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ANALYSIS OF THE CHALLENGES OF THE IMPORT PROCESS FOR AN AMAZONIAN FREIGHT FORWARDING COMPANY

ANÁLISE DOS DESAFIOS DO PROCESSO DE IMPORTAÇÃO DE UMA EMPRESA AMAZÔNICA DE AGENCIAMENTO DE CARGAS

ANÁLISIS DE LOS DESAFÍOS DEL PROCESO DE IMPORTACIÓN PARA UNA EMPRESA DE TRANSPORTE DE CARGA AMAZÓNICA

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Abstract

This study aimed to analyze the challenges of the import process of an Amazonian freight forwarding company. It employed the scientific-technological method in its scientific dimension to generate answers to the guiding questions and the central question, using a semi-structured interview guide administered to professionals in each department, which constitutes the company's core activity. The data were analyzed using semantic and content analyses, organized into summary tables, and the results were interpreted comparatively against the theoretical framework developed from the state of the art on import processes. The results indicated that: a) nine challenges exist in the import process, b) faced by all units that comprise its core activities, c) these challenges represent small parts of the organizational macro-challenge of achieving the target negotiated with clients, d) the causes of the challenges are logistical, technological, communicational, and financial, and e) the complexity is high when negotiation is involved, medium in technical and technological aspects, and low when bureaucracy is present. The conclusion was that the challenges of the import process are primarily external and uncontrollable, necessitating organizational adaptation.

Keywords: Import process; Amazonian companies; Agency firm; Challenges to the import process; International trade.

Resumo

Este estudo teve como objetivo analisar os desafios do processo de importação de uma empresa amazônica de agenciamento de cargas. Utilizou o método científico-tecnológico em sua dimensão científica para gerar as respostas às questões norteadoras e à questão central, com o uso de um roteiro de entrevista semiestruturada aplicada em profissionais que atuam em cada um dos

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departamentos constituintes da atividade-fim da empresa, cujos dados foram analisados com o auxílio de análise semântica e de conteúdo, organizados em tabelas sintetizadoras e os resultado interpretados de forma comparativa com a estrutura teórica elaborada a partir do estado da arte sobre processo de importação. Os resultados apontaram que a) nove desafios ao processo de importação praticado, b) enfrentados por todas as unidades que compõem suas atividades-fins, c) esses desafios representam pequenas partes do macrodesafio organizacional de alcançar o target negociado com os clientes, d) as causas dos desafios são de ordem logística, tecnológica, comunicacional e financeira e e) a complexidade alta quando envolve negociação, média nas técnicas e tecnológicas e baixa quando há burocracia. A conclusão foi que os desafios do processo de importação são quase todos de natureza externa, incontroláveis e exigem da organização a capacidade de se adequar a eles.

Palavras-chave: Processo de importação; Empresas amazônicas; Empresa de agenciamento; Desafios ao processo de importação; Comércio internacional.

Resumen

Este estudio tuvo como objetivo analizar los desafíos del proceso de importación de una empresa de transporte de carga amazónica. Se empleó el método científico-tecnológico en su dimensión científica para generar respuestas a las preguntas orientadoras y a la pregunta central, mediante una guía de entrevista semiestructurada aplicada a profesionales de los departamentos que constituyen la actividad principal de la empresa. Los datos se analizaron mediante análisis semántico y de contenido, se organizaron en tablas de resumen y los resultados se interpretaron en comparación con el marco teórico desarrollado a partir del estado del arte en procesos de importación. Los resultados indicaron que: a) existen nueve desafíos en el proceso de importación, b) son enfrentados por todas las unidades que componen sus actividades principales, c) estos desafíos representan pequeñas partes del macrodesafío organizacional para alcanzar el objetivo negociado con los clientes, d) las causas de los desafíos son logísticas, tecnológicas, comunicacionales y financieras, y e) la complejidad es alta cuando hay negociación, media en los aspectos técnicos y tecnológicos, y baja cuando hay burocracia. La conclusión fue que los desafíos del proceso de importación son casi todos de naturaleza externa e incontrolable, lo que requiere que la organización se adapte a ellos.

Palabras clave: Proceso de importación; Empresas amazónicas; Empresa agencia; Desafíos del proceso de importación; Comercio internacional.

1. Introduction

Science shows that the import process is a set of highly challenging activities. These challenges tend to increase in both quantity and intensity when the process is conducted by Amazonian organizations, owing to their geographic context. Factors such as demand volatility, transport disruptions, and technological integration increase logistical complexity and risk in import flows, directly affecting industries dependent on imported inputs, such as those located in the Manaus Industrial Hub (PIM), as can be seen in studies such as those by Liu et al. (2025), Shekarabi et al. (2025), and Petropoulos (2025). Other studies

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also show that trade facilitation policies and best practices in customs management and logistics are crucial for reducing import uncertainties, something essential for industrial sectors heavily dependent on imported goods, such as the electronics and machinery sectors in the PIM (Sibupiwa, 2025; Shekarabi et al., 2025; Miller et al., 2025). Furthermore, several studies also indicate that digital technologies (such as IoT, blockchain, and integrated systems) transform logistics and import processes, improve traceability and risk response, which is essential for industries that operate in an environment of high dependence on imported inputs (Challouf et al., 2025; Briatore et al., 2025; Zahid et al., 2025). These aspects are fundamental to justifying specific studies of the import process in Amazonian organizations.

