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Enhancing Operational Cross-Border Logistics Performance Based on the Perspective of Thailand LSP

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ABSTRACT

In order to determine the cause of the delay that occurred in Bukit Kayu Hitam, this study examined the effectiveness of cross-border logistics from the viewpoint of a Thai logistics service provider. Thailand acts as one of the primary centres for cross-border travel since Malaysia and Thailand share a land border. As a result, cutting down on border delays can assist to grow the connection in the long run. The triangulation method is used in this study together with a qualitative approach. To obtain information, this entails conducting in-depth interviews. Several methodologies are used to examine the information obtained from respondents of logistics service provider organizations. Descriptive analysis is used to study the demographic or profile data of the organizations in order to broadly define their history. Results showed a significant relationship between all operational cross-border logistics performance dimensions, including customs department process, infrastructure, services, international shipment, tracking and tracing, and timeliness, and the capabilities of the logistics service provider, including logistics service quality and innovation capabilities. Additionally, the results of the qualitative method contribute to our understanding of the phenomena of cross-border logistics performance.

Keywords: Cross-Border Logistics, Customs Clearance, Logistics Performance, Logistics Service Provider (LSP), Thailand-Malaysia Border.

1. INTRODUCTION

Malaysia and Thailand work collectively in supporting the economy of both countries, especially, the ability of the countries in terms of ease of doing business and trading across borders. Malaysia and Thailand have the highest level of competitiveness in cross-border trade, ranking first and second in ease of doing business since 2017, and their bilateral commerce is the highest in ASEAN in terms of value [1], averaging at THB 48.384.90 million in January–November 2018, accounting for more than half of Thailand's border trade (51.00 %) compared to the trade value with Cambodia, Laos and Myanmar.

The performance of border trade between Thailand and Malaysia has improved year by year because of the cost and complexity reduction measures taken to make it easier to trade across the border. Both countries have improved in the electronic submission and processing of documents for import-export. Malaysia has strengthened its border infrastructure by upgrading the management system, expanding terminals, decreasing the cut-off time, and enhancing customs administration and inspections for cross-border operations [2]. Moreover, there has been an extended time of cross-border operation from 18 hours daily to 24 hours a day at the Immigration, Customs, Quarantine, and Security (ICQS) Bukit Kayu Hitam – Sadao entry point for cargo and goods movements using lorries, container trucks, and other commercial vehicles [3].

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These measures are to facilitate effective cross-border operations, which will boost the macro-economy as well as improve the quality of citizens in both countries.

However, eight border posts are operating for border crossing between Thailand and Malaysia, with the maximum trade value and the number of commercial vehicles accounted for at Bukit Kayu Hitam and Sadao borders [3] [4]. The average number of trucks passing through the borders is accounted for around 250 – 370 lorries a day. The peak time for lorries from Malaysia to Thailand is between 12.00 – 1.59 p.m. and from Thailand to Malaysia in the period of 08.00 a.m. – 12.00 p.m. However, there are very few lorries passing through the border during the extended hours (00.00 - 05.59 a.m.), which accounted for only 0.7% due to the lower demand [3]. Considering the time spent on cross-border, it shows that the process of validating the document for X-Ray inspection and the inspection of cargo by X-Ray takes maximum time and costs [4]. These steps are authorized by government officers. Therefore, the government is related to the efficiency of cross-border operations in terms of a policy maker of trade facilitation and infrastructure development for border crossing [5-11].

On the other hand, the service providers are taking on a vital role, serving as intermediaries between the point of origin and the end of consumption among countries. They can make the logistics cross-border process with cost reduction [12],[13]. The higher the Logistic Service Provider Capabilities (LSPC), the greater the Cross-Border Logistics Performance (CBLP), which would ultimately generate larger trade for both countries.

In the context of trade logistics, logistics performance is an important aspect that determines a country's competence in facilitating domestic and international trade [14]. Thus, cross-border logistics is one significant operation of all activities in terms of the functions of logistics for a more straightforward trade between the countries. It is the point of origin to the destination where the end-users are located.

Although there are plenty of data showing that the border trade between Thailand and Malaysia has evolved and improved processes, there remain some issues of logistics performance problems, reflecting the unsuccessful reinforcement of both countries in improving cross-border operations and infrastructures. Moreover, it is associated with the failure of the development, which is not in accordance with actual requirements or problems in the process. There are several reasons causing these problems, such as the person in charge may not understand clearly the needs of the border's users, which leads to misunderstanding the direction or moving the wrong way to develop each process of cross-border operations appropriately. In addition, the channel for collecting the user's feedback on the development or improvement of logistics processes may have some limitations. Therefore, those needs are not taken as part of the plan and development of logistics operations to achieve the desired efficiency and effectiveness.

