

Analysis of Purchasing Efficiency Through Goods and Services Procurement Procedures in the Purchasing Division of PT XYZ

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Abstract

PT XYZ is a company engaged in the manufacturing, assembly, and testing of electronic modules and components for the global automotive industry. To support the smooth running of its operational activities, an efficient procurement process for goods and services is essential. Based on data from the XYZ Pre-PR Tracking, there are serious issues in the efficiency of the procurement process. The percentage of items that experience delays is quite high, very slow with a category above 15 working days, far exceeding the target time of 7 working days. These delays have the potential to disrupt the company's operational continuity. The purpose of this study is to analyze the efficiency of the goods and services procurement procedures and to identify the factors that influence this efficiency. This research uses a qualitative descriptive method supported by a Value Stream Mapping (VSM) approach. The findings of this study indicate that most of the time in the procurement process is spent on activities that do not provide direct value to the efficiency of the procurement process especially on the manual approval request process which is less efficient, and should be simplified through system digitization.

Keywords: Efficiency, Purchasing, Procurement Procedures, Goods and Services Procurement, Purchasing Division

1. Introduction

In facing increasingly intense business competition, purchasing efficiency is an essential activity to support the smooth operation of a company. Hidayati (2021) states that the fundamental function within a company lies in purchasing activities. Without proper purchasing management and adherence to procedures, a company will not be able to operate optimally. Efficiency is not only about price, but also quality and the timeliness of delivery.

PT XYZ is a company engaged in the manufacturing, assembly, and testing of electronic modules and components for the global automotive industry. As a manufacturing company, PT XYZ coordinates with the purchasing division in the procurement of goods and services to ensure the continuity of its operational needs. The purchasing division plays a very important and strategic role in the procurement of goods across various industrial sectors. Purchasing is not only responsible for acquiring goods, but also includes planning, supplier evaluation, risk management, and the application of technology to support operational efficiency and the company's competitiveness

(Ardiansyah & Susanto, 2024). The primary task of the purchasing department is to ensure the availability of materials required for the production process in sufficient quantities, on time, in accordance with specified quality standards, and obtained at a reasonable price (Hidayati, 2021). This requires the ability to work diligently, accurately, and thoroughly, as well as skills in managing and analyzing the goods or services to be used (Darno et al., 2021).

The procurement procedures of goods and services are intended to ensure that purchasing activities are carried out optimally and achieve maximum results in terms of quality, location, completion time, and, most importantly, cost savings (Rahma Syari, 2022). Well-structured procurement procedures are a key factor in achieving corporate objectives, as they enable the company's needs to be fulfilled optimally while supporting all operational activities. With structured and detailed procedures in place, every member of the organization has a common reference in carrying out their tasks, thereby reducing the potential for errors, improving productivity, and ensuring the achievement of expected performance standards (Kretarto & Rusdianto, 2024).

The procurement process of goods and services at PT

XYZ is divided into two categories: direct procurement and indirect procurement. Direct procurement refers to the acquisition of goods and services that are directly related to the company's core production activities. Meanwhile, indirect procurement refers to the purchase of goods and services that are not directly used in the production process, but are still necessary to support the overall smoothness of the company's operations. In practice, the indirect procurement process continues to face several challenges, particularly in terms of delivery timeliness.

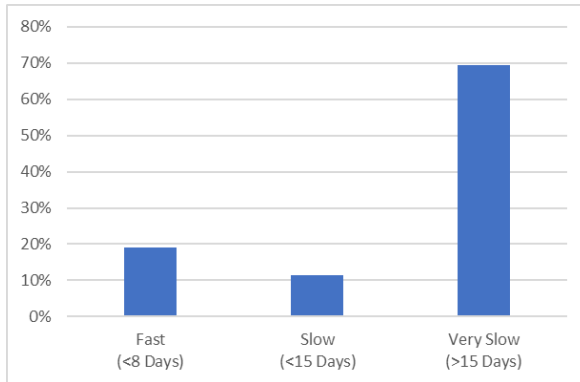


Figure 1: XYZ Pre-PR Tracking for July-October 2024

Based on Figure 1, it can be observed that XYZ Pre-PR Tracking from July to October 2024 indicates serious issues in the efficiency of the procurement process. The percentage of items experiencing delays is considerably high, reaching 70%, far exceeding the company's target of 7 working days. Such delays potentially disrupt the company's operational flow and ultimately have a negative impact on overall performance. Therefore, this study was conducted to analyze and thoroughly review the workflow of indirect goods and services procurement at PT XYZ, in order to identify obstacles as well as influencing factors.

