

Assessing the Benefits and Challenges of Robotic Process Automation in Payroll Automation for Retail Organizations

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DOI: <https://doi.org/10.47772/IJRISS.2026.100600210>

Received: 27 May 2026; Accepted: 02 June 2026; Published: 20 June 2026

ABSTRACT

This study examined the implementation of Robotic Process Automation (RPA) in payroll management within the Compensation and Benefits Division of a large retail organization in the Philippines. It aimed to determine the perceived benefits, challenges, and implementation issues of RPA from the perspective of employees directly involved in payroll operations. A descriptive-quantitative research design was used, involving 17 purposively selected respondents who answered a validated 4-point Likert scale questionnaire covering efficiency, cost savings, compliance, employee satisfaction, resistance to change, skills gap, system integration, and job security concerns. Findings show that RPA significantly improves payroll operations, particularly in reducing processing time, increasing consistency, and enhancing overall efficiency. Employees strongly recognize faster payroll completion as the most important benefit, along with improved workflow standardization. Cost efficiency and error reduction are also positively perceived, although broader financial outcomes such as return on investment are rated more moderately. Regulatory compliance and employee satisfaction are generally positive, with respondents noting improved work environments and reduced stress levels. Resistance to change is low, supported by clear communication and leadership alignment, while job security concerns are minimal, indicating strong employee confidence in automation adoption. However, the study identifies skills gaps and system integration as key challenges, particularly the need for continuous training and infrastructure improvement. The findings suggest that RPA enhances payroll performance, but sustained success depends on ongoing capability development and system support.

Keywords: Robotic Process Automation, payroll automation, benefits, challenges, retail organizations, Philippines, descriptive-quantitative research

INTRODUCTION

Robotic Process Automation (RPA) has emerged as one of the most significant technological innovations in modern organizational operations, particularly in industries that rely heavily on repetitive, rule-based, and data-intensive processes. The conceptual foundation of automation can be traced to early industrial principles emphasizing the use of programmable systems to execute structured tasks more efficiently and consistently than human labor, which is often affected by fatigue and operational variability (Nof, 1999). Over the years, developments in digital technologies and user-interface-level automation paved the way for modern RPA platforms capable of interacting with multiple software applications without requiring changes to underlying system codes (Blue Prism, 2019). As organizations continue to pursue digital transformation initiatives, RPA has become increasingly recognized as a practical and accessible form of intelligent automation that can improve operational performance, reduce costs, enhance compliance, and support organizational scalability (Davenport & Ronanki, 2018). McKinsey and Company (2021) further emphasized that organizations achieving the greatest benefits from automation are those that integrate technology adoption with process redesign and employee capability development.

Among the many organizational functions adopting automation, payroll management has become one of the most suitable areas for RPA implementation because of its repetitive, structured, and time-sensitive nature. Payroll

processing requires organizations to manage large volumes of employee data accurately while complying with strict legal and organizational deadlines. Errors in payroll may result in financial losses, regulatory penalties, and employee dissatisfaction, making accuracy and consistency essential. Chui, Manyika, and Miremadi (2016) identified payroll and similar administrative functions as highly susceptible to automation because they involve predictable and rule-based activities that can be standardized and digitized effectively. Consequently, organizations worldwide have increasingly integrated RPA into payroll and human resource management systems to streamline processes and reduce administrative burdens.

Several global organizations have documented the operational benefits of RPA in payroll and HR functions. ADP (2018) integrated RPA into large-scale payroll infrastructures to automate repetitive payroll transactions and improve processing speed. IBM (2019) implemented RPA solutions for payroll and HR compliance management, reducing manual intervention and improving data reliability. SAP (2020) embedded RPA capabilities within its human capital management systems to support more efficient HR operations and reporting processes. Similarly, UnitedHealth Group (2021) applied automation in compensation and benefits administration to reduce administrative overhead and improve service delivery. In the retail industry, Walmart (2019) documented the use of RPA to improve payroll accuracy and operational efficiency across its extensive workforce. KPMG (2021) further identified large multi-site retail organizations as among the sectors with the highest potential for back-office automation because of their complex organizational structures, geographically dispersed employees, and high transaction volumes.