Although international trade and the import process are essential phenomena in contemporary times, studies describing their intricacies in Amazonian organizations remain scarce, particularly regarding how they have navigated the natural adversities that every enterprise faces and the lessons they have learned. In this context, this study aimed to analyze the import-related challenges faced by an Amazonian freight forwarding company. Specifically, a mapping of these challenges was conducted, including how they occur, why they have occurred, and the degree of complexity of each. The scientific-technological method, in its scientific dimension, was used to address the guiding questions and the central question of the investigation (Nascimento-e-Silva, 2021c).

2. Import Process: Literature Review

The scientific literature does not present a conceptual definition for the import process. However, some studies present two conceptual conceptions that approximate a conceptual scope, thereby allowing one to propose an institutional definition, in which the import process is viewed globally, and an organizational definition, in which the import process is considered in light of the challenges enterprises face. A first way of viewing the import process is as a risk-management process focused on customs control, understood as a set of declarations, verifications, documentation, screening, and administrative and

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operational actions carried out by customs to permit or prevent the entry of goods. From a business perspective, it also entails document preparation, tariff classification, and interactions with customs brokers to mitigate tax and customs risks and avoid rework and fines, as shown in studies such as Karklina-Admine et al. (2024).

The import process can be seen as a documentary flow and management of these physical flows, which represents a logical and coordinated sequence of exchange and management of documents, such as manifests, bills of lading, invoices, customs declarations, packing lists, and others, as well as logistical operations so that the receipt and delivery of imported goods can be carried out (Lupi et al., 2024). This scope also applies to companies, to expedite deliberation and improve stock availability.

Another conceptual scope that is clear in studies such as Barbary and Tawfiq (2024), which treat the import process as a set of customs policies and measures that shape the circulation of goods. At the macro level, these are arrangements of customs policies, tariffs, non-tariff barriers, and facilitation measures that increase the cost, time, and viability of imports; at the micro level, they are regulated sequences that also influence entry costs, final prices, and competitive advantages. When regulatory environments are complex, they tend to penalize companies with limited logistical capacity. In peripheral regions, poorly coordinated policies further widen inequalities in access to the benefits of international trade, as shown by Barbary and Tawfiq (2024). The study by Zhao et al. (2025) treats the import process as a fundamental operating system for e-commerce importers, combining selection/sampling and inspection to identify non-conformities without disrupting large-scale logistical flows. From a business perspective, the import process operates similarly, focusing on sampling, screening, and agility within high-volume logistics flows.

Studies such as Wang et al. (2024) examine the import process within international logistics. Here, the process is conceptualized as a combination of procedures, such as dispatch and customs clearance, infrastructure, and logistics services, where performance (measured in clearance efficiency, time, and cost)

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directly influences both the volume and competitiveness of trade. The entire process is taken as a performance variable (composed of lead time, total logistics cost, and reliability). From an organizational perspective, research indicates that performance must be managed to maintain service levels and inventory turnover (Wang et al., 2024). Table 1 summarizes the conceptions of the import process in the scientific literature.

Table 1. Conceptions of the import process in recent scientific literature

References	Focus of the approach	Key elements emphasized	Managerial Implications
Karklina-Admine et al. (2024)	Risk mitigation process	Risk management, inspection, document compliance	Reduction of fines, withholdings, and hidden costs
Lupi et al. (2025)	Integrated flow of documents and operations	Documentation, terminals, IT, logistics coordination	Increased operational efficiency and predictability
Barbary; Tawfiq (2024)	Regulatory instrument	Tariffs, non-tariff barriers, customs policies	Strategic planning for international sourcing
Zhao et al. (2025)	Mass release operating system	Sampling, screening, and expedited clearance	Scalability and bottleneck reduction
Wang et al. (2024)	Key component of logistics performance	Clearance time, logistics cost, and reliability	Competitive advantage based on logistical efficiency
Liao et al. (2024)	Technical-fiscal process	HS classification, evaluation, automation	Tax compliance and fiscal optimization
Ordoñez et al. (2024)	Sequence of commercial and technical steps	Negotiation, shipment, inspection, and delivery	Process adaptation by merchandise category
Konstantinidou; Kehris (2024)	Opportunity for digitization and automation	Certificate of origin, DLT/blockchain	Reduced bureaucracy and increased reliability
Tong et al. (2024)	Governance mechanism	Certifications, testing, and regulatory controls	Brand protection and reduction of legal risks
Shui; Song (2025)	Strategic decision point	Environmental oversight, green channels, ESG	Alignment with reputational and ecological goals

Source: data compiled by the authors.

The study by Liao et al. (2024) addresses the import process as a technical-fiscal process, consisting of a critical tariff classification stage using digital resources, called the "HS code," which is associated with taxation, statistics, and control. From a business perspective, the process is also technical and fiscal, focused on classifying and evaluating goods with the highest possible degree of accuracy to avoid penalties and optimize tax regimes. The study by

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Ordoñez et al. (2024) presents the import process as a sequence of well-defined steps: importer specification, shipment, unloading, storage, inspections, certifications, quality tests, and delivery to the processor. This set of steps constitutes a flow of operations that is simultaneously commercial and customs-related, and, from the importer's perspective, comprises negotiation, shipment, unloading, testing and inspections, and delivery.