This research contributes by specifically examining purchasing efficiency within the procurement procedures of indirect goods and services in the Purchasing Division of PT XYZ, which to date has not been comprehensively analyzed. Thus, this study is expected to provide a deeper understanding of the actual conditions so that the procurement process of goods and services can be completed in accordance with the established target time of 7 working days, thereby optimally supporting the company's operations.

2. Literature Review

Purchasing Efficiency

In the business world, efficiency refers to a company's ability to optimize the use of resources to achieve its

business objectives. This includes operational efficiency (reducing waste and improving productivity), cost efficiency (minimizing operational expenses), and time efficiency (accelerating business processes) (Wulandary et al., 2024). Purchasing is one of the business activities aimed at providing goods, either for direct use or as inventory, with the primary objective of generating profit (Hidayati, 2021).

Procurement Procedures for Goods and Services

Procedures play a crucial role for every company to ensure that each activity can be carried out more systematically and in a structured manner (Alpiah & Nopiana, 2023). According to Narko (in Wijaya & Wardhana, 2024) "A procedure is a series of administrative tasks involving several people, designed to ensure that the handling of recurring company transactions is carried out consistently and in accordance with established standards." Procurement of goods or services is an effort to acquire the desired or required items or services at an appropriate price, quality, and quantity to support business operations (Alfiani Noor, 2022).

Value Stream Mapping (VSM)

Value Stream Mapping (VSM) is one of the tools in lean manufacturing that maps the flow of raw materials or components and information from arrival, through the processes involved, until a product reaches the customer (Nurhadyan & Suryani, 2022). VSM provides a visual representation of the entire sequence of activities (both value-added and non-value-added) required to deliver a product or service to the customer. The objective of VSM is to describe, identify, and eliminate all forms of waste occurring throughout production processes or other operational activities, and to take steps to improve the overall flow rather than making isolated improvements to specific parts (Benedikta & Sukarno, 2020).

The VSM process consists of two main stages that form the basis of value stream mapping (Fhadillah et al., 2020). The first stage is the development of a Current State Map, which captures the actual conditions of the current procurement procedures to identify various types of waste within the process. The second stage is the development of a Future State Map, which serves as a proposed improvement or solution based on the analysis of the Current State Map to enhance procurement efficiency.

Value Stream Mapping consists of three key components. Material Flow illustrates the main process through which raw materials are transformed into finished products and delivered to customers. Information Flow represents the various types of information that determine what must be done and when it should be done. Timeline shows the proportion of value-added (VA) time compared to

non-value-added (NVA) time. The timeline is depicted as a pulse wave and only demonstrates the effects of waste, not its root causes (Siti Zaenab Nur Hasanah et al., 2023).

3. Research Methodology

This study employs a qualitative approach with a case study design to analyze time efficiency in the procurement procedures of goods and services within the Purchasing Division of PT XYZ. The case study method was chosen because it enables the researcher to explore in depth and comprehensively the purchasing processes that occur within a single organizational unit, in a real and specific context. Through this method, the researcher can collect richer and more contextual data using interviews, observations, and document analysis related to procurement activities.

The research was conducted at PT XYZ, located in the Executive Industrial Park, Batam Center, Batam City, Riau Islands, Indonesia. The object of this study specifically focuses on the Indirect Purchasing Division due to its crucial role in the procurement process. The subjects or informants in this research are the manager and staff of the Purchasing Division of PT XYZ, who are directly involved in the procurement of goods and services. Informant selection was carried out using a non-probability sampling technique, specifically purposive sampling with a judgment sampling method. This method was chosen as it allows the researcher to select informants who possess relevant knowledge and experience on the research topic, thus providing more in-depth and accurate information.

The determination of informants was based on several aspects, including: (1) Managers directly involved in strategic decision-making related to procurement, to provide broad perspectives on process efficiency, (2) Staff directly engaged in the procurement of goods and services, and (3) Staff with significant roles in procurement-related decision-making.