Despite the growing evidence supporting the operational benefits of RPA, the successful implementation of automation technologies extends beyond technical deployment alone. Organizational readiness, employee acceptance, and effective change management play crucial roles in determining whether automation initiatives achieve long-term success. Lacity, Willcocks, and Craig (2015) argued that RPA implementation is not a simple “plug and play” process, emphasizing that organizations must prepare their workforce and organizational culture to adapt to new ways of working with automation technologies. Aguirre and Rodriguez (2017) noted that one of the most important contributions of RPA is its ability to return valuable time to employees by eliminating repetitive administrative tasks, thereby allowing workers to focus on more analytical, strategic, and customer-oriented responsibilities. In support of this perspective, Lacity and Willcocks (2016) explained that automation does not necessarily remove the value of human work but instead enhances it by enabling employees to concentrate on problem-solving, collaboration, and decision-making activities that require human judgment and interpersonal interaction.

However, organizational transitions involving automation may also generate resistance, uncertainty, and anxiety among employees. Concerns regarding job displacement, inadequate technical skills, and difficulties in adapting to new systems may influence employee attitudes toward RPA implementation. Kotter (1996) emphasized that successful organizational change requires visible leadership support, transparent communication, employee involvement, and the achievement of early tangible successes that help build confidence and reduce resistance to change. These factors become especially important in organizations implementing digital transformation initiatives, where employees must adapt not only to technological changes but also to shifts in organizational workflows and responsibilities.

These issues are highly relevant within the Philippine retail industry, where organizations manage large and geographically dispersed workforces while maintaining highly complex payroll systems. Retail organizations process substantial amounts of employee information, attendance records, statutory deductions, and compensation data on a regular basis. The increasing complexity of payroll administration, combined with the demand for greater operational efficiency and regulatory compliance, has encouraged organizations to explore automation technologies such as RPA. However, despite the increasing global adoption of RPA, there remains limited empirical evidence regarding its actual implementation and operational impact within Philippine organizational settings, particularly in the retail sector. Existing studies often focus on multinational corporations and developed economies, creating a gap in the literature concerning how RPA is experienced and utilized within local organizations in the Philippines.

This study focuses on a major Philippine retail corporation that utilizes a centralized, RPA-integrated payroll system. To maintain confidentiality and comply with organizational agreements, the company is referred to in

this study as “the participating retail organization.” The research specifically examines the Compensation and Benefits Division within the Human Resources Department, which is responsible for managing the organization’s end-to-end payroll operations. The participating retail organization currently employs RPA to automate several payroll-related activities, including timekeeping processes, payroll computations, statutory deductions such as SSS, PhilHealth, Pag-IBIG, and BIR contributions, as well as payroll report generation. Through automation, the organization aims to improve efficiency, minimize manual errors, strengthen compliance, and enhance the overall reliability of payroll operations.

This study seeks to contribute practitioner-grounded evidence regarding the actual benefits and challenges associated with RPA implementation in payroll management within a Philippine retail setting. Unlike studies that focus primarily on technical performance indicators, this research examines the perspectives and experiences of employees directly involved in payroll operations. By understanding how compensation and benefits personnel perceive the effectiveness of RPA, the study provides a more comprehensive understanding of how automation affects operational efficiency, employee experiences, and organizational workflows.

The study is guided by two complementary theoretical perspectives. First, Davis’s (1989) Technology Acceptance Model explains that users are more likely to adopt technological systems when they perceive such systems as useful and easy to use. This framework is relevant in examining how payroll personnel perceive the effectiveness and usability of RPA technologies within their daily operations. Second, Kotter’s (1996) Change Management Framework emphasizes the importance of leadership commitment, effective communication, and employee engagement in facilitating successful organizational change. The integration of these frameworks allows the study to examine both the technological and human dimensions of RPA implementation, recognizing that successful automation depends not only on system functionality but also on employee acceptance and organizational readiness for change.

