



**BUSINESS PROCESS REENGINEERING PROCUREMENT MATERIALS
WAREHOUSE IN PT TELKOM PEKALONGAN**

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Abstract

Telkom Pekalongan carries out four main business processes: warehouse material procurement, employee recruitment, Wi-Fi service installation, and Wi-Fi service termination. These four processes are crucial to ensure that material supplies continue to exist and are obtained at low prices, obtain a qualified workforce to fulfill the company's vision and mission, and provide fast and strong internet services for customers. Telkom Pekalongan has established itself as a leading, respected brand in the Indonesian telecommunications industry due to its commitment to continue to grow and develop its business operations. This research is expected to be a learning medium for other companies to learn from Telkom Pekalongan to then understand the importance of business processes and find out how best to implement them. The research method used in this study is mixed methods, bearing in mind that this research uses both qualitative and quantitative methods simultaneously. The findings of this study conclude that Telkom Pekalongan's procurement business process, which is considered very good, experiences problems in the flow of its activities, resulting in inefficient business operations and ineffective business processes. Therefore, activities involving task composition and automation need to be redesigned. Later, after the activity has been redesigned and re-executed, business processes will require lower costs and time, so that business operations can run more efficiently.

Kata Kunci: *Telkom Pekalongan, Business Process, Procurement Of Goods*

INTRODUCTION

Telkom Pekalongan is a telecommunications company in Indonesia that has four business processes that will be discussed, which include warehouse materials procurement, employee recruitment, installation of wifi, and uninstallation of wifi services. These services are essential to ensure a constant supply of necessary materials, acquire a highly skilled workforce, and provide fast and reliable internet services to its customers.

With a well-established procurement process, Telkom Pekalongan acquires quality products at the best prices, which helps in reducing the overall cost of operations. The company understands the importance of having a highly skilled and talented workforce to

achieve its goals and ensures to hire the best talent available in the market. Additionally, by offering installation and uninstallation of wifi services, Telkom Pekalongan has become a leading provider of internet services in Indonesia. Through its commitment to providing quality services, the company has established itself as a trusted name in the telecommunications industry in the country.

One of the challenges that many businesses face is ensuring the effectiveness of their business processes. The question arises as to what factors contribute to the success of these processes, and how they can be improved to achieve better results. This is where Telkom Pekalongan comes in with its efficient business processes in warehouse materials procurement, employee recruitment, and



installation/uninstallation of wifi services. The problem then becomes how to identify the factors that contribute to the effectiveness of these processes and how to measure their success.

The purpose of studying Telkom Pekalongan's business processes is to gain insights into how they work and identify areas for improvement. This study can help businesses understand how to optimize their own processes and achieve better results. By examining Telkom Pekalongan's procurement, recruitment, and wifi installation processes, businesses can learn from their best practices and apply them to their own operations.

The benefits of understanding Telkom Pekalongan's business processes are numerous. By identifying the factors that contribute to their success, businesses can optimize their own processes, reduce costs, and increase efficiency. The use of business process models can help visualize the workflow and identify areas of improvement. By implementing best practices from Telkom Pekalongan, businesses can improve their overall performance and achieve their goals more effectively.

This study relies heavily on business process models, which may not fully capture the complexities and nuances of real-world business operations. It is important to note that the effectiveness of a business process cannot solely be determined by its model and that other factors, such as human expertise and technology, can also play a significant role.

Human expertise and technology are crucial elements that contribute to the effectiveness of any business process. However, relying too much on either of these factors can also be a bad thing.

Over-reliance on human expertise can lead to inconsistencies and errors in the business process. This is because humans are prone to making mistakes, and their expertise may not always be up to date with the latest developments in the industry. On the other hand, relying too much on technology can lead

to automation bias, where operators blindly trust the technology, leading to incorrect decisions and outcomes.

RESEARCH METHODS

Both qualitative and quantitative methods were used in this study. The qualitative method was used to collect data in the form of monthly and fixed costs, while the quantitative method was used to make calculations to determine Time, Cost, and Utilization in the outcomes of the lab simulation analysis.

