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Enhancing Export Delivery Performance: Strategic Interventions for Overcoming Late Deliveries in Malaysia's Food Trading Company

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Abstract: The present study focuses on a prominent food trading company in Malaysia, which boasts a strong market presence and a commitment to quality in diverse Southeast Asian markets. Despite its strong market presence, the food trading company struggles with significant delays in delivering its export items, adversely impacting customer satisfaction and competitive advantage. The identified delivery performance discrepancies in certain Southeast Asian countries highlight a critical area for investigation. Thus, this study aims to identify the underlying causes of these late deliveries and propose strategic solutions to enhance delivery efficiency. Employing a qualitative case study methodology, the investigation involves semi-structured interviews with ten experienced company employees selected through a purposive sampling technique. The analysis followed a rigorous qualitative data analysis procedure, including data reduction, data display, drawing, and verifying conclusions. The findings reveal four primary causes of late delivery: *1) INACCURATE INFORMATION, 2) INEFFICIENT PRODUCTION PROCESS, 3) TRANSPORTATION SCHEDULING,* and *4) LIMITATION OF THE SYSTEM.* To address the causes, the study recommends *INTEGRATING SYSTEM INFORMATION* to resolve the issues of *INACCURATE INFORMATION and LIMITATION OF THE SYSTEM,* alongside *RESOURCING ALTERNATIVE SHIPPING AGENTS* as a strategic approach to overcome *INEFFICIENT PRODUCTION PROCESS* and *TRANSPORTATION SCHEDULLING*. The findings advocate that the top management of the food trading company to embrace system integration and establish partnerships with reliable transportation agencies to address immediate late delivery concerns. Implementing these strategies will not only address issues of late deliveries but also enhance its export delivery performance, ensure customer satisfaction, and maintain its international market leadership.

Keywords: *Late Delivery, Export Items, Food Trading Company, Ishikawa Diagram, Integrated System*

1. Introduction and Background

Logistics, as the backbone of supply chain operations, consists of the movement, storage, and handling of goods. This process, usually managed by skilled and experienced logisticians, is vital for ensuring timely and accurate delivery. Logistics commonly encompasses two key aspects: upstream and downstream. The upstream, also known as material management (Slam et al., 2023), involves sourcing, acquiring, and maintaining inventory starting from raw materials. On the other hand, downstream logistics focuses on physical distribution, including the transportation and processing of company orders (Obiero, 2019; Saleheen & Habib, 2023). The downstream logistics are crucial as they directly affect the delivery of goods to customers, highlighting transportation as a tactical strategy in bridging the suppliers to customers. However, the challenge lies in ensuring the delivery of goods is timely, accurate, and meets quality standards, a task often beset with competitive and operational hurdles (Pott et al., 2023). Therefore, addressing these challenges is crucial for companies that aim to maintain efficiency and customer satisfaction in the increasingly competitive food trading industry.

The selected food trading company in this research has been in Malaysia's market for nearly 25 years. The company aims to provide high-quality products and services that enhance people's lives, including health foods, supplements, household items, and skincare products. The food trading company, with nearly 180 employees possessing diverse talents, operates by the Direct Selling Association of Malaysia's (DSAM) guidelines. Its distribution center appropriately complies with Good Distribution Practice for Medical Devices (GDPMD) practices. The products and services of the food trading company are distributed locally and internationally. Specifically, they are exported to countries in Southeast Asia.

To safeguard its competitive advantage and market position, the food trading company must adopt several strategies to retain its customers' loyalty from shifting to other brands (Rathore et al., 2023). One of the key strategies is on-time delivery, which requires optimization of inter-department process flows, effective implementation of robust shipment preparation, and thorough delivery planning (Pott et al., 2023). Nevertheless, the data on the export items delivery performance of the food trading company across nine Southeast Asian countries revealed discrepancies, specifically in Cambodia and the Philippines, where late deliveries were notably evident. It is reported that the delivery performance of Cambodia and the Philippines is 91.00% and 87.00%, respectively. Thus, the regional overall delivery performance for 2022 is 97.56% out of 100%, falling short of the management team's Key Performance Index (KPI) of 100% on-time delivery for each country. This shortfall led to significant dissatisfaction with the food trading company's management team, prompting a thorough investigation into the underlying causes of these delivery delays.

These delivery delays caused the food trading company to pay additional transportation and operation costs to resolve the implication. The company may have to pay penalties for breaching contractual delivery deadlines and additional shipping and storage fees, resulting in losses or decreased profit due to unavailable stock. These consequences are also mentioned by Fan et al. (2023), who emphasized the significant impact of late delivery on firms. They noted that disruptions caused by delays not only incur substantial costs for the firm but also negatively affect its investors. Furthermore, the delayed delivery of export products can result in pressure and conflicts between the food trading company and its customers. This adversely impacts customer satisfaction and potentially drives them to seek products from competitors (Dündar & Öztürk, 2020). By realizing the above scenario, this study thus aims to 1) identify the causes of the late delivery of export items within the food trading company. Subsequently, 2) it proposes some practical recommendations for resolving the issue of delayed delivery of export items in the company.

