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Effectiveness of Cargo Warehouse Use at Soekarno Hatta Airport: Library Research

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Abstract: The article on the effectiveness of using cargo warehouses at Soekarno Hatta Airport is a scientific literature review article within the scope of operational management science. This article aims to create a hypothesis regarding the relationship between factors, which can then be used for further research in the field of operational management. Descriptive qualitative research methodology was used in this research. The data used in this research comes from previous research which is still relevant to the current investigation. Data was collected from leading academic online platforms, including Publish or Perish, Google Scholar, digital reference books, and journals. The findings of this research are as follows: 1) Loading and unloading equipment influences the effectiveness of warehouse use; 2) The frequency of imported commodities influences the effectiveness of warehouse use; 3) International trade influences the effectiveness of warehouse use; and 4) The regulatory system influences the effectiveness of warehouse use.

Keyword: Effectiveness of Use of Warehouses, Loading and Unloading Equipment, Frequency of Imported Commodities, International Trade, Regulatory Systems

INTRODUCTION

The effectiveness of employing a cargo warehouse at Soekarno-Hatta Airport is determined by numerous major criteria that influence logistics operations and products storage at Indonesia's largest airport. One of the primary issues is the lack of infrastructure and technology in terms of loading and unloading equipment used to manage the flow of commodities at the airport. Even though Soekarno-Hatta Airport has relatively big loading and unloading facilities, there are still issues with the quality and efficiency of these loading and unloading equipment. Slow loading and unloading operations, as well as a lack of sufficient equipment maintenance, can cause delays in the cargo handling process, reducing the effectiveness of airport warehouses (Susanto et al., 2020).

Aside from that, the frequency of imported commodities is a factor to consider when determining the effectiveness of using the cargo warehouse at Soekarno-Hatta International Airport. As one of the key gates for importing products into Indonesia, this airport confronts issues in dealing with a wide range of commodities entering the country. The high frequency of imports of commodities with varying features necessitates efficient and well-organized

warehouse administration. However, a lack of adequate planning and management of the frequency of imported commodities can lead to a buildup of items and difficulty in organizing warehouse storage (Ko, 2016).

International trade has a considerable impact on the effectiveness of using cargo warehouses at Soekarno-Hatta Airport. As Indonesia's principal commerce gateway, this airport serves as a hub for the flow of products entering and departing the country. High trade volumes and diverse trade mix put a strain on logistics infrastructure, especially cargo warehouses. A lack of appropriate management of the volume and kind of commodities traded might result in an imbalance in the usage of storage space and interrupt the processing time of items in the warehouse. Furthermore, the regulatory structure for cargo warehouse management at Soekarno-Hatta Airport contributes to the problem of effective warehouse usage. Even while existing norms and regulations are meant to govern logistics and goods storage activities, their implementation is not always simple. Compliance with regulations, openness, administrative efficiency, and justice in enforcing regulations remain issues at this airport. This can have an impact on the overall efficacy of cargo warehouse use, as warehouse operating processes must adhere to the applicable legal and regulatory frameworks (Susanto & Keke, 2020);(Susanto et al., 2023).

Overall, the background to the problem of effective cargo storage utilization at Soekarno-Hatta Airport includes a variety of factors such as loading and unloading equipment, the frequency of imported commodities, international trade, and regulatory procedures. To address this issue, efforts must be made to improve loading and unloading infrastructure and technology, improve planning and management of the frequency of imported commodities, optimize international trade logistics management, and strengthen the implementation and enforcement of cargo warehouse-related regulations. As a result, Soekarno-Hatta Airport can improve cargo warehouse utilization while also supporting the overall growth and development of Indonesia's logistics sector (Harahap et al., 2020).

Based on the background of the problem above, the problem formulation is determined as follows: 1) Does loading and unloading equipment affect the effectiveness of warehouse use?; 2) Does the frequency of imported commodities affect the effectiveness of warehouse use?; 3) Does international trade influence the effectiveness of warehouse use?; and 4) Does the regulatory system influence the effectiveness of warehouse use.