The study applies an interactive data analysis model by Miles and Huberman, which consists of three main stages: data reduction, data display, and conclusion drawing/verification. To support the analysis, this study also utilizes Value Stream Mapping (VSM) as a visual tool to comprehensively illustrate the procurement process, from need identification to the receipt of goods/services, including the time and resources involved at each stage. This approach allows the researcher to identify value-added (VA) activities, non-value-added (NVA) activities, and necessary non-value added (NNVA) activities. The application of VSM helps to reveal potential waste, identify bottlenecks in the process, and highlight areas that can be optimized within the procurement procedures of goods and services.

4. Results and Discussion

Procurement Procedures of Goods and Services

Through a qualitative approach using observation, interviews, and documentation techniques, the researcher obtained a comprehensive overview of the procurement flow. The collected data were reduced to extract relevant information and analyzed to reveal the factors influencing efficiency within the process. The results and analysis of this research are expected to answer the research objectives and provide an understanding of the structure and stages in the procurement procedures that directly impact purchasing efficiency in the company.

a. Stakeholders Involved in the Procurement Process

1. User
2. Purchasing
3. Supplier
4. Technical Expert
5. Department Head
6. Site Manager
7. Managing Director
8. Product Launch Manager (PLM)
9. Finance

b. Documents Used in the Procurement Process

1. Initial Request Form for Procurement of Goods and Services (Pre-Purchase Requisition Form)
2. Quotation from Supplier
3. Purchase Requisition Form
4. Purchase Order
5. Delivery Order from Supplier
6. Invoice

c. Procurement Procedures at PT XYZ

1. Identification of Needs & Preparation of Pre-PR
2. Evaluation of Pre-PR
3. Request for Quotation (RFQ) Submission

4. Receipt of RFQ and Evaluation of Requirements
5. RFQ Comparison and Negotiation Process
6. Preparation of Purchase Requisition (PR) Form
7. Request for Approval
8. Inputting PR into the QAD System
9. Creation of Purchase Order
10. Ordering and Receiving of Goods or Services

Efficiency of Procurement Procedures

Based on the results of interviews and observations, it was found that the current procurement procedures at PT XYZ are still not running efficiently. Informant 1 explained that so far the process of requesting the need for goods is done manually and must request confirmation or approval from each interested party manually as well. This causes the procurement process to be slow and less efficient. Informant 1 stated: *“So far, we have been filling out the request forms manually and asking each person for their signature. That is what makes the process inefficient.”*

In addition, Informant 2 revealed that aside from the lengthy processing time, the procurement process is also hampered by unsystematic document management, which often leads to repeated steps that could otherwise be minimized. Informant 2 stated: *“Of course, it is not efficient, as explained earlier inefficient in terms of time and inefficient in terms of document handling.”*

From these findings, it can be concluded that the procurement procedures in the Indirect Purchasing Division of PT XYZ have not been implemented efficiently. The inefficiency is not only caused by delays in processing time and waiting time but also by poorly structured document management and frequent duplication of steps.

Value Stream Mapping (VSM)

TABLE I
IDENTIFICATION OF VALUE-ADDED TIME AND
NON-VALUE-ADDED TIME IN THE PROCUREMENT
PROCESS

Activity	Category	Estimated Time (Days)	Average Days
Identification of needs and preparation of Pre-PR, including approval from HOD	VA	1	1

Evaluation of Pre-PR and Pre-PR revision	NVA	1	1
Inputting Pre-PR into the E-PR Tracking system	NVA	1	1
Sending RFQ to supplier	VA	1	1
Waiting for RFQ from supplier	NNVA	1-2	1.5
Follow-up on pending RFQ with supplier via email/phone	NVA	1-2	1.5
Evaluation and comparison of RFQs, including negotiation process	VA	1	1
Revision of quotation if not aligned with user requirements	NVA	1-2	1.5
Preparation and drafting of PR Form	NVA	1	1
Request for approval	NNVA	1-6	3.5
Revision of PR if rejected	NVA	1-2	1.5
Request for re-approval after PR revision	NVA	1-2	1.5
Inputting PR into QAD system	NVA	1	1
Approval by Finance Controller through QAD system	NVA	1	1
Creation of PO and sending PO to supplier	VA	1	1

Based on Table I, it can be seen that each activity in the VSM diagram is classified into three (3) categories: Value Added Activities (VA), which are activities that provide added value and produce outputs in each stage; Non-Value Added Activities (NVA), which are activities that do not contribute value to the process; and Necessary but Non-Value Added Activities (NNVA), which are activities that do not provide added value but are still required to support the completion of the process (Siti Zaenab Nur Hasanah et al., 2023).