2. Literature Review

Logistics Management for Export Items: Critical elements are crucial in logistics service networks, particularly those focused on managing export items and aiming for resilient operations, as Chen et al. (2022) indicated. These networks involve the efficient and effective movement of export goods along the supply chain, encompassing participants ranging from suppliers to end customers. Effective logistic management in the context of export items is crucial as it could assist in reducing operational costs, enhancing inventory control, and boosting production rates. This efficiency is significant for the timely and cost-effective transportation of export items, which are often subject to strict deadlines and quality standards. Moreover, increasing overall efficiencies significantly improves customer experiences and satisfaction levels for suppliers and international customers. Furthermore, in the competitive realm of global trade, robust logistics management of export items provides a tangible competitive advantage, ensuring the company's ability to meet diverse market demands and maintain its standing in the international marketplace.

A few researchers, such as Abdallah et al. (2021) and Jonsson et al. (2024), conducted studies by exploring various perspectives regarding the company's delivery activities of export items. For instance, a study by Abdallah et al. (2021) underscores the critical role of supply chain integration as a key component in enhancing the delivery performance of export items. Nevertheless, it is important to note that any delay in the delivery of export items may have a ripple effect, impacting various stakeholders within the supply chain network (Li, 2019).

Late Delivery: Delivery processes consist of several critical activities, including the preparation of a goods travel document, the physical transportation of exported items, and ensuring accurate quantities are transferred from the shipper to the carrier and, ultimately, to the customers. The commitment to on-time delivery leads to the development of a reliable and robust relationship between the company and its customers, as is seen as a marker of operational excellence (Niemi et al., 2020). Moreover, following scheduled delivery times is essential to comply with international trade regulations. In cases where export items are delivered late, companies may need to identify alternative solutions, such as arranging for additional shipments with expedited delivery to fulfill the customer's demand.

Late delivery could be described as the duration beyond the agreed-upon delivery time that the shipper takes

to deliver goods. In the context of export items, such delays might increase transportation and operational costs, which will affect the company's profitability, diminishing customer satisfaction and potentially encouraging customers to switch to competitors who consistently deliver on time, as mentioned by Kusrini et al. (2020). In addition, the authors discovered that late delivery is caused by various factors. These include late booking, constraints in supplier production capacity, transportation inefficiencies, delays in material delivery, production process bottlenecks, and trucking issues, among other significant elements. Delays in delivering items to consumers can result in two significant consequences. Firstly, it can result in financial penalties or fines for failing to meet delivery schedules or deadlines (Bhattacharyya et al., 2023). Secondly, in the context of perishable goods, such delays may cause sanitation issues, compromising the quality and safety of the products (Bandoophanit & Pumprasert, 2022).

Factors of Late Delivery for Export Items: In their comprehensive review, Jonsson et al. (2024) underscored that previous studies have extensively explored various factors that may contribute to inconsistent delivery schedules for export items. These factors are categorized into two groups, which are external and internal factors. External factors include demand and supply, such as market fluctuations and supplier reliability. On the other hand, internal factors consist of product-specific characteristics and manufacturing-related variables such as production capacity and process efficiency. Jonsson et al. (2024) also highlighted that a critical aspect that has usually been overlooked in supplier relationships is the preparedness of supply chains to handle disruptions and the complexity of transportation dynamics. These elements are paramount in understanding the roots of delivery schedule instability and late delivery of export items.

Other key factors that may lead to the late delivery of export items include the mode of transportation, transit time, adherence to customs, and regulatory compliance. Additionally, the accuracy and timeliness of shipping documents are crucial to sustain customer satisfaction and maintain the company's competitiveness in the market. Despite the importance of on-time delivery in international trade, there remains limited research to identify and address the factors that influence the late delivery of export items. For instance, a study by Akalanka (2020) highlighted the impact of transportation in determining the timeliness of exports. The study also explains that the choice of transportation mode directly affects various aspects such as transit time, costs, and the distance over which goods must be delivered. Sea shipping, for example, offers a cost-effective solution. It typically involves longer transit times compared to air freight. Alternatively, air freight, though significantly faster, incurs higher costs than sea shipping. These transportation dynamics play a crucial role in the timely delivery of export items and consequently improve the efficiency of the global supply chain.

Customs and regulatory compliance are other factors that can influence the late delivery of export items. Proper labeling, packaging, acquisition, and authorization of relevant documents, such as import and export permits, are essential for compliance before and after export items enter the destination country. The meticulous preparation ensures a more efficient processing of goods through customs at their destination. Moreover, the timely provision of shipping documents is vital for the seamless delivery of export items. The document encompasses commercial invoices, packing lists, Bills of Lading (BL), and relevant tax exemption documents, which must be ready, available, and accurately prepared to meet the demands of customs clearance procedures.

Marpaung (2021) highlights the significance of efficiently managing export documentation as a critical factor in the delivery process. This includes not only the prompt handling of these documents but also ensuring their accuracy to facilitate efficient customs clearance. Accurate documentation is essential to avoid costly amendment and penalty charges that emerge from errors or discrepancies. The efficiency and precision in handling these regulatory and documentation aspects are fundamental in preventing delays and ensuring the prompt delivery of export items.

Recommendation for Late Delivery of Export Items: Previous researchers have proposed several suggestions and viewpoints to enhance delivery performance, specifically transitioning from late to on-time delivery. A key area of focus is improving order processing time. This involves streamlining the process by eliminating redundant or unnecessary steps and simplifying the order processing sequence. By doing so, the efficiency of the overall delivery process can be significantly increased.