Specifically, this study sought to: (1) describe the benefits of RPA in payroll automation in terms of efficiency, cost savings, compliance, and employee satisfaction; (2) determine the challenges in implementing RPA in terms of resistance to change, skills gap, system integration, and job security concerns; and (3) propose strategies for the effective implementation of RPA in payroll automation. The study utilized an Input-Process-Output (IPO) conceptual framework informed by Davis’s (1989) Technology Acceptance Model and Kotter’s (1996) Change Management Framework. Data were gathered from 17 respondents from the Compensation and Benefits Division using a validated 4-point Likert scale survey instrument with strong validity and reliability measures. The findings of this study are expected to contribute valuable insights for compensation and benefits professionals, organizational leaders, academic researchers, and future MBA students seeking to understand the practical realities of RPA adoption in Philippine organizational contexts.

MATERIALS AND METHODS

This study employed a descriptive-quantitative research design to examine the perceived benefits and challenges associated with the implementation of Robotic Process Automation (RPA) in payroll operations. The descriptive component of the study enabled the systematic characterization of respondents’ experiences, perceptions, and observations regarding the use of RPA without manipulating any variables or altering the existing organizational environment. This approach is appropriate for studies that aim to describe phenomena as they naturally occur within a specific setting. Meanwhile, the quantitative component facilitated the objective measurement and analysis of respondents’ perceptions through the use of statistical tools, particularly weighted means, allowing the study to generate measurable and interpretable findings. Creswell and Creswell (2018) emphasized that descriptive-quantitative designs are suitable when the primary objective is to document and analyze existing conditions, behaviors, or perceptions within a defined population using structured research instruments.

The study was conducted within the Compensation and Benefits Division of a large retail organization headquartered in Libis, Quezon City, National Capital Region, Philippines. The organization operates multiple retail branches nationwide under a centralized payroll management system integrated with Robotic Process Automation technology. The Compensation and Benefits Division is primarily responsible for managing payroll administration, employee compensation, statutory deductions, and payroll-related reporting processes. The

organization has adopted RPA to automate several payroll functions, including timekeeping consolidation, payroll computations, statutory compliance processing, and report generation, with the goal of improving operational efficiency and reducing manual administrative workloads. To uphold confidentiality agreements and protect organizational privacy, the name of the participating retail organization is withheld throughout the study.

Purposive sampling was utilized in selecting the respondents of the study. A total of 17 employees from the Compensation and Benefits Division were chosen based on their direct involvement and experience with RPA-assisted payroll operations. This non-probability sampling technique is appropriate when the research requires participants who possess specialized knowledge, relevant experience, or direct exposure to the phenomenon being investigated. Creswell and Creswell (2018) noted that purposive sampling is particularly useful in studies where respondents are intentionally selected because they can provide meaningful and information-rich insights related to the research objectives. Since the study specifically focused on the implementation of RPA in payroll processes, only employees actively engaged in payroll-related functions using RPA technologies were included as respondents.

RESULTS AND DISCUSSION

Benefits of Robotic Process Automation in Payroll Automation

Table 1. Benefits of Robotic Process Automation in terms of Efficiency

Indicator	Mean	Verbal Description
1. RPA has reduced payroll processing time in our organization.	3.59	Strongly Agree
2. The number of payroll-related errors has decreased since RPA was implemented.	3.18	Agree
3. RPA has improved the accuracy of salary and deduction computations.	3.18	Agree
4. The consistency of payroll processes has improved because of RPA.	3.29	Strongly Agree
5. RPA has reduced reliance on manual data entry in payroll tasks.	3.24	Agree
6. RPA enables timely completion of payroll within scheduled deadlines.	3.29	Strongly Agree
Grand Mean	3.29	Strongly Agree

Legend: 3.26–4.00: Strongly Agree; 2.51–3.25: Agree; 1.76–2.50: Disagree; and 1.00–1.75: Strongly Disagree.

Efficiency emerged as the highest-rated benefit dimension in the study, obtaining an overall weighted mean of 3.29, interpreted as Strongly Agree. Among all indicators, the reduction of payroll processing time received the highest mean score of 3.59 (Strongly Agree), making it the most strongly affirmed benefit across the entire study. This finding strongly reflects the actual experiences of compensation and benefits personnel whose work prior to RPA implementation was characterized by repetitive, high-volume, and time-sensitive payroll processing activities. The automation of payroll functions significantly minimized the time required to complete payroll-related tasks, enabling employees to perform their responsibilities more efficiently and with greater operational consistency. Similarly, consistency improvement (3.29) and timely completion of payroll processes (3.29) also achieved the Strongly Agree interpretation, indicating that respondents perceived RPA as highly effective in standardizing payroll workflows and ensuring that payroll activities are completed within required deadlines. Meanwhile, error reduction (3.18) and accuracy improvement (3.18) were both interpreted as Agree, suggesting that although respondents recognized notable improvements in payroll reliability and precision, these benefits may become more fully realized as employees gain longer-term familiarity and experience with the RPA system. This observation is consistent with the findings of Aguirre and Rodriguez (2017), who noted that the accuracy-related advantages of RPA become more evident as organizations and employees accumulate sufficient post-implementation experience and operational exposure.

