

# Procure-To-Pay (P2p) Optimization and Organizational Efficiency of the Selected Private Companies in Cabuyao, Laguna

Kim Azriel Mayo Ramos

*A Master's Thesis presented to the Faculty of the School of Graduate Studies  
Pamantasan ng Cabuyao*

## I. INTRODUCTION

The dynamic landscape of global business underscores the critical requirements for organizational efficiency, emphasizing the importance of refining operational procedures through optimal and strategic methods. In modern business, the procure-to-pay (P2P) process facilitates organizational efficiency. The process itself is a term used to describe the cycle of acquiring goods and services from a supplier and settling the associated payments (Dupont & Heuer, 2023). Its primary aim is to procure the company's needs as effectively and efficiently as possible. The fundamental flow of the P2P process remains consistent across organizations, beginning with identification and requisitioning, then ordering, receiving, and concluding with invoicing and payment. The procurement process initiates the flow of P2P, which organizations follow when purchasing goods and services from suppliers. This integration of procurement with finance activities consolidates the entire cycle of P2P (Yoroflow, 2023). Executing a well-designed P2P process yields significant efficiency outcomes, particularly in cost savings and enhanced supplier relationships. This strategic optimization of the P2P process involves integrating procurement and accounts payable (AP) functions, utilizing suitable P2P software tailored to the operational structure, and continuously innovating the process and overall business flexibility, as these efforts directly influence organizational efficiency.

The automation approach of the P2P framework, leveraging technology, holds a crucial role in global operations and financial dynamics that influence the efficiency of an organization. A recent Gartner report claims that by 2025, more than 50% of organizations worldwide will have a cloud-based P2P suite, signifying the essence of optimizing the P2P process. This optimization refines procurement processes using comprehensive P2P software (Biedron, 2023), which becomes necessary for every organization. Maintaining such a system is naturally expensive, but considering its long-term benefit of providing efficiency gains and a modern user experience are typical cost-saving outcomes for organizations. Findings from the Paystream 2023 Procurement Report shed light on a trend related to organizational practices, indicating that 80% of businesses rely on manual or semi-digital tools in managing their P2P cycles. Within this majority, many organizations integrate their e-procurement module into their existing Enterprise Resource Planning (ERP) in performing the process. The successful implementation of the process may still vary according to the company's existing workflow and technology utilization. Several challenges hinder optimizing this crucial function, including the complexities associated with establishing a robust data management format, the segmentation of procurement and AP functions, and a notable reluctance to adopt essential tools. This trend underscores the need for organizations to reassess their approach and recognize the potential benefits that dedicated procurement solutions can bring. By embracing such solutions, businesses can enhance efficiency, accuracy, and overall effectiveness in managing the P2P cycle (GEP, April 2023).

The industrial setup in the Philippines applies the business approach of shared services in terms of a centralized and standardized process of P2P and its adoption towards the digital transformation of the procurement process by accommodating efficient handling of transactions from multiple domestic and foreign organizations. The optimization of the P2P process serves as a business resolution in a broader organizational framework that encompasses various industries for both international and domestic business setups. For these firms residing in the economic zone specifically concentrating on Cabuyao, Laguna, incorporating procurement modules through ERP or accounting software can enhance specific facets of the P2P cycle, influencing an organization's dynamic capability to compete effectively in the local market. The dedicated procurement guidelines stated in the Philippines Public Procurement (2021) serve as a foundation for the establishment of the P2P function, discussing the specialized focus on the complexities of the procurement process, which offers a more tailored and streamlined approach, presenting organizations with opportunities to streamline the operative procurement process through automation, improve data accuracy, and foster greater transparency throughout the procurement lifecycle (Velarde et al., 2021). Therefore, this study focused on the significant relationship between the implemented process of P2P and organizational efficiency and its impact.

The passage mentions challenges related to the complexities of data management, integration issues, and reluctance to adopt essential tools, which impact the optimal solutions for enhancing the P2P process. This research also includes the reliance on traditional and partially digital tools within procurement and the AP cycle. This prevailing trend prompts organizations to reconsider their approach, recognizing the potential benefits of dedicated procurement solutions that are significant to organizational efficiency in managing the consolidated P2P cycle and its overall impact. This study embraced these principles by integrating the broader global business framework into the local business approach, where companies can navigate the complexities of modern businesses and emerge as adaptive, innovative, and flexible competitive players in their respective industries. The optimization of the P2P process is a multifaceted initiative that aligns with the broader goal of enhancing organizational efficiency. By embracing innovation, fostering collaboration, and embracing best practices, businesses can streamline their procurement functions and position themselves for greater competitiveness and success in the ever-evolving business landscape.

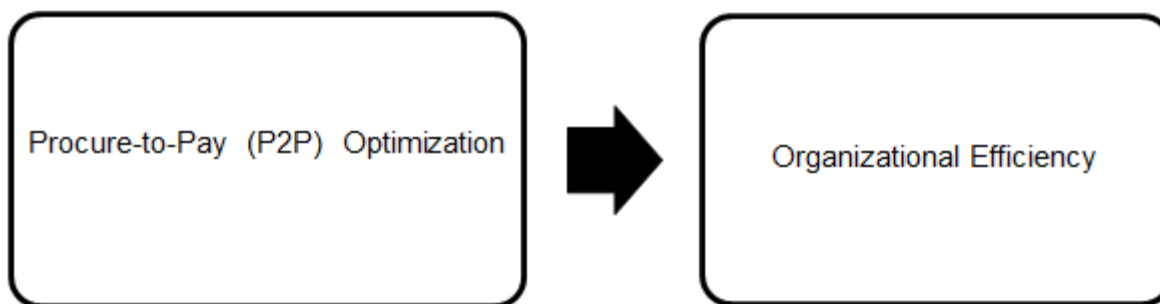
**Theoretical Framework :** The dynamic capability view has gained increasing favor among management researchers as a theoretical framework for elucidating strategic decision-making across varied environmental conditions. Given the ongoing evolution of the business landscape, addressing these changes is crucial to prevent adverse effects on the overall performance of firms (Wood et al., 2020). The lens of Dynamic Capabilities Theory (DCT) posits organizations as dynamic entities capable of adjusting and reorganizing their internal resources in response to external changes. The foundation of this theory lies in the seminal works of Teece, Pisano, and Shuen, offering a robust perspective for comprehending how organizations can construct and deploy capabilities to sense, seize, and reconfigure resources, meeting the demands of a rapidly changing business environment. Managing timely responses can be challenging, leading management experts to advocate for the dynamic capabilities approach. This method is the key to adeptly handling situations and efficiently managing change in turbulent environments by establishing successive temporary advantages.

DCT presents a fundamental paradigm for organizations seeking to enhance efficiency amid the ongoing changes in the business landscape. In optimizing the Procure-to-Pay (P2P) process, the theory emphasizes a company's adaptability, process integration, learning, and dynamic resource allocation. According to experts, the dynamic capabilities approach addresses such circumstances and effectively manages change in tumultuous environments by establishing successive temporary advantages (Wood et al., 2020). This framework is invaluable in investigating how companies navigate the dynamic P2P terrain, assessing their contributions to the seamless integration of procurement and payment processes, organizational learning, resource allocation, innovation, strategic flexibility, and ultimately gaining a competitive edge. Secondly, when scrutinizing efficiency improvement in the procurement process with an emphasis on cost mitigation, DCT accentuates adaptability to cost dynamics, integrated processes for efficiency, continuous learning, and improvement, strategic resource allocation, innovation for cost reduction, strategic flexibility, and achieving a competitive edge through effective cost mitigation. Research in this domain can employ dynamic capabilities theory to comprehend how companies navigate the dynamic procurement landscape to optimize costs and secure a competitive advantage.

Lastly, in the context of efficiency improvement through supplier collaboration, dynamic capabilities theory highlights a company's ability to adapt to changing supplier dynamics, seamlessly integrate relationships, engage in continuous learning and knowledge sharing with suppliers, strategically allocate resources for collaboration, innovate in collaborative approaches, exhibit strategic flexibility, and attain a competitive advantage through efficient collaboration. Investigating how dynamic capabilities contribute to supplier collaboration yields insights into adaptive strategies, resource management, innovation, and competitive positioning within procurement efficiency. In the report of Herold et al. (2022), academic research highlighted the list of outcome expectations as the dynamic capabilities' indicators include efficiency and effectiveness gains in the procurement cycle through cost savings, improved process speed, and enhanced product quality and innovation, as well as improved supply risk monitoring.

**Research Paradigm :** The researcher employed a conceptual framework that analyzes the relationship between Procure-to-Pay (P2P) Optimization and Organizational Efficiency in the Selected Private Companies in Cabuyao, Laguna.

In Figure 1, the first box (independent variable) represents procure-to-pay (P2P) optimization. An



**Figure 1. Paradigm of the Study**

arrow in the correct box shows the study's second box (dependent variable), which is the organizational efficiency of selected private companies. It illustrates how the independent variable (P2P Optimization) expects to influence the dependent variable (Organizational Efficiency of Selected Private Companies).

**Research Questions :** The primary goal of this study was to determine the level of P2P Optimization and Organizational Efficiency of the Selected Private Companies in Cabuyao, Laguna.

**The study aimed to answer the following questions:**

1. What is the level of P2P optimization implemented by companies in terms of:

- ✚ Adaptability,
- ✚ Resource Allocation,
- ✚ Innovation,
- ✚ Strategic Flexibility.

2. What is the level of organizational efficiency in the procurement process in terms of:

- ✚ Cost Mitigation,
- ✚ Supplier Collaboration.

3. Is there a significant relationship between P2P optimization and organizational efficiency in the selected companies in Cabuyao, Laguna?

4. Does P2P optimization impact organizational efficiency?

5. What is the recommended action plan for an organization's efficient and optimized procure-to-pay process?

### **Hypothesis**

The null hypothesis intends to guide the researcher in Procure-to-Pay (P2P) Optimization and Organizational Efficiency in the Selected Private Companies in Cabuyao, Laguna.

**H01** – There is no significant relationship between the P2P optimization and organizational efficiency of selected private companies in Cabuyao, Laguna.

**H02** – There is no impact on the relationship between the P2P optimization and organizational efficiency of selected private companies in Cabuyao, Laguna

**Scope and Limitations :** This study primarily focuses on finance and accounting employees working in Cabuyao, Laguna, employed with companies utilizing the P2P process and system. The research is limited to respondents actively practicing P2P roles and functions in companies residing within Cabuyao, Laguna. The primary objective of this research is to determine the significance of the optimized P2P process implemented by companies and its influence on organizational efficiency. Furthermore, the study targets respondents with a background in the P2P process and optimization strategies with their current companies. These respondents should have five years or more experience and at least a year or more working experience in procurement and AP or full-cycle P2P functions.

### **Significance of the Study**

The output of the study may benefit the following people:

**Procurement and Finance Employees.** This study benefits employees working from different entities from public or private institutions, equipping them with the tools and knowledge needed to navigate the complexities of procurement and AP processes, as the study contributes to the overall enhancement by integrating processes and adding value to the organization.

**Corporate Managers, Business Owners, and Economic Analysts.** This study benefits these professionals by allowing them to make strategic decisions based on data-driven insights provided by the enhancement made by optimizing the P2P process.

**Suppliers.** The study benefits suppliers beyond the organizational boundaries of the studied private companies. The study directly impacts the suppliers involved in the procurement and payment process, offering them opportunities for improved operations, reduced costs, and enhanced relationships with their business partners. As private companies in Cabuyao, Laguna embrace optimized P2P processes, vendors and suppliers stand to benefit from a more collaborative, efficient, and mutually beneficial business environment.

**Future Researchers.** The study benefits all students and future researchers in terms of the research outcome by having the potential to shape the future of procurement practices in the business landscape, making it a valuable resource for company research and the like.

### **Definition of Terms**

**Procure-to-Pay (P2P).** This term refers to the entire process of acquiring goods and services for a business, starting from the procurement or purchasing stage and extending through payment and reconciliation.

**Optimization.** This term suggests making the P2P system more effective and efficient. Optimization involves streamlining processes, reducing costs, and improving overall performance.

**Adaptability** refers to the capability of the procurement platform to proactively embrace continuous improvement (Vernall, 2024).

**Resource Allocation** refers to the strategic distribution of resources within the activities involved in the cycle of P2P (Ansar, 2023).

**Innovation** refers to the advanced methods, technologies, and approaches utilized by the P2P process (Herold et al., 2022).

**Strategic flexibility** refers to the deliberate and thoughtful decision-making process related to supplier and purchasing dynamics.

**Procurement Process** refers to an organization's steps and activities to acquire goods, services, or works from external sources, typically through purchasing or contracting.

**Organizational efficiency** refers to the extent an organization achieves its objectives by using resources, minimizing waste, and maximizing productivity.

**Cost Mitigation** refers to the strategies and actions taken to reduce or control expenses associated with the P2P process optimization.

**Supplier Collaboration** refers to the strategic and cooperative efforts between a company and its suppliers within the P2P process. It involves establishing and maintaining solid relationships with suppliers to enhance efficiency, communication, and overall performance in the procurement and payment process.

## **II. REVIEW OF LITERATURE AND STUDIES**

This chapter indicates the literature and studies about P2P optimization and organizational efficiency within the unique environment of private businesses, as well as an overview of the research presented by the literature study and review.

**Conceptual Literature :** The conceptual approach of P2P is described as an upstream and downstream framework for processing the purchase of goods or services and completing payment (Dupont & Heuer, 2023). The core of the P2P process lies in its ability to integrate diverse functions within an organization, forming a cohesive and strategic framework that originates from procurement and accounts payable processes. The complex flow of P2P, engaging various business areas in the upstream and downstream stages, demonstrates the strategic alignment of procurement with broader organizational goals, reshaping the traditional P2P process. This alignment explains the efficient transition of processes and adds a value-oriented continuum framework (ProcurePort Blog, 2020). The P2P concept connects different business activities by implementing an adaptive optimized process relevant to the efficient workflow for obtaining necessary goods and services while maintaining control over expenditures. ControlHub (2023) emphasizes the significance of having a centralized supplier database and integrated P2P technology. However, the automation of the P2P process begins within the operational framework of the organization. Therefore, the key to successfully implementing the P2P framework is integrating a well-designed procurement process with accounts payable (AP) and additionally, maintaining databases like standardized product catalogs and vendor master data aids in innovating procurement processes, as noted by Procurify (2023), which is relevant to the adaptive approach due to the optimized P2P process. Nevertheless, GEP (2023) argued that the P2P process covers the entire procurement lifecycle, from sourcing and ordering to invoice processing and payment. Thus, optimizing the P2P process entails enhancing the procurement process through P2P software solutions, emphasizing the significance of automation as an innovative approach in implementing an optimized P2P system (Biedron, 2023).