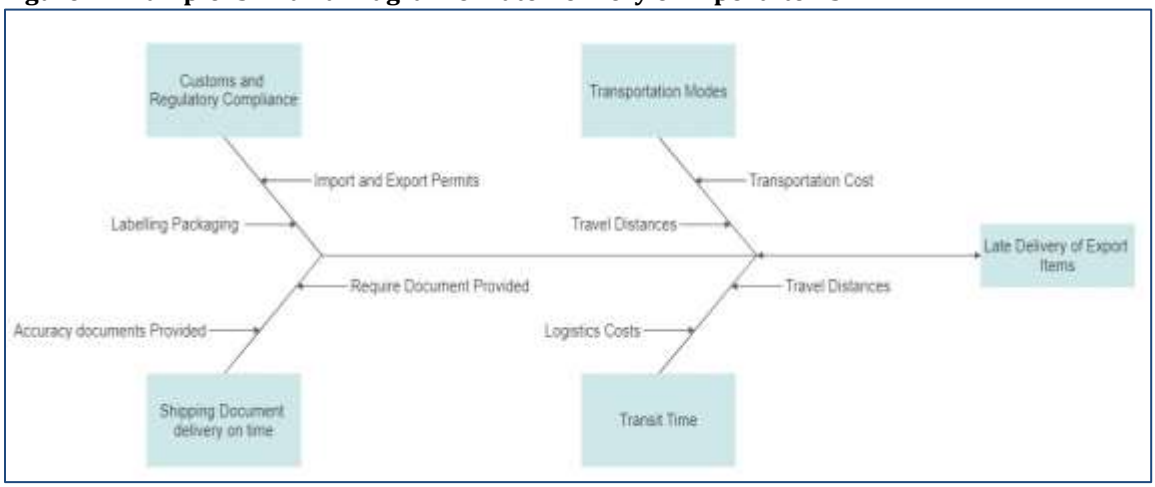
Cichosz et al. (2020) recommended leveraging digital transformation to minimize reliance on manual labor in

transportation, logistics, and warehousing. This approach enhances visibility across multiple tiers of the supply chain, facilitating more efficient and effective operations. For example, trackable delivery progress could be improved by developing an online tracking portal. The online tracking portal can consolidate data on shipment progress so that customers can monitor the delivery progress. Customers can be provided with tracking options to monitor the progress of their delivery shipments. Trackable delivery progress allows the food trading company to proactively handle late delivery of export items to enhance customer satisfaction and confidence in the business deal.

Another aspect of addressing late delivery of export items involves retaining or preserving recipients' delivery addresses. The validation and accuracy of recipient delivery addresses could lead to efficient delivery performance by transporters. It avoids incorrect delivery and guarantees that the items are delivered to the correct location. In addition, registering both items and documents with the recipient's delivery address ensures compliance with the regulatory requirements of the destination country. This practice eliminates delays and additional processes often arising from inaccuracies in the delivery addresses of export items destined for local markets.

Ishikawa Diagram: The Ishikawa diagram is also known as the fishbone diagram, as its shape is like a fishbone. The Ishikawa or fishbone diagram aims to identify possible causes of the issue to improve the event, which categorizes different causes into the branches in the simulated fishbone. Das et al. (2020) explained the steps of using the fishbone diagram, beginning with identifying the problem, preparing the significant factors involved, identifying the possible causes of the event, and analyzing the diagram. The Ishikawa fishbone technique is applied in this study to evaluate the cause-and-effect that led to the late delivery of export items in a food trading company.

Figure 1: Example Ishikawa Diagram of Late Delivery of Export Items



3. Research Methodology

This study employed qualitative methods, leveraging the case study methodology to delve deeply into the factors influencing the late delivery of export items at the food trading company. The qualitative approach is chosen due to its strength in obtaining in-depth exploration and understanding of the factors (Creswell & Creswell, 2018). In addition, the case study method illuminates the details of the circumstance and provides a comprehensive framework for analyzing and interpreting the data within the food trading company.

The population of the study comprises 180 individuals working across various departments within the food trading company. For the present study, the purposive sampling technique was utilized to select participants who possess specific expertise and experience related to the delivery process to gain knowledge about the studied phenomena (Sekaran & Bougie, 2019). This sampling technique was deployed to ensure that the data collection process achieved the research's aims. The participants who are directly involved in the food trading

company's delivery process in the company were targeted to gather relevant data that pertains to the research topic. The participants have approximately 7 to 30 years of working experience, and their job designation ranges from coordinator to manager.

The participants for the interview session are required to provide detailed feedback related to their job scope, explicitly focusing on routine delivery activities, as observed and identified by the researcher for the study. On that note, a semi-structured interview session was used to collect the data from the participants. The interview sessions with the participants were conducted face-to-face for 45 minutes to one hour. The interview session was recorded with the participants' agreement, and if the participants refused to be recorded, then effective note-talking was utilized. During the interview sessions, open-ended questions related to the late delivery of export items were asked to gather various perspectives from the selected participants.