METHODS

Literature Examination In preparing the article, methodologies such as systematic literature review (SLR) and library research were used. The methods underwent qualitative evaluation, and their accessibility was verified through scientific web sources including Mendeley and Google Scholar. A systematic literature review (SLR) is a rigorous and methodical process that involves identifying, assessing, and examining all related research literature with the goal of answering a specific research question. When conducting qualitative analysis, it is important to apply the literature review consistently according to methodological assumptions. Investigative in nature, qualitative analysis is carried out primarily for this reason, (Ali, H., & Limakrisna, 2013).

RESULT AND DISCUSSION

Result

Following are the research findings by considering the context and problem formulation:

Effectiveness of Warehouse Use

The efficacy of warehouse utilization refers to how well a warehouse uses its space and resources to efficiently store, manage, and distribute items. This includes optimizing

warehouse structure, inventory management, products handling, and the use of technology to assure on-time delivery, lower operational expenses, and little product damage or loss (Martinetta, 2023)..

Indicators or dimensions contained in the effectiveness of warehouse use include: 1) Goods processing time is the time required to receive, store, and remove goods from the warehouse. The faster this process is completed, the more efficient the warehouse will be; 2) Space Availability Rate: This metric indicates how often the warehouse has available space to receive additional goods. The more room available, the better the warehouse can handle its capacity; and 3) Stock Condition: Indicates how successfully the warehouse maintains good stock condition, including preventing damage or loss of goods (Suhada et al., 2023).

The variable effectiveness of warehouse use has been studied by previous researchers, among others: (Adawiyah, 2022), (Widyadana & Evanthi, 2023), (Martinetta, 2023).

Loading and Unloading Tools

Loading and unloading equipment is used to convey items from one location to another, particularly at transportation terminals like ports, train stations, and warehouses. Cranes, forklifts, conveyor belts, and reach stackers are a few examples. The speed and expense of the logistics process are directly affected by the efficiency with which equipment is loaded and unloaded (Brahmana, 2023).

The indicators or dimensions found on the loading and unloading equipment are as follows: 1) Utilization Rate: Indicates how often loading and unloading equipment is used during a given time period. The greater the use rate, the more productive the tool; 2) Loading and Unloading Cycle Time: The time necessary to load and unload items from a ship or vehicle. The faster this operation is completed, the more efficient the loading and unloading equipment will be; and 3) Service quality include factors such as safety and precision when handling commodities. Loading and unloading equipment that provides high-quality service is deemed more productive (Astuti et al., 2023).

Loading and unloading equipment variables have been studied by previous researchers, among others: (Gultom et al., 2022), (Brahmana, 2023), (Astuti et al., 2023).

Import Commodity Frequency

The frequency with which imported goods or commodities are delivered to a country over a given time period is referred to as their frequency. This frequency can be impacted by market demand, the season, trade policies, and other economic reasons. Import frequency management can help with inventory planning and logistics cost optimization (Sucita & Prasetya, 2021).

The indicators or dimensions contained in the frequency of imported commodities are as follows: 1) Import Volume: The number of commodities imported over a specific time period. The larger the import volume, the more frequently the commodity enters the country; 2) Commodity Diversity: Describes the various types of commodities imported. Import diversity increases with the number of commodity kinds imported; and 3) Import Origin refers to the country or region from whence the goods is imported. The frequency of various import sources might provide insight into international commerce connectedness (Sumadi & Nurkhamid, 2022).

The variable frequency of imported commodities has been studied by previous researchers, among others: (Patiung et al., 2018), (Sumadi & Nurkhamid, 2022), (Sucita & Prasetya, 2021).

International Trade

International trade refers to the transfer of products, services, and capital between countries or economic areas. This trade enables countries to expand their markets, obtain goods and services that are not available locally, and improve economic efficiency through specialization and economies of scale. commerce policy, currency rates, tariffs, and non-tariff barriers are only a few of the variables that influence international commerce (Ikaningtyas et al., 2023).

The indicators or dimensions contained in international trade are as follows: 1) Trade volume is the number of products and services exported and imported between two or more countries over a given time period. This trade volume indicates the degree of international commercial activity; 2) Trade value is the monetary value of products and services exported and imported between two or more countries over a specific time period. This trade value estimates the extent of trade's contribution to a country's economy; 3) Trade composition refers to the types or sectors of commodities and services traded between countries. This commerce can comprise raw materials, finished items, machinery and equipment, as well as services like transportation, tourism, and finance; and 4) A country's trade balance is the difference between the value of its exports and imports over a given time period. If the value of exports exceeds the value of imports, the country has a trade surplus. A trade deficit occurs when a country's imports exceed its exports (Azis, 2021).