According to Procureport Blog (2020), acquiring advanced software to manage the P2P process is a move towards centralization. The essence of P2P software is much more highlighted due to its main features of digitally connecting vendors, policies, and processes that uncover cost-saving opportunities. Implementing automated procurement systems eliminates manual data entry and enhances spend visibility, effectively addressing existing process gaps and centralizing specific approaches adapted by an optimized P2P process (Kissflow, 2024). National Supply Chain Analytics (2024) emphasizes the importance of an automated procurement process in improving the visibility of spending patterns, supplier management, compliance, risk mitigation, and accurate financial planning. At the same time, Cleartech (2023) entails this passage as significant in the upstream process that primarily involves activities like vendor selection, contract creation, purchase order generation, and receipt of goods, which encompasses the activities that aim to generate overview through data-driven insights provided by the P2P software which required in optimizing resources related with the P2P process. Banton (2023) further illustrated this by discussing the advanced features of the e-procurement system, which automates procurement activities in the upstream process and integrates the entire process using a P2P software solution. This method efficiently controls cash flow, providing a flexible approach to timely data purchasing. Crochet (2022) also implies that automation is essential for optimizing the P2P process. Consequently, a conservative approach to strategically handling cash flow should adopted by engaging with vendor payment terms.

However, an article from Simfoni (2024) contends that the structure of the upstream process can vary among organizations, requiring a flexible approach to optimizing the P2P process at this stage to mitigate potential disruptions and utilizing technologies like cloud-based software solutions with features such as e-catalogs, e-procurement, e-invoicing, and approval workflows. The automated P2P cycle supports an end-to-end process, integrating seamless order fulfillment with invoice matching to validate invoices needed for vendor payments. Consequently, implementing a standardized P2P framework module provides flexibility in optimizing the P2P process. Agilico (2023) further discussed the advanced approach of sourcing suppliers in terms of leveraging major suppliers, offering preferential pricing, and encouraging collaboration by improving supply chain integrity, leading to cost savings, reliable delivery, and enhanced overall supplier performance that implies a flexible approach in the implementation of an optimized P2P process. McConnell (2024) elaborated on the innovative approach of SRM utilizing an RFP management system that engages with vendors and enhances business by developing stronger relationships, resulting in cost savings and securing favorable deals. However, Clarke (2022) further elaborated that implementing effective management of supplier relationships is essential in optimizing the P2P process. It fosters a mutual vision and collaborative business plan while assessing past and current relationship performance. With consistent evaluation and improvement in procurement practices, organizations can maintain a competitive edge and provide value to stakeholders (Vela, 2023). Moreover, Zycus (2024) discussed the essence of managing product catalogs in the upstream procurement process. This approach involves strategically assigning product categories and specific buyers for each category, implementing a centralized procurement function in an optimized P2P process while regaining efficiency by mitigating spending controls with particular contract suppliers only.

This efficient approach of managing procured materials over actual spending analog management also ensures optimal pricing through a conveniently accessible database of approved, standardized products and services (GEP, 2024). This view supports Robinson Francis (2022), who discusses centralized and global approaches to managing the P2P process to ensure organizations can enhance essential procurement capabilities, such as responsive customer service and effective sourcing strategies. This concept is particularly relevant for modern corporate structures, especially multinational companies with regional offices in other countries. Consequently, consolidating procurement activities into a centralized system facilitates better oversight and management, leading to more effective policy enforcement and compliance with regulatory requirements, thus applying an innovative approach to optimizing the P2P process (Oleg, 2023).

ProcureDesk (2023) discussed that automated P2P prevents possible disruptions in the mid-stage of the P2P framework due to data mismatch caused by manual intervention. The automation enhances the order fulfillment aspect of the process through a streamlined purchase order that is created and automatically sent to vendors. Therefore, it ensures precise purchasing details for the ordered goods and services that adhere to the company's required delivery dates and inventory management policies. Krishna (2021) discussed the significance of the implemented P2P process with the inventory optimization process by integrating policies such as purchase planning, waste reduction, and delivery of customer expectations. It also highlights the enhancement of the seamless ordering process of inventory, integrating reordering levels with the automated P2P, which is crucial for the effective execution and timing of inventory reordering. This approach highlights the importance of optimizing both the P2P process and inventory management, enhancing each process as optimal business resolution in terms of effective utilization of resources. IBM Cloud Education (2022) further highlights the procurement process, which involves creating purchase orders, receiving goods, and invoice processing and payments. However, it emphasized the downstream process of the P2P framework, which initiates invoice verification against the accepted order before making a payment to the vendor. This verification can be accomplished through invoice matching methods, such as two-way matching or three-way matching principles, which compares the vendor's invoice with the purchase order details, or three-way matching, which ensures consistency by comparing the purchase order, invoice, and delivery receipt before proceeding with the vendor payment.

Babb (2024) thoroughly elaborated on this aspect by emphasizing the two aspects of the invoicing approach: invoice creation and product receipt, as well as invoice reconciliation and processing. This approach initiates once suppliers confirm the order details, and then the items are shipped with the invoice. In a finance or accounts payable role, when receiving invoices from a supplier, part of the processing involves validating it by comparing the invoice against the actual item or service received. This validation method ensures that the invoice is accurate and can be scheduled for payment. Additionally, posting the invoice involves simulating the AP journal entries, which serves as an extension step in the P2P framework for record and reporting purposes. Implementing this practice within organizations improves invoice processing by effectively reconciling transactions throughout the process, completing an end-to-end upstream-to-downstream process. Kingsbury (2023) further highlights that vendor payment entails disbursing funds to an external vendor for the goods or services acquired. This stage is closely linked to invoice processing, as a validated invoice is crucial for vendor payment processing. Moreover, George (2024) also discussed that on-time vendor payments are essential for maintaining positive relationships, as they demonstrate reliability and respect for the vendor's business operations. This reliability leads to negotiating more favorable terms for subsequent transactions, such as better pricing, extended credit terms, or prioritized services. Therefore, implementation in the downstream process can be flexible in other ways based on an organization's operational structure. This method illustrates the dynamic capability of an optimized P2P process, allowing flexible implementation in both the upstream and downstream workflow of the P2P.

Overall, Oberloo (2024) discussed how to manage procure-to-pay (P2P) activities effectively, and organizations should establish and monitor key performance indicators (KPIs). P2P optimization is applicable when identifying internal KPIs for the processors and external KPIs for supplier performance. In relevance with Paunonen's (2023) discussion, careful analysis of payment terms, PO coverage, and contract terms is essential to ensure optimal performance. Their automated analytics solution generates and presents user-friendly information at the category, process, contract, and item levels. With relevant controls and approvals, detecting fraud and non-compliance becomes much more accessible. Furthermore, regular data analysis helps identify trends and areas requiring corrective action. It is crucial to regularly review and update P2P KPIs based on changing business needs and industry best practices to drive continuous improvement in procurement processes. By implementing KPIs effectively,

Organizations can enhance decision-making and further optimize the P2P process based on the data-driven data gathered and its significance with operational efficiency in reducing costs, mitigating risks, and achieving tremendous success in procure-to-pay activities. Focusing on the aspect of the procurement process, Yooz (2023) further discussed that automation is the central aspect of optimizing the procurement process. This approach significantly reduces manual intervention, accelerating the entire life cycle from requisition to payment and freeing up valuable time for employees to focus on more strategic tasks. Streamlining processes includes an enhanced feature of optimized procurement that enables visible spending and control, negotiates advantageous terms with suppliers, eliminates duplicate payments, minimizes late payment penalties, and avoids unnecessary expenditures. Miller (2023) further emphasized the advantages of streamlining procurement activities, highlighting that organizations can realize substantial cost savings through bulk purchasing, competitive bidding, and strong supplier relationship management by implementing effective procurement management.

The article by Price (2024) directly aligns with the cost mitigation efficiency strategy in the procurement process. Procurement teams aim to secure goods and services at the best possible terms by identifying potential suppliers, assessing proposals, and negotiating terms. Conducting market research, issuing requests for proposals (RFPs), and evaluating supplier capabilities are essential steps in this process. Price's (2024) discussion highlights the importance of strategic supplier selection and negotiation in achieving cost mitigation efficiency within the procurement process. Organizations can optimize their procurement practices and maximize cost savings by carefully evaluating suppliers and negotiating favorable terms. Shevchenko (2024) demonstrated this aspect in discussing the significance of the S2P concept with increasing efficiency of the streamlined procurement and sourcing processes. This approach extends its importance in AP teams collaborating to resolve common issues and cover knowledge gaps by creating efficiencies in the P2P process, which leads to a fundamental shift from repetitive tasks towards value creation.

When seeking ways to cut procurement costs, Glazier (2023) further discussed the aspect of the total cost of ownership (TCO) analysis, which enables businesses to gain a deeper understanding of how decisions affect various components over time, uncovering factors typically not reflected in the upfront Price of goods or services. Incorporating TCO analysis into business strategies can lead to reduced operational costs. Streamlining process cycles, identifying opportunities for cost optimization across different departments, and capitalizing on economies of scale through long-term buying decisions may result in securing lower purchase prices from suppliers. Kamani (2022) discussed that one key advantage of procurement efficiency lies in its collaboration capacity. Through resource pooling and cooperative efforts, organizations can tap into a broader array of suppliers, goods, and services, ultimately trimming down the time allocated to the procurement process. Moreover, procurement collaboration fosters enhanced communication among organizations. Collaborative efforts enable easier sharing of information and resources, facilitating smoother and more efficient procurement operations.

An article by McKinsey & Company (2020) discussed that buyers and suppliers can collaborate to create innovative new products, increasing revenues and profits for both sides. They can adopt an integrated strategy for optimizing the supply chain by revamping processes to minimize waste and duplicate efforts or by jointly procuring raw materials. Alternatively, they can engage in collaborative efforts in forecasting, planning, and capacity management, thereby enhancing service levels, mitigating risks, and fortifying the supply chain. Similarly, Duja Consulting (2023) also mentioned that promoting collaboration among cross-functional teams involving procurement, finance, operations, and other relevant departments enables a comprehensive understanding of procurement requirements. By collaborating closely with strategic suppliers, organizations can mutually identify cost-saving opportunities, share forecasts, and engage in continuous improvement initiatives, enhancing efficiency and reducing supply chain risks. Involving stakeholders across the organization in procurement decision-making processes ensures alignment and buy-in. Regular communication and feedback sessions foster transparency, aiding in identifying process bottlenecks and facilitating smoother procurement operations.

Moreover, Supply Chain Strategy (2023) further demonstrated multi-tier supplier collaboration, a potent means to convert supply chains into agile, resilient, and value-generating ecosystems. Integrating this aspect with procurement functions enables organizations to access many advantages, such as enhanced efficiency, reduced costs, innovation, and heightened customer satisfaction. TeamHub (2023) summarizes these supplier metrics in supplier performance metrics evaluation, where supplier management and collaboration are pivotal due to the broader achievement of business goals. By offering objective benchmarks for assessing and contrasting suppliers,

These metrics empower organizations to make well-founded decisions, instill supplier accountability, cultivate robust supplier relationships, and mitigate risks. Implementing supplier performance metrics is a fundamental measure of enhancing the supply chain and guaranteeing top-notch products or services to customers. Moreover, most of the literature cited mentioned a significance between the implemented procurement and P2P strategies and organizational efficiency. The passage initially discusses the standardized procurement processes as the crucial main point of implementing an optimized P2P process that is significant in efficiency. P2P software solutions facilitate the creation of standardized workflows, approval hierarchies, and procurement policies, which establish guidelines that reduce the likelihood of errors and non-compliance, like the articulation of SAP in the P2P process (2024) relevant to overall process efficiency. Enhanced visibility into procurement data that tracks and monitors spending and identifies opportunities for cost savings and process improvement, as well as implementation of the P2P optimization that is significant with efficiency. Real-time insights that enable proactive management of the procurement process and addressing these potential issues promptly. Moreover, optimizing cash flow in financial management procure-to-pay applications, automating invoice processing and payment scheduling, ensuring timely payments, and taking advantage of early payment discounts are strategies mentioned by Orderly (2024) that are significantly relevant to the efficiency of the P2P process.

Overall, Barnum (2024) highlighted the P2P practices that significantly enhance the efficiency, accuracy, and effectiveness of the P2P process. Standardizing procedures across the P2P process reduces errors and inefficiencies while investing in automation streamlines operations. Improving communication and collaboration between departments through regular inter-departmental meetings, clear documentation of procedures, and shared performance metrics is crucial. Using collaborative tools and platforms facilitates better coordination. Establishing strong internal controls and compliance mechanisms mitigates legal and financial risks, and regular training sessions for staff on compliance standards reinforce this. They have implemented advanced cybersecurity measures to protect sensitive data and transactions from fraud and breaches. Developing a strategic approach to supplier selection and relationship management addresses supply chain risks through regular performance evaluations, supplier diversification, and open communication for continuous feedback. Additionally, tracking key performance indicators (KPIs) using analytics tools helps identify bottlenecks, spending patterns, and opportunities for cost savings. Employing these strategies ensures a robust and efficient P2P process. P2P optimization and organizational efficiency are significant among these practices implemented. Furthermore, an article in Medium (2024) discussed that enhancing proficiency in resolving the intricacies of the procure-to-pay cycle is crucial for achieving operational excellence. An optimized procure-to-pay process is more than a transactional requirement; it is a strategic asset that enhances overall business success by increasing efficiency, reducing costs, ensuring compliance, and positioning the organization for future growth. As an improved procurement practice, P2P optimization highly influences efficiency, leading to sustained success in a dynamic market. While the procurement journey is complex, P2P software solutions provide smoothly, accurately, and securely. Through slack-first workflows, centralization and streamlining of operations enable organizations to navigate these processes that challenge and emerge as industry leaders (Nicketan & Manivannan, 2024).