Feedback from the participants was then carefully transcribed. The transcription was then analyzed by using the three main steps of qualitative data analysis as suggested by Hashimov (2015), which are, 1) Data reduction, 2) data display, 3) data drawing, and verifying conclusions. Data reduction involves organizing qualitative data obtained through interviews and observations. The data displayed in this study was demonstrated using the Ishikawa diagram to illustrate potential factors and sub-factors affected by the late delivery of export items for problem-solving. Drawing and verifying conclusions are the final analytical activity in this study, where all factors and sub-factors highlighted by the participants during the interview session are illustrated in the fishbone or Ishikawa Diagram.

Profile of Respondents: Initially, 11 individuals were contacted for participation. However, only ten agreed to participate in the interview session, aligning with Opara et al. (2021), who suggest this is an appropriate sample size for qualitative research. The participants' demographic information, including job designation, gender, age, and working experience, is exhibited in Table 1.

Table 1: Respondents' Demographic Information

Participant	Job Designation	Gender	Age (years)	Years of Working
R1	Senior Executive Warehouse	Female	40-49	20
R2	Distribution Manager	Male	50 ≥	30
R3	Logistics Supervisor	Male	30-39	10
R4	Logistics Coordinator	Female	30-30	8
R5	Warehouse Manager	Male	50 ≥	20
R6	Operation Manager	Female	40-49	7
R7	Logistics Manager	Female	50 ≥	7
R8	Quality Management Manager	Male	40-49	10
R9	Procurement Assistant Manager	Female	40-49	4
R10	Senior Executive Logistics	Male	30-39	13

4. Findings

This section will explain the findings of the study according to its aim, which is firstly to identify the causes of the late delivery of export items within the food trading company. Secondly, some practical recommendations for resolving the issue of delayed delivery of export items in the company are proposed.

Findings for Research Aim 1: This section discusses the findings of the first research aim by highlighting the causes of food trading companies' late delivery of export items. The collected data confirms that the food trading company has experienced late delivery for their export items, which was agreed by 80% (n=8) of the participants. In contrast, 20.0% (n=2) of the participants deny the occurrence of late delivery in the company. The finding aligned with the statement of the company's distribution manager, who asserted that the company faced late delivery for the export items during the interview session. He said, "Yes, our company faced late delivery." During the interview sessions, it was also discovered that the food trading company utilizes Key Performance Indicators (KPIs) to evaluate on-time delivery activities for their export items. All participants (n=10) unanimously acknowledged that the food trading company used KPIs to measure and evaluate the

performance of on-time delivery activities for its export items.

The findings from the interview sessions have identified the causes of the late delivery of the export items, as presented in Table 2 below. Four factors were identified which are 1) *INACCURATE INFORMATION*, 2) *INEFFICIENT PRODUCTION PROCESS*, 3) *TRANSPORTATION SCHEDULING*, and 4) *LIMITATION OF THE SYSTEM*. A detailed explanation of the factors and sub-factors is further elaborated in Table 2.

Table 2: Causes and Sub-causes of The Late Delivery of the Export Items

Causes	***Sub-Causes***	***Sub causes Definition***
1) Inaccurate Information	*Inaccurate delivery due to recipient Information*	*The address is provided incorrectly, causing incorrect delivery*
	Incorrect package order	*Lead delivery attempt due to incorrect package order*
	The incorrect shipping addresses on the consignment	*Shipping information, such as contact and lot numbers, was not updated*
	Incorrect delivery information provided	*Buyers might give inaccurate contact details.*
	The exporter and importer did not communicate important information	*Late deliveries were due to a non-conformance, but the non-conformance was not being communicated properly*
	International shipment without proper documentation	*The necessary documents could be presented inaccurately or missing upon arrival at customs at the destination.*
2) Inefficient Production Process	*Late picking and packing*	*Item out of stock, delays in picking and packing*
	Raw materials supply	*Delay supply of materials for process continuation*
	Sequencing activities	*Activities vary by country.*
	Insufficient manpower	*Flexible working hours may cause late delivery during festival sessions.*
3) Transportation Scheduling		
	Realistic vessel schedule	*Late vessel schedule affects production progress.*
	No schedule	*A shipping schedule is needed, but the vessel was unavailable on the scheduled date.*
	Delayed shipping for finished products	*Shipping delay impacts party processes.*
4) Limitation of the System	*The system is down*	*Goods received to insert into the system were down, which affected the progressive sequence activities and caused the stock from the supplier not to be on time to receive stock.*
	System multifunctional impacting communication breakdown	*System issues due to communication breakdown between exporter and importer along the supply chain*
	Lack of sufficient system for transaction activity	*ERP may not be compatible with other export markets and their systems, resulting in late delivery. The non-conformant was detected and informed to the other department, involving another department's authority and approval.*

Causes 1: *INACCURATE INFORMATION* emerged from the interview sessions as one of the factors that caused the late delivery of export items in the food trading company. Six participants, ranging from the supervisor, senior executive, and manager, voiced similar opinions related to *INACCURATE INFORMATION*. During the interview, the operations manager, with seven years of working experience in delivery activities, explained *INACCURATE INFORMATION* more clearly than the other participants.