RESULTS AND DISCUSSION

Procurement Materials Process Business

Tabel 1
Qualitative Analysis Procurement Materials
Process Business

| No | Aktivitas | Klasifikasi Aktivitas | Analisis Aktivitas |
|----|--|-----------------------|--|
| 1 | Partner make BAPPB Form and send it to Warehouse Manager | BVA | It doesn't directly add value but is essential for the business operation and compliance purposes. |
| 2 | Warehouse manager inspect the BAPPB | BVA | The inspection of the BAPPB form by the Warehouse Manager is a crucial step for the internal operations of the company. This activity is necessary to ensure that the goods received match what's documented in the BAPPB form, helping to maintain accurate inventory records, which is crucial for effective |



| No | Aktivitas | Klasifikasi Aktivitas | Analisis Aktivitas |
|----|---|-----------------------|--|
| | | | inventory management. |
| 3 | Warehouse Manager send the BAPPB to Warehouse Staff | NVA | Sending the document from the Warehouse Manager to Warehouse Staff might not be essential for the business operation or compliance purposes. This process could potentially be automated or eliminated through a shared document system or a more streamlined process. |
| 4 | Warehouse Staff receive the BAPPB Form | NVA | This activity doesn't add any value. On the other hand, the receiving of the BAPPB form by the Warehouse Staff may seem like a necessary step in the current process, but it may not be essential for efficient business operations or regulatory compliance. |
| 5 | Warehouse Staff check the material stock | VA | Ensuring that there's adequate stock is essential to the delivery of products or services. If there's not enough stock to fulfill orders, it could lead to delays or |

| No | Aktivitas | Klasifikasi Aktivitas | Analisis Aktivitas |
|----|--|-----------------------|--|
| | | | unfulfilled orders. This activity also adds value from the business's perspective. It's an important step in managing inventory, preventing stock-outs, planning for replenishment, and ensuring smooth operations. |
| 6 | If the material stock available, Warehouse Staff take the materials out from warehouse and make the BAPPB Form | BVA | The BAPPB form is an important document for internal operations and potential regulatory compliance, but it doesn't directly add value |
| 7 | Warehouse Staff send BAPPB Form to Warehouse Manager | NVA | This activity is essentially a handoff or a transfer of a document within the organization. It doesn't directly add value for next activity. Additionally, the sending of the document from the Warehouse Staff to the Warehouse Manager might not be essential for the business operation or compliance purposes. This process could potentially be |



| No | Aktivitas | Klasifikasi Aktivitas | Analisis Aktivitas | No | Aktivitas | Klasifikasi Aktivitas | Analisis Aktivitas |
|----|--|-----------------------|---|----|--|-----------------------|---|
| | | | automated or eliminated through a shared document system or a more streamlined process. | | | | product or service they are purchasing. It's important to note that while this activity adds value, it should still be performed as efficiently as possible. |
| 8 | Warehouse Manager receive BAPPB Form | NVA | This activity doesn't add any value. On the other hand, the receiving of the BAPPB form by the Warehouse Manager may seem like a necessary step in the current process, but it may not be essential for efficient business operations or regulatory compliance. | 11 | Procurement process is finished | VA | The completion of the procurement process is a crucial step in ensuring the availability and delivery of the products or services. The procurement process ensures that the necessary materials or goods are available for production or delivery, which directly contributes to the customer receiving their desired product or service. |
| 9 | Warehouse Manager signed the BAPPB Form and send it to partner | BVA | The signing of the BAPPB form by the Warehouse Manager is an important step for the internal operations of the company and may be necessary for compliance purposes. The signature signifies that the Warehouse Manager has approved the contents of the form, which could be an important control measure for the company. | 12 | If stock not available, Warehouse Staff create material PO Document, and send it to supplier | BVA | The creation and sending of a Purchase Order (PO) to the supplier is an essential step in the procurement process to ensure the availability of materials or goods. This activity contributes to the smooth operation of the business and is necessary for managing inventory and |
| 10 | Partner take the materials from warehouse | VA | The movement of materials out of the warehouse directly contributes to the | | | | |



| No | Aktivitas | Klasifikasi Aktivitas | Analisis Aktivitas |
|----|---|-----------------------|--|
| | | | fulfilling customer orders. |
| 13 | Supplier receive material PO Document | BVA | This activity doesn't add business value. The company's operations are not directly improved or made more efficient by the supplier receiving the PO. |
| 14 | Supplier make the materials and send it to Warehouse Staff | VA | This activity is a crucial step in the supply chain that ensures the necessary materials or goods are available for production or delivery. |
| 15 | Warehouse Staff receive the material and check the material, is it same or not. | BVA | Receiving the materials ensures that they have arrived at the warehouse and are available for use, while checking the materials against the order is a crucial quality control measure. It helps prevent errors, such as wrong materials or quantities, which could impact production and customer satisfaction. |
| 16 | If yes, then Warehouse Staff take the material out and make the | BVA | The BAPPB form is an important document for internal operations and potential |