The import process can also be conceived as an opportunity for digitization and automation, as shown by Konstantinidou and Kehris (2024). This approach includes origin checks, documentation, and certifications that can be automated and verified by technologies (such as distributed ledgers and blockchain) that accelerate customs clearance and significantly reduce the risk of fraud. From a business perspective, technological resources streamline imports, reduce paperwork, and prevent fraud.

The governance mechanism offers another perspective on the import process, as shown by Tong et al. (2024). The mechanism is particularly applicable to food products, where the process involves regulatory and governance mechanisms among authorities, importers, and consumers. The purpose of the mechanism is to ensure product quality and safety upon entry, benefiting importing companies by implementing quality and safety controls, such as testing and certification, which are fundamental to reputation and legal responsibility. The latest conceptualization in the literature views the import process as a strategic decision point for corporate sustainability (Shui; Tong, 2025). From an institutional perspective, this conception is framed as an intervention point for environmental policies through customs procedures, green channels, and simplified, transparent, and clearances that reduce costs and facilitate significant transformations in logistics chains. Other benefits for business activities include reducing impacts through route selection, preferential regimes, and green channels, as well as aligning operations with ESG goals.

These results show that recent literature does not treat the import process as a simple administrative act. From an institutional point of view, its conceptual conceptions involve a) a multi-stage system, integrating documentation, logistics,

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classification, inspection, and release; b) a public policy instrument capable of affecting competitiveness, sustainability, and security; c) an object of technological innovation, with a strong presence of digitization, automation, and blockchain; and d) a governance mechanism, especially relevant for food, e-commerce, and sensitive global supply chains. From the importer's perspective, the concepts converge on the idea that the import process is a) more than a bureaucratic procedure, it is also a complex management system; b) multidimensional, involving risk, cost, time, technology, quality, and sustainability; and c) strategic, because it directly impacts competitiveness, compliance, and corporate reputation.

Thus, the import process can be defined as an institutional, technical, and operational system of regulated procedures that coordinate the entry of foreign goods, integrating documentation, logistics, classification, risk control, and governance, with direct impacts on the economic efficiency, security, sustainability, and competitiveness of international trade. From the importer's perspective, the import process can be conceptualized as an integrated management system of technical, regulatory, and logistical decisions that coordinates the entry of foreign goods to achieve legal compliance, operational efficiency, risk control, economic competitiveness, and strategic alignment (including sustainability). This conceptual framework will be applied in this study and was used to understand the scientific knowledge of the challenges that Amazonian companies face in their import processes.

The literature review identified five groups of challenges for Amazonian companies in their import processes: 1) poor infrastructure and weak intermodal integration, 2) hydrological variability and climatic impacts on navigability, 3) high logistics costs, scarcity/volatility of freight and containers, 4) customs bureaucracy, data quality and digital transition, and 5) low technological capacity and difficulties in digitizing the process. Poor infrastructure and weak intermodal integration constitute a challenge because river ports/terminals, signaling, and dredging are insufficient, and the lack of intermodal terminals makes import flows more expensive and slower for companies in the Amazon. The absence of

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coordinated policies and investments further hinders the consolidation of regular routes. The study by Vilarinho et al. (2024) demonstrated that the lack of structural investments, maintenance, and intermodal integration severely limits the efficient use of rivers. In the Amazon, the almost exclusive dependence on waterways makes companies more vulnerable to delays, high costs, and logistical disruptions, as well as to institutional bottlenecks and the challenges of long-term planning. The study by Costa et al. (2025) reports substantial regional asymmetries in the competitiveness of containerized cabotage in Brazil. It highlights that peripheral regions, such as the Amazon, exhibit lower connectivity and higher logistical costs due to low route density and weak multimodal articulation. The study by Veiga et al. (2024) found that remote regions, such as the Amazon, face deficient logistics, high transportation costs, and inefficient last-mile delivery. Although the focus is on e-commerce, the authors show that these limitations directly affect importers, increasing lead times and total costs. Regional logistical inequality is identified as a competitive obstacle. Table 2 presents the main categories of challenges identified in the literature.

Table 2. Challenges in the import process in Amazonian regions

Type of structural challenge	Key scientific evidence	References
Insufficient logistics infrastructure and low intermodal integration	A lack of ports, river terminals, and multimodal connections increases the time, cost, and uncertainty of the import process in peripheral regions.	Vilarinho et al. (2024); Costa et al. (2025); Wang et al. (2024)
Dependence on waterways and climate vulnerability	Extreme weather events reduce navigability, isolate regions, and disrupt supply chains.	Lima et al. (2024); Maciel et al. (2024); Fontes et al. (2025)
High logistics costs and freight volatility	Long distances, low service frequency, and low cargo density increase the total cost of imports.	Costa et al. (2025); Vilarinho et al. (2024); Veiga et al. (2024)
Regulatory complexity and customs bureaucracy	Complex customs processes and regulatory changes increase errors, delays, and compliance costs.	Morini et al. (2024); Barbary; Tawfiq (2024); Wang et al. (2024)
Low technological capacity and difficulties in digitalization	Uneven adoption of digital systems (Single Window, AI, automation) generates regional asymmetries.	Morini et al. (2024); Veiga et al. (2024)

Source: prepared by the authors.