Table 2. Benefits of Robotic Process Automation in terms of Cost Savings

Indicator	Mean	Verbal Description
1. RPA has improved cost efficiency in payroll operations.	3.24	Agree
2. RPA has reduced the labor costs associated with payroll processing.	3.06	Agree
3. The use of RPA has decreased the cost of correcting payroll errors and discrepancies.	3.12	Agree
4. RPA has reduced the need for additional staffing during peak payroll periods.	2.88	Agree
5. The return on investment from RPA implementation in payroll has been positive.	2.94	Agree
6. RPA has minimized financial losses caused by payroll computation mistakes.	3.24	Agree
Grand Mean	3.08	Agree

Legend: 3.26–4.00: Strongly Agree; 2.51–3.25: Agree; 1.76–2.50: Disagree; and 1.00–1.75: Strongly Disagree.

Cost savings obtained an overall weighted mean of 3.08, interpreted as Agree, indicating that respondents generally perceived RPA as contributing positively to the organization's financial efficiency. Among the indicators, cost efficiency improvement (3.24) and the minimization of financial losses resulting from payroll errors (3.24) received the highest ratings, suggesting that respondents recognized the value of automation in reducing operational inefficiencies and preventing costly payroll inaccuracies. These findings imply that the implementation of RPA helped streamline payroll processes while simultaneously reducing the likelihood of errors that could lead to financial discrepancies, compliance issues, or additional corrective work. In contrast, the indicators related to reduction in additional staffing requirements (2.88) and return on investment or ROI (2.94) received comparatively lower, though still favorable, ratings. The more moderate assessment of these items may be attributed to the limited visibility of frontline compensation and benefits personnel into broader organizational financial metrics and long-term investment evaluations, which are typically managed at the executive or managerial level. This observation aligns with the findings of Lacity, Willcocks, and Craig (2015), who emphasized that employees directly engaged in operational processes often perceive the immediate functional benefits of automation more clearly than its larger organizational and financial outcomes.

Table 3. Benefits of Robotic Process Automation in terms of Compliance

Indicator	Mean	Verbal Description
1. RPA helps our organization comply better with SSS, PhilHealth, and Pag-IBIG requirements.	3.06	Agree
2. RPA ensures that BIR withholding tax computations are accurate.	3.12	Agree
3. RPA is perceived to contribute to improved compliance audit outcomes.	3.06	Agree
Grand Mean	3.08	Agree

Legend: 3.26–4.00: Strongly Agree; 2.51–3.25: Agree; 1.76–2.50: Disagree; and 1.00–1.75: Strongly Disagree.

Regulatory compliance obtained a weighted mean of 3.08, interpreted as Agree, indicating that respondents generally perceive RPA as contributing positively to the accuracy and reliability of statutory payroll compliance processes. This level of affirmation suggests that employees recognize the capability of RPA in correctly applying and processing regulatory requirements, thereby reducing the likelihood of non-compliance in areas such as statutory deductions and government-mandated contributions. At the same time, the Agree-level rating also reflects an understanding that compliance in payroll systems remains a dynamic responsibility, particularly given

the frequent updates and adjustments to regulatory tables, rates, and government guidelines that require continuous monitoring and system updating. While RPA enhances consistency and reduces manual computation errors, respondents acknowledge that maintaining compliance still requires organizational vigilance and periodic system calibration to ensure alignment with evolving legal requirements. This finding is consistent with Willcocks, Lacity, and Craig (2015), who established that improvements in regulatory compliance represent one of the most financially significant benefits of RPA, particularly in highly regulated operational environments where accuracy and adherence to statutory requirements are critical.

