research Flow

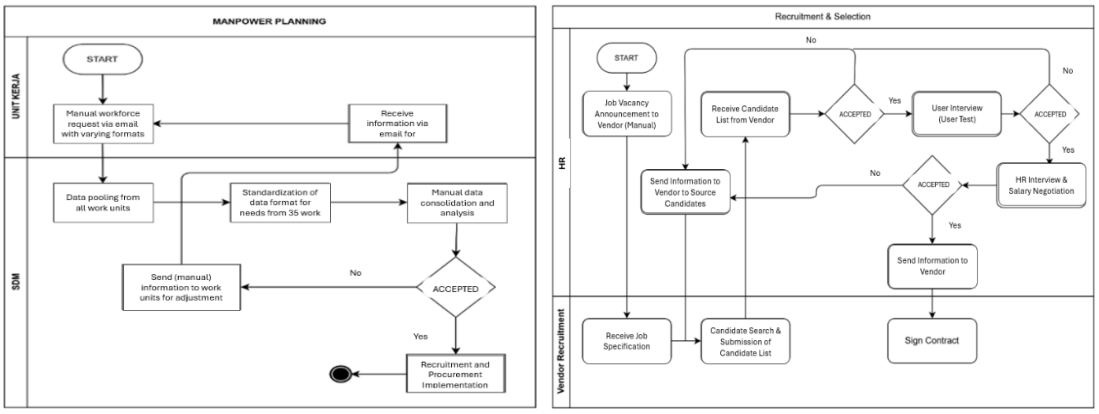
This study ensures methodological rigor through detailed documentation of procedures and the use of standardized analytical tools (BPMN and value-added analysis), allowing for replication in similar organizational contexts. The main limitation lies in the scope of a single case study. However, the developed framework offers an adaptive model for outsourcing management across various industrial sectors.

RESULTS

Outsourcing Contract Management Process and Operational Inefficiencies

Thematic analysis of interviews with seven informants at PT XYZ revealed a predominance of negative sentiments across six key categories of outsourcing management. The onboarding category recorded 18 out of 19 findings with negative tones, primarily related to delays in the provision of work facilities. Contract renewal showed 11 negative issues out of 15 findings, reflecting inefficiencies in the manual process. Performance management (8/13) and exit management (5/6) were also dominated by complaints, particularly regarding undocumented evaluation systems and manual offboarding procedures. Although manpower planning (5) and recruitment & selection (4) had fewer findings, both indicated gaps in planning and selection processes. These data establish the six areas as critical points requiring systemic intervention (Uygun et al., 2023).

Triangulation of interviews, observations, and internal documents identified 15 problem points in the outsourcing cycle. It is characterized by manual and non-standardized processes, such as email-based workforce requests, untraceable physical test records, onboarding delays (up to 10 days), inconsistent performance evaluations, Excel-based contract renewals prone to delays, and manual exit procedures risking access oversight. These consistent findings confirm that digitalization and system integration are key solutions to address process inefficiencies (Iden et al., 2025).