She said the *INACCURATE INFORMATION* caused by the wrong address or uncontactable recipients may have contributed to late delivery. She pointed out how incorrect information can result in the late delivery of export items. As a result, her operation team might require assistance from the office staff to contact the customer and confirm the delivery details when the delivery person gets close to the customer's location. She shared, *"There are some issues with some of our customers or purchasers. Sometimes they provide us with wrong information or address."* She also added, "Sometimes the product is sent to the address stated, but the address is wrong."

A warehouse manager provided another perspective about *INACCURATE INFORMATION*. He explained, "*The shipping consignment notes do not state the address correctly*. *Sometimes, the operation team member missed out on some information, such as the contact number and lot number, and as a result, we faced difficulties in identifying the location."*

Another situation that leads to late delivery of import items is also shared by the warehouse manager. He explained, "When we have an issue of inaccurate information, the delivery man will return the item to the warehouse. At the warehouse, the operations team consults with customer service to verify the correct customer details before reshipping. The customer service department then reviewed the information and emailed us the corrected delivery address. Resolving this issue will take one to two days, resulting in delayed delivery to the customer."

Cause 2: *The second factor causing the late delivery of export items at the food trading company was the INEFFICIENT PRODUCTION PROCESS, which was identified in the interview sessions. Four participants in managerial positions emphasized the INEFFICIENT PRODUCTION PROCESS* from various perspectives.

The warehouse manager, who has almost 20 years of working experience related to delivery activities, voiced a statement that insufficient manpower was observed as a sub-cause with regard to *INEFFICIENT PRODUCTION PROCESS*. He said, "*Implementing flexible working time has resulted in a manpower shortage. This issue has always occurred at our operational site, especially during the festive season, leading to potential operational disruptions".* Thus, as a backup, the production department must bring in extra staff from other departments to ensure the delivery process runs smoothly, particularly during festive seasons.

Moreover, the distribution manager noted that any delays in the picking and packing process are considered inefficient in the production process. He worries that late picking and stock packing would impact the delivery of export items within the food trading company. He emphasized the importance of immediate picking and packing for order fulfillment, depending on the availability of stocks. The distribution manager highlighted, "*In the warehouse, delays in picking and packing often occur when items are out of stock or unavailable. Having stock readily available streamlines the warehouse's picking and packing process, enabling efficient processing of incoming orders. This ensures timely delivery".*

Cause 3: *TRANSPORT SCHEDULING* is another cause of late delivery identified from the interview sessions. Some relevant feedback was voiced by the logistic and operation managers who experienced delayed shipping schedules. The logistics manager pointed out that the transporter's vehicle failed to follow the schedule timeline. As such, any changes made during the delivery were outside the food trading company's control. The logistics manager said, "*The transporter picked up export items and later notified us of a delayed shipping schedule.*" She also added, "*The delayed shipping inevitably results in late receipt of items by the recipient. As such, the company must maintain close communication with the transporter to monitor the shipping schedule accurately".*

Another opinion offered by the operation manager is that the availability of vessel schedules may cause delays in the delivery of export items. Considering this perspective is crucial to ensure that orders are fulfilled on time. She asserted*, "Sometimes the issue arises from our forwarding agent or service provider, who encounters problems with vessel scheduling. Alternatively, they lack a schedule that would enable us to ship or deliver our product to our customers."*

Cause 4: During the interview session, it was also discovered that *SYSTEM LIMITATION* emerged as another

factor that caused the late delivery of export items within the food trading company, particularly on the compatibility issue. Moreover, three sub-factors were identified from *SYSTEM LIMITATION: the system is down, the system issues experienced in the warehouse, and the lack of a sufficient system* for transaction activity. Some participants, who are senior executives and managers of the food trading company, pointed out that the system frequently contributes to delays due to its significant limitations. As a result, the participants anticipated urgent improvement in the system as feedback.

The senior warehouse executive with 20 years of experience in delivery operations emphasized that any system downtime would result in delayed deliveries. She said, *"Sometimes the system is down, sometimes the load is too heavy for the system. So, it causes a delay to the delivery."* The distribution manager, with 30 years of experience in delivery activities, said, *"At the warehouse, the system issues have caused a communication breakdown between exporter and importer along the supply chain."*