International trade variables have been studied by previous researchers, among others: (Ikaningtyas et al., 2023) and (Azis, 2021)

Regulation System

The regulatory system in international trade refers to the overarching laws, policies, and processes that control how products and services are traded between countries. This comprises rules for imports and exports, levies and taxes, quality requirements, and customs processes. The regulatory system's goal is to defend national economic interests, improve security, and promote fair and sustainable trade practices (Novita et al., 2020).

The indicators or dimensions contained in the regulatory system are as follows: 1) Regulatory Compliance: The extent to which business players and the general public follow the rules and regulations that govern a regulatory system. High compliance demonstrates the efficacy and legitimacy of the regulatory system; 2) Transparency and Readability: The clarity and ease with which the government's rules and regulations are communicated. High openness and readability make regulations easier to understand and comply with for the general public and businesses alike; 3) Administrative Efficiency: Indicates how efficient and timely the license and approval process is for various business or other activity. High administrative efficiency can help to eliminate bureaucracy and the costs associated with regulations; and 4) Justice and Equality: The extent to which laws and regulations are available to all parties without discrimination. Fair and equitable regulations will contribute to an inclusive and sustainable corporate environment (Listiyan & Subhiyakto, 2021).

Regulatory system variables have been studied by previous researchers, among others: (Aprilia et al., 2023), (Listiyan & Subhiyakto, 2021), (Novita et al., 2020).

Previous Research Results

Based on the findings above and previous research, the research discussion is formulated as follows:

Table 1. Relevant Previous Research Results

No	Author (Year)	Research Results	Similarities with this article	Differences with this article	Basic Hypothesis
1.	(Brahmana	Layout, loading and	The influence of	The influence of	H1

	, 2023)	unloading equipment and human resources influence the effectiveness of warehouse use at the PT Sricon Logistik Semarang Bonded Logistics Center	loading and unloading equipment on the effectiveness of warehouse use	layout and human resources on the effectiveness of warehouse use	
2.	(Sinaga & Hermawan, 2023)	Value chain, frequency of imported commodities and activity based management influence the effectiveness of warehouse use and company profits	The influence of the frequency of imported commodities on the effectiveness of warehouse use	The influence of value chain and activity based management on company profits	H2
3.	(Gani, 2017)	International trade influences the effectiveness of warehouse use and logistics performance	The influence of international trade on the effectiveness of warehouse use	The influence of international trade on logistics performance	H3
4.	(Kumar et al., 2023)	The regulatory system influences the effectiveness of warehouse use and supply chain efficiency	The influence of the regulatory system on the effectiveness of warehouse use	The influence of the regulatory system on supply chain efficiency	H4

Discussion

Based on the findings above and previous research, the research discussion is formulated as follows:

The Influence of Loading and Unloading Equipment on the Effectiveness of Warehouse Use

Key considerations include utilization rates, loading and unloading cycle times, and the quality of service offered by the loading and unloading equipment. Good management of these areas has a direct impact on goods processing time, space availability, and warehouse stock conditions. First and foremost, the utilization of loading and unloading equipment has a significant impact on warehouse efficiency. A high utilization rate shows that loading and unloading equipment is used to its full potential while transporting items from vehicles or ships to warehouses, or vice versa. Warehouses with a high utilization rate can maximize capacity and improve efficiency in handling commodities. This means that the time necessary to process items will be shortened, resulting in increased overall warehouse productivity.