The smooth movement of freight is crucial in an era of expanding cross-border trade in commodities, services, and commerce. Such activities demand the coordinated cooperation of numerous stakeholders, such as freight forwarding organizations, transportation service providers, and third-party logistics firms. But a significant issue has surfaced, particularly in the vital cross-border center of Bukit Kayu Hitam. The otherwise complex web of cross-border logistics has been disrupted by delays in a variety of ways, which have hurt productivity and, consequently, global trade.

2. OBJECTIVE

This research aimed to investigate the factors contributing to delays from the perspectives of logistics service providers (LSPs) in Malaysia and Thailand.

3. METHODOLOGY

This research employed a qualitative approach, utilizing in-depth interviews to extract valuable insights into the operational efficiency at the border between Malaysia and Thailand. The study conducted insightful interviews with six prominent logistics service providers in Thailand, specifically chosen to illuminate the nuances of operational cross-border logistics efficiency between Malaysia and Thailand. Guided by the recommendations of an industry expert with a background in the field, the selected companies bring a wealth of expertise to the table, ensuring that the acquired information is robust and contributes significantly to understanding the challenges at the Bukit Kayu Hitam border. The interview panel was used as a research instrument for data collection from the key informants of each company. These companies operate in varied capacities, encompassing freight forwarding, transportation, and third-party logistics, providing a well-rounded perspective on the intricacies of cross-border operations. Situated strategically in Hatyai, Sadao, and Songkhla, these companies are key players in trading goods across the Malaysia-Thailand border, making their insights invaluable for identifying and addressing the specific problems leading to delays at the Bukit Kayu Hitam border point. Also, descriptive analysis is used to study the demographic or profile data of the organizations in order to broadly define their history.

4. RESULTS

The results will be divided into two parts, including: The performance of operational cross-border logistics and the LSP capabilities, as follows;

4.1 The performance of operational cross-border logistics

4.1.1 Custom Department – Processes

There are three vital aspects involved in the complexity of the processes, which are the container availability, documentation simplicity and complexity of process. For the container availability, the data collectively imply that the infrastructure and container availability in Padang Besar and Bukit Kayu Hitam might have a substantial influence on the performance of operational cross-border logistics. While Bukit Kayu Hitam suffers difficulties due to container shortages and delays in handling returned containers, Padang Besar looks to have an advantage due to its multi-modal connection, greater storage capacity, and better supply of containers. Certain elements may have an impact on the general efficacy and efficiency of cross-border logistics in certain areas.

For the documentation Simplicity, the data together indicate that the effectiveness of operational cross-border logistics is significantly influenced by the simplicity or complexity of documentation processes. Logistics activities often go more smoothly in Padang Besar since paperwork is easier and more rapid there. Bukit Kayu Hitam, in contrast, has difficulties with more time-consuming documentation, which might result in delays. The efficacy and efficiency of cross-border logistics operations may be impacted by proactive document preparation and the overall difficulty of paperwork procedures at some border crossing sites.

For the complexity of the process. The complexity of the procedure that requires all vehicles listed on a single booking form to arrive at the border simultaneously might directly affect the performance of operational cross-border logistics. It may result in coordination issues, holdups, and waiting periods, which may compromise the efficacy, economy, and dependability of cross-border logistical operations. The performance of logistics might be enhanced by streamlining or simplifying this procedure, for example, by allowing for staggered arrivals or providing more flexible booking alternatives.

4.1.2 Infrastructure

The infrastructures include three major aspects, namely: infrastructure in need of improvement, a high number of accidents, and insufficient facilities. For the need of improvement, the findings show that a variety of infrastructural problems have a negative impact on the operational cross-border logistics performance at the Sadao border. These problems include the shared use of road lanes for private and commercial cars, the lack of appropriate container storage space, the intense traffic caused by the few available road lanes, and the high frequency of accidents. To increase the effectiveness, safety, and dependability of cross-border logistics operations at the Sadao border, it is imperative to address these infrastructural concerns. To reduce these problems and increase logistics performance in the area, infrastructure upgrades are required, such as increasing road capacity and providing enough container storage facilities.

