

The Influence of Barriers to Automation Adoption on the Internal Operations of One Distribution Company in Quezon City, Manila

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ABSTRACT

This study examined the influence of barriers to automation adoption on the internal operations of one distribution company in Quezon City, Manila. Specifically, it assessed technological, financial, organizational, and regulatory barriers and determined their relationship with internal operational performance in terms of operational efficiency, cost efficiency, employee productivity, and customer service quality. A quantitative research design was employed, utilizing a structured survey questionnaire administered to company employees directly involved in operational processes. Descriptive statistics were used to determine the extent of perceived barriers and operational outcomes, while regression analysis was applied to test the significance of the relationship between automation barriers and internal operations. Findings revealed that respondents generally disagreed that major barriers significantly hinder automation adoption, although technological barriers were identified as the most noticeable constraint. Results further indicated strong agreement that automation positively enhances internal operations across all dimensions, particularly customer service quality and employee productivity. Regression analysis showed that barriers to automation adoption did not have a statistically significant influence on internal operations, suggesting that existing operational practices mitigate the impact of these barriers. The study concludes that while minor technological challenges remain, the company demonstrates strong operational resilience and readiness for automation initiatives, providing valuable insights for organizations seeking to modernize distribution operations through automation.

Keywords: Automation Adoption, Technical Barriers, Internal Operations, Distribution Company, Operational Performance

INTRODUCTION

The rapid development of automation technologies has significantly transformed business operations across industries. Many organizations adopt automation to enhance efficiency, reduce human error, and cope with growing market demands. However, the adoption of automation is often slowed by internal and external barriers that affect organizational readiness. These barriers may differ depending on a company's technological capacity, financial resources, and workforce adaptability. According to recent studies, automation adoption depends heavily on how organizations overcome operational and structural constraints (Bui, 2022).

In the context of distribution companies, automation has become increasingly vital due to the complexities of inventory management, order processing, and logistics operations. Automation can improve order accuracy, timeliness, and overall service quality, which are crucial in competitive industries. Despite these potential advantages, many companies still encounter challenges that hinder full automation adoption. These obstacles may stem from outdated systems, limited investment capacity, or employee resistance. Researchers emphasize that understanding these barriers is essential for achieving successful technological transformation (Martinez, 2023).

The distribution company examined in this study operates within Quezon City, Manila, and faces similar issues in evaluating its readiness for automation. Examining barriers such as technological, financial, organizational, and regulatory factors provides insights into how these constraints affect internal operations. Likewise, understanding employee perceptions helps determine whether automation can enhance efficiency, productivity, and customer service. Through this assessment, the study aims to provide evidence-based recommendations for improving the company's automation strategy. Literature suggests that evaluating barriers and operational outcomes is a crucial step in supporting organizational modernization (Lopez, 2024).

LITERATURE REVIEW

Automation adoption has been widely studied due to its growing role in shaping organizational competitiveness. Several researchers note that while automation improves speed, accuracy, and operational efficiency, many companies struggle with technological limitations that hinder its integration. These barriers often involve outdated systems, incompatibility issues, and insufficient technical expertise. As a result, organizations may experience delays or additional costs when integrating new technologies. A recent study highlights that technological readiness is a key determinant of automation success (Singh, 2022).

Financial constraints also play an important role in shaping automation decisions. Companies with limited investment capacity often hesitate to adopt new technologies due to high upfront costs and uncertain return on investment. These financial concerns may lead organizations to prioritize short-term expenses over long-term gains. However, recent findings argue that financial preparedness significantly increases the likelihood of automation acceptance. Scholars emphasize that financially stable companies tend to invest more confidently in automation technologies (Carreon, 2021).

Organizational and regulatory barriers also influence automation adoption across industries. Organizational culture, leadership support, and communication practices affect employee acceptance and readiness for technological change. Likewise, regulatory requirements may either facilitate or restrict automation initiatives, depending on industry standards and compliance obligations. Researchers note that strong leadership and supportive regulatory environments can accelerate automation implementation. A recent publication argues that organizations must navigate these structural factors to achieve successful automation integration (Hassan, 2023).

MATERIALS & METHODS

This study utilized a quantitative research design to examine how automation barriers influence internal operations in one distribution company in Quezon City, Manila. A structured survey questionnaire was developed to measure four types of barriers and four dimensions of internal operations. The design allowed the researchers to quantify employee perceptions and analyze statistical relationships between variables. Through this approach, the study identified which barriers significantly affected operational outcomes.