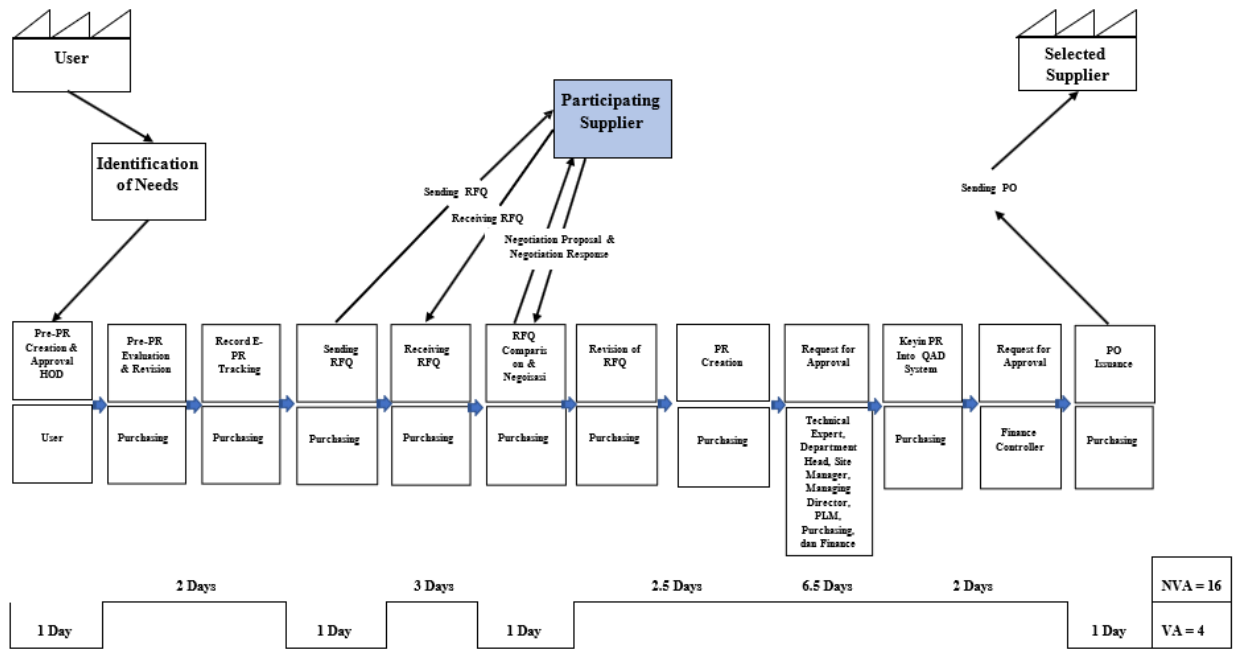


Figure 2: Current State Value Stream Mapping

Based on Figure 2, the Current State Value Stream Mapping illustrates the entire process and flow of information within the procurement procedures at PT XYZ, beginning from the identification of needs to the issuance of a Purchase Order (PO) to the supplier.

The process starts with the User, who identifies the need for goods or services and prepares a Pre-Purchase Requisition (Pre-PR) that must first receive approval from the Head of Department (HOD). The E-PR request is then received by the Purchasing Division, where the Pre-PR is evaluated and revised to ensure feasibility and document completeness. If deficiencies are found, the Pre-PR is returned to the user for revision. Once the Pre-PR is considered complete and compliant, Purchasing records the request into the E-PR Tracking system. Afterward, Purchasing sends a Request for Quotation (RFQ) to potential suppliers. The suppliers that receive the RFQ respond by submitting quotations.

Upon receiving the supplier quotations, Purchasing evaluates the offers, compares them, and conducts negotiations to obtain the best prices and terms. Revised quotations are then discussed again with the user. Following this, Purchasing prepares the Purchase Requisition (PR).

The completed PR then undergoes the PR approval process, requiring authorization from several parties, including the Technical Expert, Department Head, Site Manager, Managing Director, Product Launch Manager (PLM), Purchasing, and Finance. After all manual approvals are obtained, Purchasing keys the PR into the QAD System, which involves inputting the approved PR data into the system. The PR entered into

QAD is subject to Finance Controller approval within the system. Once this approval is granted, Purchasing proceeds with the creation of the PO in the system. The final step is sending the PO to the selected supplier via email, marking the formalization of the goods or services order.