**Research Literature :** The research found that optimization is necessary in modern business, particularly in the corporate aspect. Various literature and business aspects were integrated and implemented with potential benefits. The Procure-to-Pay (P2P) process emerges as a modern automated accounting approach relevant to the AP function, which serves as a business resolution that provides an enhanced operational and financial process. Peltomaa (2021) further discussed the empirical findings that automation of the P2P process is an adaptive approach in terms of its optimization. Integrating functions between the procurement and accounts payable departments makes automation necessary in optimizing the P2P process. Given that both departments are inherently involved in the process, effective P2P management initiates the adaptive approach as a unified framework required for its post-implementation within a P2P technology. Langstrom (2021) highlights that integrating new processes internally requires an adaptive approach in consideration of preparation time for implementing the procurement process. The approach also includes cultural challenges companies encounter when adapting to new systems. The study suggests employing various teaching methods to engage and motivate users, stressing that effective change management is crucial for optimizing resources before and after implementing new processes or systems. In addition, offering in-person training is another adaptive approach to optimizing the P2P process, as it requires end-users to test the system before it goes live—a critical aspect of the training process for implementing an optimized procure-to-pay (P2P) system. However, Domselaar (2023) highlights that adequate change management, particularly effective communication, was critical but lacking in this context, leading to end-users being unaware of the benefits and hindering the adoption of the new system. Support from stakeholders by identifying clear goals and communicated guidelines are essential approaches in

Adapting an implemented P2P process. Furthermore, Moonen (2021) supported this literature by highlighting the organizational context affecting purchasing maturity. The recommendation is to cultivate a culture that fosters information sharing. Reluctance to share information with the purchasing department is a barrier to progress optimization. One way to do this is by elevating the purchasing function to a higher hierarchical level within the organization and corresponding with the proposal that improves coordination between departments, involving a higher inclination towards information sharing that fosters a flexible and adaptable approach to optimizing department processes. Flechsig et al. (2022) further highlight the impact of emerging digital technology on procurement. The benefits increased operational efficiency, data quality, employee satisfaction, cost savings, and easy implementation of RPA's potential for the PSM function. Nevertheless, RPA integrates well with multiple software applications, securing the compatibility of processes by utilizing existing ERP and e-procurement systems, which was considered optimal management of resources in optimizing the P2P process. Most benefits are internal, but RPA improves transparency and speeds up information exchange by assessing a future-trend approach in innovating an optimized process, affecting supplier relationships, integration, and capability development.

Berti e. al. (2023) studied the object-centric event logs of the procurement process in SAP. The results of the analysis actively enhance the execution of the business process. Notable improvements addressing maverick buying (PC1) and postmortem changes in purchase requisitions (PC2) involve updating internal documents and engagement with training programs as an adaptive approach to implement an optimized P2P process. Conversely, relevant workshops leverage Pareto principle analysis to optimize extended processing times (PP6). Identifying duplicated invoices (PQ1) addressed master data management issues caused by user workarounds, which are adaptive strategies that result in improved data management practices. Identifying "peak times" optimizes temporary resources in the procurement process by resolving correlation issues between high workloads and prolonged processing times (P7). In addition, the analysis in terms of the current processing capacity of AP (PP1) and the required cycle time in verifying and processing invoices (PP2) highlights potential interventions in master data updates, and interdepartmental workshops were an adaptive approach in optimizing the procurement process. Insights from the average throughput time of order placement to goods receiving (PP4) and payment processing and identifying the end-to-end performance of the P2P process on prolonged invoice life cycles (PP5) informs a flexible design of an optimized procurement process to better communication strategies between departments handling invoice payments and ordering. Examining outliers in interconnected processes (PQ2) initiated an adaptive approach of compliant behaviors when optimizing the procurement process. The measure of 'no-touch' orders (PP3), indicating efficient order creation without modifications, is also under consideration. Strategies to implement 'no-touch' orders is a flexible approach in optimizing order entry training, better documentation, and steps toward innovative technological solutions like AI-based assistance or predictive algorithms to minimize order entry errors within the procurement process.

As such, Allai-Cherif et al. (2020) supported this by highlighting that AI equips organizations with the tools needed to create systems that learn and integrate new knowledge into business management that enables buyers to tackle complex problems that were previously unsolvable or addressed less effectively. Advanced information systems utilize algorithms to analyze the environment, aiding buyers in decision-making by evaluating their proposed solutions, establishing scenarios, and recommending the best options with minimal risk. Faccia Petrata (2021) further discussed the advanced and innovative approach to optimizing the procurement process using SAP Ariba. It is a cloud-based procurement solution connecting suppliers and buyers on a single platform, which also optimizes resources in terms of its capability to perform P2P process using a single software that benefits a company in terms of reducing cycle time, improving automation and productivity, cost savings, security, reliability and safety, and flexible, dedicated functional support that facilitates platform use.

The study by Oriji Joel (2024) discussed the integrated model that empowers aerospace companies by providing actionable insights and decision-support tools, enabling informed decision-making across all organizational levels. This literature is relevant in the optimization context of supply chain operations, and identifying cost-saving opportunities contributes to significant cost reductions without compromising product quality or safety standards. Through streamlined processes, improved collaboration, and proactive risk management, overall operational efficiency within the aerospace supply chain is enhanced. Harju et al. (2023) emphasize that improved supplier collaboration dramatically boosts the efficiency of the procurement process within organizations. Data analytics through digitalized procurement processes can help companies enhance information sharing with suppliers. This improved communication facilitates better Supply Chain Risk Management (SCRM), which boosts Supply Chain Resilience (SCRES). Consequently,

Effective supplier collaboration through digital procurement enhances the overall efficiency and effectiveness of the procurement process, enabling organizations to mitigate risks and respond to disruptions. Herold et al. (2022) further highlight that Digital Procurement Technology (DPT) enhances performance outcomes by optimizing costs through more efficient procurement processes. DPT helps manage administrative costs by reallocating resources from operational to strategic activities, emphasizing human decision-making. This flexibility inherent in AI technology is regarded as a successful means of cost reduction in procurement processes. In addition, decreased material cost due to digital sourcing practices directly impacting 2-5% of annual sourcing costs while increasing quality performance outcomes due to transparent and accurate delivery of suppliers was also found to be a cost-efficient approach in the supply chain and procurement processes. The study also indicates the effective implementation of DPT as an efficient approach to supplier relationship management using advanced digital technologies, which empirically proves transparency and traceability in the procurement process that also strengthens the buyer-supplier relationship while maintaining a sustainable sourcing practice as an efficient supplier collaboration approach by adopting digital technologies.

Ozkan et al. (2021) further highlights the improvements in the procurement process through smart contracts that enable enterprises to achieve competitive advantages in terms of mitigated operational cost that support efficient leadership strategy, while enhancements in quality and data management can contribute to differentiation strategy as an efficient approach of collaborating buyer-supplier relationship which aims to improve productivity and reliability issues. Peng et al. (2023) discussed the implications of digital transformation that initially enhances process optimization and decision-making, which are critical components of the P2P process. Optimal processes, in which organizations can streamline their procurement activities, aim to reduce costs and improve supplier relationships. These improvements, in turn, drive organizational efficiency and sustainability. Patrucco et al. (2022) further emphasized that integrating external partners, particularly suppliers, into company innovation endeavors is instrumental in enhancing organizational efficiency, particularly in supplier collaboration. Engagement with suppliers in collaborative innovation projects, organizations can leverage external expertise and resources to drive innovation and improve product development processes. This collaboration streamlines communication channels, fosters knowledge sharing, and facilitates the co-creation of innovative solutions. Consequently, organizations can achieve greater efficiency in product development, reduce time-to-market, and enhance competitiveness. The purchasing department's critical role in orchestrating and managing supplier collaboration ensures that the organization effectively harnesses the potential of external partnerships to optimize its innovation processes and overall operational efficiency.

The study by Ruth (2022) highlights that entities in Kabale District have widely adopted accounts receivables, a critical component of procure-to-pay optimization. This adoption has positively and significantly impacted organizational performance, demonstrating that efficient accounts receivable management enhances overall procurement processes and organizational efficiency. The study reveals that increased adoption of accounts receivables leads to significant improvements in procurement performance, highlighting the crucial correlation between procure-to-pay optimization and organizational efficiency. Therefore, organizations can achieve better financial management, streamline procurement activities, and improve their overall performance by optimizing the procure-to-pay cycle. Consequently, by rejecting the null hypothesis and accepting the research hypothesis, the study underscores the significant impact of procure-to-pay optimization on organizational efficiency, affirming that effective financial process management is essential for achieving enhanced procurement outcomes and overall organizational success.

Bag et al. (2020) provide in their study evidence that companies can gradually move towards digitalization to enhance resource conservation and recycling activities, thereby supporting circular economy (CE) efforts. Specifically, it demonstrates that firms with a robust procurement strategy and effective Procurement 4.0 review processes can optimize their procurement activities and achieve better CE performance. The information processing capability, enhanced by Procurement 4.0 technologies, moderates the relationship between performance reviews and the intention to optimize procurement processes. Firms with more robust information processing capabilities are better able to leverage the performance review process for optimization. These results highlight the significant impact of procurement practices on procurement optimization, yielding direct financial benefits, and on CE performance, providing sustainability benefits. Furthermore, Procurement 4.0 applications expedite purchasing transactions by developing information processing capabilities that support the organizational processing of information and data, which is crucial for intelligent manufacturing. Effective smart manufacturing is necessary for optimizing business processes and enhancing organizational efficiency. Procurement 4.0 provides an adaptive capability that enables firms to adapt quickly through resource flexibility. Additionally,

Its absorptive capability integrates external knowledge with internal operations, while its innovative capability connects the firm's inherent innovativeness to market-related gains. These capabilities collectively facilitate firms in achieving better procurement and CE outcomes, thereby underscoring the strong correlation between procure-to-pay optimization and overall organizational efficiency. By optimizing procurement processes, organizations streamline operations, reduce costs, and enhance overall efficiency, ultimately contributing to improved performance and sustainability in the circular economy context.

**Synthesis :** The Procure-to-Pay (P2P) conceptual approach encompasses an integrated upstream and downstream framework for purchasing goods or services and completing payment, as noted by Dupont and Heuer (2023). This comprehensive system aligns an organization's procurement and accounts payable (AP) processes, forming a cohesive structure that strategically connects various business activities. This alignment enhances efficiency, transparency, and control over expenditures, highlighting the value-oriented continuum that P2P provides (ProcurePort Blog, 2020). Central to optimizing the P2P process is implementing advanced P2P software and automation technologies, which integrate procurement and AP functions into a streamlined workflow. ControlHub (2023) emphasizes the importance of a centralized supplier database and integrated P2P technology, underscoring that successful implementation begins within the operational framework of the organization. Standardized product catalogs and vendor master data uphold this integration, streamlining procurement processes (Procurify, 2023). Automation and integration of procurement activities in the upstream process prevent disruptions caused by data mismatches, ensuring precise purchasing details and adherence to delivery dates and inventory management policies (ProcureDesk, 2023; Krishna, 2021). The upstream process includes activities like vendor selection, contract creation, and purchase order generation that are optimized through data-driven insights provided by P2P software (Cleartech, 2023) and agreed by Banton (2023) that automated procurement activity is also capable of efficiently managing cash flow and ensures timely data purchasing.

Similar overviews in the article by GEP (2023) and Kissflow (2024) highlight those activities covering the procurement lifecycle, from sourcing and ordering to invoice processing and payment, can be enhanced through P2P software solutions. National Supply Chain Analytics (2024) agreed that automation plays a crucial role in this process, eliminating manual data entry, increasing spend visibility, and centralizing procurement activities to uncover cost-saving opportunities, leading to better supplier management, compliance, and financial planning. However, flexible approaches to optimizing the P2P process are essential for mitigating potential disruptions, as Simfoni (2024) discussed. This strategic approach is related to supplier relationship management (SRM). It is critical in optimizing the P2P process, which builds strong supplier relationships, negotiates favorable terms, and fosters mutual collaboration to enhance procurement efficiency and reduce costs (McConnell, 2024; Clarke, 2022). Managing product catalogs and assigning specific buyers highlighted optimal pricing strategies that must be considered in the upstream process (Zycus, 2024). While in the downstream process, adequate invoice verification and payment methods, such as two-way and three-way matching, ensure accurate and timely vendor payments, maintaining positive supplier relationships (IBM et al., 2022; Babb, 2024; Kingsbury, 2023).

Langstrom (2021) emphasizes the importance of an adaptive approach for internal process integration, accounting for preparation time and cultural challenges. Effective change management, including teaching methods and in-person training, is vital for resource optimization before and after new system implementation. Domselaar (2023) highlights that clear goals and communicated guidelines are essential for successful change management, as inadequate communication can hinder system adoption. However, Moonen (2021) further discusses the influence of organizational context on purchasing maturity, recommending the elevation of the purchasing function to foster information sharing and enhance interdepartmental coordination. This cultural shift supports a flexible and adaptive approach to optimizing procurement processes.

The aspect of digitalization and automating the P2P process was initially discussed by

Peltomaa (2021), who emphasized that an automated P2P process is an adaptive strategy essential for optimization, focusing on integrating procurement and accounts payable departments. This unified framework is necessary for the post-implementation phase of P2P technology, enabling streamlined operations and enhanced financial processes. In addition, strategic supplier selection and collaboration were discussed as another essential context in procurement optimization, as they lead to cost savings and improved supplier performance (Price, 2024; Shevchenko, 2024; Glazier, 2023). Collaborative efforts across procurement, finance, and operations departments enhance efficiency and reduce supply chain risks (Duja Consulting, 2023; Supply et al., 2023;

TeamHub, 2023). The study by Allai-Cherif et al. (2020) and Faccia and Petrata (2021) share a standard overview that underscores the implementation of AI and advanced information systems in procurement optimization. AI aids decision-making by analyzing environments and recommending optimal solutions, while SAP Ariba enhances the P2P process through a cloud-based platform that improves cycle time, automation, and productivity. Flechsig et al. (2022) also share the same overview by highlighting the role of emerging digital technologies in using Robotic Process Automation (RPA) as another future-trend innovative approach to optimizing the process to enhance data quality and cost savings. RPA's integration with existing ERP and e-procurement systems ensures compatibility and transparency that further optimizes resource management and supplier relationships in the implementation of the P2P process.

These advanced technologies further emphasize the implementation of key performance indicators (KPIs) to monitor P2P activities that help identify areas for improvement and enhance decision-making (Oberloo, 2024; Paunonen, 2023). This data-driven approach, supported by automated such as RPA and AI technologies, can produce analytics solutions that facilitate continuous improvement and operational efficiency. The literature consistently highlights the significant impact of P2P optimization on organizational efficiency. Implementing standardized procurement processes, enhancing visibility into procurement data, and optimizing cash flow through automated P2P applications contribute to reduced costs, mitigated risks, and improved operational efficiency (Barnum, 2024; Medium, 2024; Nicketan & Manivannan, 2024).