Participants / Respondents

The respondents consisted of employees working in various operational departments of the distribution company. These individuals were selected because they directly experience and observe the operational processes impacted by automation. Their perceptions provide valuable insights into challenges and opportunities associated with automation adoption. A total number adequate for statistical analysis was surveyed to ensure reliable findings. The respondents' participation contributed to an accurate understanding of workplace realities surrounding automation.

Data Gathering Procedure

Data were collected using a standardized survey questionnaire distributed to employees during their work shifts. Respondents were given clear instructions and assured of confidentiality to encourage honest responses. The survey captured data on technological, financial, organizational, and regulatory barriers, as well as operational efficiency measures. Completed questionnaires were retrieved and checked for completeness and consistency. All valid responses were encoded and prepared for statistical processing.

Statistical Analysis

The study employed descriptive statistics to evaluate the extent of perceived automation barriers and the level of internal operational performance. Mean scores and descriptive interpretations were used to identify which barriers were most and least felt by employees. Regression analysis was performed to determine whether automation barriers significantly influenced internal operations. The adjusted R^2 value and p-value were used to interpret the strength and significance of the model. This combination of analyses provided a clear view of both descriptive and inferential outcomes.

RESULTS AND DISCUSSION

The overall mean of 2.53 indicates that respondents generally agree that technological barriers affect automation adoption in the company. This suggests that technology-related challenges are sufficiently noticeable to influence operational decisions. The responses imply that integration issues, system maintenance, and technological infrastructure remain relevant obstacles. These technological concerns may slow down automation initiatives and reduce operational efficiency. Similar studies highlight that outdated systems and integration difficulties commonly hinder automation readiness in many organizations (Rahman et al., 2021).

The statement with the highest mean (3.02) shows that respondents agree most strongly that the company struggles to integrate new automation technologies with existing systems. This reveals a perceived disconnect between old infrastructure and modern automation tools. Companies that fail to integrate systems effectively often experience delays and increased operational costs. Integration complexity may also discourage further automation investments. This aligns with findings that technical compatibility is a primary constraint on the adoption of automated systems (Lee & Chen, 2022).

Table 1
Barriers to Automation Adoption in terms of Technological Barriers

Statements	Mean	Description
Our company faces challenges with integrating new automation technologies with existing systems.	3.02	Agree
The current technological infrastructure in our company is outdated and hinders automation adoption.	2.43	Disagree
There is a lack of technical expertise within the company to properly implement automation.	2.28	Disagree
The automation technologies available do not meet the specific needs of our company's operational processes.	2.30	Disagree
The company experiences difficulties in maintaining and updating automated systems.	2.63	Agree
Overall	2.53	Agree

Legend: 1.00-1.75 Strongly Disagree, 1.76-2.50 Disagree, 2.51-3.25 Agree, and 3.26-4.00 Strongly Agree

The lowest mean (2.28) relates to the perceived lack of technical expertise in implementing automation, which respondents generally disagree with. This suggests that employees believe they

possess the necessary skills or that training has been adequate. The result may imply that workforce capability is not seen as a significant technological barrier. This also shows greater confidence in personnel than in infrastructure and system integration. Research indicates that workforce readiness is improving across industries due to greater exposure to digital tools (Martins & Silva, 2023).

The overall mean of 2.24 indicates that respondents disagree with the presence of financial in adopting automation. This suggests that financial constraints are not perceived as a major obstacle for the company. Employees may view the firm's budgeting and financial planning as sufficient to support automation initiatives. This perception can positively influence future automation projects. Similar evidence shows that firms with stable financial systems often perceive fewer financial risks regarding automation (Goyal & Sharma, 2021).

The highest mean (2.43) relates to concerns about long-term financial benefits, although it is still in the “disagree” category. This shows that respondents generally believe the benefits of automation are clear and likely to produce returns. It may also reflect confidence in strategic investment decisions. Employees may perceive automation as a valuable long-term asset rather than a financial burden. Studies show that organizations increasingly view automation as a cost-effective approach, driven by improved ROI predictability (Nguyen, 2023).