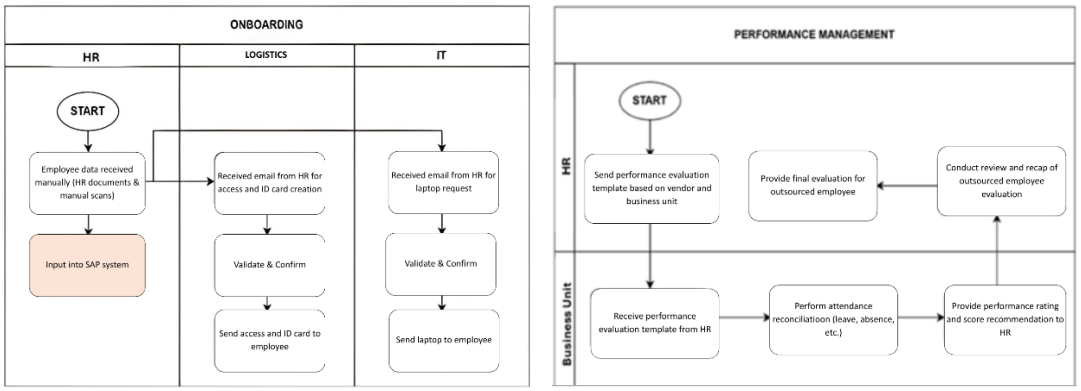


(a) Manpower Planning (b) Recruitment & Selection

Figure 2. Manpower Planning and Recruitment Process

The six identified processes were documented using the BPMN model to depict the sequence of activities, process actors, and points of inefficiency. Based on the business process illustrated in Figure 2, it is evident that workforce requests are still carried out manually via email with inconsistent formats. While 86% of units (30 out of 35) have adopted a standardized format, the remaining 14% (5 units) continue to use varied formats. This discrepancy necessitates re-standardization efforts by the HR team. The problem is further exacerbated by revision requests that can take up to 15 working days, along with manual communication between units, which significantly slows down the recruitment cycle and decision-making process (Mariya et al., 2024).

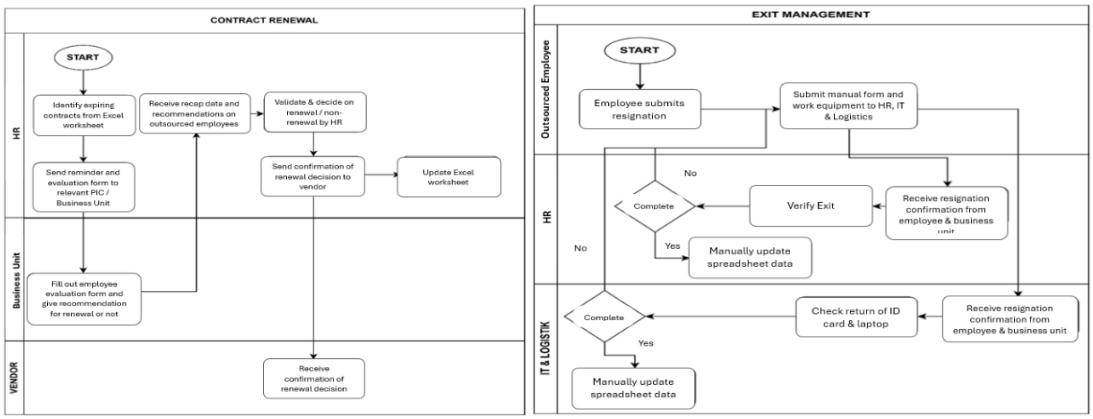
The current outsourcing recruitment process, as shown in Figure 2, faces several critical challenges. First, the documentation of test and interview results, stored in non-standard formats (both physical and digital), hampers data retrieval efficiency and analysis. Second, the absence of a centralized platform for coordination among recruitment teams, vendors, and candidates results in ineffective communication. Third, the existing system lacks an audit trail for process tracking and does not offer real-time access for business units to monitor recruitment status. This condition leads to reliance on manual coordination through the outsourcing of PIC, significantly increasing the workload and slowing the overall recruitment process (Dumas et al., 2018).



(a) Onboarding (b) Performance Management

Figure 3. Onboarding and Performance Management Process

Meanwhile, the onboarding process in Figure 3 still relies on manual coordination via email among the HR, logistics, and IT departments, resulting in a lack of synchronization in the provision of work facilities. Data indicate that 10% of new employees experience delays in receiving essential facilities (ID cards, access credentials, and laptops), with an average delay of 3–4 working days, and extreme cases reaching up to 10 days. This condition has a significant impact on initial productivity and the integration process of new employees (Gao, 2024). The performance evaluation format currently refers to the individual standards of each vendor, resulting in a lack of uniformity in performance assessments. The HR unit is required to reconsolidate evaluations to accommodate input from all parties in an integrated manner. In addition, supporting data such as performance evaluations, attendance records, and leave information are not yet integrated into a single system, forcing the HR unit to manually collect and consolidate data to support a comprehensive and objective performance evaluation process (Khan et al., 2024).