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Another significant challenge for the import process is the hydrological variability and climatic impacts on navigability in the Amazon, with drought and low river levels. This is a considerable challenge because many routes in the Amazon depend on rivers, where extreme droughts and variations in water levels (as occurred between 2023 and 2024) reduce navigable stretches, increase transit times, restrict shipping capacity, and generate costly logistical detours. This directly affects importers who rely on river transport to centers such as Manaus, as shown in studies by Lima et al. (2024), Maciel et al. (2024), and Fontes et al. (2025). Technical and environmental limitations increase operational costs and reduce transport reliability, thereby increasing logistical risk and necessitating contingency planning for importers. These studies quantified the increase in days of low draft and showed that, during extreme droughts, routes were interrupted for weeks to months, with a direct impact on lead time and cost.

High logistics costs and the scarcity/volatility of freight and containers are additional challenges for Amazonian importers. The distance from consolidation centers, limited availability of regular services (air/road/sea), and fluctuations in container and freight costs increase the total import costs for Amazonian companies, as do longer lead times, which also increase the capital tied up in inventory. The study by Costa et al. (2025) evaluated the competitiveness of maritime container cabotage in Brazil. It highlighted its advantages over road transport for distances beyond 1,800 kilometers, as well as its environmental benefits. Still, numerous rivers remain underutilized because, as shown by Vilarinho et al. (2024), there is a lack of public policies, coupled with precarious infrastructure for waterways, ports, and locks, as well as limited integration with other modes of transport. In remote regions such as the Amazon, logistics costs and lead times tend to exceed the national average, as shown by Veiga et al. (2024).

Customs bureaucracy, data quality, and digital transition (compliance/e-commerce) are other challenges that Amazonian importers need to face and overcome due to complex processes, variable documentary requirements, the need for qualification in Siscomex/Portal Único, and specific requirements for

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shipments (e-commerce) that increase errors, fines, and delays. In contrast, recent changes in the digital framework require adaptation from local SMEs. The study by Morini et al. (2024) analyzed recent changes in Brazilian customs regulations for cross-border trade and found that compliance requirements, data quality, and technological adaptation increase operational complexity, particularly for small and medium-sized enterprises. In regions such as the Amazon, the lack of digital training and infrastructure further amplifies these difficulties. This finding is consistent with studies by Barbary and Tawfiq (2024), which showed that complex customs policies negatively affect companies with limited logistical capacity, and with Wang et al. (2024), which demonstrated that poor customs performance is associated with reduced import volume.

The fifth and final set of challenges that Amazonian companies must overcome concerns limited technological capacity and difficulties in digitizing processes. This challenge stems from the unequal adoption of digital systems, such as the Single Window Portal, artificial intelligence, and automation, which generate profound and severe regional asymmetries. The study by Morini et al. (2024) pointed out the challenges for the technological adaptation of small and medium-sized enterprises in Brazil, which has constituted a differentiating factor in relation to larger importers, a result very similar to that obtained by the study by Veiga et al. (2024), which highlighted logistical and digital exclusion in peripheral regions, especially the Amazonian region.

These findings have substantial implications for importing companies operating in the Amazon. Operationally, delays and additional costs stem mainly from fragile infrastructure, with navigation affected by droughts. In financial terms, the volatility of freight and containers, and the greater amount of idle capital, increase the total acquisition cost for Amazonian companies. Regarding compliance, the transition to digital systems (Single Portal/e-commerce requirements) presents opportunities (facilitation) but requires investment in information technology and training to avoid errors that block cargo.

These findings show that the challenges faced by Amazonian companies in the import process are cumulative and interdependent: fragile infrastructure,

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extreme climate, high costs, regulatory complexity, and technological limitations compound their effects. Recent literature converges on the conclusion that these barriers are systemic rather than the result of isolated management failures within companies. Despite these multiple challenges, importers continue to operate; therefore, it is essential to understand their operational fundamentals so that they can be compared with state-of-the-art methods, and new knowledge can be added to the scientific arsenal.

3. Research Methodology

This study is qualitative, as the data used to generate the results for the guiding questions are nominal. The unit of analysis was processual, as import processes were the object of study, and the organizational reality that constituted the level of analysis was described. This means that the research findings apply only to the organization studied and cannot be generalized to other organizations. The perspective of analysis (or temporal cut) was synchronic, also called transversal or cross-sectional, and is characterized by presenting reality statically.

3.1 Guiding Questions

The general objective of the study was articulated as a set of specific guiding questions to inform data collection and analysis (Nascimento-e-Silva, 2021b). The questions that guided the study were: 1) What are the main challenges encountered in each stage of the import logistics process? 2) How do these challenges manifest themselves? How do they happen? 3) What are the causes that explain the occurrence of these challenges, and why do they happen? 4) What is the degree of complexity of each challenge? The entire study design was developed to answer these questions, in accordance with the studies of Nascimento-e-Silva (2020; 2021a).