The organizational efficiency approach in the procurement process was further supported by Harju et al. (2023) and Herold et al. (2022), discussing the benefits of improved supplier collaboration and digital procurement technologies in the procurement process in terms of risk management and procurement efficiency that contributes to cost savings and better supplier relationships while Ozkan et al. (2021) on the other hand, specifically discussed the use of smart contracts technology in achieving competitive advantages in terms of mitigating operational costs and improving data management. Peng et al. (2023) support this by highlighting the critical role of digital transformation in process optimization and decision-making within the procurement process, which mitigates costs in the internal procedural aspects of P2P, while Petrucci et al. (2022) further emphasize the external integration of the procurement process with suppliers through collaboration with innovation projects, which enhances efficiency and reduces time-to-market, thereby increasing competitiveness. Ruth (2022) reveals that compelling accounts receivable management is integral to P2P optimization and significantly impacts organizational performance by improving financial management and procurement activities. Bag et al. (2020) further emphasize the role of Procurement 4.0 technologies in enhancing resource conservation and recycling, which supports circular economy efforts. These technologies improve procurement processes, yield financial benefits, and promote sustainability by enabling firms to adapt quickly and integrate external knowledge with internal operations. The study's relevance indicates the correlational significance of organizational performance with financial management and procurement activities, particularly in utilizing 4.0 technologies that optimize overall performance and impact organizational efficiency.

**Research Gap :** While there is existing literature examining the concepts of P2P optimization and organizational efficiency in procurement processes, there still needs to be more empirical research focused explicitly on assessing the level of P2P optimization and its impact on organizational efficiency within companies located in Cabuyao, Laguna, Philippines. Current literature provides generalized frameworks and principles for P2P optimization and procurement efficiency without addressing the unique context and challenges companies operating in Cabuyao, Laguna face. Furthermore, while some studies have explored the relationship between P2P optimization and organizational efficiency in other geographical locations or industries, limited research specifically examines this relationship within the context of Cabuyao-based companies. Understanding the dynamics of P2P optimization and organizational efficiency in this context is crucial for local businesses to effectively allocate resources, adopt relevant strategies, and enhance their competitive advantage. Moreover, the existing literature may primarily focus on either P2P optimization or organizational efficiency independently rather than investigating their interdependence and causal relationship. Therefore, there is a need for empirical research that evaluates the level of P2P optimization and organizational efficiency and examines the direct impact of P2P optimization initiatives on enhancing organizational efficiency in Cabuyao-based companies. Addressing this research gap will contribute to the body of knowledge by providing empirical evidence and insights tailored to the local business environment of Cabuyao, facilitating informed decision-making, and guiding the development of targeted strategies for P2P optimization and procurement efficiency in the region.

### III. RESEARCH METHODOLOGY

This chapter explicitly covers the methodology utilized by the research. It included discussing the research design, locale, population and sampling, instruments and validation, data gathering procedure, ethical considerations, and quantitative data treatment. This chapter provides the relevant information required to understand the variables studied thoroughly.

**Research Design :** The study primarily described procure-to-pay (P2P) optimization and organizational efficiency of selected private companies in Cabuyao, Laguna. In doing so, it uses quantitative research and descriptive correlational design. Quantitative research design involves gathering and analyzing numerical data, as outlined by Bhandari (2022). The researcher used this approach to formulate hypotheses, identify patterns and averages, explore causality, and generalize findings to larger populations. Furthermore, descriptive correlational research aims to determine the significant relationship between P2P optimization and organizational efficiency and its impact. According to Bhat (2024), correlational design provides an effective means of exploring the characteristics of a population or group and understanding the connections between its various elements.

**Research Locale :** The researcher conducted the study in the selected private companies in Cabuyao, Laguna. The researcher chose the city as the research site due to its significant growth and the emergence of various multinational industries within the economic zone, which made it an area of interest for the study. Cabuyao, as the research location, provided a local context for understanding the dynamics of procure-to-pay optimization and organizational efficiency among the selected private companies in the area.

**Respondents of the Study :** This research evaluates the relationship between procure-to-pay optimization and organizational efficiency among selected private companies in Cabuyao, Laguna. Thirty-two (32) finance and accounting employees from sixteen (16) different private companies. The companies involved are Ivoclar Vivadent, Inc., GAC Logistics (formerly Philip Morris), Wyeth Philippines, Inc., Ampleon Philippines Inc., Nexperia Philippines, Inc., H.B. Fuller, James Hardie Philippines, Inc., Automated Technology (Phils.) Inc., APM Technica AG, Universal Robina Corporation, Procter & Gamble Philippines, Inc., Henkel Philippines, Inc., Del Monte Philippines, Inc., Pepsi Cola Products Philippines, Inc., and Concepcion Industrial Corporation. Two (2) employees represented each company to participate in the study. By examining the relationship among these variables, the research used Slovin's formula as the basis for the total acceptable number of respondents. The respondents provided valuable insights into the factors influencing the operational and financial function of the selected private companies in the specific locality.

**Sampling Design :** The study focused on finance and accounting employees with relevant experience managing or optimizing the P2P process. These employees were currently employed among the selected private companies in Cabuyao, Laguna, and were recognized using the P2P process and system. The sampling method used by the researcher was stratified random. This method involved the researcher considering a selected number of respondents drawn from the population data by categorizing and selecting respondents based on specific criteria aligned with the study's objectives. Two employees from each company, identified by their job role/title, length of tenure, and experience handling P2P functions, represented their respective organizations. Additionally, the sampling deliberately encompassed these employees working with companies mainly residing within the economic zonal area in Cabuyao, Laguna, and industries in Cabuyao, Laguna, but multinational by nature. This population and sampling approach aimed to provide depth and specificity, capturing diverse experiences and perspectives relevant to the study's objectives.

**Instrumentation and Validation :** The research instrument employed in this study was a self-made survey questionnaire. The questionnaire drew upon ideas and compiled literature in the field, providing valuable information for addressing the research issues and ensuring relevance and effectiveness. The survey questionnaire consisted of three-part questions to ensure accurate data collection and interpretation. The questionnaire focused on the respondents' profiles, encompassing their age, company role, length of tenure, and working experience in handling P2P functions. The second section of the questionnaire assessed the level of P2P optimization implemented by companies in Cabuyao, Laguna, regarding process adaptability, effective resource allocation, process innovation, and strategic flexibility. The third section of the questionnaire measured the level of organizational efficiency of the procurement process in terms of cost mitigation and supplier collaboration implemented by companies in Cabuyao, Laguna. The questionnaire used a Four-Point Likert Scale and the definite interpretation as a guide. This scale allowed respondents to express their agreement or disagreement with each statement in the questionnaire.

The Likert Scale and verbal interpretations enabled the researcher to analyze the responses quantitatively and understand the P2P optimization and organizational efficiency of the selected private companies in Cabuyao, Laguna. The researcher used the rating scale to assess the level of the study's procure-to-pay optimization and efficiency-related variables associated with a weight, a definite response, and a verbal interpretation. A thorough validation procedure was applied to the self-made survey questionnaire to ensure validity and reliability. The questionnaire undergoes a review and approval process by the panel and experts, including a technical expert, statistician, and research advisor. Their expertise and contributions helped improve the instrument by providing valuable feedback and recommendations that enhanced the questionnaire according to the reviewer's specific recommendations and remarks. The study was revised to improve its clarity, relevance, and alignment with the research objectives. Any additions or deletions to questionnaire components followed Pamantasan ng Cabuyao's research policies. The data-gathering procedure was initiated through Cronbach's Alpha Test to evaluate the reliability and internal consistency of the questionnaire. This method determines the degree to which a set of Likert-type questions and scales are interconnected, indicating their reliability and validity in measuring the intended construct. The Cronbach's Alpha related to the procure-to-pay (P2P) optimization variables resulted in acceptable coefficients in terms of adaptability ( $\alpha= 0.79$ ), resource allocation ( $\alpha= 0.75$ ), and strategic flexibility ( $\alpha= 0.79$ ), and good coefficient was obtained of innovation ( $\alpha= 0.80$ ). The researcher found the acceptable coefficients for organizational efficiency variables to cost mitigation ( $\alpha= 0.78$ ) and supplier collaboration ( $\alpha=0.71$ ).

### Evaluation and Scoring

#### To Determine the Level of Procure-to-Pay (P2P) Optimization and Efficiency Enhancement Rating Weight with Descriptive Equivalents.

| Assigned Points | Numerical Range | Categorical Interpretation | Verbal Interpretation |
|-----------------|-----------------|----------------------------|-----------------------|
| 4               | 3.25 - 4.00     | Strongly Agree             | Very High             |
| 3               | 2.50 - 3.24     | Agree                      | High                  |
| 2               | 1.75 - 2.49     | Disagree                   | Low                   |
| 1               | 1.00 - 1.74     | Strongly Agree             | Very Low              |

**Data Gathering Procedure :** The data-gathering procedure of the study begins with drafting a consent letter addressed to the respondents. This letter is reviewed and approved by the research adviser. Once approved, the researcher collated this letter with the survey questionnaire hosted on the Google Form portal. The researcher administered the data collection process and electronically provided the respondents with the Google Form link to access the questionnaire. Responses were captured by the researcher automatically by the Google Form portal upon submission. The researcher extracted the electronic data submitted and used it for analysis. The researcher carefully computed the research questions' responses, tabulated them, and facilitated the subsequent stages of data analysis, presentation, and final reporting. This method ensures a thorough data analysis, uncovering patterns, trends, and insights relevant to the study's objectives.

**Treatment of Data :** To appropriately analyze the data, the research employed various statistical methods. The statistical treatments applied to the collected data encompassed the following techniques:

1. **Weighted Mean** was used to evaluate and determine the relationship between the level of P2P optimization and organizational efficiency of selected private companies in Cabuyao, Laguna.
2. **The Pearson Correlation Coefficient** was used to determine the significant relationship between P2P optimization and organizational efficiency in the selected private companies in Cabuyao, Laguna.
3. **Multiple Regression Analysis** determines the impact of P2P optimization on organizational efficiency in the selected private companies in Cabuyao, Laguna.

**Ethical Considerations :** The researcher conducted the study per ethical standards, including informing the research adviser and participants to obtain their agreement. The research faculty of the Graduate School of

Pamantasan ng Cabuyao initiated the approval. The researcher provided a validated consent letter with a validated self-constructed interview questionnaire and politely asked the respondents about the topics. The respondents were well-informed about the study and understood that all answers provided were for research purposes only. The researcher assured the strict data privacy compliance of the information the respondents would provide. The researcher kept all the information confidential and the respondents signed a consent form acknowledging the right to drop out of the study whenever they wanted. From here, the researcher strictly complies with R.A. No. 10173 compliance, popularly known as the "Data Privacy Act of 2012." As the researchers began to collect information from all parties involved, the same rules served as guides.

#### IV. RESULTS AND DISCUSSION

This chapter presents statistical data relative to the research questions posted. The researcher's corresponding data analysis and interpretation integrate into the study's results. The researcher presents the data in this chapter based on the respondent's answers to the Survey Questionnaires that the researcher could gather.

##### 1. Level of P2P optimization implemented by companies in terms of adaptability, resource allocation, innovation, and strategic flexibility.

**Table 1.1.**  
*Level of P2P Optimization in terms of Process Adaptability*

| Indicators  | $\bar{X}$   | Interpretation   |
|---|-------------|------------------|
| 1. The timing of implementation of the P2P process in our organization is accepted by its employees and stakeholders. | 3.73        | Very High        |
| 2. Our organization's Procurement and Accounts Payable functions collaborate as a unified workflow.                   | 3.57        | Very High        |
| 3. The vendor master data in our organization has a standard format.  | 3.47        | High             |
| 4. The P2P process in our organization adapts to current versions of software/systems.                                | 3.53        | Very High        |
| 5. Our organization only accepts e-invoices from all suppliers.   | 3.53        | Very High        |
| 6. Our organization has defined and measurable P2P performance metrics.   | 3.63        | Very High        |
| <b>AVERAGE WEIGHTED MEAN</b>  | <b>3.58</b> | <b>VERY HIGH</b> |

*Legend: 3.50 - 4.00 Very High (Strongly Agree); 2.50 - 3.49 High (Agree); 1.50 - 2.49 Low (Disagree); 1.00 - 1.49 Very Low (Strongly Disagree)*

Table 1.1 shows the collective evaluation of the P2P optimization regarding process adaptability among the selected private companies in Cabuyao, Laguna. The overall findings obtained an average weighted mean of 3.58, indicating a high interpretation. The adaptability of the P2P process implies that companies have wholly integrated and adapted such internal procedures between the procurement and accounts payable functions. This aspect also includes the automation aspect of utilizing P2P software resolutions that further enhance the end-to-end process of procurement and AP into a systemized P2P process. Furthermore, the successful implementation of optimized processes includes the cultural aspect of an organization that involves the participation and support of its employees and stakeholders by fulfilling their roles in performing the entire process. According to Wang (2020), the integrated processes of procurement and accounts payable are critical components of IT Financial Management which emphasizes that the automated structure of procure-to-pay is a must in the modern IFTM industry. Consequently, PayEm (2022) elaborated that automation is the solution to enhance the P2P process further, thus offering an efficient and fine-tuned business resolution. However, Monteverde (2021) highlights that implementing an optimized procure-to-pay (P2P) process starts with executing good practices. The opportunity to adopt a more resilient P2P solution relies heavily on the support and adherence of employees to these best practices, which is essential for effectively managing the complexities of current business environments.