Based on the classification of activities using the Value Stream Mapping approach, it was identified that:

Formula for Calculating Time Percentage:

$$\text{Percentage} = \left(\frac{\text{Estimated Time Per Category}}{\text{Total Estimated Time}} \right) \times 100\%$$

TABLE II

RECAPITULATION OF CURRENT STATE ACTIVITY TIME

Category	Total Activities	Total Average Days	Percentage
Value Added (VA)	4	4	20%
Non-Value Added (NVA)	9	11	55%
Necessary Non-Value Added (NNVA)	2	5	25%
Total	15	20	100%

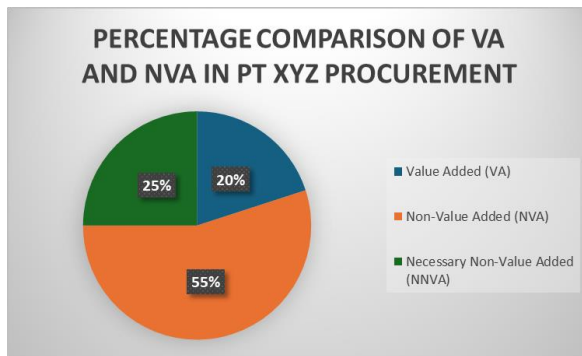


Figure 3: Percentage of Current State VSM Activities

Based on Table II, it can be identified that the total time required for the entire procurement process, consisting of 15 activity steps, is 20 days. When compared to the company's standard procurement duration target of 7 days, there is a delay of 13 days. As shown in Figure 3, the percentage comparison between VA and NVA activities indicates that the proportion of value-added time (VA) is only 20%, while non-value-added time (NVA + NNVA) reaches 75%, consisting of 55% NVA and 25% NNVA.

Identification of Waste in the Procurement Procedure

Waste refers to any activity within the workflow that does not add value. The seven types of waste in lean manufacturing (Setiawan & Rahman, 2021) are as follows:

1. Over Production
2. Defect
3. High Inventory
4. Transportation
5. Motion
6. Waiting
7. Over Processing

From the analysis of the Current State VSM presented earlier, it can be observed that non-value-added activities exceed the proportion of value-added activities.

TABLE III
RECAPITULATION OF WASTE IN THE PROCUREMENT PROCESS

Activity	Type of Waste	Activity Category	Average Days	Percentage
Evaluation and revision of	Over Processing	NVA	1	6.20%

Pre-PR				
Recording Pre-PR into E-PR Tracking	Over Processing	NVA	1	6.20%
Waiting for RFQ from suppliers	Waiting	NNVA	1.5	9.40%
Follow-up of pending RFQ to suppliers	Over Processing	NVA	1.5	9.40%
Revision of quotation if not aligned with user needs	Over Processing	NVA	1.5	9.40%
Preparation and compilation of PR Form	Over Processing	NVA	1	6.20%
Request for approval	Waiting	NNVA	3.5	21.90%
Revision of PR if rejected	Over Processing	NVA	1.5	9.40%
Request for re-approval after PR revision	Over Processing	NVA	1.5	9.40%
Inputting PR into QAD system	Over Processing	NVA	1	6.20%
Approval by Finance Controller through QAD system	Waiting	NVA	1	6.20%
Total Waiting	–	–	6	37.50%
Total Over Processing	–	–	10	62.50%
Total Waste	–	–	16	100.00%

Based on Table III, several significant types of waste in the procurement procedure at PT XYZ can be identified, namely waiting waste and over processing waste. The total identified waste time amounts to 16 days, consisting of 6 days from waiting activities (37.5%) and 10 days from over processing activities (62.5%). These findings indicate that the majority of waste in the process is caused by repetitive tasks, manual processes, and inefficient workflows.

1. Waiting

The most dominant waiting waste is found in the approval request activity, with an average duration of 3.5 days, contributing 21.9% of the total waste. This approval process is carried out manually and must go through multiple stakeholders, resulting in prolonged waiting times. Hence, this activity falls into the category of waiting waste. A similar issue occurs in the waiting for RFQ from suppliers activity, which takes an average of 1.5 days (9.4%), as well as the Finance Controller's approval through the QAD system, which contributes an additional 1 day (6.2%) of waiting waste. These bottlenecks indicate that decision-making processes and information flow between departments are not yet running efficiently.