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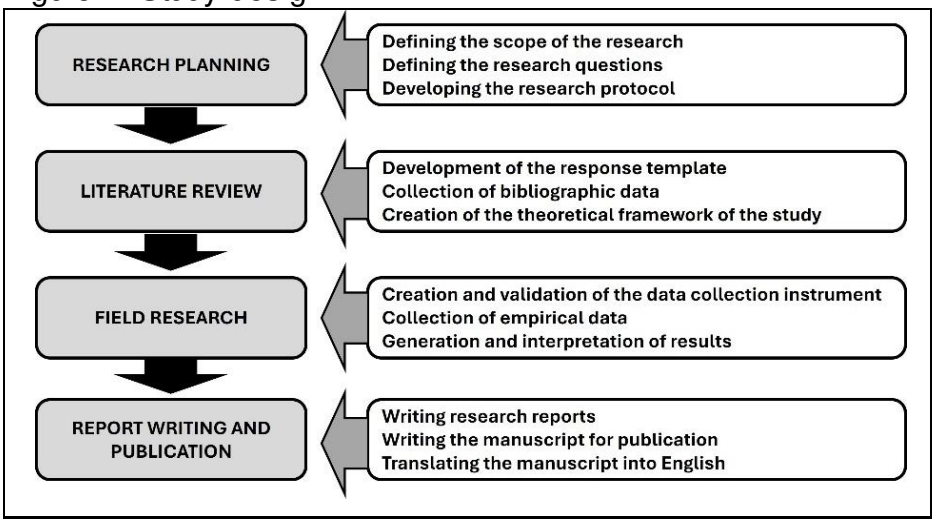
3.2 Study Design

The operationalization of this study was carried out in four primary stages, subdivided into sub-stages, as shown in Figure 1. The first phase was study planning, during which the research scope and the primary and secondary research questions were defined. This was followed by elaboration of the protocol for both the literature review and the field research, and by writing the reports and the final version for publication. The second stage was the literature review, which involved developing the survey's guiding questions, each with its corresponding response pattern. Then, bibliographic data were collected from Google Scholar, Scopus, and Web of Science, whose results informed the theoretical framework that guided the study's fieldwork.

Figure 1. Study design



Source: data collected by the authors.

The third stage of the study design involved conducting field research. This began with the creation and testing of the data collection instrument, developed based on the theoretical framework derived from the literature review, followed by the collection of empirical data from respondents at the company under investigation. This culminated in the critique, analysis, and organization of the data, as well as the subsequent generation and interpretation of the results. In the fourth stage, the research reports (reports of findings and methodological details)

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were prepared and written, and then transformed into a manuscript for submission to a scientific journal and as a book chapter. The final stage involved translating the article into English for publication.

3.3 Research Subjects

The research subjects were selected from professionals working in each of the four core business departments of the company, since they possess in-depth knowledge of all aspects targeted by the study. The choice was made for convenience to leverage each participant's experience and in-depth understanding of the import process and its challenges, as outlined in the study. The respondents' experience in the logistics sector, specifically in freight forwarding, enabled the collection of highly detailed data on the processes, bottlenecks, and challenges that occur daily within the freight forwarding company.

3.4 Data Collection Instrument

The data were collected using a procedural guide aligned with the literature review and the company's specific import process activities. The guide was developed based on the study's theoretical framework and particular objectives, aiming to identify the challenges of the import process, their causes, and the degree of their complexity. The guide was specifically designed to align with the company's operational procedures and work routines. The interview guide followed the following operational structure: 1) list the main challenges by departmental unit and process; 2) understand how these challenges manifest themselves; 3) identify the causes of these challenges; 4) determine the degree of complexity of each challenge (high, medium, or low). After development, the script was validated by comparing it with the theoretical framework and by evaluating it with other researchers specializing in foreign trade and international logistics. No data were collected from respondents due to organizational requirements for anonymity.

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3.5 Data Collection Strategy

Data collection began with negotiations with the organization's leaders regarding the study's scope and objectives (Nascimento-e-Silva, 2023). Changes were requested to the scope and breadth of responses to each guiding question, which were accepted because they did not conflict with the theoretical framework or the intended objectives. Next, the departments to be investigated and the focus of the investigation were negotiated, defining the departments of Pricing/Sales (focused on planning and negotiation), Operations (collection, dispatch, and international freight), Representation (shipping documents, cargo arrival, and cargo presence), and Billing (customs clearance and delivery at destination). Subsequently, the days and times for data collection, the recording methods, and prohibitions (e.g., photography and videography) were defined. On the agreed days and times, the data was collected, always under managerial supervision.

3.6 Data Organization and Analysis Techniques

After collection, the data were transcribed and entered into a word processor to ensure that the dataset fully aligned with the initial proposal. The purpose of this procedure was to ensure complete data fidelity and prevent contamination of the analysis. After transcription, the answers to each question were compiled into tables. On the left side of the table, the departmental unit was indicated; on the right were the names of the processes described for each departmental unit; and in the rightmost columns were listed the challenges of each process, followed by the occurrences of each challenge and, finally, at the far right of the table, the degree of complexity of the challenges reported. The data analysis was carried out in accordance with the guiding questions. For the question seeking to identify the challenges, the study focused on identifying the range of difficulties, the most divergent, and the most consensual. The question, which inquired into how these challenges arise and provided examples, was analyzed to identify the core source of the difficulty. To address questions about why they happen (causes) and the degree of complexity, the analysis focused on

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identifying factors (logistics, technology, communication, and finance) and classifying complexity levels.

The data organization was facilitated by summarizing tables. On the left side appear the departmental units, in the center were placed the import processes, and on the right side the specifications, in accordance with the guiding research questions: for the question that sought to know what the challenges of the import processes are, the challenges were allocated on the right side; for the question that aimed to learn how these challenges occur, they appear on the right side, and so on.