**Table 1.2.**  
*Level of P2P Optimization in terms of Effective Resource Allocation*

| Indicators  | $\bar{X}$   | Interpretation |
|---|-------------|----------------|
| 1. The number of processors in our organization is sufficient to accommodate overall P2P activities.                | 3.43        | High           |
| 2. The processors in our organization are Finance and Accounting experts to perform the entire process.             | 3.33        | High           |
| 3. Our organization utilizes a single P2P software to perform the end-to-end requisition to the payment processing. | 3.40        | High           |
| 4. The P2P processors in our organization were provided with regular training and knowledge-sharing opportunities.  | 3.37        | High           |
| 5. Our organization practices invoice processing cycle time and accuracy monitoring.                                | 3.57        | Very High      |
| 6. Our organization practices an on-time vendor payment schedule before the invoice due date.                       | 3.40        | High           |
| 7. Our organization conducts leveraging supplier approval.  | 3.37        | High           |
| <b>AVERAGE WEIGHTED MEAN</b>  | <b>3.41</b> | <b>HIGH</b>    |

*Legend: 3.50 - 4.00 Very High (Strongly Agree); 2.50 - 3.49 High (Agree); 1.50 - 2.49 Low (Disagree); 1.00 - 1.49 Very Low (Strongly Disagree)*

Table 1.2 illustrates the overall level of implementing effective resource allocation in optimizing the P2P process among selected private companies in Cabuyao, Laguna. The data reveals that these companies received an average weighted mean score of 3.41, corresponding to a high level of interpretation among the respondents. A practical resource allocation indicates efficient use of financial, human resources, and technological aspects to streamline procurement to payment activities, including implementing practices in terms of advanced technologies, streamlined workflows, and effective supplier management. These findings were further elaborated by the MaterLog Team (2024), emphasizing that implementing a P2P system tailored to your business needs involves managing available resources through quality and sustainable investments, leading to long-term savings. The findings also suggest that, beyond the P2P system itself, the automation may incur additional operating costs initially, but it optimizes administrative costs over time, providing long-term benefits.

Olmstead (2022) explained that digitizing the P2P process removes labor-intensive tasks, significantly enhancing organizational efficiency. Saputra (2023) added that an automated workflow helps maintain strong supplier relationships by improving strategic decision-making and ensuring transactional transparency. This approach includes consolidating purchase volumes, establishing long-term supplier agreements, and leveraging collaboration.

**Table 1.3.**  
*Level of P2P Optimization in terms of Process Innovation.*

| Indicators  | $\bar{X}$ | Interpretation |
|---|-----------|----------------|
| 1. Our organization leverages P2P software as the future business resolution providing an end-to-end cycle of procurement and AP. | 3.63      | Very High      |

|   |             |             |
|---|-------------|-------------|
| 2. Our organization integrates product catalog in managing items for procurement.   | 3.50        | Very High   |
| 3. Our organization integrates RFP features in handling the supplier sourcing process.                                    | 3.63        | Very High   |
| 4. Our organization integrates an e-procurement workflow creating requisitions until Purchase Order creation and sending. | 3.53        | Very High   |
| 5. Our organization integrates an e-invoicing feature for data capturing.   | 3.37        | High        |
| 6. Employees are provided with a comprehensive training program.  | 3.23        | High        |
| 7. The process actively collaborates with supplier systems.   | 3.3         | High        |
| 8. Data analytic tools are integrated within our P2P organization for data-driven insight purposes.                       | 3.03        | High        |
| <b>AVERAGE WEIGHTED MEAN</b>  | <b>3.40</b> | <b>HIGH</b> |

---

*Legend: 3.50 - 4.00 Very High (Strongly Agree); 2.50 - 3.49 High (Agree); 1.50 - 2.49 Low (Disagree); 1.00 - 1.49 Very Low (Strongly Disagree)*

Table 1.3 illustrates the overall level of implementing effective resource allocation in optimizing the P2P process among selected private companies in Cabuyao, Laguna. The data reveals that these companies received an average weighted mean score of 3.40, corresponding to a high level of interpretation among the respondents. Implementing an optimized P2P indicates success in fostering innovation within the selected private companies in Cabuyao. These findings suggest that the companies have embraced innovative practices to enhance their procurement-to-payment processes. This high level of implementation signifies a commitment to efficiency, transparency, and adaptability within their operations. Furthermore, it underscores the importance these companies place on staying competitive in a dynamic business landscape by continuously seeking ways to improve their processes and deliver value to their stakeholders.

These findings indicate a surface-level adoption of innovative practices within the P2P process and a deeper integration of innovation throughout the operational framework. These companies have likely invested significant financial and human capital resources into researching, developing, and deploying innovative solutions within their P2P processes (Handfield et al., 2020). Such solutions may include adopting advanced procurement technologies, automating payment process automation, utilizing data analytics for decision-making (Agrawal et al., 2021), and integrating digital platforms for supplier management and communication (Hofmann & Rubmann, 2020). Moreover, this includes the employees across various levels of the organization who are actively engaged and supportive of these innovation initiatives (Westerman & Matos, 2020). This organizational alignment is crucial for the successful implementation of innovation, as it fosters a culture of experimentation, collaboration, and continuous improvement (Kanter, 2020). Furthermore, the positive correlation between the implementation of innovation and the efficiency of the P2P process suggests that these companies are not just innovating for the sake of it but rather with the clear objective of improving operational efficiency, reducing costs, minimizing errors, and ultimately enhancing overall business performance. Thus, it reflects a strategic commitment to staying ahead in a competitive market by leveraging technology, creativity, and a culture of innovation to drive sustainable growth and success.

**Table 1.4.**  
*Level of P2P Optimization in Terms of Strategic Flexibility.*

| Indicators   | $\bar{X}$   | Interpretation |
|--|-------------|----------------|
| 1. The workflow, roles, and responsibilities in our organization can be customized due to change management dynamics.        | 3.33        | High           |
| 2. Centralized procurement and AP functions by assigning specific buyers and invoice processors as per transaction category. | 3.13        | High           |
| 3. The P2P software in our organization is capable of performing end-to-end visibility over the entire P2P process.          | 3.27        | High           |
| 4. The P2P process in our organization has a workflow for suppliers in the exemption list.                                   | 3.17        | High           |
| 5. Employee performance data metrics are customizable due to internal management preferences.                                | 3.37        | High           |
| 6. Supplier performance data metrics are customizable due to internal management preferences.                                | 3.33        | High           |
| <b>AVERAGE WEIGHTED MEAN</b>   | <b>3.27</b> | <b>HIGH</b>    |

*Legend: 3.50 - 4.00 Very High (Strongly Agree); 2.50 - 3.49 High (Agree); 1.50 - 2.49 Low (Disagree); 1.00 - 1.49 Very Low (Strongly Disagree)*

Table 1.4 illustrates the overall level of implementing strategic flexibility in optimizing the P2P process among selected private companies in Cabuyao, Laguna. The data reveals that these companies received an average weighted mean score of 3.27, corresponding to a high level of interpretation among the respondents. This approach indicates that the implementation of the P2P process has been effectively integrated into their operational strategies, showcasing a robust commitment to enhancing procurement and payment systems. This implementation signifies a strategic shift towards leveraging advanced methodologies and technologies to optimize the P2P process. This flexibility approach indicates that most companies surveyed know the importance of strategic flexibility but are also actively embedding it into their business practices. By doing so, they can streamline operations, reduce lead times, and minimize errors, contributing to a more efficient and cost-effective procurement cycle.

Furthermore, this level of implementation reflects a strategic alignment with industry best practices, where agility and responsiveness are paramount. The emphasis on strategic flexibility enables these companies to swiftly adapt to market fluctuations, regulatory changes, and evolving customer demands. This adaptability is crucial in maintaining supply chain resilience and ensuring uninterrupted business operations. According to Ivanov et al. (2021), strategic flexibility in supply chain management significantly enhances the ability to respond to disruptions and maintain continuity. In addition, the focus on optimizing the P2P process through strategic flexibility fosters stronger supplier relationships. Companies can negotiate better terms, improve supplier performance, and enhance collaboration, leading to mutual benefits. Improved supplier relationships also translate to better quality control, reduced risks, and enhanced innovation, as suppliers are more likely to engage in joint development activities. Research by Kaufmann et al. (2020) highlights that strong supplier relationships are crucial for achieving supply chain efficiency and innovation. The findings suggest that continuous improvement and innovation in the P2P process are not merely optional but essential for sustaining competitive advantage. Companies in Cabuyao, Laguna, that prioritize these aspects will likely experience increased operational efficiency, reduced costs, and improved profitability. Moreover, rapidly implementing changes and improvements ensures that these companies can maintain operational excellence and achieve long-term business goals, even in a highly competitive market environment.

## 2. Level of organizational efficiency of the procurement process in terms of cost mitigation and supplier collaboration.

**Table 2.1.**

*Level of Organizational Efficiency in the Procurement Process in terms of Cost Mitigation.*

| Indicators   | $\bar{X}$   | Interpretation   |
|--|-------------|------------------|
| 1. Our organization executes simplified procurement and AP practices.                          | 3.67        | Very High        |
| 2. The P2P process in our organization utilizes both e-procurement and ERP interfaces.         | 3.47        | High             |
| 3. Posted invoices are integrated with budgetary constraints through approved Purchase Orders. | 3.47        | High             |
| 4. Our P2P system adapts to the vendor system in terms of sharing sourcing details.            | 3.50        | Very High        |
| 5. Fixed payment schedules were standardized in our organizations.                             | 3.47        | High             |
| <b>WEIGHTED MEAN</b>   | <b>3.52</b> | <b>VERY HIGH</b> |

*Legend: 3.50 - 4.00 Very High (Strongly Agree); 2.50 - 3.49 High (Agree); 1.50 - 2.49 Low (Disagree); 1.00 - 1.49 Very Low (Strongly Disagree)*

Table 2.1 presents the overall organizational efficiency of the procurement process regarding cost mitigation in the chosen private companies in Cabuyao, Laguna. The data reveals that these companies received an average weighted mean score of 3.52, corresponding to a very high level of interpretation among the respondents. This result indicates that implementing the procurement process is highly effective in mitigating costs. The procurement departments in these companies are performing exceptionally in several key areas. Handfield et al. (2021) state that solid negotiation skills are critical in achieving cost savings and optimizing procurement outcomes where effective negotiation practices are evident, as companies secure favorable terms and prices from suppliers as strategic partnerships with suppliers likely contribute to both direct cost savings and cost avoidance, as the companies can rely on stable and high-quality inputs for their operations. According to Schoenherr et al. (2020), spending analysis is a strong point, with companies effectively categorizing and analyzing their expenditures. This approach allows them to identify opportunities for bulk purchasing, consolidating suppliers, and eliminating unnecessary spending, all of which contribute to cost efficiency. Furthermore, the consistency in achieving cost savings and avoidance indicates robust procurement strategies that are well-integrated into the organizational processes. This integration helps ensure that procurement activities are aligned with the overall business goals, facilitating continuous improvement and adaptation to market changes (Walker & Brammer, 2021). Strong performance in procurement not only improves operational efficiency but also has a significant positive impact on the financial performance of the organizations. By minimizing costs and ensuring reliable supply chains, these companies can allocate resources more effectively, invest in growth opportunities, and enhance their competitive advantage in the market.

**Table 2.2.**

*Level of Organizational Efficiency in the Procurement Process in terms of Supplier Collaboration.*

| Indicators  | $\bar{X}$ | Interpretation |
|---|-----------|----------------|
| 1. The procurement process is standardized in our organization and cleans up vendor data. | 3.30      | High           |
| 2. The P2P process in our organization leverages vendor payment terms.                    | 3.50      | Very High      |
| 3. The P2P process integrates product catalogs from different vendors.                    | 3.27      | High           |

|   |             |             |
|---|-------------|-------------|
| 4. The P2P system in our organization collaborates data and information with suppliers.                               | 3.40        | High        |
| 5. The e-procurement system integrates with a shared email account to communicate supplier concerns and requirements. | 3.20        | High        |
| 6. The P2P process in our organization clearly defines the supplier performance metrics.                              | 3.47        | High        |
| <b>WEIGHTED MEAN</b>  | <b>3.33</b> | <b>HIGH</b> |

Legend: 3.50 - 4.00 Very High (Strongly Agree); 2.50 - 3.49 High (Agree); 1.50 - 2.49 Low (Disagree); 1.00 - 1.49 Very Low (Strongly Disagree)

Table 2.2 presents the overall organizational efficiency of the procurement process regarding supplier collaboration in the chosen private companies in Cabuyao, Laguna. The data reveals that these companies received an average weighted mean score of 3.33, corresponding to a high level of interpretation among the respondents. This result indicates that implementing the procurement process with a strong focus on supplier collaboration is perceived positively by the stakeholders involved. The high level of interpretation suggests that these companies' current strategies and practices foster effective communication, mutual trust, and streamlined operations between the companies and their suppliers. Additionally, robust supplier collaboration contributes to more efficient procurement cycles, reduced costs, and enhanced quality of goods and services. This efficiency bolsters the companies' operational performance and positions them competitively within the market. Recent studies have shown that solid supplier collaboration can significantly improve supply chain performance and innovation (Bag et al., 2020; Dubey et al., 2020). Furthermore, the consistently high scores across various dimensions of the procurement process highlight the importance of maintaining and further improving these collaborative efforts to sustain organizational efficiency and drive continuous improvement in supply chain management (Roehrich et al., 2020; Fan et al., 2021).

**3. Significant relationship between P2P optimization and organizational efficiency in the selected private companies in Cabuyao, Laguna.**

**Table 3.**  
**Significant Relationship of P2P Optimization and Organizational Efficiency.**

| P2P Optimization      | Organizational Efficiency | r-value | P-value | Remarks     | Decision  |
|-----------------------|---------------------------|---------|---------|-------------|-----------|
| Adaptability          | Cost Mitigation           | 0.66    | 0.0001  | Significant | Reject HO |
|                       | Supplier Collaboration    | 0.57    | 0.0010  | Significant | Reject HO |
| Resource Allocation   | Cost Mitigation           | 0.76    | 0.0001  | Significant | Reject HO |
|                       | Supplier Collaboration    | 0.79    | 0.0001  | Significant | Reject HO |
| Innovation            | Cost Mitigation           | 0.73    | 0.0001  | Significant | Reject HO |
|                       | Supplier Collaboration    | 0.63    | 0.0001  | Significant | Reject HO |
| Strategic Flexibility | Cost Mitigation           | 0.69    | 0.0001  | Significant | Reject HO |
|                       | Supplier Collaboration    | 0.68    | 0.0001  | Significant | Reject HO |

\*df:2

\*Significant 0.05 (2 tailed)

Table 3 presents statistical data demonstrating a significant correlation between P2P optimization, measured in terms of adaptability, resource allocation, innovation, strategic flexibility, and organizational efficiency, assessed through cost mitigation and supplier collaboration. The Pearson values, ranging from 0.57 to 0.79, indicate a positive linear relationship among the variables. Moreover, the significance of each variable leads to the rejection of the hypothesis, confirming a notable association between P2P optimization and organizational efficiency. The result of the study indicates a strong correlation between P2P optimization and organizational efficiency.