Table 4. Benefits of Robotic Process Automation in terms of Employee Satisfaction

Indicator	Mean	Verbal Description
1. I have more time for meaningful and higher-value work because RPA handles routine tasks.	3.06	Agree
2. The introduction of RPA has improved the overall work environment in the payroll department.	3.18	Agree
3. I feel that RPA has made my role more efficient and less stressful.	3.12	Agree
Grand Mean	3.12	Agree

Legend: 3.26–4.00: Strongly Agree; 2.51–3.25: Agree; 1.76–2.50: Disagree; and 1.00–1.75: Strongly Disagree.

Employee satisfaction recorded an overall weighted mean of 3.12, interpreted as Agree, indicating that respondents generally perceive RPA as having a positive influence on workplace experience within the Compensation and Benefits Division. Among the indicators, work environment improvement obtained the highest mean score of 3.18, suggesting that employees perceive automation as contributing to a more organized, less manual, and more structured payroll workflow environment. This improvement may be attributed to the reduced administrative burden and increased process standardization brought about by RPA implementation. Meanwhile, meaningful work availability (3.06) and role efficiency and stress reduction (3.12) both received Agree-level ratings, indicating that employees moderately perceive RPA as enabling them to shift away from repetitive tasks toward more value-added responsibilities while also experiencing a reduction in workload-related stress. These findings suggest that while RPA contributes positively to employee satisfaction, the perceived benefits are experienced in a balanced and gradual manner rather than as immediate or transformative changes. This interpretation is consistent with Lacity and Willcocks (2016), who noted that employee satisfaction with automation typically develops progressively as employees gain greater role clarity and establish trust in the reliability and stability of automated systems over time.

Challenges in Implementing Robotic Process Automation

Table 6. Challenges in Implementing Robotic Process Automation in terms of Resistance to Change

Indicator	Mean	Verbal Description
1. Employees in the payroll department were resistant to the introduction of RPA.	2.47	Disagree
2. Management in our organization showed hesitation about adopting RPA for payroll.	2.24	Disagree
3. Staff members expressed concerns about how RPA would change their daily responsibilities.	2.82	Agree
4. There was difficulty convincing payroll staff to trust the outputs generated by RPA.	2.47	Disagree

5. Resistance from employees slowed down the RPA implementation process.	2.59	Agree
6. Communication about RPA during implementation was adequate.	3.06	Agree
Grand Mean	2.61	Agree

Legend: 3.26–4.00: Strongly Agree; 2.51–3.25: Agree; 1.76–2.50: Disagree; and 1.00–1.75: Strongly Disagree.

Resistance to change obtained an overall weighted mean of 2.61, interpreted as Agree, indicating a generally moderate presence of change-related concerns among respondents, with notable variation across specific indicators. Communication adequacy recorded the highest mean at 3.06 (Agree), suggesting that respondents generally perceive organizational communication regarding RPA implementation as sufficient and informative. Staff concerns about role changes also scored at the Agree level with a mean of 2.82, reflecting some level of apprehension regarding potential adjustments in job responsibilities brought about by automation. In contrast, management hesitation (2.24, Disagree) and employee resistance (2.47, Disagree) fell below the Agree threshold, indicating relatively low perceived resistance from both leadership and staff. This pattern suggests a strong degree of leadership alignment and organizational readiness, which may have contributed to smoother implementation of RPA within payroll operations. Kotter’s (1996) framework emphasizes that leadership alignment is a critical determinant in minimizing resistance during organizational change, and the low level of management hesitation observed in this study reinforces this principle.

This finding is further supported by Oreg (2003), whose Resistance to Change scale conceptualizes resistance as comprising affective, behavioral, and cognitive dimensions, and who found that employees who receive clear, role-specific communication from management tend to exhibit significantly lower levels of behavioral resistance. In addition, Prosci’s (2020) ADKAR model highlights that awareness of the need for change and desire to support the change are foundational elements in successful change adoption, particularly in technology-driven transitions. The combination of relatively strong communication adequacy, low management hesitation, and only moderate employee concern suggests that these foundational ADKAR elements were sufficiently established within the organization, thereby contributing to the generally low levels of resistance observed in this study.