(a) Contract Renewal (b) Exit Management

Figure 4. Contract Renewal and Exit Management Process

The current outsourcing contract renewal process in Figure 4 remains entirely manual, relying on Excel and email without an integrated system. The fragmented workflow, which includes contract tracking, validation by business units, managerial approvals, and communication with vendors, creates a high risk of data errors and process delays. The absence of an automated system for reminders and status tracking further exacerbates this operational inefficiency (Egbumokei et al., 2024). The current exit management process for outsourced employees faces three primary issues: a manual system based on physical forms and spreadsheets, which is prone to errors, unintegrated cross-departmental coordination among HR, IT, and Logistics, and process delays recorded in 12 cases (8 due to incomplete documentation, and 4 due to unreturned facilities). These conditions highlight the urgent need for digitalization to establish a more efficient and accountable process (Sharmin & Chowdhury, 2025).

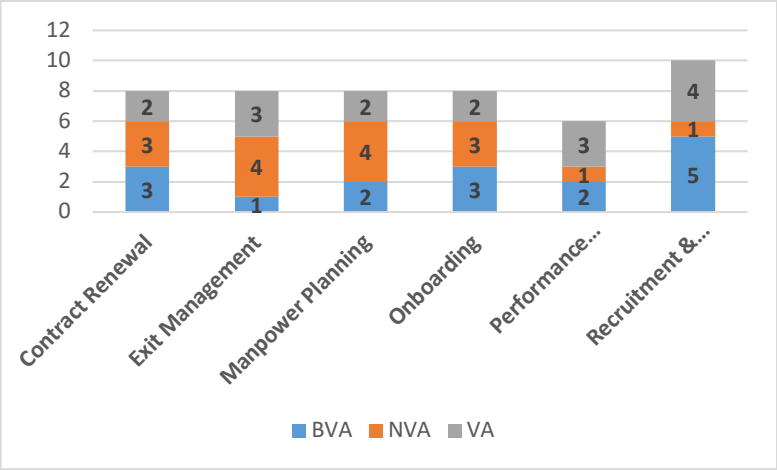


Figure 5. Demography Classification

Figure 5 shows that subsequent value-added analysis of the six main sub-processes in outsourcing workforce management revealed a significant imbalance in activity distribution, with 72% of processes consisting of non-value-adding (38%) and business-value-adding (34%) activities, while value-adding activities accounted for only 28%. The dominance of manual processes, such as data entry in Excel and coordination via email, not only leads to operational inefficiencies but also constitutes a primary source of bottlenecks, with HR acting as a single point of failure in 82% of activities. Workflow mapping indicates excessive process complexity, where each strategic decision requires an average of 4.7 approval steps, resulting in cumulative waiting times of 15–20 working days per cycle (Womack & Jones, 2003).

Value-Added Analysis and Organizational Role Structure

Tangible impacts are observed across several critical areas, such as the Manpower Planning process, where 40% of time is spent consolidating data in varying formats; delays in work facility provisioning for 23% of new employees during onboarding; and 17% of contract renewal delays due to manual tracking systems. Based on these findings, digital transformation through the integration of a centralized platform, automation of 15 BVA/NVA activities, and the implementation of advanced features such as contract auto-reminders and real-time tracking is projected to reduce process time by 55%, administrative errors by 70%, and HR workload by 40%, while establishing a more agile, accurate, and value-driven outsourcing management system (Teixeira et al., 2024).

Table 1. RACI Matrix Manpower Planning Process & Recruitment and Selection Process

Matrix	Process	HR	BU	PIC OS	Vendor
Manpower Planning Process	Distributing workforce requirement forms	A	R	-	-
	Fill out and submit the requirement form	I	R	-	-
	Consolidation of data across units and needs analysis	R	C	-	-
	Submission of results to PIC/Management	R	I	-	-
Recruitment and Selection Process	Send recruitment requirements & specifications to vendors	A	I	R	R
	Search & submission of candidate lists	I		I	R
	Candidate review & shortlist		R	C	
	User interviews		R	C	
	HR interview + salary negotiation	R		C	
	Selection result information to vendors	A	I	C	R
	Signing of the employment contract	A	I	C	R

Note: R = Responsible, A= Accountable, C= Consulted, I= Informed, BU = Business Unites.