The lowest mean (2.15) is observed across multiple items, indicating a consistent perception that financial costs are not a significant hindrance. Respondents do not view initial costs or ROI uncertainty as barriers. This suggests strong financial capacity or a positive outlook on the affordability of automation. Companies with efficient cost management often minimize financial hesitation in adopting new technologies. Research supports that financial readiness reduces resistance to automation investments (Ali & Khan, 2022).

Table 2
Barriers to Automation Adoption in terms of Financial Barriers

Statements	Mean	Description
The initial cost of automation is too high for our company to afford.	2.15	Disagree
The company is uncertain about the return on investment (ROI) from adopting automation technologies.	2.15	Disagree
Financial constraints limit the company's ability to invest in automation technologies.	2.24	Disagree
There are concerns regarding the long-term financial benefits of adopting automation.	2.43	Disagree
The cost of automation tools and systems is a major barrier to their adoption in our company.	2.22	Disagree
Overall	2.24	Disagree

Legend: 1.00-1.75 Strongly Disagree, 1.76-2.50 Disagree, 2.51-3.25 Agree, and 3.26-4.00 Strongly Agree

The overall mean of 2.21, interpreted as “disagree,” suggests that respondents do not perceive organizational barriers as significant obstacles. This indicates that employee attitudes, managerial support, and communication systems are not viewed as major deterrents to automation. The findings reflect a relatively supportive organizational environment. This can facilitate smoother implementation of automation systems. Studies show that supportive organizational cultures contribute positively to digital transformation initiatives (Patel & Varma, 2021).

The highest mean (2.35) concerns internal communication gaps, though respondents still fall under “disagree.” This means respondents do not believe communication issues heavily hinder automation adoption. The perception indicates that communication structures are functioning adequately. However, even mild concerns may signal areas for improvement. Research indicates that effective communication is essential to minimize resistance during automation transitions (Johnson, 2022).

The lowest mean (1.91) is linked to perceptions of managerial support, suggesting strong disagreement that leadership is unsupportive. Respondents likely believe that management plays an encouraging role in promoting automation. This positive perception can facilitate quicker adoption of new technologies. Supportive leadership reduces fear and uncertainty among employees. Prior studies emphasize that leadership endorsement is crucial in successful automation adoption (Fernandez, 2023).

Table 3
Barriers to Automation Adoption in terms of Organizational Barriers

Statements	Mean	Description
There is resistance to automation from employees within the company.	2.26	Disagree
Management is not fully supportive of adopting automation technologies.	1.91	Disagree
Employees feel that automation may lead to job loss or significant changes in their roles.	2.24	Disagree
The company lacks the internal communication needed to promote automation adoption effectively.	2.35	Disagree
The company does not provide adequate training or skill development opportunities to handle automated systems.	2.28	Disagree
Overall	2.21	Disagree

Legend: 1.00-1.75 Strongly Disagree, 1.76-2.50 Disagree, 2.51-3.25 Agree, and 3.26-4.00 Strongly Agree

The overall mean of 2.17 shows that respondents disagree that regulatory barriers significantly affect automation adoption. This suggests that legal and regulatory frameworks are not seen as obstructing the company's automation plans. The company likely operates under regulations that do not heavily restrict new technologies. This perception can allow more flexible automation implementation. Findings from similar research suggest that regulatory clarity reduces barriers to automation (Santos & Rivera, 2022).

The highest mean (2.28) relates to compliance as a barrier, yet still interpreted as "disagree." This shows respondents do not feel compliance processes impede automation. This may reflect well-organized regulatory compliance protocols in the company. It also implies that the company is comfortable navigating regulatory requirements. Research has shown that firms with established compliance systems integrate automation more effectively (Kim & Park, 2023).

The lowest mean (1.98) appears in the statement about government support, with respondents disagreeing that regulations fail to encourage innovation. This indicates that employees see the regulatory environment as neutral or supportive. The perception suggests that government policies do not hinder technological advancement. This positive regulatory climate can be advantageous for automation growth. Studies highlight that supportive policies accelerate technological adoption in industries (Rodriguez, 2021).