Second, the loading and unloading cycle time has a significant impact on warehouse efficiency. Loading and unloading cycle time covers the time spent loading and unloading goods from the warehouse. The quicker this process is completed, the faster the warehouse can handle arriving and exiting commodities. Shorter loading and unloading cycles reduce the time spent shipping and receiving items, improving overall warehouse efficiency and productivity. This will also have a direct impact on warehouse processing times, since goods will be ready sooner for storage or shipment. In addition, the quality of service offered by loading and unloading equipment has a considerable impact on warehouse stock levels. Loading and unloading equipment that offers high-quality service ensures that goods are handled properly and safely during the loading and unloading procedure. This reduces the chance of product damage or loss, which can have an impact on warehouse stock levels. With high-quality service, the warehouse can ensure that stock is properly maintained, maximizing the effective use of storage space and lowering expenses connected with product damage or loss.

Overall, the impact of loading and unloading equipment on warehouse productivity is critical in logistics and supply chain management. Warehouses can improve operating efficiency, optimize storage space use, and preserve stock conditions by paying attention to

utilization levels, loading and unloading cycle times, and the service quality of loading and unloading equipment. This will improve overall warehouse productivity and reinforce the warehouse's position in the larger supply chain.

Loading and unloading equipment influences the effectiveness of warehouse use, this is in line with research conducted by: (Gultom et al., 2022), (Brahmana, 2023), (Astuti et al., 2023).

The Effect of Frequency of Imported Commodities on the Effectiveness of Warehouse Use

In the context of logistics management and products storage, the frequency of imported commodities has a significant impact on the effectiveness of warehouse utilization. Import volume, commodity diversity, and the origin of items received at the warehouse are all important considerations. Good management of these areas has a direct impact on goods processing time, space availability, and warehouse stock conditions. First and foremost, the amount of imports plays an important role in determining the effectiveness of warehouse use. High import volumes mean that more products must be handled and kept in warehouses. Thus, the warehouse must be able to successfully control the flow of incoming items in order for the commodities processing process to run smoothly and without excess stock or a shortage of storage space. Thus, high import quantities might pose issues for warehouse management while simultaneously providing opportunity to improve operating efficiency on a broader scale.

Furthermore, the variety of imported commodities has a considerable impact on the efficiency of warehouse utilization. Commodity diversity refers to the different sorts of commodities that must be handled and kept in the warehouse. The more diversified the imported commodities, the more complex warehouse management becomes because different storage requirements must be considered for each type of item. However, commodity diversity can help boost warehouse flexibility in dealing with a wide range of customer demands, as well as prospects for product portfolio diversification. Aside from that, the origin of imported commodities effects the efficiency of warehouse utilization. Import origin covers the nation or region from which the items are imported, which can give an understanding of import patterns and the flow of commodities into the warehouse. Geographic distance and delivery durations can have an impact on supply chain management and warehouse inventory levels. By considering the origin of imports, warehouses can create more efficient storage strategies and change the process of sending and receiving items to meet the needs and characteristics of commodities imported from various sources.

Overall, the frequency of imported commodities has a considerable impact on warehouse use in terms of logistics and supply chain management. Warehouses can improve operating efficiency, make better use of storage space, and maintain good stock conditions by paying attention to import volume, commodity diversity, and origin. This will allow warehouses to respond to shifting market demands more quickly and effectively.

The frequency of imported commodities influences the effectiveness of warehouse use, this is in line with research conducted by: (Patiung et al., 2018), (Sumadi & Nurkhamid, 2022), (Sucita & Prasetya, 2021).

The Influence of International Trade on the Effectiveness of Warehouse Use

The impact of international trade on warehouse effectiveness is important in terms of logistics management and commodities storage. The primary aspects to evaluate are trade volume, trade value, trade composition, and trade balance. Good management of these areas has a direct impact on the processing time of items, the amount of space available, and stock conditions in the warehouse. First and foremost, trade volume is an important factor in

determining the impact of international trade on warehouse efficiency. Trade volume measures the amount of products and services traded between countries over a given time period. The larger the commerce volume, the more commodities will be handled and housed in warehouses. To accommodate the large trade volume, the warehouse must be capable of properly managing the movement of items in and out. items processing time is critical in this case because the warehouse must be able to process items rapidly so that there is no stockpile of goods that can impede warehouse operations.