3.6 Techniques for Generating and Interpreting Results

The results were generated from the answers to the guiding questions. The results of the question on challenges were a list of problems that employees frequently encounter in their day-to-day work, organized by departmental unit and process (Table 3). The results of the question on how the problems occur were summarized in descriptions that enabled a precise understanding of each difficulty (Table 4). The results of the question on why they happen (causes) were presented as a list of structuring factors (Table 5). The question on the degree of complexity yielded classifications of low, medium, or high (Table 6). The interpretation of the results involved comparing the empirical findings with the theoretical framework developed in the literature review, as presented in the results discussion section.

4. Results and Discussion

The presentation of the research results follows the order of the guiding questions. First, the company's internal processes will be presented by department, followed by the specifications of the challenges, highlighting the critical factors that influence the import process. The third part presents how the challenges occur, the fourth part examines their causes, and the fifth part assesses their complexity. The discussion of the results concludes this section.

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4.1 Processes by departmental unit

Table 3 shows the processes originating from the challenges of this study, organized by departmental units. The Pricing/Sales unit is responsible for the first stage of negotiating logistics services, which generally follows the planning and negotiation procedures previously defined and analyzed by the importer/exporter and the consolidating agent. The Operations department assumes responsibility for the physical execution of logistics, including collection, dispatch, international freight, and the management of shipping documents, ensuring compliance and traceability of the process. The performance of this department is crucial to ensure that the cargo moves correctly between origin and destination, within deadlines and regulatory requirements. The Representation department centralizes activities at cargo transit points, including arrivals and the presence of cargo. This monitoring is essential to confirm that the merchandise is appropriately registered and available for subsequent steps, thereby avoiding delays and documentation discrepancies. The Billing is responsible for the final stages of the logistics process, including customs clearance and delivery to the destination. Its role involves both legal aspects, such as customs release, and operational elements, ensuring that the cargo is delivered to the customer as planned. The organization of processes highlights the flow of activities, in which each area contributes specifically to the efficiency and security of the overall logistics operation.

Table 3. Processes by departmental unit

Departmental units	Processes
Pricing/Sales	Planning and negotiation
Operational	Collection
	Dispatch
	International freight
Representation	Shipping documents
	Cargo arrival
	Cargo presence
Billing	Customs clearance
	Delivery to the destination

Source: Data collected by the authors

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The information presented above illustrates how the company's logistics processes are distributed across departmental units, each performing specific functions within the operational flow. Each Pricing/Sales unit conducts planning and negotiation, the initial stage that defines commercial and operational parameters of the logistics chain. The Operations department executes the core logistics activities, including collection, dispatch, and international freight, ensuring the movement of cargo between origin and destination and connecting the initial negotiation stages with the operational phases of transportation. Subsequently, the Representation unit monitors operational milestones, particularly the management of shipping documents, cargo arrivals, and cargo presence, thereby ensuring complete traceability of information and the proper continuity of customs and port flows. Finally, the billing department, the final stage of the operation, includes customs clearance and delivery to the destination. Its role ensures the legal release of the goods and the formal closure of the logistics chain, integrating fiscal, customs, and operational requirements. This allows us to understand the logistics process practiced between the consignee and the freight forwarder.

4.2 Specification of challenges by process

Table 4 presents the main challenges associated with each departmental process, highlighting the critical points that influence the efficiency and compliance of logistics operations. In the Pricing/Sales sector, the central challenge is to achieve target values for client closings, an essential requirement for ensuring commercial competitiveness and operational viability. In the Operations department, obstacles include avoiding delays in collection, receiving cargo at the origin terminal, conducting assertive follow-up during international freight, and ensuring the validation of shipping documents, all of which are fundamental to maintaining operational flow while meeting deadlines and regulatory requirements. In the Representation area, the challenges center on confirming cargo arrival with the airlines and shipping companies and on releasing the original documentation, both of which are decisive steps for the continuity of

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customs procedures. Finally, the Billing department faces challenges related to the payment of freight expenses and the delivery time to the client, which determines the proper completion and formal closure of the logistics operation. In this section, the table highlights how each departmental unit handles specific demands that directly impact the overall performance of the logistics chain.

Table 4. Challenges of each departmental process

Departaments	Processes	Challenges
Pricing/Sales	Planning and negotiation	Achieving target values to close deals with clients
Operational	Collection	Avoiding collection delays
	Dispatch	Clearing cargo at the terminal in the country of origin
	International freight	Assertive follow-up
Representation	Shipping documents	Validation of shipping documents
	Cargo arrival	Confirming arrival with airlines and shipping companies
	Cargo presence	Releasing original documentation
Billing	Customs clearance	Paying freight expenses
	Delivery to the destination	Meeting client delivery deadlines

Source: Data collected by the authors

The main challenge for the Pricing/Sales department, responsible for planning and negotiation, is to achieve target prices to close deals. This means that the agent receives a quote request from a client and is tasked with determining prices that meet the client's expectations. This operation is carried out through negotiations between the agent and their partners at the origins specified in the client's request, as well as with shipowners and airlines, to achieve the target quotes. This challenge is complex because of competition among agents and the reliability of partner agents' services. There is a wide variety and abundance of agents worldwide, offering highly differentiated agency services, which makes competition for market share fierce and underscores the complexity of this process.