Table 4
Barriers to Automation Adoption in terms of Regulatory Barriers

Statements	Mean	Description
The company faces legal or regulatory restrictions when trying to adopt automation technologies.	2.22	Disagree
The current regulatory environment is not aligned with the latest automation technologies.	2.17	Disagree
Compliance with industry regulations is a barrier to adopting automation in our operations.	2.28	Disagree
Regulatory approval for automation implementation is a slow and complicated process.	2.22	Disagree
The government regulations do not encourage or support the adoption of automation technologies in our industry.	1.98	Disagree
Overall	2.17	Disagree

Legend: 1.00-1.75 Strongly Disagree, 1.76-2.50 Disagree, 2.51-3.25 Agree, and 3.26-4.00 Strongly Agree

The overall mean of 2.29 shows that respondents generally disagree that barriers significantly restrict automation adoption. This indicates an overall positive environment for automation. Employees perceive fewer constraints across technological, financial, organizational, and regulatory dimensions. This collective perception can encourage automation initiatives. Research shows that organizations with fewer perceived barriers adopt automation more effectively (Shaikh & Malik, 2024).

Technological barriers received the highest mean (2.53), interpreted as “agree.” This suggests that among all barrier types, technology-related issues are the most felt by respondents. These include integration challenges and outdated systems. Addressing these concerns may accelerate automation adoption. Studies show that technological compatibility remains a major hurdle in digital transformation (Mehta, 2022).

Regulatory barriers have the lowest mean (2.17), indicating minimal perceived regulatory constraints. This implies employees feel that laws and policies do not obstruct automation. A favorable regulatory environment may encourage innovation. The company may also have strong compliance structures that reduce regulatory friction. Literature suggests that supportive regulations foster rapid technological adoption (Ocampo, 2023).

Table 5
Summary of Barriers to Automation Adoption

Statements	Mean	Description
Technological Barriers	2.53	Agree
Financial Barriers	2.24	Disagree
Organizational Barriers	2.21	Disagree
Regulatory Barriers	2.17	Disagree
Overall	2.29	Disagree

Legend: 1.00-1.75 Strongly Disagree, 1.76-2.50 Disagree, 2.51-3.25 Agree, and 3.26-4.00 Strongly Agree

The overall mean of 3.32 indicates respondents strongly agree that automation can improve operational efficiency. This highlights a strong belief in automation’s impact on process speed and accuracy. Employees recognize that automation can streamline order fulfillment, reduce errors, and maximize resource use. This perception reflects readiness for technological change. Studies confirm that automation enhances operational efficiency in distribution operations (Bates & Howard, 2021).

The highest mean (3.69) indicates strong agreement that automation reduces redundancies in internal processes. Respondents believe automation will significantly minimize repetitive tasks. This aligns with the expectation that automation increases workflow speed and consistency. Reducing redundancies may also lower labor strain and operational delays. Research shows automation reduces process duplication and improves workflow reliability (Chen, 2023).

Table 6
Internal Operations of One Distribution Company in terms of Operational Efficiency

Statements	Mean	Description
The company’s internal processes are slow due to a lack of automation.	2.80	Agree
Automation would significantly improve the efficiency of order fulfillment in our operations.	3.50	Strongly Agree
Errors in our operations are primarily caused by manual tasks that could be automated.	3.13	Agree
Our company’s resource utilization (e.g., time, labor) would improve with the adoption of automation.	3.48	Strongly Agree
Automation would help reduce redundancies in our internal processes.	3.69	Strongly Agree
Overall	3.32	Strongly Agree

Legend: 1.00-1.75 Strongly Disagree, 1.76-2.50 Disagree, 2.51-3.25 Agree, and 3.26-4.00 Strongly Agree

The lowest mean (2.80) involves perceptions of slow processes due to lack of automation, though respondents still “agree.” This suggests employees acknowledge inefficiencies but less strongly than other items. The result implies variability in how strongly different inefficiencies are felt. Nonetheless, perceptions still favor automation as a solution. Prior studies indicate manual processes contribute significantly to operational delays (Lopez, 2022).

The overall mean of 3.26 indicates that respondents strongly agree that automation enhances cost efficiency within the company. This suggests that employees perceive automation as a valuable tool in reducing operational expenses. The findings imply that shifting from manual tasks to automated systems could significantly reduce labor-related and process-related costs. Respondents clearly recognize automation as an investment with tangible financial benefits. Research supports the idea that automation improves cost efficiency by minimizing waste and optimizing workflows (Silva & Romero, 2021).

The highest mean (3.56) reflects strong agreement that adopting automation will improve the company’s overall cost efficiency. This finding highlights employees’ confidence in automation as a long-term financial strategy. It also implies that cost savings are among the most anticipated benefits of automation. Such perceptions may encourage managers to prioritize automation initiatives. Studies show that organizations adopting automation typically experience significant cost reductions in routine operational processes (Wang, 2023).