Furthermore, trade value has a significant impact on the effectiveness of warehouse use. Trade value refers to the monetary value of goods and services traded between countries. A high trade value suggests that the warehouse must handle high-value commodities that may require more specialized storage or handling. This can have an impact on the amount of space available in the warehouse, as high-value products may demand more secure storage space or particular conditions to preserve quality. Trade composition also has a substantial impact on warehouse efficiency. Trade composition refers to the types of commodities and services traded between countries. varied commodities have varied storage and handling requirements. For example, things with a short shelf life, such as fresh produce, may require more storage space than non-perishable items. Warehouses must be able to adjust their infrastructure and operational operations to changing trade compositions.

The trade balance has a substantial impact on warehouse efficiency. The trade balance is the difference in the value of a country's exports and imports over a specific time period. A trade surplus indicates that a country's exports exceed its imports. On the other side, if a country has a trade deficit, it signifies that its imports exceed its exports. In a warehouse setting, a positive trade balance can result in more items being exported, whereas a negative trade balance can result in more goods being imported. This will effect the flow of items into and out of the warehouse, as well as the amount of space available and stock conditions.

Overall, the impact of international trade on warehouse efficiency is complex and diverse. Factors such as trade volume, trade value, trade composition, and trade balance all influence how a warehouse controls the flow of commodities and storage space. By paying close attention to all of these elements, warehouses may enhance operational efficiency, make better use of storage space, and guarantee that stock conditions remain optimal. This will enable warehouses to support supply chains that are more efficient and responsive to changes in the global trade environment.

International trade influences the effectiveness of warehouse use, this is in line with research conducted by: (Ikaningtyas et al., 2023) and (Azis, 2021).

1. The Influence of the Regulatory System on the Effectiveness of Warehouse Use

The regulatory system's impact on warehouse effectiveness is critical to ensuring that logistics and commodities storage activities work smoothly and efficiently. Compliance with rules, clarity and readability of regulations, administrative efficiency, and fairness and equity in regulatory application are all important considerations in this relationship. Good management of these areas has a direct impact on the processing time of goods, the amount of space available, and the quality of stock in the warehouse. First and foremost, regulatory compliance is the cornerstone of a successful regulatory system. Compliance with applicable rules is critical to ensuring that warehouse operations meet defined requirements. This includes safety, health, and environmental considerations, as well as adherence to current trade and tax legislation. In a warehouse setting, compliance with these standards ensures that goods are kept, handled, and dispersed in accordance with applicable legal provisions, which affects goods processing times and stock conditions within the warehouse.

Furthermore, regulatory clarity and readability are critical to ensure that all parties involved understand the applicable laws and processes. Regulations that are transparent and

easy to comprehend can help to reduce errors and misunderstandings when applying regulations in the warehouse. This will accelerate the commodities processing process while lowering the risk of noncompliance with regulations, so improving the overall efficacy of warehouse use. Furthermore, administrative efficiency is a significant aspect in determining the regulatory system's impact on warehouse effectiveness. An efficient and hassle-free administrative process will ensure that all procedures for goods storage, processing, and distribution are done quickly and without needless delays. For example, the license or approval process for importing or exporting items must be easy and time-efficient. With excellent administration, goods processing time in the warehouse can be shortened, allowing for more efficient use of space and stock conditions.

Finally, fairness and equity in the application of rules are critical to ensuring that all business actors have equitable access to warehouses. This includes equitable allocation of storage space and handling of commodities, as well as equal treatment in the administrative process and rule enforcement. By maintaining fairness and equality, warehouses may establish an inclusive and sustainable environment for all parties involved, hence improving the overall efficacy of warehouse use. Overall, the regulatory framework has a considerable impact on warehouse efficiency and safety. Warehouses can improve their performance, maximize storage space use, and ensure proper stock condition by focusing on regulatory compliance, transparency and legibility, administrative efficiency, and fairness and equality in the application of regulations. This will benefit the supply chain as a whole, improving competitiveness and company sustainability in an increasingly complicated and changing market environment.

The regulatory system influences the effectiveness of warehouse use, this is in line with research conducted by: (Aprilia et al., 2023), (Listiyana & Subhiyanto, 2021), (Novita et al., 2020).