In the recruitment and selection process, HR holds a key role in communication with vendors and final decision-making, while vendors act as executors responsible for candidate sourcing. The business units play an active role during the candidate selection stage. Next, Table 2 shows that in the onboarding stage, HR coordinates the onboarding process, while IT and logistics act as executors responsible for providing facilities. This fragmentation of responsibilities has the potential to cause delays (Adepoju et al., 2022).

Table 2. RACI Matrix for Onboarding Pro

Process	HR	IT	LOG	BU	Staff
Input data into SAP	R				
Send ID & laptop access notification	A	I	I	I	
ID card preparation & access	I		A		
Laptop preparation	I	A			
Delivery of ID & laptop to employees	I	R	R		I
System activation & onboarding confirmation	A	C	C	C	I

Note: R = Responsible, A= Accountable, C= Consulted, I= Informed.

Table 3 shows that, in the performance management process, HR leads the development of evaluation formats and the final review, while the business units act as executors of the assessments. Vendors are only informed and do not hold a significant role. This distribution indicates that performance evaluation activities are highly centralized within HR, with limited cross-functional involvement in decision-making processes. As a result, the process relies heavily on HR coordination, which may contribute to delays in consolidation and feedback delivery (Khan et al., 2024).

Table 3. RACI Matrix for Performance Management

Process	HR	BU	Vendor	PIC OS
Compile and send assessment formats	A	C	I	I
Input values & recommendations by users	I	R		
Consolidation of assessment results	R	C	C	
Final review & validation of grades	A	C	I	I
Delivery of feedback to employees	C	C		R

Note: R = Responsible, A= Accountable, C= Consulted, I= Informed.

Meanwhile, Table 4 shows that the renewal process is predominantly controlled by HR, particularly in terms of accountability for decision-making, while the business units act as the main executors of evaluation activities. Vendors are only informed without active involvement in the decision-making process. This structure indicates a centralized governance model in which HR plays a critical coordinating role across most renewal activities. However, the reliance on manual coordination and limited vendor participation may contribute to delays in contract validation and reduce the efficiency of the renewal process (Namadi, 2023).

Table 4. RACI Matrix for Contract Renewal Process

Process	HR	BU	Vendor	PIC OS
Monitoring of expiring contracts	R	I	I	R
Send evaluation form & reminder	A	R		
Work unit assessment and recommendation input	I	R		
Validation and final decision on extension	A	C		
Delivery of results to vendors	A	I	R	
Update contract status in the system	R	I	I	I

Note: R = Responsible, A= Accountable, C= Consulted, I= Informed.

According to Table 5, in the exit management process, HR verifies the resignation, while IT and logistics handle the return of assets. The employee acts as the initiator of the resignation process. The RACI matrix analysis revealed an excessive dependence on HR as the single point of contact in 85% of outsourcing management processes, with manual

coordination complexity involving 4–6 stakeholders per process. The dominance of accountable and responsible activities by HR across 70% of stages from workforce planning to exit management creates operational bottlenecks, while vendor and outsourcing PIC involvement tends to be passive, as informed in 83% of processes. This pattern is exacerbated by the absence of an integrated system, where 92% of critical activities such as contract tracking and performance management still rely on Excel and email, resulting in time inefficiencies averaging 3–15 working days per process (Iden et al., 2025).

Table 5. RACI Matrix for Exit Management

Process	HR	BU	IT	LOG	Staff	PIC OS
Resignation application	I	I	I	I	R	I
Verify the resignation form	A	C	C	C	I	C
Collection and check of work equipment	C	C	R	R	C	I
Deactivate system & email access	I	I	A	-	-	I
Finalize employee status in the system	R	I	I	I	I	R

Note: R = Responsible, A= Accountable, C= Consulted, I= Informed.