Table 7. Challenges in Implementing Robotic Process Automation in terms of Skills Gap

Indicator	Mean	Verbal Description
1. There were significant skill gaps among payroll staff that made RPA adoption challenging.	2.53	Agree
2. Payroll employees needed substantial training before they could effectively work with RPA.	3.18	Agree
3. Based on your knowledge, existing IT capabilities supported RPA implementation.	3.18	Agree
4. Staff found it difficult to transition from manual payroll to RPA-supervised workflows.	2.65	Agree
5. Upskilling programs provided during RPA implementation were not sufficient to meet staff needs.	2.59	Agree
6. There is an ongoing need for continuous training as RPA systems and tools are updated.	3.18	Agree
Grand Mean	2.88	Agree

Legend: 3.26–4.00: Strongly Agree; 2.51–3.25: Agree; 1.76–2.50: Disagree; and 1.00–1.75: Strongly Disagree.

The skills gap dimension obtained an overall weighted mean of 2.88, interpreted as Agree, making it the highest-rated challenge among all identified dimensions in the study. This result indicates that respondents generally recognize the presence of capability-related constraints in maximizing the full potential of RPA within payroll operations. Within this dimension, training needs recorded a weighted mean of 3.18 (Agree), IT capability adequacy also obtained 3.18 (Agree), and continuous training requirements likewise scored 3.18 (Agree), reflecting a consistent perception that workforce capability development remains a critical concern across multiple aspects of system utilization. The uniformity of these ratings suggests that while employees acknowledge the usefulness of RPA, they also perceive a sustained need for technical upskilling to effectively adapt to evolving system requirements and maintain operational efficiency.

Notably, the continuous training requirement emerging as one of the highest-rated indicators underscores the importance of ongoing skills development as a permanent operational priority rather than a one-time intervention. This implies that organizations implementing RPA must institutionalize continuous learning mechanisms to ensure that employees remain competent in managing system updates, process refinements, and evolving payroll complexities. Such a finding reinforces the view that technological advancement alone is insufficient without parallel investment in human capital development. This observation directly supports Chui, Manyika, and Miremadi's (2016) argument that successful automation initiatives require sustained investment in human capability development alongside technology deployment, particularly in functions characterized by high data volume and procedural complexity such as payroll processing.

Table 8. Challenges in Implementing Robotic Process Automation in terms of System Integration

Indicator	Mean	Verbal Description
1. Integrating RPA with existing payroll systems in our organization was technically difficult.	2.29	Disagree
2. Compatibility issues between RPA tools and legacy payroll software were a major barrier.	2.41	Disagree
3. Data migration to the RPA-enabled environment was complex and time-consuming.	2.41	Disagree
4. Based on your knowledge, system upgrades were required to support RPA.	3.29	Strongly Agree
5. Connecting RPA with multiple data sources (e.g., timekeeping, HR systems) was challenging.	2.76	Agree
6. Technical support from the RPA vendor during integration was insufficient.	2.71	Agree
Grand Mean	2.65	Agree

Legend: 3.26–4.00: Strongly Agree; 2.51–3.25: Agree; 1.76–2.50: Disagree; and 1.00–1.75: Strongly Disagree.

System integration obtained an overall weighted mean of 2.65, interpreted as Agree, indicating that respondents perceive moderate but persistent challenges in integrating RPA with existing organizational systems. Among the indicators, infrastructure upgrade requirements recorded the highest mean score of 3.29 (Strongly Agree), making it the most strongly recognized issue within this dimension. This suggests that respondents, including those without advanced technical expertise, clearly recognize the necessity of improving or modernizing existing infrastructure to fully support RPA functionality and ensure stable system performance. Connecting multiple data sources (2.76) and vendor support limitations (2.71) both received Agree-level ratings, reflecting ongoing concerns regarding interoperability and external technical assistance in sustaining smooth RPA operations. Meanwhile, direct integration technical challenges scored below the Agree threshold, indicating that while

technical integration issues are present, they are perceived as less severe compared to broader infrastructure and support-related concerns. This pattern is consistent with Lacity, Willcocks, and Craig's (2015) documentation of common RPA implementation challenges, particularly those related to system integration complexity and organizational readiness.