The lowest mean (2.83) indicates agreement that reduced automation use has impacted operational expenses, though the perception is less intense. Respondents acknowledge that not fully utilizing automation prevents the company from maximizing cost savings. This may imply inefficiencies or areas where manual processes still dominate. Addressing these gaps can lead to greater financial gains. Prior research points out that partial automation prevents firms from achieving optimal cost efficiencies (Hernandez, 2022).

Table 7
Internal Operations of One Distribution Company in terms of Cost Efficiency

Statements	Mean	Description
The company spends a significant amount of money on manual operational tasks that could be automated.	3.13	Agree
Automation could lead to substantial savings in operational costs for our company.	3.44	Strongly Agree
The company has seen a reduction in operational costs due to the limited use of automation.	2.83	Agree
Adopting automation could improve the company's overall cost efficiency.	3.56	Strongly Agree
The lack of automation increases operational costs for the company.	3.33	Strongly Agree
Overall	3.26	Strongly Agree

Legend: 1.00-1.75 Strongly Disagree, 1.76-2.50 Disagree, 2.51-3.25 Agree, and 3.26-4.00 Strongly Agree

The overall mean of 3.40 indicates that respondents strongly agree that automation enhances employee productivity. This suggests employees expect automation to improve job performance and streamline workflow. The perception implies readiness to adopt automation as a tool for skill enhancement. Automation is seen as a way to shift employees toward more meaningful and complex tasks. Studies confirm that automation increases productivity by reducing repetitive work and enhancing task allocation (Rahimi & Patel, 2020).

The highest mean (3.63) indicates strong agreement that automation will allow better use of employee skills. This means employees believe automation can free them from manual tasks, enabling them to focus on higher-value responsibilities. Such improvements may increase job satisfaction and performance. This perception demonstrates openness to task restructuring. Research agrees that

automation enhances role specialization and promotes more efficient use of human talent (Gonzales, 2023).

The lowest mean (2.70) concerns employee resistance due to fear of role changes, though respondents still “agree.” This indicates some awareness of hesitancy toward automation transitions. Employees recognize that role adjustments may cause anxiety among some workers. Addressing these concerns may require training and communication strategies. Studies show that fear of job displacement is one of the most common psychological barriers to automation acceptance (Ling & Chow, 2021).

Table 8
Internal Operations of One Distribution Company in terms of Employee Productivity

Statements	Mean	Description
Automation would enhance the productivity of employees in the company.	3.59	Strongly Agree
Employees feel that automation would reduce repetitive, mundane tasks and improve their job satisfaction.	3.54	Strongly Agree
The introduction of automation would result in better use of employee skills in more valuable tasks.	3.63	Strongly Agree
The company would experience an increase in employee productivity if automation was implemented.	3.56	Strongly Agree
Employees are generally resistant to adopting automation due to fear of change in their roles.	2.70	Agree
Overall	3.40	Strongly Agree

Legend: 1.00-1.75 Strongly Disagree, 1.76-2.50 Disagree, 2.51-3.25 Agree, and 3.26-4.00 Strongly Agree

The overall mean of 3.50 shows that respondents strongly agree that automation improves customer service quality. This indicates a strong belief that automation can enhance accuracy, speed, and reliability in serving customers. Employees understand that automation can reduce order errors and allow faster processing. This perception aligns with modern customer service expectations. Research supports that automation strengthens customer satisfaction by improving response time and service accuracy (Hogg & Andrews, 2022).

The highest mean (3.70) indicates strong agreement that automation enables faster customer response times. Respondents believe speed is one of the greatest benefits of automation in customer service. Faster service may lead to higher customer retention and more positive experiences. This shows employees recognize the competitive advantage of timely service. Prior studies emphasize that automation significantly improves response speed and customer engagement (Kumar, 2024).

The lowest mean (3.11) relates to the difficulty of meeting customer expectations without automation. Although still “agree,” it indicates that some functions may currently meet expectations even without full automation. However, the result also shows acknowledgment of limitations in manual processes. This implies that further automation could solve ongoing issues with timeliness and accuracy. Research indicates that manual processes often cause inconsistencies in customer service performance (Diaz, 2020).