For the High Number of Accidents. The performance of operational cross-border logistics is significantly hampered by the large incidence of incidents at the Sadao border. These difficulties include potential financial losses, delays, and issues with traffic and safety. The efficiency and dependability of logistical operations at the border may be increased by addressing safety concerns and putting into place measures like building separate tollways for trucks. Cross-border logistics must prioritize safety, and initiatives to reduce accidents can benefit the sector as a whole. For the insufficient facilities, the data indicate the operational difficulties resulting from a lack of X-ray scanning equipment at the Sadao border. Long wait times for truckers are caused by the demand for scanning in combination with the scarcity of scanners. These delays may cause delivery schedule changes, operating cost increases, and inefficiencies in cross-border logistics operations. They may also disrupt the logistics supply chain. It is essential to close this infrastructure gap by increasing the capacity of scanning facilities if we want to boost the effectiveness and performance of border logistics operations.

4.1.3 Services

This matter is related to long holiday and break period in Malaysia. Malaysia's extended Friday Prayer break and lengthier holiday and break times have a considerable effect on the efficiency of operational cross-border logistics. These hiccups may cause shipments to be delayed, customs clearance to take longer, and logistical timetables to be thrown off. Logistics businesses operating in the area may need to modify their timetables and account for potential delays during these prolonged break periods in order to deal with these issues. Additionally, it may be possible to lessen the effect of these disruptions on cross-border operations by working closely with customs officials to speed clearance procedures even during downtime.

4.1.4 International Shipment

The results indicate that there is a higher government charge in Thailand and an additional charge at Malaysia's border. The higher government fees and operating expenses in Thailand compared to Malaysia might affect the performance of operational cross-border logistics. For logistics firms and shippers, Malaysia's more appealing cost structure may influence their decision on routes and border crossings. Additionally, decreased costs can help logistics operations run more efficiently and raise the competitiveness of companies involved in cross-border trade between the two nations. The data suggest that extra fees and cost fluctuation at Malaysia's border, notably at Bukit Kayu Hitam, may have a variety of effects on the performance of operational cross-border logistics. They could result in inefficiencies, difficulties with the budget, and issues with compliance and transparency. Cross-border logistics operations can run more smoothly and effectively if these problems are addressed and more open, predictable border processes are promoted.

4.1.5 Tracking and Tracing

The results show that operational cross-border logistics performance may be impacted by entirely relying on logistics service providers, such as goods forwarders, for tracking and tracing procedures. Although such reliance can cause some delays, integrating drivers directly and employing cutting-edge tracking techniques might assist in reducing these delays and enhancing reaction to problems. To guarantee effective cross-border logistics, logistics organizations must find a balance between outsourcing to service providers and keeping direct control and visibility over significant areas of their operations.

4.1.6 Timeliness

Our data highlight how necessary precise and thorough documentation is in cross-border logistics operations. Due to the dependence on the documentation procedure, any errors or inconsistencies in the paperwork may cause snags and delays at the border. It is vital for logistics organizations to prioritize rigorous and error-free paperwork preparation to ensure easy customs clearance and reduce delays in order to optimize cross-border logistics performance.

4.2 LSP capabilities

4.2.1 Logistics Service Quality

The two elements of keeping service quality of cross-border logistics include the insurance provided and the monitoring efficiency. For the insurance, the ability of logistics service providers to properly manage cross-border logistics operations is greatly influenced by the insurance they offer. Comprehensive insurance coverage promotes trust and dependability in logistics services as well as protection against unanticipated occurrences, which ultimately makes cross-border transit safer and more seamless. Moreover, the capacities of logistics service providers are influenced by monitoring efficiency, whether through internal team meetings or external customer satisfaction surveys. In order to successfully manage cross-border logistics, it is crucial to have good communication, coordination, and quality improvement.

4.2.2 Innovation Capabilities

The innovation capabilities of the service providers are related to the logistics service quality standards, the reward system and the improvement program. Compliance with the quality requirements for logistics services considerably enhances the capacities of logistics services considerably enhances the capacities of the logistics service providers. It comprises comprehensive service coverage, effective driver readiness methods, and internal monitoring systems, all of which improve the provider's capacity to offer dependable and high-quality logistics services. Moreover, having a compensation system in place, such as commissions or incentive plans, can improve worker morale, productivity, and overall service quality at a logistics service provider. However, the absence of such mechanisms can lead to poorer service standards and possibly lower motivation. These reward systems' precise execution and design have a significant impact on how they affect the company's capabilities. In addition, the enhancement initiative, shown by the "V-Serve Institute" and joint operations, indicates a robust dedication to augmenting personnel competencies. The company's employees gain from the internal training centre, which also offers training to other logistics service providers, guaranteeing industry-wide proficiency. Engaging in collaborative efforts and industry gatherings demonstrates a dedication to ongoing education and information exchange. Customers and the industry as a whole gain from this proactive strategy, which enhances the company's capabilities and advances the logistics industry generally.