This finding is further aligned with Kirchmer's (2017) observation that organizations undergoing digital transformation frequently encounter legacy system incompatibility as a primary barrier to successful integration, particularly when attempting to connect automation tools with older or fragmented IT architectures. In addition, Aguirre and Rodriguez (2017) found that organizations that invested in middleware solutions and integration-enabling technologies experienced significantly smoother and more stable RPA implementation outcomes over time, highlighting the importance of strategic IT infrastructure enhancement in overcoming integration-related challenges.

Table 9. Challenges in Implementing Robotic Process Automation in terms of Job Security Concerns

Indicator	Mean	Verbal Description
1. Payroll staff are concerned that RPA will reduce the number of available jobs.	2.47	Disagree
2. Employees worry that their roles will be significantly diminished or eliminated due to automation.	2.41	Disagree
3. Concerns about job displacement have affected staff morale during the RPA implementation period.	2.41	Disagree
4. Management has not provided sufficient reassurance to employees about their job security with RPA.	2.24	Disagree
5. The introduction of RPA has created uncertainty about future career paths in the payroll department.	2.24	Disagree
6. Concerns about automation influenced employees' willingness to support RPA.	2.53	Agree
Grand Mean	2.38	Disagree

Legend: 3.26–4.00: Strongly Agree; 2.51–3.25: Agree; 1.76–2.50: Disagree; and 1.00–1.75: Strongly Disagree.

Job security concerns yielded the only overall dimension rated below the Agree threshold, with a weighted mean of 2.38, interpreted as Disagree. This indicates that respondents generally do not perceive job security as a significant issue in the context of RPA implementation within the Compensation and Benefits Division. Notably, five out of six indicators within this dimension were rated below the Agree level, reinforcing the conclusion that concerns about displacement or job loss are relatively minimal among employees directly involved in payroll operations. This outcome represents a strong positive indicator of organizational stability and employee confidence, suggesting that the introduction of RPA has not significantly disrupted perceived employment security. Instead, it reflects a work environment in which employees continue to engage with automation initiatives without substantial fear of redundancy or job displacement.

This pattern further implies that organizational communication regarding role continuity and workforce transition has been sufficiently clear, consistent, and credible to mitigate anxiety related to automation. As a result, job security concerns are not acting as a barrier to RPA acceptance or utilization among employees in the division. This aligns with Chui, Manyika, and Miremadi (2016), who established that clear organizational communication regarding role changes and workforce implications is one of the most effective mechanisms for reducing automation-related anxiety. The findings of this study suggest that such clarity has been effectively achieved within the organization, contributing to the low level of job security concerns and supporting a more stable environment for the continued adoption and use of RPA in payroll operations.

Proposed Strategies

Based on the findings, six strategies are proposed for the effective implementation of RPA in payroll automation for retail organizations:

Table 10. Proposed Strategies for the Effective Implementation of RPA in Payroll Automation for Retail Organizations

Focus Area	Objectives	Strategies	Timeline	Responsible Person	Expected Outcomes
Process Standardization Before Automation	Ensure all payroll workflows are fully documented before RPA deployment	Conduct workflow mapping; perform dry-run testing; assign dedicated RPA champion; implement phased automation beginning with simple tasks	3–6 Months	HR Manager; C&B Division Head; IT Department	Fully documented workflows; reduced errors; smooth go-live
Change Management and Staff Adaptation	Minimize employee resistance through transparent communication	Conduct pre-deployment orientations; involve staff in pilot phases; establish safe feedback channel; provide individualized role updates	Ongoing from 1 month before go-live	HR Manager; L&D Team; C&B Division Head	Reduced resistance; improved morale; higher adoption rate
Continuous Training and Skills Development	Address skills gap by building permanent tiered training architecture	Design three-tiered training program; update content with every system upgrade; conduct quarterly upskilling workshops	Quarterly and Continuous	L&D Manager; HR Manager; IT Department	Reduced skills gap; staff equipped to manage RPA independently
System Maintenance, Audit, and Regulatory Compliance	Ensure RPA systems remain accurate and compliant	Conduct quarterly bot audits; update rules upon regulatory changes; implement mandatory human verification checkpoint before payroll disbursement	Quarterly Audits; Immediate upon Regulatory Changes	HR-IT Task Force; RPA Developer; Compliance Officer; C&B Division Head	Zero compliance violations; audit-ready documentation
Post-Implementation Feedback and Performance Monitoring	Establish structured feedback system tracking RPA performance	Track error rates every payroll cycle; monitor incident logs; use KPIs for quarterly assessment;	Monthly Monitoring; Quarterly Reviews	HR Manager; C&B Division Head; IT Department	Data-driven evidence of efficiency gains; early error detection