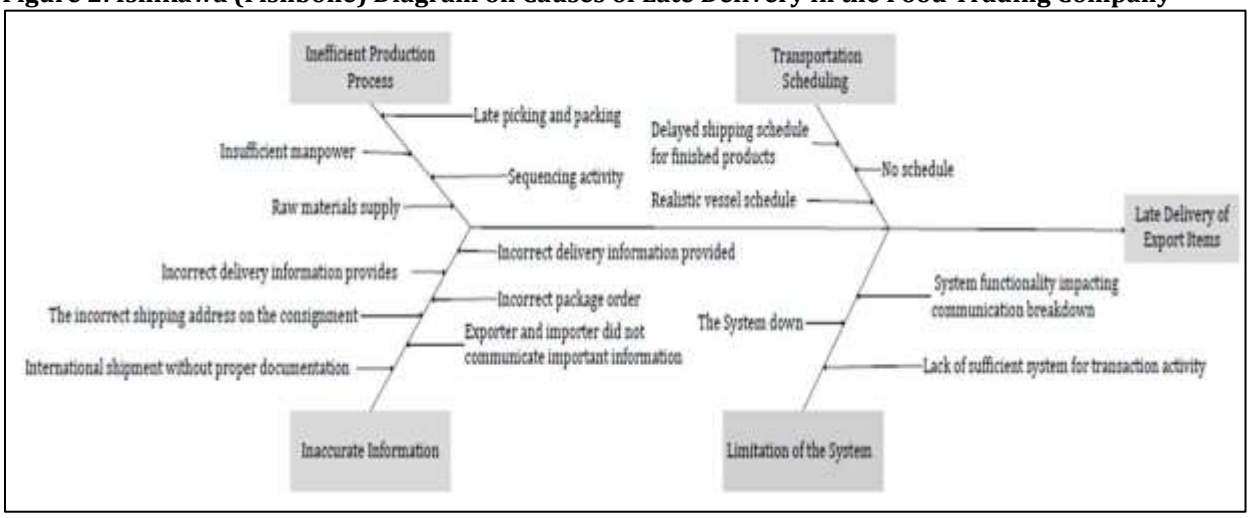
Similarly, the quality management manager with ten years of experience in delivery activities explained, *"The system may not be compatible with the other export market we intend to access. Thus, we may need to adopt other approaches, whether manual or a different system. This lack of compatibility, along with the end users' or another country's software unfamiliarity, can lead to delays in deliveries".*

Causes Illustrated in an Ishikawa or Fish Bone Diagram

The findings discovered in the interview sessions are then presented in the Ishikawa or Fish Bone Diagram. This graphic tool organizes and categorizes the causes into different branches, making understanding the issue and solution easy. In the Ishikawa diagram presented in Figure 2, four factors that caused the late delivery of export items within the food trading company are presented and placed at the four main branches. The causes are *INACCURATE INFORMATION, INEFFICIENT PRODUCTION PROCESS, TRANSPORTATION SCHEDULING, and SYSTEM LIMITATIO*N.

Figure 2 also shows that each identified cause or branch is elaborated upon through its respective sub-causes or sub-branches, such as *LIMITATION OF THE SYSTEM*. The cause encompassed sub-causes, including the system being *down*, *issues encountered by the system*, and *lack of a sufficient method for transaction activity*. These sub-causes highlight participants' different perspectives on the *LIMITATION OF THE SYSTEM*. The sub-causes have been clearly explained in section 4.1 and presented in Table 2.

Figure 2: Ishikawa (Fishbone) Diagram on Causes of Late Delivery in the Food Trading Company



Finding for Research Aim 2

This section will discuss the findings related to the second research aim of the study. It focuses on identifying solutions to address the causes of the food trading company's late delivery of export items. The solutions proposed by the participants to address the identified causes are 1) *INTEGRATING SYSTEM INFORMATION* and 2) *RESOURCING ALTERNATIVE SHIPPING AGENTS*.

Solution 1: The recommendations provided by the participants primarily focused on *INTEGRATING SYSTEM INFORMATION*, which is the primary solution to address two identified causes, including *INACCURATE INFORMATION* and the *LIMITATION OF THE SYSTEM*. This recommendation is essential for achieving timely and precise deliveries, therefore enhancing delivery performance through improved system capabilities. By refining delivery process activities and incorporating critical information, the system's effectiveness can be significantly improved. Moreover, *INTEGRATING SYSTEM INFORMATION* will allow related stakeholders, including customers, operations team, exporters, and importers, to monitor and track delivery activities. Thus, each stakeholder can accurately access vital information, leading to enhanced delivery efficiency.

Improving the system's capability will also reduce the occurrence of *INACCURATE INFORMATION*, benefiting the managers' experiences. One of the participants expressed concern about the necessity of verifying and correcting received data or information before initiating the delivery process. He emphasized, *"We make it a priority to confirm that the orders we receive from customers contain the correct information before we proceed with the delivery."*

Substantial evidence also supports the recommendations of managers and senior executives regarding solutions to address the cause of the *LIMITATION OF THE SYSTEM*. The distribution manager proposed employing reliable logistics software to schedule orders and shipments: *"Adopting information software, such as automatic planning software, can accelerate the preparation of deliveries. Such software simplifies the planning process, especially contributing to more on-time delivery."*

INTEGRATING SYSTEM INFORMATION can also address the issue of customers needing to use different systems in various geographical locations. The quality management manager shared his experience with *INTEGRATING SYSTEM INFORMATION. "With regard to the system, I have experienced good results from companies that develop a single software to accommodate all exporters. So, whenever an exporter A sends a file, the system automatically processes all the contained information. Thus, both the sender and the receiver can access and interpret the information timely and accurately*."

Solution 2: Another recommendation provided by the participants focused on *RESOURCING ALTERNATIVE SHIPPING AGENTS* as the solution to address *INEFFICIENT PRODUCTION PROCESS* and *TRANSPORTATION SCHEDULING*.