Conceptual Framework

A conceptual framework has been established based on research findings, previous investigations, and the above-mentioned discourse:

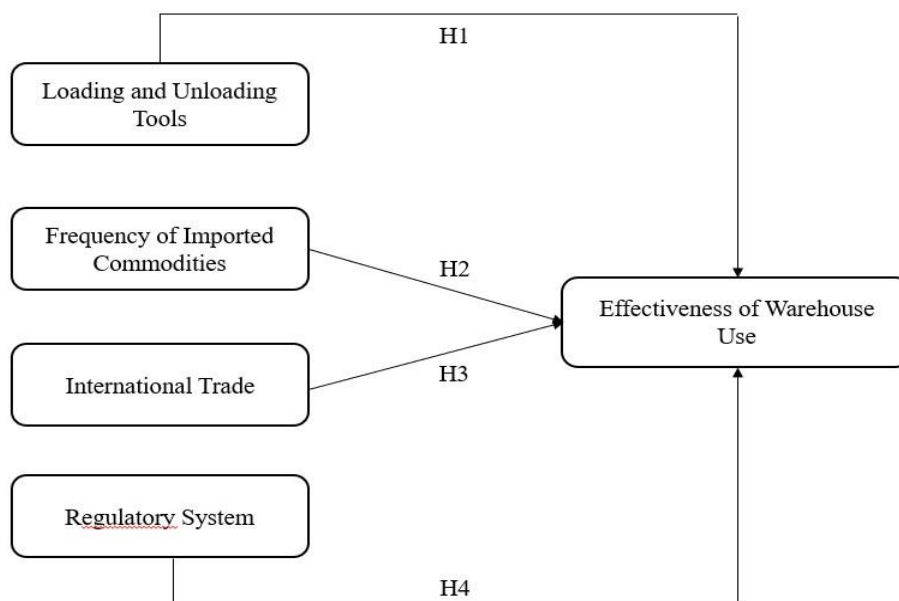


Figure 1. Conceptual Framework

Based on Figure 1 above, loading and unloading equipment, frequency of imported commodities, international trade and regulatory systems influence the effectiveness of

warehouse use. However, apart from loading and unloading equipment, frequency of imported commodities, international trade and regulatory systems that influence the effectiveness of warehouse use, there are other variables that influence it, including:

- 1) Warehouse Management System: (Harsono, 2020) and (Nugraha et al., 2021).
- 2) Information Technology: (Nurrahman et al., 2019) and (Senduk & Sitokdana, 2022).
- 3) Customer Satisfaction: (Endang & Sugiyanto, 2019) and (Widodo et al., 2023).

CONCLUSION

Based on the problem formulation, results and discussion above, the conclusions of this research are:

1. Loading and unloading equipment influences the effectiveness of warehouse use.
2. The frequency of imported commodities influences the effectiveness of warehouse use.
3. International trade influences the effectiveness of warehouse use.
4. The regulatory system influences the effectiveness of warehouse use.