		conduct end-user satisfaction surveys			
Strategic Expansion and Organizational Transformation	Scale RPA responsibly as an ongoing strategic capability	Expand automation scope incrementally; conduct process optimization review before each new phase; integrate RPA into annual HR and IT strategic planning	Annual Strategic Planning; Expansion Every 6–12 Months	HR Manager; IT Department; Senior Management; C&B Division Head	Sustainable long-term RPA capability; maintained workforce trust

CONCLUSIONS

The findings of the study indicate that Robotic Process Automation (RPA) delivers strong operational benefits in payroll management, particularly in improving efficiency, consistency, and processing speed. Employees strongly recognize the reduction in payroll processing time as the most significant advantage, supported by improvements in workflow standardization, timely completion of tasks, and overall system reliability. While improvements in accuracy and error reduction are positively acknowledged, they appear to develop more gradually as users gain familiarity with the system. Cost-related benefits are also evident, particularly in cost efficiency and reduced financial losses from errors, although perceptions of broader financial impacts such as staffing reduction and return on investment are more moderate due to limited visibility at the operational level. Overall, the results demonstrate that RPA is highly effective in streamlining payroll operations and enhancing day-to-day task performance within the organization.

In terms of organizational and human factors, the study shows generally positive outcomes in employee satisfaction, regulatory compliance, and resistance to change. Employees report improved work environments, reduced stress, and increased engagement in more meaningful tasks, although these benefits are experienced in a gradual and balanced manner. Compliance is strengthened through more reliable and standardized processing, while resistance to change remains low, supported by effective communication and leadership alignment. The most notable challenges are concentrated in skills gaps and system integration requirements, particularly the need for continuous training and infrastructure enhancement. However, concerns related to job security are minimal, indicating strong employee confidence in role stability. Overall, the findings suggest that successful RPA implementation depends not only on technological efficiency but also on sustained investment in employee capability development and system infrastructure support.

RECOMMENDATIONS

The organization should prioritize strengthening its exception-handling processes to further improve payroll accuracy and prevent recurring issues such as incorrect holiday scheduling within the RPA system. This can be addressed by reviewing how holiday data is encoded and integrated into the payroll platform and by introducing a verification checkpoint before final payroll runs. This initiative should be led by the Human Resources Manager in coordination with the IT RPA Developer to ensure technical and operational alignment.

A structured and continuous training program should also be established to address the identified skills gap. This program should include basic RPA understanding for newer staff, more advanced auditing and quality control training for mid-level employees, and governance-focused training for supervisors and team leaders. The training content should be regularly updated whenever system or regulatory changes occur. The Head of the Compensation and Benefits Division, together with the Learning and Development unit, should oversee the design and implementation of this program.

To improve coordination between departments, a formal HR–IT Payroll Automation Task Force should be created. This group should have clear responsibilities, regular meetings, and defined escalation procedures to

ensure consistent monitoring of RPA performance. It should be jointly led by the Human Resources Manager and the IT Department Head. In addition, the organization should explore middleware solutions to improve system integration across HR, timekeeping, and payroll platforms. This can be piloted and evaluated by the IT RPA Developer in consultation with the Compensation and Benefits Division within a defined testing period.

Leadership should also maintain clear and consistent communication regarding job roles and responsibilities as automation continues to expand. Employees should be informed about how RPA affects their tasks and how their roles remain relevant within the evolving system. The Human Resources Manager should take responsibility for preparing and sharing these role-specific updates during each phase of automation rollout. Finally, the organization should institutionalize a quarterly performance review system to monitor key indicators such as processing time, error rates, compliance outcomes, and employee satisfaction. This will support continuous improvement and ensure that RPA delivers sustained value over time through regular assessment and adjustment.

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