4.3 Forms of Occurrence of Challenges

The information in Table 5 systematizes the operational challenges associated with each departmental unit, highlighting the elements with the most

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significant impact on predictability, meeting deadlines, and the reliability of the logistics flow. In the Pricing/Sales area, it is observed that challenges in negotiating prices stem fundamentally from the fact that freight rates vary widely, being influenced by frequent changes in international tariffs, availability of aircraft and ships, and carriers' commercial adjustments. In the Operational unit, the first obstacle is meeting deadlines, as the client's tolerance for delays is low. In addition, there is a deadline for receiving cargo at air and sea terminals; any delay in the collection and arrival process at the terminal can trigger retention, additional costs, and rescheduling of shipments. Furthermore, operational complexity increases when shipping companies and airlines continually revise their estimates, necessitating ongoing monitoring and rapid response capabilities for the logistics agent. In the Representation sector, challenges focus on updating information and document processing. In many cases, approval of the bill of lading is delayed, resulting in delays in the documentation stage and compromising cargo release. Additionally, airline websites are slow to update, hindering operational visibility and prolonging the time required to confirm the arrival status of goods. In this context, it is also important to note that the importer's customs broker receives cargo at the terminal, and this face-to-face interaction is a critical point that can accelerate or delay the logistics flow depending on the availability and efficiency of the local representative. The Billing department, operations are constrained by specific financial obligations, as terminals must be paid for expenses incurred to release the cargo, establishing a direct dependence between cost settlement and process continuity. Additionally, the final stage of the operation may be compromised when the carrier delays delivery, thereby affecting the fulfillment of the agreed deadline with the client and influencing the perceived reliability of the freight forwarder's service.

Table 5. How the challenges occur

Departments	Challenges	How challenges arise
Pricing/Sales	Reaching the target value to close the deal with the client.	Shipping costs vary widely.
Operational	Avoid delays in collection	Deadline set by the client

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	Receive the cargo at the terminal in the country of origin.	There is a deadline for clearing cargo through air and sea terminals.
	Assertive follow-up	Shipping companies and airlines continually revise their estimates.
Representation	Validation of shipping document	Bill of lading approval always exceeds the deadline
	Confirm arrivals with airlines and shipping companies	Airline websites are slow to update
	Release original documentation	The importer's customs broker receives the cargo at the terminal.
Billing	Payment of freight expenses	It is necessary to pay the terminal fees to release the cargo.
	Meet customer delivery deadlines.	The carrier delays the delivery.

Source: Data collected by the authors

It was found that the identified challenges do not manifest themselves in isolation. They constitute a set of related factors that directly affect logistical performance. Freight variability, delays in system updates, and inconsistencies in delivery forecasts characterize an operational environment of high uncertainty, in which information management is crucial. Furthermore, the need for additional payments, document rework, and on-site interventions at the terminal indicates the presence of hidden operational costs and procedural obstacles that accumulate throughout the logistics chain. Thus, the data demonstrate that the presence of these challenges depends on both internal optimization measures and collaborative alignment among transport agents, freight forwarders, shipping companies, and other participants in the process.

4.4 Causes of the occurrence of the challenges

Table 6 shows the causes of the challenges. In the Pricing/Sales department, to meet the importer's target values, it is necessary to verify prices with several suppliers in the country of origin of the requested cargo. On the operational side, the lack of clear and assertive communication between the importer and their supplier causes delays in material collection, while loading the cargo at the origin facilities within the established deadline makes entry into the origin terminals more difficult. Similarly, the tracking websites of shipping

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companies and airlines, due to delays, make monitoring less accurate and generate errors in updates that should be precise. In the Representation area, the process of validating initial shipping documents, such as the Invoice (commercial invoice) and packing list (list of input descriptions), has a bottleneck because the acceptance of these documents depends on the importer's system and updates, when necessary, from the supplier in the country of origin.

The high demand for shipments is also a significant challenge for the representation sector, as tracking more than 20, 30, or even 50 shipments simultaneously requires a system or method that facilitates this process. Given the number of documents, the challenge of releasing the original documentation is particularly significant, as it depends on the digital release services of airport concessionaires (for air freight) and on the shipping company's document representatives (for maritime freight). Finally, in billing, terminals provide document handling and delivery services, thereby issuing freight charges that must be paid for the cargo to be released. Consequently, cargo deliveries to companies may be delayed because these two points are interconnected: non-payment leads to cargo non-release and, thus, to delivery delays.

Table 6. Causes of the occurrence of the challenges

Departments	Challenges	Causes
Pricing/Sales	Reaching the target value to close the deal with the client.	There are several causes: Logistical cause.
Operational	Avoid delays in collection	Noise in communication between supplier and client: Communicational cause
	Receive the cargo at the terminal in the country of origin.	For cargo to be shipped on time according to the established reservation: Logistical cause
	Assertive follow-up	Company/shipping company websites are slow to update: Technological cause.
Representation	Validation of shipping document	Delay in return between origin and destination: Technological cause.
	Confirm arrivals with airlines and shipping companies	High demand for shipments: Technological cause.
	Release original documentation	Cargo release and bill of lading: Logistical cause.
Billing	Payment of freight expenses	Handling and document delivery services: Financial cause.
	Meet customer delivery deadlines.	Slow cargo delivery to companies: Logistical cause.