REFERENCES

- Adawiyah, R. (2022). Faktor-Faktor Yang Mempengaruhi Efektivitas Pengelolaan Gudang. *Jurnal Bisnis, Logistik Dan Supply Chain (BLOGCHAIN)*, 2(2), 72–77.
- Ali, H., & Limakrisna, N. (2013). Metodologi Penelitian (Petunjuk Praktis Untuk Pemecahan Masalah Bisnis, Penyusunan Skripsi (Doctoral dissertation, Tesis, dan Disertasi. In *In Deepublish: Yogyakarta*.
- Aprilia, A., Anggara, R., Kusbiantoro, A. F., & Witardi, R. J. (2023). Perkembangan Sistem Resi Gudang Di Indonesia Dan India. *Diponegoro Private Law Review*, 8(1), 82–96.
- Astuti, S. D., Angraini, T. N., Firdaus, I. M., Nurochman, T., Sahara, S., & Verawati, K. (2023). Pengaruh Moda Transportasi Darat Terhadap Kelancaran Bongkar Muat. *Jurnal Ilmiah Wahana Pendidikan*, 9(13), 599–607.
- Azis, V. A. A. (2021). ANALISIS TERHADAP LARANGAN EKSPOR BIJIH NIKEL KADAR RENDAH BERDASARKAN PRINSIP RESTRIKSI KUANTITATIF. *Hukum Pidana Dan Pembangunan*, 1–10.
- Brahmana, D. M. B. (2023). *PENGARUH TATA LETAK, PERALATAN DAN SUMBER DAYA MANUSIA TERHADAP EFEKTIVITAS BONGKAR MUAT DI PUSAT LOGISTIK BERIKAT PT. SRICON LOGISTIK SEMARANG*. Universitas Diponegoro.
- Endang, E., & Sugiyanto, S. (2019). Pengaruh Fasilitas Dan Kualitas Pelayanan Terhadap Kepuasan Pengguna Gudang Komoditi Sistem Resi Gudang Kabupaten Bojonegoro. *JPIM (Jurnal Penelitian Ilmu Manajemen)*, 4(3), 1031–1042.
- Gani, A. (2017). The Logistics Performance Effect in International Trade. *The Asian Journal of Shipping and Logistics*, 33(4), 279–288. <https://doi.org/10.1016/j.ajsl.2017.12.012>
- Gultom, S., Sihombing, S., Chairuddin, I., Sirait, D. P., Pahala, Y., Setyawati, A., & Susanto, P. C. (2022). Kompetensi TKBM Dalam Mewujudkan Pelayanan Bongkar Muat yang Lebih Efisien dan Efektif di Pelabuhan Cirebon. *ABDI MOESTOPO: Jurnal Pengabdian Pada Masyarakat*, 5(1), 127–132. <https://doi.org/10.32509/abdimoestopo.v5i1.1825>
- Harahap, V. N., Susanto, C., Strategi, M., Aplikasi, :, Perusahaan, P., Udara, C., Bandara, D., Memenangkan, U., & Bisnis, P. (2020). Strategic Management: Applications In Air Cargo Companies at the Airport To Win Business Competition. *Jurnal Ilmiah Kedirgantaraan*, 17(2), 81–90.
- Harsono, G. (2020). Analisa Dan Perancangan Sistem Manajemen Gudang Pada Perusahaan Jasa Maklon/E-Contract Manufacturing (Studi Kasus: CV. Sakura Satrya Jaya). *JUSIBI (Jurnal Sistem Informasi Dan Bisnis)*, 2(3), 374–390.
- Ikaningtyas, M., Andarini, S., Maurina, A. C., & Pangestu, I. A. (2023). Strategi dan