Table 9
Internal Operations of One Distribution Company in terms of Customer Service Quality

Statements	Mean	Description
Automation would improve the accuracy of order fulfillment and reduce mistakes in customer orders.	3.52	Strongly Agree
Customer service levels would improve if the company adopted automation in its operations.	3.54	Strongly Agree

The adoption of automation would help the company meet delivery deadlines more effectively.	3.65	Strongly Agree
Automation would enable the company to offer better customer service through faster response times.	3.70	Strongly Agree
Without automation, the company struggles to meet customer expectations for timely deliveries.	3.11	Agree
Overall	3.50	Strongly Agree

Legend: 1.00-1.75 Strongly Disagree, 1.76-2.50 Disagree, 2.51-3.25 Agree, and 3.26-4.00 Strongly Agree

The overall mean of 3.37 indicates strong agreement that automation improves internal operations. Respondents believe automation enhances efficiency, reduces costs, increases productivity, and improves customer service. This broad agreement shows the company's workforce is aware of automation's organizational benefits. The perception suggests readiness for more advanced automation strategies. Studies confirm that holistic automation improves multiple operational dimensions simultaneously (Torres & Malik, 2021).

Customer service quality has the highest mean (3.50), indicating strong support for automation's role in enhancing customer outcomes. Employees evidently value automated systems that improve delivery accuracy and timeliness. This highlights customer service as the operational area most positively impacted by automation. Enhanced service quality may improve customer loyalty. Research confirms that automation contributes critically to competitive customer service performance (Wright & Felix, 2023).

Cost efficiency has the lowest mean (3.26), though still interpreted as "strongly agree." This suggests that while automation improves cost management, employees believe its benefits are slightly less compared to other areas. The result may reflect operational complexities that influence savings. Nonetheless, the perception remains highly favorable. Studies note that financial gains from automation vary depending on industry maturity and workflow structure (Olivares, 2024).

Table 10
Summary of Internal Operations of One Distribution Company

Statements	Mean	Description
Operational Efficiency	3.32	Strongly Agree
Cost Efficiency	3.26	Strongly Agree
Employee Productivity	3.40	Strongly Agree
Customer Service Quality	3.50	Strongly Agree
Overall	3.37	Strongly Agree

Legend: 1.00-1.75 Strongly Disagree, 1.76-2.50 Disagree, 2.51-3.25 Agree, and 3.26-4.00 Strongly Agree

The regression results show that barriers to automation adoption have a negative coefficient ($B = -0.256$), suggesting that as perceived barriers increase, internal operations tend to decrease. The p-value of .063 indicates that the relationship is not statistically significant at the 0.05 level. This means barriers do not have a significant measurable effect on operational performance in the company. The adjusted R^2 of .047 shows that only 4.7% of the variation in internal operations is explained by barriers. Overall, the findings suggest that barriers exist but do not strongly influence how internal processes function.

The results imply that the company may have developed strong operational practices that minimize the impact of automation barriers. This can also mean that existing workflows remain effective even without full automation. However, the negative coefficient signals the need to continue reducing technological or organizational challenges to optimize operations further. The nonsignificant relationship suggests that future automation initiatives can move forward without major concerns

about barrier-driven disruptions. Studies indicate that organizations with adaptive systems can maintain performance despite technological constraints (Barkley, 2022).

Table 11
Test of Significant Influence of Barriers to Automation Adoption on the Internal Operations of One Distribution Company in Quezon City, Manila

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	4.192	.378		11.088	.000
Barriers to Automation Adoption	-.256	.135	-.255	-1.901	.063

Note: Adjusted $r^2 = .047$ ANOVA for Regression $f = 3.615$ $p = .063$

CONCLUSION

The findings revealed that employees generally disagreed that major barriers hinder the adoption of automation in the company. Among the four types of barriers, technological issues were the most noticeable, while regulatory concerns were the least significant. Respondents strongly believed that automation could improve operational efficiency, cost management, employee productivity, and customer service. These results point to a positive organizational climate that is open to technological advancement. Overall, the study indicates that internal operations are functioning well despite minor technological constraints.

The regression results demonstrated that automation barriers did not significantly influence internal operations, although the negative coefficient suggested a slight inverse relationship. This implies that while barriers exist, they do not substantially weaken the company's operational performance. The results also show that the company has processes in place that mitigate the impact of automation-related challenges. However, reducing technological limitations may further enhance operational outcomes. Future initiatives should focus on system upgrades, training programs, and process improvements to strengthen automation readiness.

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