This result further suggests that as the P2P process becomes more optimized, it will significantly enhance the efficiency of an organization. The result further implies that automation facilitates real-time data analysis and decision-making that is critical for maintaining a competitive edge in today's fast-paced business environment. As systems become more integrated and execute seamlessly, organizations can respond more swiftly to market changes and demands, ensuring greater adaptability and resilience (Heikkilä et al., 2020). The study's findings suggest that companies should invest in advanced P2P technologies and employee training to maximize the benefits of process optimization. Furthermore, the study underscores the importance of continuous improvement in P2P processes to sustain and further augment organizational efficiency. Companies that prioritize P2P optimization are likely to experience more streamlined operations, improved supplier relationships, and better resource utilization. These strategies are consistent with recent research highlighting that effective P2P systems reduce operational costs and foster innovation and strategic flexibility (Chopra & Meindl, 2020; van Weele, 2021). Overall, the positive correlation between P2P optimization and organizational efficiency emphasizes the strategic value of investing in procurement technologies and practices. By leveraging automation and fostering a culture of continuous improvement, organizations can achieve significant gains in efficiency, cost savings, and competitive advantage.

**4. Impact of P2P optimization on organizational efficiency of the Selected Private Companies in Cabuyao, Laguna.**

**Table 4**  
*Impact of P2P Optimization on Organizational Efficiency*

| <i>Regression Statistics</i> |          |
|------------------------------|----------|
| Multiple R                   | 0.846818 |
| R Square                     | 0.717101 |
| Adjusted R Square            | 0.671838 |
| Standard Error               | 0.223886 |
| Observations                 | 30       |

| ANOVA      |           |             |             |          |                       |
|------------|-----------|-------------|-------------|----------|-----------------------|
|            | <i>df</i> | <i>SS</i>   | <i>MS</i>   | <i>F</i> | <i>Significance F</i> |
| Regression | 4         | 3.176495329 | 0.794123832 | 15.8427  | 1.3925                |
| Residual   | 25        | 1.2531343   | 0.050125372 |          |                       |
| Total      | 29        | 4.42962963  |             |          |                       |

Table 4 presents the combined impact of the P2P optimization among the selected private companies in their organizational efficiency, with an R square value of 0.7171 known to be the coefficient of determination. It is the proportion of the variance in the response variable that the explanatory variables can explain. The discussion further implies that **32.22%** of the variation explains various aspects of P2P optimization: Adaptability, Resource Allocation, Innovation, and Strategic Flexibility. With a standardized error of **0.223886**, this is the average distance that the observed values fall from the regression line. The result implies that the observed values fall to an average of 0.223886 or 0.22 units from the regression line. **F=15.8427** is the overall F statistic for the regression model, calculated as regression MS/residual MS. With a **Significance F of 1.3925**, this is the p-value associated with the overall F statistic. It tells us whether or not the regression model as a whole is statistically significant. In other words, it tells us if the four explanatory variables (P2P Optimization) combined have a statistically significant association with the response variable (Organizational Efficiency). In this case, the p-value is more significant than 0.05, indicating that the explanatory variables (P2P Optimization) combined do not significantly impact Organizational Efficiency statistically.

These findings lead to the acceptance of the hypothesis which implies that P2P optimization in terms of Adaptability, Resource Allocation, Innovation, and Strategic Flexibility significantly does not impact the organizational efficiency of the selected private companies. The findings discuss that implementing optimized P2P strategies may lead to minor improvements in organizational efficiency within the context of the selected private companies. This lack of significant impact suggests that other factors may be more influential in determining efficiency outcomes.

These companies already have mature processes in place, or external factors, such as market conditions and competitive pressures, may overshadow the benefits of P2P Optimization. Zhao et al. (2020) further discussed that external market dynamics significantly influence organizational efficiency, often more so than internal optimization efforts. Additionally, the metrics used to measure organizational efficiency are not sufficiently sensitive to capture the incremental improvements brought about by P2P Optimization. Singh et al. (2021) also discussed that traditional efficiency metrics may need to reflect the nuanced benefits of optimization strategies. Therefore, while P2P Optimization may offer theoretical advantages, its practical application in these organizations might require further refinement or integration with other strategic initiatives to realize tangible benefits. Future research could explore these possibilities in more detail, incorporating a broader range of variables or alternative methodologies better to understand the relationship between P2P Optimization and organizational efficiency. Chen and Wang (2022) suggest that a mixed-methods approach could provide deeper insights into these complex dynamics.

**5. Recommended Action Plan :** The researcher designs the proposed improvement plan for the study to enhance the procurement and finance team of private companies in Cabuyao, Laguna. This improvement plan aims to help these companies identify areas for growth, address weaknesses, and continuously strive for better performance. It provides a structured framework to drive positive change and achieve sustainable success. The team can operate more efficiently and productively by identifying and correcting current process inefficiencies in some companies. These findings further suggest that an organization makes better decisions that will benefit the company and involve providing training and tools. This plan for enhancement holds promise in enhancing internal adaptability by integrating procedures and emerging technologies, optimizing resource utilization, fostering process innovation, and implementing flexible and strategic approaches throughout the procurement and payment process, thereby establishing a cohesive end-to-end P2P framework.

6.

**Table 5**  
**Procure-to-Pay (P2P) Optimization Action Plan**

| Key Results Area   | Objectives   | Specific Strategic Activities  | Department Involved  | Time Frame                                 |
|--|--|--|----------------------|--|
| <b>ADAPTABILITY</b>  |  |  |                      |  |
| Companies should implement a standardized procurement process.                               | To establish and implement a standardized procurement process that aims to optimize procurement activities, increase cost savings, mitigate risks, and foster a culture of continuous improvement in procurement operations.   | Develop a standardized procurement policies from requisitioning, sourcing, negotiating, contract handling, and order fulfillment aspect that aligns on the invoicing and AP policy of the Finance Department.  | Procurement          | 3 months                                   |
| Companies should integrate procurement with the accounts payable function.                   | To establish a P2P framework from streamlined function between procurement activities, such as purchasing and supplier management, and the AP process, including invoice and payment processing, by facilitating better decision-making through real-time visibility into procurement and financial data, enabling the organization to adapt more effectively to changing business needs and market dynamics.                                  | Develop the standardized procurement policy by integrating AP policies in the workflow and establish a systematic framework of P2P. This includes streamlining processes to create a unified P2P workflow that spans from requisitioning and purchasing to invoice and payment processing.                       | Procurement /Finance | 3 to 5 months                              |
| Companies should implement change management strategies and comprehensive training programs. | To ensure that employees understand the rationale behind the changes and are equipped with the necessary knowledge and skills to perform their roles effectively within the new framework, and are supported throughout the transition process of maximizing user adoption and compliance, and realize the full benefits of the integrated P2P approach, including improved efficiency, accuracy, and adaptability to changing business needs. | <ul style="list-style-type: none"> <li>- Solicit feedback and input from stakeholders to address concerns, gather insights, and ensure buy-in for the new framework.</li> <li>- Provide opportunities for employees to practice new skills and receive feedback in a supportive learning environment.</li> </ul> |                      | 1 to 3 months after system implementation. |

**RESOURCE ALLOCATION**

|   |  |  |                         |                   |
|---|--|--|-------------------------|-------------------|
| Companies should determine the required skilled members to perform end-to-end P2P process.  | To identify and allocate the required skilled personnel to effectively execute and manage the end-to-end procure-to-pay process, ensuring operational efficiency and process optimization.   | P2P processors should have a background in P2P or AP functions, and is proficient with automation accounting.  | HR                      | As necessary      |
|   |  | - Evaluate and leverage technologies that would be compatible to the operational structure of an organization.   | - Finance /IT           | - 5 to 7 months   |
|   |  | - Standardize a curated product list by integrating an approved product catalog from suppliers.  | - Procurement / Finance | - 7 to 8 months   |
| Companies should determine the required fund software acquisition and process redesign.   | To systematically identify and allocate the necessary resources for software acquisition and process redesign to ensure the successful implementation and optimization of the procure-to-pay process.  | - Integrate an e-RFP format to streamline sourcing-to-sourcing activities.   | - Procurement           | - 9 to 10 months  |
|   |  | - Standard implementation of e-invoice format to all suppliers.  | - Finance /Supplier     | - 10 to 11 months |
|   |  | - Integrate online banking features with your accredited bank to seamlessly run payment remittances.   | - Finance /Bank         | - 11 to 12 months |
| Companies should be able to determine both internal and external performance metrics for the P2P process and supplier performance review. | To define key performance indicators (KPIs) that align with organizational goals and industry best practices, facilitating data-driven decision-making, and promoting continuous improvement. By achieving this objective, the organization aims to enhance operational transparency, improve supplier relationships, reduce costs, and ensure the P2P process supports overall business strategy and performance. | <b>Procurement activities</b><br>- Sourcing-to-procurement cycle time and accuracy rate,<br>- Price variance analysis,<br>- Procurement to Order fulfillment cycle time and accuracy date, | - Procurement           | - Regularly       |
|   |  | <b>Accounts Payable activities</b><br>- Invoice processing cycle time and accuracy rate,<br>- On-Time payment and payment accuracy rate.   | - Finance               | - Regularly       |

**INNOVATION**

|   |   |   |                          |  |
|---|---|---|--------------------------|--|
| Companies should implement an innovative approach that further enhances an optimized P2P process.       | To implement an innovative approach to further enhance the optimized P2P process, with the goal of achieving 20% reduction in procurement cycle times within the next 12 months.    | Implement P2P technologies such as SAP Ariba, Oracle, and Coupa as an end-to-end P2P software solution that automates workflow from requisition, sourcing, purchasing, invoicing, and payment solutions, including approval features of requisition and invoice processing.               | Finance /IT              | 7 to 10 months after evaluation            |
| Companies to provide comprehensive employee trainings to further enhance proficiency with P2P software. | To provide comprehensive training programs to all employees involved in the P2P process to ensure they have the necessary skills and knowledge to effectively use the P2P software. | Engage with trainings benefits that are included in the acquisition of new P2P software.  | Finance /Procurement /IT | 1 to 3 months after system implementation. |
| Companies to include the use of data analytics tools to gather data-driven overview.                    | Measure the impact of data analytics initiatives on P2P performance, such as improvements in cycle times, cost savings, process efficiency, and supplier relationships.             | Deploy data collection mechanisms within the P2P process to capture relevant data points at various stages, including procurement, purchasing, invoicing, and payments, that are aligned with P2P objectives such as cycle time, cost savings, invoice accuracy and supplier performance. | Finance /IT              | As necessary                               |

**STRATEGIC FLEXIBILITY**

|  |   |   |                      |              |
|--|---|---|----------------------|--------------|
| Companies should allow adaptive changes on the automated P2P system. | To enable agile adaptation of the automated procure-to-pay (P2P) system to accommodate evolving business needs, market dynamics, and regulatory requirements. | Interchangeable procurement function metrics due to internal management preference. | Finance /Procurement | As necessary |
|  |   | Interchangeable supplier performance metrics due to internal management preference. | Procurement          | As necessary |

**V. SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS**

This chapter presents the findings and conclusions derived from the study's conduct and the recommendations based on the findings and conclusions.

**Summary of Findings :** The researcher conducted the study in the city of Cabuyao, Laguna. The respondents are private companies located within Cabuyao, Laguna, and were chosen through stratified random sampling to ensure the validity of the study's findings. The researcher summarizes the findings.

**1. As of the Level of P2P Optimization Implemented by Companies in terms of:**

**✚ Adaptability**

The research revealed that the adaptability in the P2P optimization obtains an average weighted mean of **3.58 with** an interpretation of a **Very High** level of implementation among the selected private companies in Cabuyao, Laguna.

✚ **Resource Allocation**

The research revealed that the resource allocation in the P2P optimization obtains an average weighted mean of **3.41** with an interpretation of a **High** level of implementation among the selected private companies in Cabuyao, Laguna.

✚ **Innovation**

The research revealed that the innovation in the P2P optimization obtains an average weighted mean of **3.40** with an interpretation of a **High** level of implementation among the selected private companies in Cabuyao, Laguna.

✚ **Strategic Flexibility**

The research revealed that the innovation in the P2P optimization obtains an average weighted mean of **3.27** with an interpretation of a **High** level of implementation among the selected private companies in Cabuyao, Laguna.

**As to the Level of the Organizational Efficiency of the Procurement Process in terms of:**

✚ **Cost Mitigation**

The research revealed that cost mitigation in the procurement process obtains an average weighted mean of **3.52 with** an interpretation of a **Very High** level of organizational efficiency among the selected private companies in Cabuyao, Laguna.

✚ **Supplier Collaboration**

The research revealed that supplier collaboration in the procurement process obtains an average weighted mean of **3.33, which interprets** a **high** level of organizational efficiency among the selected private companies in Cabuyao, Laguna.

**3. As to the significant relationship between the P2P optimization and organizational efficiency in the selected private companies in Cabuyao, Laguna.**

As to the test of correlation, the result found that there was a **significant relationship** between P2P optimization and organizational efficiency with a computed probability value of variables that ranged from 0.0010 to 0.0001 and was higher than the level of significance ( $P < 0.05$ ); thus, the researcher rejecting the null hypothesis. The overall result showed that there was a significant relationship between the variables.

**4. As to the impact of P2P optimization on the organizational efficiency of selected private companies in Cabuyao, Laguna**

Based on the findings, with a p-value associated with the overall F statistic of **1.3925**, the four variables of P2P optimization, such as adaptability, resource allocation, innovation, and strategic flexibility, have statistically **no significant impact** among the private companies in the city of Cabuyao, Laguna, thus, the researcher accepted the null hypothesis. The combined result of P2P optimization in terms of adaptability, resource allocation, innovation, and strategic flexibility, has no direct impact on organizational efficiency.

**5. Proposed Action Plan for P2P Optimization.**

The proposed action plan for the optimization of the P2P process aims to assist companies in identifying the possible areas of adaptability, strategic allocation of resources, innovation, and flexible approach to implementing strategic approaches of optimized P2P process aims to achieve a higher level of organizational efficiency. It offers a systematic framework for an enhanced P2P cycle that achieves long-term success. It guarantees that the found enhancements support the organization's long-term success and are consistent with its overarching strategic direction.

**Conclusions**

**Based on the indicated findings, the following conclusions are as follows:**

1. As to the level of P2P optimization implemented in selected private companies in Cabuyao, Laguna, the researcher observed that these companies prioritize process adaptability in optimizing their P2P processes. This conclusion implies they recognize the need to remain agile and responsive to changing market conditions and operational demands. However, to fully realize the benefits of P2P optimization, these companies must efficiently utilize both human and technological resources. This entails investing in employee training, advanced procurement software, and data analytics tools to streamline processes and enhance decision-making capabilities. Addressing these areas highlights the essence of optimizing the P2P

process to build a robust framework that supports long-term growth and resilience in a competitive landscape.