2. Over Processing

Over processing waste dominates the procurement process in the Indirect Purchasing Division at PT XYZ, accounting for 10 days (62.5%) of the total waste. This type of waste arises due to repetitive processes, manual data entry, and inefficient approval workflows. Over processing is clearly visible in activities such as re-entering Pre-PR data into the E-PR system and preparing PR Forms outside the system, which must then be entered again into the QAD system, resulting in duplicated work. The approval process also consumes excessive time as it involves multiple cross-departmental stages and requires repeated approvals from users and Heads of Department (HOD). Since the Purchasing team must submit approvals to several related parties, the process becomes inefficient because it does not provide direct value-added and requires a considerable amount of time.

In addition, activities such as PR revisions, re-approval requests, and quotation revisions are classified as over processing, as they occur due to incorrect data, unclear specifications, or insufficient coordination at the initial stage. These issues force process repetitions that could have been avoided if accurate and complete information had been provided upfront. Other manual activities such as Pre-PR evaluation, RFQ follow-up, and PR entry are also considered over processing, since they do not generate direct added value. The high proportion of over processing waste highlights the urgent need for digitalization, workflow improvement, and enhanced interdepartmental coordination to achieve optimal procurement efficiency.

Procurement Process Efficiency Analysis

Based on the results of interviews with informants, direct field observations, internal company documentation, and process mapping using Value Stream Mapping (VSM), it can be analyzed that the procurement process in the Indirect Purchasing Division of PT XYZ still faces several obstacles that hinder efficiency.

From the interviews with informants, it was found that the procurement process in the Purchasing Division of PT XYZ is still dominated by manual activities, such as document preparation and approval flows that have not been fully digitized. This leads to prolonged waiting times, which potentially cause delays and obstruct important stages in the procurement procedure. Informants also emphasized that manual processes and repetitive tasks are the main sources of time inefficiency in the procurement cycle.

These findings were reinforced by field observations, which identified bottlenecks in the approval stage as well as repetitive activities, such as creating the PR form and re-entering it into the QAD system. This repetition slowed down the procurement process and clearly indicated waste of time and human resources.

Furthermore, analysis of internal documentation also indicated that procurement procedures are not yet well standardized and have not been fully digitized. The lack of consistency in document management contributes to a higher risk of input errors and repetitive tasks, which should have been minimized through an integrated digital system.

The process mapping using Value Stream Mapping (VSM) clearly revealed that 80% of the activities are classified as Non-Value-Added (NVA). The high percentage of non-value-added activities highlights that the procurement process is not yet efficient. Wastes were identified in the form of waiting time and repetitive activities (over processing). These two types of waste demonstrate that several stages in the procurement process do not provide added value but instead prolong the procurement cycle time. This condition directly impacts the overall productivity of the procurement process.

From all the findings above, it can be concluded that the procurement process in the Purchasing Division of PT XYZ faces various obstacles that result in low efficiency. The main challenges identified include:

1. Dominance of Manual Processes

Manual processes still dominate procurement implementation, especially in document preparation and repetitive data entry, which requires longer time to complete each stage. This not only slows down the workflow but also increases the risk of input errors. This

indicates inefficiency in the current system and highlights the need for digital transformation to accelerate processes, reduce human errors, and improve accuracy and document consistency.

2. Lengthy Approval Waiting Times and Delays from Suppliers

The approval process, which requires multiple stakeholders, often creates bottlenecks and delays in the procurement cycle. This not only slows down procurement but also increases the workload of the purchasing staff, who must repeatedly follow up with related parties to ensure smoother progress. However, this follow-up also creates other bottlenecks, delaying subsequent critical stages. Additionally, the purchasing team must actively remind suppliers who delay in submitting quotations. Supplier delays further prolong the procurement cycle.

3. Lack of Standardized Procedures

Procurement procedures have not been fully standardized, resulting in inconsistent and inefficient implementation in practice.