Based on the findings from the RACI and value-added analyses, the implementation of digital solutions is focused on sub-processes with the highest inefficiency levels and greatest improvement impact. A phased implementation approach is chosen to minimize operational disruption risks, with system prototype development following agile methods to ensure feature refinement flexibility. Each module undergoes a series of rigorous tests in the Quality Assurance (QA) environment before being launched in limited production to validate the solution's effectiveness. This stage is designed to enable iterative improvements based on user feedback prior to full-scale implementation. The detailed implementation plan integrating six main modules is presented in Table 6.

Table 6. Roadmap for Implementing Digitalization of Outsourcing Processes

Period	Feature / Module	Implementation Description	Impact / Target
Q2 (2025)	e-Contract Renewal	Digitalization of contract renewal process: automatic form submission, integration of evaluations, and documentation of decisions.	Process time reduced from 10 days to 3–4 working days.
	Contract Reminder & Automatic Exit	Notifications prior to contract end and resignation process include an auto-deactivation feature for employee access.	Reduces delays and post-resignation risks.
Q3 (2025)	e-Recruitment Tracking	Real-time monitoring of selection status for HR and users.	Minimizes offline coordination, increases visibility.
	Selection Notifications	Automated notifications for test schedules, interviews, and selection results.	Replaces manual announcements via email.
Q4 (2025)	Automated Onboarding Integration	Automatic delivery of work devices to IT & Logistics units.	Eliminates delays in the delivery of work devices.
	Digital Evaluation	Online performance evaluation forms are integrated with the system.	Eliminates manual Excel summaries.
	e-Request Manpower	Digital submission of HR requests by all work units.	Process time reduced by 30%.
	Standardized Request Template	All units use uniform digital forms.	Simplifies consolidation by HR.

Based on Table 6, the digital transformation roadmap is designed as a phased implementation strategy to systematically address inefficiencies across the outsourcing contract management lifecycle. In Q2 2025, the focus is on critical administrative

processes such as contract renewal and employee exit, where automation is expected to significantly reduce processing time and minimize compliance risks. These early-stage improvements establish the foundation for standardized and system-driven contract governance. In Q3 2025, the implementation expands to recruitment-related processes through real-time tracking and automated notifications, which aim to enhance transparency and reduce dependency on manual coordination via email. Subsequently, Q4 2025 focuses on integration and standardization across onboarding, performance evaluation, and manpower request processes. This roadmap demonstrates a progressive shift toward end-to-end digital integration, resulting in improved efficiency, data accuracy, and cross-functional coordination, as well as reduced administrative workload for HR and related units (Iden et al., 2025).

DISCUSSION

The findings of this study indicate that outsourcing workforce management at PT XYZ is characterized by fragmented coordination, extensive manual processing, and weak integration across organizational units. Although outsourcing is intended to enhance flexibility and efficiency, the absence of standardized and digitally supported processes has instead resulted in coordination delays, data inconsistencies, and increased administrative workload. These findings align with prior research emphasizing that outsourcing effectiveness depends not only on contractual arrangements but also on strong governance mechanisms that regulate inter-organizational interactions (Lacity et al., 1995; Willcocks & Lacity, 2017). The reliance on email and spreadsheet-based workflows reflects ad-hoc process execution with limited ownership, monitoring, and performance control (Dumas et al., 2018). In PT XYZ, this is evident in inconsistent workforce requests, onboarding delays due to a lack of synchronization between HR, IT, and Logistics, and manually tracked contract renewals without automated reminders. Such conditions highlight how limited process transparency and traceability contribute to inefficiencies in complex organizational systems (Davenport, 1993).

The value-added analysis further confirms inefficiencies by showing that many activities fall into Business-Value-Adding (BVA) and Non-Value-Adding (NVA) categories. From a process improvement perspective, this indicates significant redesign potential, as performance gains are achieved by eliminating NVA activities and simplifying BVA activities through standardization and automation (Womack & Jones, 2003). In outsourcing contexts, such inefficiencies typically arise from redundant approvals, repeated validations, and fragmented information exchange due to limited process visibility (Ghazawneh & Henfridsson, 2013). At PT XYZ, this pattern is evident in recruitment, onboarding, and exit management, where delays are driven more by coordination failures than task complexity.