| No | Aktivitas | Klasifikasi Aktivitas | Analisis Aktivitas |
|----|--|-----------------------|--|
| | BAPPB Form | | regulatory compliance. However, if this form is essential for tracking the movement of goods within the warehouse and ensuring accurate inventory records |
| 17 | If no, then Warehouse Staff start the return process | BVA | This activity is crucial for the business operation. Having a return process in place is necessary for managing incorrect deliveries, maintaining quality standards, and ensuring accurate inventory levels. While it's a step that businesses aim to avoid, when it's necessary, it's an important part of ensuring the business can deliver the right product. |
| 18 | Supplier receive the return material document | NVA | This step is, however, necessary for the supplier to acknowledge the return and correct the error. So, from the supplier's perspective, it could be considered a BVA or even VA, but from the perspective of the |



| No | Aktivitas | Klasifikasi Aktivitas | Analisis Aktivitas |
|----|--|-----------------------|--|
| | | | initial company, it's an NVA activity. The goal in process improvement efforts would be to ensure this step is performed as efficiently and effectively as possible to prevent any delays or issues in the procurement process. |
| 19 | Supplier make the materials again and send it to Warehouse Staff | VA | The creation and delivery of the materials directly contributes to the product or service they are purchasing. This activity is a crucial step in the supply chain that ensures the necessary materials or goods are available for production or delivery. |

Redesign Analysis

Tabel 2. Redesign Analysis Procurement Business Process

| No | Redesign Level | Activities | Redesign Reason | Possibility |
|----|----------------|--|--|-------------|
| 1 | Task Level | 1. Warehouse manager inspect the BAPPB | These tasks might be consolidated into one task or omitted altogether since they seem unnecessary. The | Implement |

| | | | | |
|--|---|--|---|----------|
| | | | BAPPB form might be processed and examined simultaneously by employing an automated system, doing away with the requirement for separate inspections. | |
| | 2. Warehouse Staff check the material stock | | A real-time inventory management system that tracks stock levels automatically could automate this process. By doing so, manual inspections would take less time and there could be fewer stock outs. | Possible |
| | 3. Supplier make the materials and send it to Warehouse Staff | | The delivery of products will be more timely if you know the shortest route to your destination since you | Possible |



| | | | | |
|---|-----------------|---|--|-----------|
| | | | won't lose time if you can avoid roadblocks like traffic jams. This will also make the procedure of shipping goods more timely. | |
| 2 | Flow Level | 1. Warehouse Staff receive the material and check the material | By establishing quality controls at the supplier's end, this activity might be made better while requiring fewer inspections after delivery. | Challenge |
| 3 | Processes Level | 1. If stock not available, Warehouse Staff create material PO Document, | .When stock levels drop below a predetermined level, the process of generating a PO document might be automated to happen. This would | Challenge |

| | | | | |
|--|--|-------------------------|--|--|
| | | and send it to supplier | enable restocking more quickly and lessen the possibility of supply shortages. | |
| | | | | |

The activity element is one of many factors that, in my opinion, must be taken into account when purchasing goods. It is advisable to complete tasks all at once in order to prevent the creation of new tasks and to maximize the use of time. The continuing business operations move forward rather swiftly by merging between activities. Additionally, the conversion of paper documents into digital products through digitization helps hasten the flow of information from one location to another. Using digital items rather than paper can also reduce costs. Using Google Maps to locate the warehouse address can also help drivers save money by eliminating the need to confirm the address with the warehouse workers. This can also save time. The cost and time are greatly decreased after the redesign, as can be shown when the simulation method is used to bizagi.

CONCLUSION

According to simulations performed in bizagi, the goods procurement business process has issues with the flow of activities that run inefficiently, making business processes ineffective. This necessitates redesign activities in the form of automation and task composition, and after carrying out redesign activities, it results in reduced costs and time, making it more effective.



REFERENCE

- [1] Bartolini, C., Calabró, A., & Marchetti, E. (2019). Enhancing Business Process Modelling with Data Protection Compliance: An Ontology-based Proposal. (Icissp), 423.
- [2] Owen, M., & Raj, J. (2004, March). BPMN and Business Process Management An Introduction to the New Business Process Modeling Standard. *BPTrends*, 2678(c).
- [3] Pflanzl, N., & Vossen, G. (2018, February). What do Business Process Modelling and Super Mario Bros. have in Common? A Games-perspective on Business Process Modelling Nicolas. *International Journal of Conceptual Modeling*, 71.
- [4] Weske, M. (2007). *Business Process Management: Concepts, Languages, Architectures*. Springer.