- Kebijakan Ekspor Impor atau Perdagangan Internasional terhadap Pertumbuhan Ekonomi Indonesia. *El-Mal: Jurnal Kajian Ekonomi & Bisnis Islam*, 4(6), 160–165.
- Ko, Y. D. (2016). An airline's management strategies in a competitive air transport market. *Journal of Air Transport Management*, 50, 53–61.
<https://doi.org/10.1016/j.jairtraman.2015.10.005>
- Kumar, P., Aziz, S., & Khan, A. M. (2023). THE INFLUENCE OF WAREHOUSE MANAGEMENT SYSTEMS ON SUPPLY CHAIN EFFICIENCY : A CASE STUDY OF THE ONLINE GARMENT SUPPLIER ' S THE INFLUENCE OF WAREHOUSE MANAGEMENT SYSTEMS ON SUPPLY CHAIN EFFICIENCY : A CASE STUDY OF THE ONLINE GARMENT SUPPLIER ' S EXPERIENC. *International Journal of Economics, Commerce and Management*, 11(10), 159–168.
- Listiyan, E., & Subhiyakto, E. R. (2021). Rancang Bangun Sistem Inventory Gudang Menggunakan Metode Waterfall Studi Kasus Di Cv. Aqualux Duspha Abadi Kudus Jawa Tengah. *KONSTELASI: Konvergensi Teknologi Dan Sistem Informasi*, 1(1), 74–82.
- Martinetta, M. V. (2023). *EFEKTIVITAS PENGGUNAAN WAREHOUSE MANAGEMENT SYSTEM (WMS) PADA GUDANG DIAMOND PT RITRA CARGO SEMARANG*. Universitas Diponegoro.
- Novita, D., Arnas, Y., & Supriyadi, A. (2020). KAJIAN SISTEM KEAMANAN DI SECURITY CHECK POINT (SCP) 2 BANDAR UDARA INTERNASIONAL MINANGKABAU PADANG Dian. *Jurnal Ilmiah Aviasi Langit Biru*, 13(1), 105–116.
<https://doi.org/10.21608/pshj.2022.250026>
- Nugraha, F. F., Kustian, N., Kom, M., Auliya, R. N., & Pd, M. (2021). Sistem Informasi Manajemen Gudang Pada PT. Datindo Infonet Prima Bekasi. *Jurnal Nasional Komputasi Dan Teknologi Informasi*, 4(5).
- Nurrahman, A. A., Rukmana, O., & Fauzi, I. A. (2019). Perancangan Sistem Informasi Gudang Barang Jadi di PT Remaja Rosdakarya. *ETHOS: Jurnal Penelitian Dan Pengabdian Kepada Masyarakat*, 7(1), 143–150.
- Patiung, R., Darma, R., & Brasit, N. (2018). Peranan Peti kemas Dalam Menunjang Ekspor Impor Komoditi Hasil Pertanian Di Pelabuhan Soekarno Hatta Makassar. *Pasca. Unhas. Ac. Id.*
- Senduk, H. Y., & Sitokdana, M. N. N. (2022). Perancangan Sistem Informasi Pencatatan Gudang Berbasis Website (Studi Kasus Slingbag Salatiga). *JATISI (Jurnal Teknik Informatika Dan Sistem Informasi)*, 9(1), 373–383.
- Sinaga, Y. D., & Hermawan, A. A. (2023). INCREASING THE COMPANY'S PROFITABILITY AND COST EFFICIENCY THROUGH THE IMPLEMENTATION OF ACTIVITY-BASED MANAGEMENT, VALUE CHAIN, AND PESTEL. *Akurasi: Jurnal Studi Akuntansi Dan Keuangan*, 6(2), 287–309.
- Sucita, S., & Prasetya, M. N. (2021). KERJASAMA INDONESIA-SINGAPURA DALAM EKSPOR IMPOR KOMODITAS PERTANIAN 2013-2018 Indonesia-Singapore Cooperation In The Import Export Of Agricultural Commodities 2013-2018. *Jurnal FISK*, 2(1).
- Suhada, R. F., Yustanto, R., & Puariesthaufani, A. (2023). EFEKTIFITAS PENGGUNAAN APLIKASI GUDANG ONLINE DALAM PERSEDIAAN MATERIAL DI PLN ULP KISARAN. *J-Com (Journal of Computer)*, 3(3), 213–220.
- Sumadi, T. R. D., & Nurkhamid, M. (2022). Pengaruh tarif bea masuk , profil importir , frekuensi impor , fasilitas kepabeanan , dan nilai pabean pada tax evasion di bidang kepabeanan. *Fair Value : Jurnal Ilmiah Akuntansi Dan Keuangan*, 5(5), 2105–2117.
- Susanto, P. C., Ali, H., Sawitri, N. N., & Widyastuti, T. (2023). Strategic Management : Concept , Implementation , and Indicators of Success (Literature Review). *Siber*

- Journal of Advanced Multidisciplinary*, 1(2), 1–11.
- Susanto, P. C., & Keke, Y. (2020). Implementasi Regulasi International Civil Aviation Organization (ICAO) pada Penerbangan Indonesia. *Aviasi : Jurnal Ilmiah Kedirgantaraan*, 16(1), 53–65. <https://doi.org/10.52186/aviasi.v16i1.23>
- Susanto, P. C., Sakti, R. F. jaya, & Widiyanto, P. (2020). Alat Bantu Pendaratan Visual Di Airport Untuk Mendukung Keselamatan Pesawat. *AVIASI Jurnal Ilmiah Kedirgantaraan*, 17(1).
- Widodo, A. P., Ayowembun, I. V., & Sukmadewi, R. (2023). Analisis Kepuasan Internal Customer Pada Pendistribusian Gudang PT Eigerindo Multi Produk Industri. *JOMBLO: Jurnal Organisasi Dan Manajemen Bisnis Logistik*, 1(1), 138–150.
- Widyadana, F. A., & Evanthi, A. (2023). Analisis penerapan manajemen pergudangan pada cv. yummys motherlacto indonesia. *Jurnal Pengabdian Masyarakat Indonesia*, 1(2), 10–22.