5. CONCLUSION AND DISCUSSIONS

Discoveries gleaned from logistics service providers (LSPs), encompassing freight forwarders, third-party logistics entities, and transporters, offer a comprehensive perspective from both Malaysia and Thailand. These industry stakeholders, operating at the Bukit Kayu Hitam and Sadao border point, have illuminated several critical issues that significantly impact the operational efficiency of cross-border logistics. The resultant congestion at the Malaysia-Thailand border introduces delays and disrupts the efficiency of international trade. Unravelling the root causes behind these challenges holds the key to alleviating congestion and enhancing the overall trade facilitation process. The subsequent elucidation details the prominent issues contributing to the operational complexities at Bukit Kayu Hitam.

5.1 Documentation Simplicity - Complicated and Time Consuming

Cross-border logistics operations between Malaysia and Thailand encounter a substantial hurdle in the form of complex and time-consuming documentation procedures. Interviews with logistics service providers (LSPs) indicate that the processes at Bukit Kayu Hitam are notably more protracted compared to the Sadao border in Thailand. The intricacies involved in documentation checking and customs clearance significantly contribute to Malaysia's operational delays, impacting the overall efficiency of cross-border trade.

5.2 Long Holiday and Break Periods During Prayer Break

The occurrence of extended holidays and break periods presents another challenge at the Malaysia-Thailand border, specifically in Bukit Kayu Hitam. Holidays such as Hari Raya Aidilfitri, Deepavali, Chinese New Year, and Christmas Eve, coupled with an elongated lunch break on Fridays for prayer, result in a reduced number of available officers.

5.3 Agents Incompetency - Incomplete Documentation

An identified issue contributing to delays at the border pertains to the competency of agents handling trade affairs between Malaysia and Thailand. Some agents, as reported by respondents, exhibit inadequacies in managing and facilitating cross-border trade, leading to incomplete documentation for customs clearance. This agent's incompetence further compounds the challenges faced by logistics operators.

5.4 Insufficient Number of Officers

A critical bottleneck affecting the operational efficiency at the border is the inadequate number of officers. The limited personnel available to manage the influx of trade activities result in prolonged queues and delays. The shortage of officers emerges as a prominent factor hindering the expeditious movement of goods and services across the Malaysia-Thailand border.

5.5 Tracking and Tracing - Mobile Communication, Poor internet connection

Technology challenges, particularly related to tracking and tracing mechanisms, add another layer of complexity to cross-border logistics. Respondents highlight issues such as poor and unreliable internet connections, hindering the effective use of GPS and mobile communication tools. This technological impediment negatively impacts the real-time monitoring and tracking of consignments, contributing to operational disruptions.

5.6 Complexity of Process - Customs Clearance and Release

The intricacies of customs clearance and release processes pose challenges on the Thailand side of the border. Respondents from LSPs on both sides note difficulties, especially when multiple lorries within the same booking form need to arrive simultaneously. Delays ensue if the lorries do not coordinate their arrival times precisely. This complexity in the process adds a layer of unpredictability to cross-border logistics operations.

5.7 Insufficient Facilities - X-ray Equipment for Inspection

Inadequate facilities, particularly the insufficiency of x-ray equipment for inspection, emerge as a bottleneck in the border-crossing process. Inspections are crucial for ensuring compliance with regulations and detecting any irregularities in the cargo. The shortage of essential inspection tools contributes to delays, as thorough inspections cannot be conducted efficiently.

5.8 Dependency on Documentation Process - Advanced Documentation Preparation

Efficiency in cross-border logistics is intricately tied to the preparatory stages of documentation. The ability of LSPs to proactively prepare and submit comprehensive documentation aligning with the stringent trade requirements between Malaysia and Thailand is pivotal. The dependency on advanced documentation preparation becomes a crucial factor influencing the smooth flow of goods and services across the border.

These nuanced insights, derived from interviews with six companies in Thailand, underscore the multifaceted challenges faced at the Malaysia-Thailand border. The complexities range from procedural intricacies to technological hindrances, emphasizing the need for targeted solutions to enhance cross-border operational efficiency. Addressing these challenges is paramount for fostering a conducive environment for international trade and economic cooperation between the two nations.

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