The managers and senior executives recommended several suggestions to address the *INEFFICIENT PRODUCTION* PROCESS. As per the findings, the warehouse manager has a practical solution to optimize manpower and increase delivery efficiency, i.e., the warehouse department must update the customer service department on late delivery occurrences. According to the manager, *"Late delivery often occurs due to a manpower shortage. We tried to schedule our staff efficiently to ensure timely stock dispatch. However, sometimes the scheduled staff are not available when needed. In that case, we need to communicate these delays promptly to the customer service department that coordinates our delivery operations".*

In terms of *TRANSPORTATION SCHEDULING*, the managers recommended several suggestions to address the issue. The logistics manager emphasized meticulous scheduling and planning of delivery activities to boost efficiency and guarantee transportation availability. He stated, "*Efficient delivery depends on well-organized scheduling and planning*. *Thorough preparation will enhance the overall efficiency of the delivery process*". Furthermore, the operations manager mentioned that providing customers with up-to-date information will enable them to track transportation progress. He said, "*We consistently update our records and communicate with our customers. We also create contingency plans to address potential issues proactively*.

Discussion

Research Aim 1:

This study aimed to discover the root causes of the late delivery of export items in the food trading company. *INACCURATE INFORMATION, INEFFICIENT PRODUCTION PROCESS, TRANSPORTATION SCHEDULING*, and the *LIMITATION OF THE SYSTEM* were identified as the causes that contributed to the late delivery of export items in the company. These factors required improvement to align with the trading company's KPIs for delivery performance and to ensure the satisfaction of the end customer.

The interview sessions with the participants revealed that *INACCURATE INFORMATION* significantly affects on-time delivery. This finding is consistent with the findings of other scholars, such as Kusrini et al. (2020) and Marpaung (2021), who identified precision and accuracy as areas requiring mitigation to improve the on-time delivery of export items. Most participants in the study also agreed that *INACCURATE INFORMATION* significantly causes late delivery in the company. The finding aligns with Ju et al. (2019) and Abdulla and Musa (2022), who stated that logistics service providers should manage the information flow effectively to regulate the movement of goods within their company. Therefore, accurate information is essential in ensuring punctuality in delivery, particularly for import and export items.

The INEFFICIENT PRODUCTION PROCESS is another factor contributing to the late delivery of export items, identified during interview sessions. The *INEFFICIENT PRODUCTION PROCESS* needs improvement to ensure effective delivery by closely monitoring the production process, particularly the labeling and packing activities. This is because the labels and packaging of the items must comply with various countries' product registration requirements. Failure to comply with the destination country's regulations may delay delivery by three to four working days. Thus, activities in the production process must be executed promptly to prevent the backlog of incoming orders from impacting subsequent picking and packing processes. This is important as *the INEFFICIENT PRODUCTION PROCESS* would lead to additional company resources such *as* processing time, labor hours, capital, and raw materials to fulfill the delivery activities.

TRANSPORTATION SCHEDULING is another essential factor contributing to the late delivery of export and import items to the food trading company. This factor was also emphasized by Obiero (2019) and Huiwen et al. (2023), who highlighted the critical need for an effective transportation schedule for efficient physical distribution to fulfill the trading company's customer demands. The study reaffirmed that the availability of *TRANSPORTATION SCHEDULING* is required for on-time delivery. However, during the interview session, participants of the present study disclosed that the food trading company outsources its transportation activities to an external transportation firm. Thus, this external company is responsible for managing the transportation scheduling for the food trading company. This process is beyond the control of both the food trading company and its customers.

The last factor frequently mentioned by participants that contributes to the late delivery of the export and import items in the food trading company is the *LIMITATION OF THE SYSTEM*. Some participants complained that the existing system could only handle a small volume of orders, which becomes problematic during peak periods. The *LIMITATION OF THE SYSTEM* can result in communication breakdown among related parties involved in the delivery process, potentially leading to significant disruption. Due to this constraint, there is often a need to record the order transaction using manual methods, forms, or other alternative systems. The present finding aligns with the studies by Kusrini et al. (2020) and Obiero (2019). Both studies suggest that optimal integration of information technology is crucial for enhancing information sharing, which is crucial in addressing the issue of late delivery of export items within the food trading company. This integration will lead to real-time and synchronized data, assisting timely and efficient delivery processes that are vital for maintaining sustainable business activity and the food trading company's competitive advantage. Besides, Loh et al. (2024) specifically highlighted that the capability to provide advanced digital solutions is significantly related to enhancing customer satisfaction levels, thus impacting the timeliness and reliability of export item deliveries.

Research Aim 2:

The participants proposed several recommendations to address the causes of the late delivery of the food trading company's export items. The recommendations are 1*) INTEGRATING SYSTEM INFORMATION* and 2) *RESOURCING ALTERNATIVE SHIPPING AGENTS*. The participants emphasized these recommendations during the interview sessions as practical solutions to address the issue of the late delivery of export items in the food trading company.

The *INTEGRATION INFORMATION SYSTEM* is highly proposed by the participant as one of the vital solutions to address the issue of *INACCURATE INFORMATION* and the *LIMITATION OF THE SYSTEM.* The participants suggested that *INTEGRATING SYSTEM INFORMATION* relevant stakeholders, including the warehouse operation team and the customer service department, can more effectively utilize data in delivery activities,

therefore enhancing customer satisfaction. This is because if the issue of *INACCURATE INFORMATION* and *LIMITATION OF THE SYSTEM* is not resolved, it will impact the warehouse's ability to verify customer feedback from the customer service department. This finding aligns with the views of Ju et al. (2019) and Siagian et al. (2020), who pointed out that *INTEGRATING SYSTEM INFORMATION* plays an essential role in effectively managing the flow of goods and enhancing the process of receiving information, thus leading to more efficient and punctual deliveries. The integrated system information acts as a "checks and balances" mechanism, ensuring the preciseness of information and enabling the handling of large order volumes. Besides, *INTEGRATING SYSTEM INFORMATION* supports efficient storage and tracking, which is crucial to monitor delivery performance and enhance system capabilities.