The RACI matrix analysis shows that the HR function serves as the central coordination hub across most outsourcing processes, creating a structural bottleneck. While HR accountability is expected in workforce management, excessive role concentration can reduce process resilience and create throughput constraints. Responsibility assignment theory emphasizes the importance of clearly separating execution, accountability, consultation, and information roles to prevent role overload and decision delays (Harmon, 2019; Dissanayake et al., 2025). In PT XYZ, HR frequently acts as both responsible and accountable in multiple subprocesses, suggesting that digital transformation should address not only task automation but also the redistribution of decision rights.

These findings are consistent with transaction cost economics, which explains that outsourcing arrangements often generate coordination and monitoring costs due to information asymmetry, bounded rationality, and opportunistic risks (Williamson, 1985). Manual tracking systems increase these transaction costs because they require continuous human intervention to verify information, monitor deadlines, and ensure compliance. The delays observed in contract renewal and exit management illustrate how weak governance mechanisms may expose organizations to operational and compliance risks.

Digital process integration can therefore function as a governance instrument by enhancing transparency, enforcing standardized controls, and enabling real-time monitoring (Dibbern et al., 2008).

To address these issues, this study proposes a redesigned TO-BE process model based on the Devil's Quadrangle framework, which balances time, cost, quality, and flexibility. BPM research emphasizes that process optimization often involves trade-offs, as improvements in cycle time through automation may reduce flexibility if exception-handling mechanisms are not carefully designed (vom Brocke et al., 2014; Babar, 2024). The proposed solution prioritizes time efficiency and process quality through standardization and automation while maintaining flexibility through phased implementation and controlled escalation mechanisms.

From a theoretical perspective, this study contributes to BPM and outsourcing literature by extending BPM applications into outsourced workforce governance, an area that remains relatively underexplored compared with manufacturing or service operations. The integration of BPMN, value-added analysis, and RACI mapping provides a comprehensive diagnostic framework capable of identifying structural inefficiencies, governance gaps, and role misalignment within outsourcing systems. However, the single-case study design limits statistical generalizability. Consistent with Eisenhardt (1989) and Annisa and Sutjipto (2025), this research aims for analytical generalization by proposing a reusable governance framework rather than universal performance claims. The findings emphasize that outsourcing workforce management should be treated as a governance-intensive process domain rather than merely an administrative function. BPM-based digitalization enables organizations to transform fragmented coordination into transparent, accountable, and data-driven workflows, thereby improving outsourcing governance in complex organizational environments.

CONCLUSION

This study concludes that outsourcing contract management at PT XYZ continues to face substantial challenges across six core processes: manpower planning, recruitment and selection, onboarding, performance management, contract renewal, and exit management. The findings demonstrate that these processes are predominantly manual, weakly standardized, and insufficiently integrated with information systems, resulting in coordination delays, data inconsistencies, and elevated administrative risks. The application of the Business Process Management (BPM) approach has proven effective in systematically identifying process inefficiencies, mapping AS-IS conditions, and redesigning a more integrated and digitized TO-BE process model. By combining BPMN modeling, value-added analysis, and responsibility mapping, this study shows that BPM not only improves operational efficiency but also strengthens process governance through enhanced transparency, accountability, and cross-unit coordination. In this context, BPM-based digitalization functions as both a process improvement mechanism and a governance instrument for managing outsourced workforce operations.

From a theoretical perspective, this study extends BPM application into the domain of outsourcing workforce management, which remains underexplored in existing literature. The proposed model provides a structured and scalable reference for organizations seeking gradual and measurable digital transformation in human resource management. Although the research is limited to a single case study, the analytical framework and redesign principles offer transferability to organizations with similar outsourcing characteristics. Future research is recommended to examine post-implementation outcomes using quantitative performance indicators, conduct comparative multi-case studies, explore the integration of emerging technologies such as AI and Robotic Process Automation (RPA), and evaluate the cost–benefit implications of BPM-based digital transformation initiatives. In addition, future studies may strengthen external validity by employing multi-case designs or quantitative assessments of key performance indicators such as cycle time reduction, error rates, and administrative workload.

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