The findings of this study are consistent with a previous study conducted by Arunizal et al. (2024) entitled “Implementation of Value Stream Mapping (VSM) to Reduce Lead Time Process and Improve Procurement Activity Performance at Mining Sites.” That study identified that the main form of waste in procurement is waiting, particularly the idle time before the next work process begins. Sub-activities containing waiting waste included waiting for updates on buyer assignment dashboards, confirming technical specifications with users, document review by supervisors, waiting for vendor documents, and multi-level approval processes.

Additionally, the study also identified a second form of waste in the form of over processing (excess processing), namely activities involving repetitive work or inefficient administrative processes. Examples include repeated requests for supporting documents by buyers via email and repeated clarifications with users regarding technical information.

These findings are in line with the results of this research in the Purchasing Division of PT XYZ, where significant waiting waste was also found in PR approval stages and RFQ processes, as well as over processing due to PR document revisions and negotiations that were not finalized promptly. Both studies indicate that these types of waste have a direct impact on long lead times and low procurement efficiency.

Factors Affecting Efficiency

Based on the results of interviews, observations, documentation, and process mapping using Value Stream Mapping (VSM), the factors influencing the efficiency of procurement procedures in the Indirect Purchasing Division of PT XYZ are as follows:

1. Limited Digitalization and Process Automation

The use of digital systems (e-procurement) can reduce manual processes and minimize input errors. In addition, it can also improve transparency and accelerate the procurement process.

2. Lack of Interdepartmental Coordination

The absence of effective coordination between departments leads to miscommunication and delays in the delivery of information required for the approval process. This unstructured communication flow can cause subsequent stages to be postponed. The situation worsens when the authority responsible for approval is unavailable, while the purchasing team has already invested time and effort in preparing the necessary documents. As a result, the time spent becomes unproductive and directly impacts the overall efficiency of the procurement process.

3. Insufficient Guidelines and Control

The absence of Standard Operating Procedures (SOP) in procurement makes it difficult to supervise the implementation of procurement processes, as there are no established benchmarks to serve as a reference.

Proposed Improvements to the Procurement Procedures

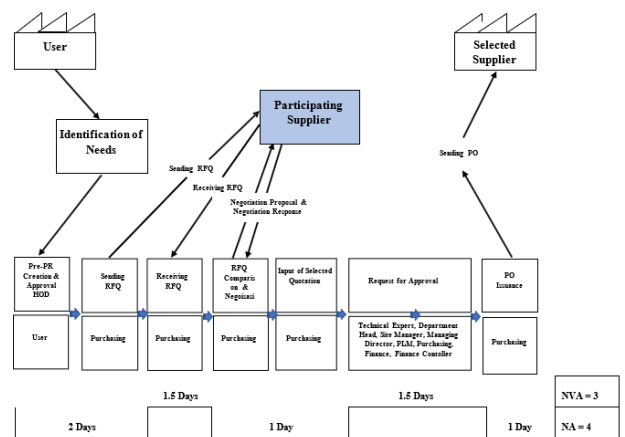


Figure 4: Future State Value Stream Mapping

Based on Figure 4, it can be seen that the Future State Map illustrates a more efficient process flow by utilizing digital systems and interdepartmental integration. This approach reduces Non-Value Added (NVA) activities, accelerates the approval process, and minimizes waste such as waiting, over processing, and manual input. The proposed improvement is expected to enhance both the effectiveness and transparency of the procurement process.

TABLE IV

RECAPITULATION OF FUTURE STATE ACTIVITY TIME

Category	Total Average Days	Percentage
Value Added (VA)	4	57.14%
Necessary Non-Value Added (NNVA)	3	42.86%
Total	7	100%

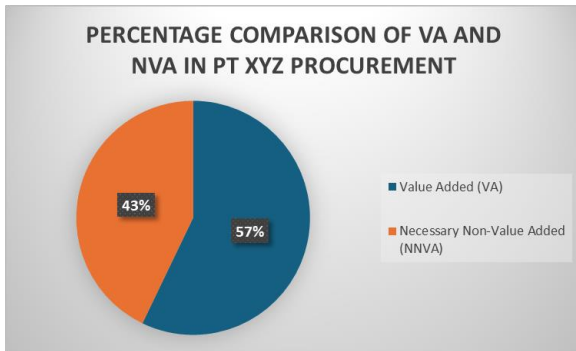


Figure 5: Percentage of Future State VSM Activity Time

Based on Table IV, the Future State mapping indicates a targeted reduction of the total procurement process time to 7 days. In this condition, Value-Added (VA) activities remain at 4 days (57.14%). Meanwhile, the time previously identified as Non-Value Added (NVA) in the current state, which amounted to 16 days, has now been streamlined so that only Necessary Non-Value Added (NNVA) activities remain, totaling 3 days (42.86%). This significant efficiency improvement is achieved through process simplification, elimination of unnecessary activities, and the optimization of approval workflows and supplier interactions. The proportional distribution of Future State activity time is clearly visualized in Figure 5: Percentage of Future State VSM Activity Time.