Another recommendation proposed by the participants during the interview session is *RESOURCING ALTERNATIVE SHIPPING AGENTS*. According to the participants, *RESOURCING ALTERNATIVE SHIPPING AGENTS* is the key solution to address *INEFFICIENT PRODUCTION PROCESS* and *TRANSPORTATION SCHEDULING*.

RESOURCING ALTERNATIVE SHIPPING AGENTS with good track records could be an alternative approach to improve the company's delivery operations, especially concerning the late delivery of export items. These alternative shipping agents have the necessary capabilities and expertise to handle delivery tasks effectively, ensuring that operations are handled effectively. Besides, they are equipped with the appropriate facilities, equipment, and resources to guarantee timely delivery to their customers. Furthermore, these shipping agents are committed to investing in value-added services and sophisticated *TRANSPORTATION SCHEDULING* systems to meet customer demand. By partnering with reliable *ALTERNATIVE SHIPPING AGENTS,* the food trading company could improve its delivery operations, mitigating the issue of late deliveries (Obiero, 2019; Huiwen et al., 2023).

5. Managerial Implications and Recommendations

This study offers substantial managerial implications for the food trading company, particularly in addressing the late deliveries of export items to the food trading company. The study identified four main causes of late delivery, namely: 1) *LIMITATION OF THE SYSTEM*, 2) *INACCURATE INFORMATION*, 3) *TRANSPORTATION SCHEDULES*, and 4) *INEFFICIENT PRODUCTION PROCESSES*. To address these identified causes, managers at the food trading company are advised to consider the recommendations proposed by the participants of the study, which is the 1) *INTEGRATION OF SYSTEM INFORMATION*, which can significantly mitigate the risks associated with *LIMITATION OF THE SYSTEM and INACCURATE INFORMATION*. This strategic integration can lead to more accurate forecasting, enhanced decision-making, and, ultimately, more reliable delivery schedules for its export items.

Furthermore, the study suggests *RESOURCING ALTERNATIVE TRANSPORTATION AGENTS* as a practical solution for overcoming obstacles related to *TRANSPORTATION SCHEDULING* and *INEFFICIENCIENT PRODUCTION PROCESSES*. By partnering with shipping agents with good track records, the company can leverage external expertise and infrastructure to ensure more efficient transportation and production workflows. This collaboration not only aims to enhance the punctuality of deliveries of the export items but also contributes to the company's overall operational efficiency.

Thus, it can be concluded that managers of food trading companies should prioritize adopting integrated systems and the strategic selection of transportation partners as essential steps toward improving the delivery performance of export items. Implementing these solutions will not only address the immediate challenges of late deliveries but also guarantee the company’s long-term international competitiveness and customer satisfaction.

With regard to recommendations for future studies, it is advisable to incorporate a large sample size to gain in-depth insights into the topic and recommend approaches to various trends in the trading industry. The identified cause of the late delivery process from the larger sample size could provide a better perspective on maintaining the good delivery performance of the export items.

Besides, future research studies can employ quantitative measurements. The findings of the quantitative analysis would provide significantly solid data to validate the identified factors. Moreover, customer satisfaction analysis should also be an integral part of future studies to analyze the strength of the association between delivery performance and customer satisfaction by exploring the reliability of the relationship.

Conclusion

The food trading company's commitment to on-time delivery is critical, not only for maintaining its reputation but also for the success of its export and import activities. Due to the critical nature of delivery performance, the study initiated two key research aims, which are to uncover the root causes of late delivery of the export items and subsequently to propose some practical solutions to address the identified causes. The research methodically applied has achieved these aims, yielding comprehensive insights that informed the study's goal of improving the timeliness of the company's export item deliveries.

This study employed a qualitative approach, specifically the case study with purposive sampling, selecting participants who brought relevant expertise and experience to the export items delivery process analysis. The interview sessions with the participants or the food trading company's employees facilitated an exploration of the factors contributing to delivery delays, ensuring that the data collected directly supported the study's aims. The feedback from various company employees was analyzed thoroughly and illustrated via the lens of an Ishikawa diagram. The Ishikawa diagram pinpointed the causes, such as *inaccurate information, inefficient production processes, problematic transportation scheduling,* and *system limitations*. The study not only highlighted the causes that prevent on-time delivery of export items at the food trading company but also proposed some actionable solutions. The recommendations proposed by the participants are integrating system information and partnering with reliable alternative shipping agents to streamline delivery operations of its export items.

In light of the findings, one practical recommendation is the adoption of an integrated system tailored to the food trading company's needs. The proposed system would enable the company to identify, aggregate, and analyze customers' orders, thereby enhancing its understanding of customer preferences and improving its delivery forecasting accuracy. This strategic implementation of an integrated system could be a game-changer for the food trading company, providing the company with the insights to optimize order fulfilment and elevate the overall delivery performance of its export items.

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