2. In their procurement process, the level of organizational efficiency sustained by the selected private companies in Cabuyao, Laguna, suggests that these companies excel in cost mitigation, which implies a solid ability to manage and optimize expenses. Supplier collaboration provides opportunities for further enhancement to foster stronger partnerships that potentially lead to increased efficiency and innovation within the procurement process.
3. The analysis of the test of the significant relationship between P2P optimization and organizational efficiency yielded substantial findings. The findings demonstrate a clear correlation between the level of P2P optimization and organizational efficiency within the selected private companies in Cabuyao, Laguna. It also suggests that investments and efforts directed toward optimizing procurement processes have a tangible impact on organizational efficiency. Therefore, fostering a culture of continuous improvement and innovation in P2P optimization can serve as a strategic imperative for companies seeking to enhance their competitive advantage and sustainability.
4. The analysis of the combined impact of P2P optimization (adaptability, resource allocation, innovation, and strategic flexibility) on organizational efficiency yielded insignificant findings. The findings demonstrate that the four explanatory variables of P2P optimization combined have a negligible impact on organizational efficiency. The results also highlight the complexity of the relationship between P2P optimization and organizational outcomes, suggesting that companies should carefully evaluate and prioritize specific optimization strategies based on their unique organizational context and objectives.
5. The proposed improvement plan or action plan aims to help companies optimize the procure-to-pay process in their organization for enhanced organizational efficiency. Firstly, it suggests conducting a comprehensive review of current P2P practices that involves assessing the effectiveness of existing systems and procedures by gathering feedback from key stakeholders within the P2P framework. Secondly, the recommended plan involves implementing targeted interventions that address gaps and enhance critical aspects of P2P optimization, such as adaptability, resource allocation, innovation, and strategic flexibility. By implementing these measures, companies can streamline their procurement processes, reduce costs, and improve operational performance, leading to greater organizational efficiency and competitiveness in the marketplace.

### **Recommendations**

The researcher formulated the following recommendations based on the summarized findings and derived conclusions:

1. To strengthen P2P optimization and its practices in terms of adaptability, resource allocation, innovation, and strategic flexibility, the research recommends to the top management, managers, supervisors, and business leaders of private companies establish a solid foundation for optimizing their procure-to-pay processes. The study suggests that companies continue to actively foster a culture of innovation and strategic flexibility within procurement operations. The study's findings also involve encouraging cross-functional collaboration, exploring new technologies and methodologies, and regularly evaluating and adapting P2P strategies to meet evolving business needs. Companies that embrace innovation and strategic flexibility prevent potential disruptions and uncertainties in the market.
2. The research also recommends that the top management, managers, supervisors, and business leaders implement a structured continuous improvement framework to strengthen the company's operational efficiency within its procurement process. This framework should encompass regular performance evaluations, feedback mechanisms, and benchmarking exercises to identify areas for enhancement and best practices. Fostering a collaborative and transparent communication culture across departments and with external stakeholders is crucial for aligning procurement goals with broader organizational objectives. Furthermore, investing in talent development programs to cultivate a skilled and knowledgeable procurement workforce can significantly contribute to the success of P2P optimization efforts. By actively engaging leadership and promoting a culture of continuous improvement, companies can drive sustainable improvements in operational efficiency and maximize the value derived from their procurement processes.
3. The study recommended top management, managers, supervisors, and business leaders prioritize investments in their companies that optimize their procure-to-pay process. In addition, fostering a culture of continuous improvement and innovation within the procurement function can further amplify the benefits derived from P2P optimization efforts.
4. Private companies are encouraged to conduct further analysis to identify potential bottlenecks or inefficiencies and develop targeted strategies to address them. In addition, continued monitoring and

evaluation of P2P performance metrics can help companies identify trends and areas for improvement over time. By taking a proactive approach to procurement optimization and refining strategies based on empirical data, companies can position themselves for tremendous success and competitiveness in the long run.

- Private companies in the global corporate set-up can evaluate and further investigate this study to measure improvement parameters. This research can be their reference for implementing a standardized procurement process to optimize procurement activities, increase cost savings, mitigate risks, and foster a culture of continuous improvement in procurement operations. These outputs are achievable by developing standardized procurement policies covering requisitioning, sourcing, negotiating, contract handling, and order fulfillment. These policies must align with the invoicing and accounts payable (AP) policy of the Finance Department. This initiative involves the Procurement Department to complete an enhanced process within three months.
- Future researchers could revisit and utilize this study while considering other variables to delve deeper into the procure-to-pay optimization practices and organizational efficiency of the selected private companies in Cabuyao, Laguna.

#### LITERATURE CITED

- Agilico. (2023, June 26). Optimising the Purchase-to-Pay Process: Strategies for Efficiency and Profitability. [www.linkedin.com](http://www.linkedin.com/pulse/optimising-purchase-to-pay-process-strategies-efficiency/). Retrieved May 18, 2024, from <https://www.linkedin.com/pulse/optimising-purchase-to-pay-process-strategies-efficiency/>
- Agrawal, C. M., Malhotra, M. K., & Singh, M. M. (2021). "Data Science and Business Analytics with R," Chapman and Hall/CRC.
- Allai-Cherif, O., Simon-Moya, V., & Carlos Cuenca Ballester, A. (2020, November 25). Intelligent Purchasing: How artificial intelligence can redefine the purchasing function. [www.sciencedirect.com](http://www.sciencedirect.com). Retrieved May 23, 2024, from <https://www.sciencedirect.com/science/article/abs/pii/S0148296320308031>
- Ansar. (2023, November 6). Understanding Resource Allocation Optimization Metrics. [www.teamhub.com](http://www.teamhub.com). Retrieved February 10, 2024, from <https://teamhub.com/blog/understanding-resource-allocation-optimization-metrics/#:~:text=When%20it%20comes%20to%20financial%20capital%2C%20resource%20allocation,investment%20and%20weighing%20it%20against%20other%20financial%20commitments>.
- Babb. (2024, February 5). Procure-to-Pay: P2P Process Key Steps and Best Practices (2024). [www.pipefy.com](http://www.pipefy.com). Retrieved May 18, 2024, from <https://www.pipefy.com/blog/procure-to-pay/>
- Bag, S., Wood, L. C., Xu, L., Dharmija, P., & Kayikci, Y. (2020). Big data analytics as an operational excellence approach to enhance sustainable supply chain performance. *Resources, Conservation and Recycling*, 153, 104559.
- Banton. (2023, January 28). Purchase-to-Pay (P2P): Definition, Process, Steps, and Benefits. [www.investopedia.com](http://www.investopedia.com). Retrieved May 6, 2024, from <https://www.investopedia.com/terms/p/purchasetopay.asp>
- Barnum. (2024, January 4). Purchase-to-Pay (P2P): Definition, Process, Benefits & Insights. [www.ivalua.com](http://www.ivalua.com). Retrieved May 8, 2024, from <https://www.ivalua.com/blog/purchase-to-pay/>
- Berti, Jessen, Park, Rafiei, & van der Aalst. (2023, July 1). Analyzing interconnected processes: using object-centric process mining to analyze procurement processes. Retrieved May 6, 2024, from <https://doi.org/10.1007/s41060-023-00427-3>
- Bhandari, P. (2023, June 22). What Is Quantitative Research? | Definition, Uses &#038; Methods. [Scribbr](http://www.scribbr.com). <https://www.scribbr.com/methodology/quantitative-research/>
- Bhat. (2024). Descriptive Correlational: Descriptive vs Correlational Research. [www.questionpro.com](http://www.questionpro.com). Retrieved February 1, 2024, from <https://www.questionpro.com/blog/descriptive-research-vs-correlational-research/>
- Biedron. (2023). Procure-to-Pay Process Optimization. <https://planergy.com/>. Retrieved January 12, 2024, from <https://planergy.com/blog/procure-to-pay-process-optimization/>
- Chen, J., & Wang, L. (2022). Mixed-Methods Approaches in Organizational Studies. *Journal of Organizational Behavior*, 43(2), 102-118.
- Chopra, S., & Meindl, P. (2020). *Supply Chain Management: Strategy, Planning, and Operation*. Pearson.
- Clarke. (2022, March 7). What is Supplier Collaboration? [www.vizibl.co](http://www.vizibl.co). Retrieved February 16, 2024, from <https://www.vizibl.co/blog/what-is-supplier-collaboration>
- ClearTech. (2023, September 26). Upstream and Downstream Processes in Accounts Payable: A Definitive Guide. [www.clear.tech](http://www.clear.tech). Retrieved May 13, 2024, from <https://www.clear.tech/blog/upstream-and-downstream-process-in-accounts-payable>
- Clochet. (2020, May 5). Why automation your P2P process is no longer an option? *Process Excellence Network*. Retrieved October 16, 2023, from

- <https://www.processexcellencenetwork.com/innovation/articles/why-automating-your-p2p-process-is-no-longer-an-option>
18. ControlHub, (2022). Procure to Pay Process: Optimization Guide. (2022, June 15). [www.controlhub.com](http://www.controlhub.com). Retrieved April 15, 2024, from <https://www.controlhub.com/blog/procure-to-pay-optimization>.
  19. Domselaar, (2023, October 13). Leveraging the Usage of Procure-to-Pay (P2P) Software to Enhance Purchasing Tactics. Retrieved December 1, 2023, from [http://essay.utwente.nl/97428/1/vanDomselaar\\_MA\\_BMS.pdf](http://essay.utwente.nl/97428/1/vanDomselaar_MA_BMS.pdf)
  20. Dubey, R., Bryde, D. J., Foropon, C., & Tiwari, M. K. (2020). An investigation of information alignment and collaboration as complements to supply chain agility in humanitarian supply chain. *International Journal of Production Research*, 58(17), 5401-5419.
  21. Duja Consulting. (2023, June 1). Enhancing Efficiency in Procurement: Strategies and Case Studies. [www.linkedin.com](http://www.linkedin.com). Retrieved February 12, 2024, from <https://www.linkedin.com/pulse/enhancing-efficiency-procurement-strategies-case-studies/>
  22. Dupont & Heuer. (2023, October 25). Help organizations manage and optimize the procure to pay business processes. [www.learn.microsoft.com](http://www.learn.microsoft.com). Retrieved February 5, 2024, from <https://learn.microsoft.com/en-us/dynamics365/guidance/business-processes/procure-to-pay-introduction>
  23. Faccia, A.; Petratos, P. Blockchain, Enterprise Resource Planning (ERP) and Accounting Information Systems (AIS): Research on e-Procurement and System Integration. *Appl. Sci.* 2021, 11, 6792
  24. Flechsig, C., Lasch, R., & Anslinger, F. (2020, January 28). Robotic Process Automation in purchasing and supply management: A multiple case study on potentials, barriers, and implementation. [www.researchgate.net](http://www.researchgate.net). Retrieved May 25, 2024, from <http://dx.doi.org/10.1016/j.pursup.2021.100718>
  25. GEP. (2023, June 23). Procure to Pay: A Cost-Saving Opportunity. [www.gep.com](http://www.gep.com). Retrieved February 2, 2024, from <https://www.gep.com/blog/technology/procure-to-pay-streamlining-cost-savings-opportunity>
  26. Glazier. (2023, November 6). The Best Cost Reduction Strategies in Procurement. [www.ziphq.com](http://www.ziphq.com). Retrieved February 12, 2024, from <https://ziphq.com/blog/cost-reduction-strategies-in-procurement>
  27. Handfield, R. B., Swafford, P. M., & Gibson, B. J. (2021). Negotiation and the management of supplier relationships in a competitive market. *Journal of Supply Chain Management*, 57(2), 45-58.
  28. Handfield, J. Monczka, R., Giunipero, L., & Patterson, J. (2020). "Purchasing and Supply Chain Management," 7th edition, Cengage Learning.
  29. Harju, Immonen, & Lintukangas. (2023, April 21). The Impact of Procurement Digitalization on Supply Chain Resilience: Empirical Evidence from Finland. [www.emerald.com](http://www.emerald.com). Retrieved May 20, 2024, from <http://doi/10.1108/SCM-08-2022-0312/>
  30. Heikkilä, J., Vilko, J., & Kess, P. (2020). Supply Chain Analytics and Technology Innovation for Data-Driven Management. Springer.
  31. Herold, Heller, & Rozemeijer. (2022, October 8). Dynamic Capabilities for Digital Procurement Transformation: A Systematic Literature Review. Retrieved January 31, 2024, from <https://www.emerald.com/insight/content/doi/10.1108/IJPDLM-12-2021-0535/full/pdf?title=dynamic-capabilities-for-digital-procurement-transformation-a-systematic-literature-review>
  32. P. Hofmann & S. Rüßmann, (2020). "Industry 4.0 and the Digital Transformation of Supply Chains: Concepts, Technologies, and Applications," Springer.
  33. IBM Cloud Education. (2022, November 17). What is the Procure-to-Pay Workflow? [www.ibm.com](http://www.ibm.com). Retrieved May 17, 2024, from <https://www.ibm.com/blog/procure-to-pay/>
  34. Ivanov, D., Dolgui, A., & Sokolov, B. (2021). "Ripple effect in the supply chain: Definitions, frameworks, and future research perspectives." *Transportation Research Part E: Logistics and Transportation Review*, 140, 101961.
  35. Kamani, S. (2022, July 30). How Collaboration in Procurement Increases Savings and Efficiency. [www.factwise.io](http://www.factwise.io). Retrieved May 25, 2024, from <https://factwise.io/blog/post/collaboration-procurement-savings-efficiency>
  36. Kanter, R. M. (2020). "Think Outside the Building: How Advanced Leaders Can Change the World One Smart Innovation at a Time," PublicAffairs
  37. Kaufmann, L., Esslinger, J., & Carter, C. R. (2020). "Toward relationship resilience: Managing buyer-supplier relationships in the face of major disruptions." *Journal of Supply Chain Management*, 56(2), 22-39.
  38. Kingsbury. (2023, November 16). How to Optimize and Improve the Vendor or Supplier Payment Process. [www.nanonets.com](http://www.nanonets.com). Retrieved May 18, 2024, from <https://nanonets.com/blog/supplier-payment-process/>
  39. Kissflow. (2024, January 2). The Ultimate Guide to a Truly Effective Procure-to-Pay Process. [www.kissflow.com](http://www.kissflow.com). Retrieved January 26, 2024, from <https://kissflow.com/procurement/procure-to-pay-process-guide/>