Comparison of Current State and Future State VSM

From the analysis of both process flows in the current state and the future state, the comparison is presented as follows:

TABLE V

COMPARISON OF CURRENT STATE AND FUTURE STATE

Category	Current State	Future State
Value Added (VA)	20%	57.14%
Non-Value Added (NVA)	80%	42.86%
Total	100%	100%

Based on Table V, it can be seen that the comparison between the process flow in the Current State and the proposed improvements mapped in the Future State shows a reduction in the total procurement cycle time by 13 days. Non-Value Added activities are reduced significantly, from 20 days to 7 working days when the Future State is implemented. At the same time, the percentage of Value-Added activities increases from 20% to 57.14%.

5. Conclusion and Recommendations

Conclusion

Based on the analysis conducted, the findings of this study can be summarized as follows:

1. The procurement procedure at PT XYZ consists of several stages, namely: Needs Identification, Needs and Budget Assessment, Request for Quotation (RFQ) Submission, Quotation Receipt and Evaluation Against Needs and Requirements, Quotation Comparison and Negotiation Process, Preparation of Purchase Requisition Form, Request for Approval, Inputting PR into the QAD System, Purchase Order Creation, Ordering, and Receipt of Goods or Services.
2. The efficiency of the procurement process in the Indirect Purchasing Division of PT XYZ remains low and can be considered inefficient. This is reflected in the fact that Value-Added (VA) activities account for only 20%, Non-Value Added (NVA) activities for 55%, and Necessary Non-Value Added (NNVA) activities for 25%. Significant waste occurs mainly in the form of waiting time for approvals and repeated activities (over processing) during the process.
3. Several factors influencing the efficiency of the procurement process at PT XYZ include the limited use of digital technology and process automation, lack of interdepartmental coordination, and insufficient reference standards and control mechanisms.

Recommendations

Based on the conclusions outlined above, the following recommendations are proposed to improve the efficiency of the procurement process at PT XYZ:

1. Implementation of Digital Systems and Automation

It is recommended to adopt digital technologies that can automate critical stages in the procurement process, such as purchase history recording, preparation of purchase request documents, and approval workflows. PT XYZ may choose to adopt an integrated Enterprise Resource Planning (ERP) system, particularly the procurement module, or alternatively, develop an in-house customized system. Such digitalization will shorten the procurement cycle time, minimize errors, and enhance transparency.

2. Development of Standard Operating Procedures (SOP)

It is recommended to establish and develop clear and detailed Standard Operating Procedures (SOPs) for each stage of the procurement process. These SOPs should outline the specific steps to be followed, the responsibilities of each party involved, and the expected timeframes for each stage. With standardized SOPs in place, all employees will have clear guidance, thereby reducing confusion, improving process consistency, and accelerating the onboarding of new employees.

3. Enhancement of Interdepartmental Coordination

Building stronger communication channels across departments is crucial to ensure effective collaboration among all stakeholders in the procurement process. It is recommended to implement an integrated communication platform that connects all relevant parties. This platform may be embedded within the company's internal system or developed as a separate communication tool. Through real-time communication, waiting times can be reduced, responsiveness to needs can be improved, and information can be disseminated more quickly, ensuring that all stakeholders remain updated on the current status

the elimination of non-value-added activities, which have been the main sources of time inefficiency. With the application of the Future State, the procurement process is expected to become more efficient, structured, and aligned with the targeted timeline.

This study is limited in scope as it only covers the Indirect Purchasing Division, and therefore does not represent the entire procurement process within the company, particularly Direct Purchasing. For future research, it is recommended to expand the scope to cover all procurement divisions at PT XYZ, including Direct Purchasing processes.

Furthermore, it is recommended that PT XYZ implement the process flow illustrated in the Future State Map as a benchmark for improving the procurement system. This includes system digitalization, automation of approval processes, and

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