40. Krishna. (2021, August 2). 10 Best Practices to Optimize the Procure-To-Pay Process. [www.qxglobalgroup.com](https://qxglobalgroup.com/fa/us/blog/10-best-practices-to-optimize-the-procure-to-pay-process#:~:text=Properly%20optimizing%20your%20inventory%20management%20will%20enable%20your,while%20paying%20warehouse%20fees%2C%20taxes%2C%20insurance%20and%20more.). Retrieved May 18, 2024, from <https://qxglobalgroup.com/fa/us/blog/10-best-practices-to-optimize-the-procure-to-pay-process#:~:text=Properly%20optimizing%20your%20inventory%20management%20will%20enable%20your,while%20paying%20warehouse%20fees%2C%20taxes%2C%20insurance%20and%20more.>
41. Langstrom. (2021, April 24). Key Focus Areas for Successful Procure-to-Pay Software Replacement Case: Company X. Retrieved November 6, 2023, from <https://www.theseus.fi/bitstream/handle/10024/496116/John%20Langstrom%20Thesis.pdf?sequence=2&isAllowed=y>
42. Mathnal Supply Chain Analytics. (2024). How procure to pay business process can impact the spend of the organization? [www.mathnal.tech](https://mathnal.tech). Retrieved May 11, 2024, from <https://mathnal.tech/how-procure-to-pay-business-process-can-impact-the-spend-of-the-organization/>
43. McConnell. (2024, February 17). Supplier relationship management: Guide and expert tips. [www.responsive.io](https://www.responsive.io). Retrieved May 15, 2024, from <https://www.responsive.io/blog/procurement-advice-supplier-relationship-management/>
44. Mckinsey & Company. (2020, July 7). Taking supplier collaboration to the next level. [www.mckinsey.com](https://www.mckinsey.com). Retrieved May 25, 2024, from <https://www.mckinsey.com/capabilities/operations/our-insights/taking-supplier-collaboration-to-the-next-level>
45. Medium. (2024, January 30). Navigating Efficiency: A Deep Dive into the Procure-to-Pay Cycle and Process. [www.medium.com](https://medium.com). Retrieved May 25, 2024, from <https://medium.com/@nitin086012/navigating-efficiency-a-deep-dive-into-the-procure-to-pay-cycle-and-process-837b586de61c>
46. Miller. (2023). Why Efficient Procure to Pay (P2P) Process Management is Crucial for Organizations? [www.productivityland.com](https://www.productivityland.com). Retrieved January 27, 2024, from <https://www.productivityland.com/procure-to-pay-process-management/#:~:text=Efficient%20P2P%20process%20management%20drives%20organizational%20success.%20It,mitigates%20risks%2C%20ensures%20compliance%2C%20and%20provides%20decision-making%20visibility.>
47. Monteverde, P. (2021, November 4). Procure-to-Pay: Optimise your processes, make them more adaptable. [www.itesoft.com](https://www.itesoft.com). Retrieved May 30, 2024, from <https://www.itesoft.com/en-gb/blog/procure-to-pay-adaptable-process/>
48. Moonen. (2021, October 27). Factors Influencing the Level of Purchase-to-Pay and Contract Management Maturity of Dutch Hospitals. Retrieved November 3, 2023, from [http://essay.utwente.nl/88898/1/Moonen\\_MA\\_BMS.pdf](http://essay.utwente.nl/88898/1/Moonen_MA_BMS.pdf)
49. Nicketan, G., & Manivannan, K. (2024, April 8). A comprehensive guide on procure to pay. [www.spendflo.com](https://www.spendflo.com). Retrieved May 25, 2024, from <https://www.spendflo.com/blog/procure-to-pay-process-guide>
50. Oleg. (2023, August 27). Optimizing Procurement Processes with SAP Procure to Pay. [www.cleverence.com](https://www.cleverence.com). Retrieved February 16, 2024, from <https://www.cleverence.com/articles/sap/optimizing-procurement-processes-with-sap-procure-to-pay/>
51. Orderful. (2023). What is Procure-to-Pay? Optimizing Efficiency and Accuracy. <https://www.orderful.com/>. Retrieved January 12, 2024, from <https://www.orderful.com/edi-blog/procure-to-pay/>
52. Orij, N. O., & Joel, N. O. S. (2024). Integrating accounting models with supply chain management in the aerospace industry: A strategic approach to enhancing efficiency and reducing costs in the U.S. *World Journal of Advanced Research and Reviews*, 21(3), 1476–1489. <https://doi.org/10.30574/wjarr.2024.21.3.0873>
53. Ozkan, E., Azizi, N., & Haass, O. (2021, December 3). Leveraging Smart Contract in Project Procurement through DLT to Gain Sustainable Competitive Advantages. <https://www.mdpi.com>. Retrieved May 23, 2024, from <https://www.mdpi.com/2071-1050/13/23/13380>
54. Patrucco, A. S., Di Benedetto, A., & Fratini, F. (2022, February 17). Characteristics of supplier performance measurement systems in collaborative innovation projects: the role of the purchasing department. [www.researchgate.com](https://www.researchgate.com). Retrieved May 23, 2024, from [https://www.researchgate.net/publication/352384364\\_Characteristics\\_of\\_supplier\\_performance\\_measurement\\_systems\\_in\\_collaborative\\_innovation\\_projects\\_the\\_role\\_of\\_the\\_purchasing\\_department](https://www.researchgate.net/publication/352384364_Characteristics_of_supplier_performance_measurement_systems_in_collaborative_innovation_projects_the_role_of_the_purchasing_department)

55. Paunonen. (2023, August 22). Procure-to-Pay (P2P) Analytics | Spend analytics in the P2P process. [www.sievo.com](https://sievo.com/blog/the-procure-to-pay-process-p2p-enhanced-with-spend-analytics). Retrieved May 6, 2024, from <https://sievo.com/blog/the-procure-to-pay-process-p2p-enhanced-with-spend-analytics>
56. PayEM. (2022, November 3). Understanding the Procure-to-Pay Cycle. [www.payem.co](https://www.payem.co). Retrieved February 10, 2024, from <https://www.payem.co/blog/understanding-the-procure-to-pay-cycle>
57. Peltomaa. (2021, June 5). Implementing Automated Procure-to-Pay: Organizational Change and Organizational Design. Retrieved October 15, 2023, from [https://lutpub.lut.fi/bitstream/handle/10024/162993/pro%20gradu\\_peltomaa\\_teemu.pdf?sequence=3&isAllowed=y](https://lutpub.lut.fi/bitstream/handle/10024/162993/pro%20gradu_peltomaa_teemu.pdf?sequence=3&isAllowed=y)
58. Peng, Ahmad, Irshad, Al-Razgan, & Ali. (2023, October 23). Impact of Digitalization on Process Optimization and Decision-Making towards Sustainability: The Moderating Role of Environmental Regulation. Retrieved February 14, 2024, from <https://www.mdpi.com/2071-1050/15/20/15156>
59. Price, L. (2024). Procure to Pay Process: The Full Guide. Tradogram. Retrieved May 25, 2024, from <https://www.tradogram.com/blog/procure-to-pay-process-guide>
60. ProcurePort Blog. (2023, December 26). A Guide to Procure-to-Pay (P2P) Process. [www.blog.procureport.com](https://www.blog.procureport.com). Retrieved April 17, 2024, from <https://www.blog.procureport.com/a-guide-to-procure-to-pay-p2p-process/>
61. ProcurePort Blog. (2020, November 18). How the P2P Cycle Impacts Business. [www.blog.procureport.com](https://www.blog.procureport.com). Retrieved May 6, 2024, from <https://www.blog.procureport.com/how-the-p2p-cycle-impacts-business/>
62. Procurify. (2023, November 28). The Complete Procure-to-Pay Process: Definitions and Best Practices. [www.procurify.com](https://www.procurify.com). Retrieved February 5, 2024, from <https://www.procurify.com/blog/procure-to-pay-process/>
63. Roehrich, J. K., Grosvold, J., & Hoejmoose, S. U. (2020). Reputational risks and sustainable supply chain management: Decision making under bounded rationality. *International Journal of Operations & Production Management*, 40(4), 415-442.
64. Robinson, & Francis. (2022). GOVERNING PROCURE-TO-PAY AS AN END-TO-END PROCESS. [www.scottmadden.com](https://www.scottmadden.com). Retrieved May 6, 2024, from <https://www.scottmadden.com/insight/governing-procure-to-pay-as-an-end-to-end-process/>
65. Ruth, K. (2022, April). ADOPTION OF INTEGRATED FINANCIAL MANAGEMENT SYSTEM AND PROCUREMENT PERFORMANCE IN UGANDA A CASE OF KABALE DISTRICT IN UGANDA. Retrieved May 28, 2024, from <https://backend.kab.ac.ug/server/api/core/bitstreams/629bd305-8040-4a2b-a86c-154dd978a238/content>
66. SAP. (2024). What is Procure-to-Pay? (P2P). [www.sap.com](https://www.sap.com). Retrieved May 2, 2024, from <https://www.sap.com/products/spend-management/procure-to-pay/what-is-procure-to-pay.html>
67. Schoenherr, T., Tummala, R., & Harrison, T. (2020). Spend analysis and procurement performance: Evidence from the field. *Journal of Purchasing and Supply Management*, 26(3), 100-113.
68. Simfoni. (2024). Introduction to Procure to Pay. [www.simfoni.com](https://www.simfoni.com). Retrieved May 11, 2024, from <https://www.simfoni.com/procure-to-pay/>
69. Singh, R., Kumar, M., & Gupta, N. (2021). Evaluating Efficiency Metrics in Optimization Strategies. *International Journal of Management Science*, 37(4), 555-570.
70. Shevchenko. (2024). Creating higher procurement efficiency through Source-to-Pay synergies. [www.infosysbpm.com](https://www.infosysbpm.com). Retrieved May 18, 2024, from <https://www.infosysbpm.com/blogs/sourcing-procurement/creating-higher-procurement-efficiency-through-source-to-pay-synergies.html#:~:text=Traditionally%2C%20the%20cycle%20is%20divided%20into%20upstream%20Source-to,to%20procurement%20policies%20and%20agreed%20terms%20and%20conditions.>
71. Supply Chain Strategy. (2023, December 19). Why Multi-Tier Supplier Collaboration is Vital to Building Supply Chain Agility and Efficiency. [www.gep.com](https://www.gep.com). Retrieved April 22, 2024, from <https://www.gep.com/blog/strategy/why-multi-tier-supplier-collaboration-is-vital-to-building-supply-chain-agility-and-efficiency>
72. TeamHub. (2023, September 28). Supplier Performance Metrics Explained. [www.teamhub.com](https://www.teamhub.com). Retrieved April 21, 2024, from <https://www.teamhub.com/blog/supplier-performance-metrics-explained/>
73. van Weele, A. J. (2021). *Purchasing and Supply Chain Management: Analysis, Strategy, Planning and Practice*. Cengage Learning.
74. Veile, & Schmidt. (2020, July 17). Relationship Follows Technology! How Industry 4.0 Reshapes Future Buyer-Supplier Relationships. Retrieved February 10, 2024, from <https://sci-hub.yt/10.1108/JMTM-09-2019-0318>

75. Vela. (2023, July 6). Procurement Performance: Maximizing Efficiency and Value in Supply Chains. [www.linkedin.com](https://www.linkedin.com/pulse/procurement-performance-maximizing-efficiency-value-supply-vela/). Retrieved February 12, 2024, from <https://www.linkedin.com/pulse/procurement-performance-maximizing-efficiency-value-supply-vela/>
76. Velarde, Tayag, Natividad, & Aquilizan. (2021). The Legal 500 Country Comparative Guides: Philippines Public Procurement. [Www. acralaw.com](https://www.acralaw.com/wp-content/uploads/2021/05/legal%20500%20guide%20on%20public%20procurement.pdf). Retrieved February 20, 2024, from <https://www.acralaw.com/wp-content/uploads/2021/05/legal%20500%20guide%20on%20public%20procurement.pdf>
77. Vernall. (2024, January 26). Optimizing Your Organizations Procure-to-Pay Cycle. [www.linkedin.com](https://www.linkedin.com/pulse/optimizing-your-organizations-procure-to-pay-cycle-mark-vernall-jxxec/). Retrieved February 9, 2024, from <https://www.linkedin.com/pulse/optimizing-your-organizations-procure-to-pay-cycle-mark-vernall-jxxec/>
78. Walker, H., & Brammer, S. (2021). Strategic alignment in procurement: Creating value through integration. *Supply Chain Management: An International Journal*, 26(1), 1-15.
79. Wang, B. (2020, October 26). Adapting procurement to payment (P2P) with AWS Purchase Order Management. [www.aws.amazon.com](https://aws.amazon.com/blogs/aws-cloud-financial-management/adapting-procurement-to-payment-with-aws-purchase-order-management/). Retrieved May 30, 2024, from <https://aws.amazon.com/blogs/aws-cloud-financial-management/adapting-procurement-to-payment-with-aws-purchase-order-management/>
80. Westerman, J. & Matos, T. (2020). "Corporate Innovation: Disruptive Thinking in Organizations," Kogan Page.
81. Wood, Bag, & Luthra. (2020, January 1). Procurement 4.0 and its implications on business process performance in a circular economy | 10.1016/j.resconrec.2019.104502. Retrieved January 31, 2024, from <https://sci-hub.et-fine.com/10.1016/j.resconrec.2019.104502>
82. Yooz. (2023, November 30). How to Optimize the Procure-to-Pay Process. [www.getyooz.com](https://www.getyooz.com/blog/procure-to-pay). Retrieved February 16, 2024, from <https://www.getyooz.com/blog/procure-to-pay>
83. Yoroflow. (2023, December 7). Procurement Process Optimization: 6 Ways To Revolutionize Your Business. [www.linkedin.com](https://www.linkedin.com/pulse/procurement-process-optimization-6-ways-revolutionize-your-business-guutc). Retrieved January 26, 2024, from <https://www.linkedin.com/pulse/procurement-process-optimization-6-ways-revolutionize-your-business-guutc>
84. Zhao, Y., Zhang, H., & Li, X. (2020). Market Dynamics and Organizational Efficiency: A Comprehensive Analysis. *Journal of Business Research*, 115, 412-420.
85. Zycus. (2024, April 17). What Is Procurement Catalog Management: Your AIO Guide. [www.zycus.com](https://www.zycus.com/blog/catalog-management/guide-to-procurement-catalog-management). Retrieved May 14, 2024, from <https://www.zycus.com/blog/catalog-management/guide-to-procurement-catalog-management>