Source: Data collected by the authors

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The biggest challenge in the import process is achieving the target values to close deals with clients. The primary cause is logistics, which manifests in various ways. In the operational area, there are two main challenges: the first is avoiding delays in collection, caused by communication problems between the supplier and the client; the second is getting the cargo into the terminal of the country of origin (i.e., placing it in a port or airport), also caused by logistics. Finally, adequate follow-up is hampered by technology. The representation faces two significant challenges related to documentation and cargo tracking, both attributable to technological deficiencies, and a third related to cargo release, attributable to deficient logistics. The challenges end with invoicing, where meeting delivery deadlines is caused by logistics. There are four groups of logistics-related challenges: three technological, one communicational, and one financial.

4.5 Degrees of Complexity of the Challenges

Table 7 presents the classification of difficulty levels for the identified challenges across three levels: low, medium, and high. The challenge of reaching the target values to close with the client is classified as High complexity. This significant difficulty can be associated, as noted above, with the need to verify multiple suppliers in the cargo's country of origin for the import request. In the Operational unit, the challenge of avoiding delays in collection is considered of medium complexity. Internalizing the cargo at the country of origin is classified as High complexity, consistent with the description that this step, along with the shipment, causes delays in material collection due to the difficulty of securing the shipment within the established deadline. In contrast, the challenge of assertive follow-up is considered low complexity. For the Representation, both the Validation of shipping documents and the Confirmation of arrival with airlines and shipping companies are challenges of medium complexity. The Release of original documentation is classified as low complexity, indicating a lower degree of difficulty for this specific process. In Billing, the payment of freight expenses is classified as having medium complexity. Finally, the challenge of meeting

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customer delivery deadlines is classified as having High complexity. This challenge is directly related to significant delays in collection and shipment, and to challenges in releasing documentation and cargo, which justifies its high complexity.

Table 7. Degrees of complexity of the challenges

Departments	Challenges	Complexity
Pricing/Sales	Reaching the target value to close the deal with the client.	High
Operational	Avoid delays in collection	Medium
	Receive the cargo at the terminal in the country of origin.	High
	Assertive follow-up	Low
Representation	Validation of shipping document	Medium
	Confirm arrivals with airlines and shipping companies	Medium
	Release original documentation	Low
Billing	Payment of freight expenses	Medium
	Meet customer delivery deadlines.	High

Source: Data collected by the authors

As indicated by the data source, the analysis of complexity levels reveals that the challenges are distributed across three levels (low, medium, and high). Table 5 offers a clear view of where the most significant challenges in the logistics process are concentrated. By classifying difficulty levels, it is possible to conclude that the problems that most affect the final delivery deadline and customer satisfaction are in activities classified as High complexity. Examining the nine challenges listed, a predominance is observed in the higher levels: Medium complexity is the most repeated, appearing 4 times in "Avoiding delays in collection", "Validation of shipping document", "Confirming arrival with airlines and shipping companies" and "Payment of freight expenses", while High complexity is repeated three times in "Reaching the target value", "Internalizing the cargo in the terminal" and "Meeting customer delivery deadline", reflecting the main strategic and operational bottlenecks of the process. The low-complexity challenges appear only twice: "Assertive follow-up" and "Release of original documentation," indicating that most of the problems lie in activities that require significant effort to overcome.

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4.6 Discussion of results

The study results showed that all its end units address the import process challenges faced by the research organization. Several studies have shown that organizational structure must be aligned with the company's strategy (Nascimento-e-Silva et al., 2019), as evidenced by an empirical investigation of an importing company. The study by Joseph and Sengul (2025) found that structural choices, such as configuration, coordination, and control mechanisms that support the strategy, produce superior performance, a result that converges with the findings in the study by Hernaus et al. (2025) that performance is dependent on the link that the strategy maintains with the organizational structure. The extensive systematic review conducted by Stanikzai and Mittal (2025) also confirmed that strategic-structural alignment, centered on decisions consistent with the strategy, is frequently associated with better organizational performance and sustainability.

The empirical results also showed that these challenges are small relative to the company's broader operational challenge of properly executing the import process and allocating work among its core business units. They represent a series of obstacles that arise for each department, but together they constitute the conditions considered normal in import operations. Dividing a considerable challenge into smaller challenges is a strategy widely practiced by organizations. This technique is used both to find solutions to complex problems, as is the case with the application of the crowdsourcing technique, as shown in the study by Yang et al. (2025), breaking down the challenge into smaller challenges, and in partitioning significant problems into smaller ones, as in the research by Van den Hoof et al. (2025). This technique is so effective that Lee and Kang (2025) developed a modular design to decompose complex design problems into smaller ones, thereby reducing complexity, improving efficiency, and facilitating large-scale implementation. The company under study will likely mitigate the impact of challenges in the execution of its import processes by using this technique.

The challenges that occur are obstacles that can have a greater impact on the predictability, meeting deadlines, and reliability of the organization's logistics

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flow under study, indicating instability across the stages of its import processes. However, almost all these challenges stem from the external environment; they are adversities in its operating environment, over which it has practically no influence, such as freight prices. Studies such as that of Jiang et al. (2025) show that these factors really hinder predictability and impact the reliability and meeting deadlines in import chains, resulting in outcomes very similar to those reported in the study by Müller et al. (2025), which found that delivery delays and lead time variability remain central problems, even with the adoption of predictive methods. Karmelić's research reported that the low reliability of shipping line schedules stems from port congestion, geopolitical events, and transport infrastructure, all of which are external factors.

The organization under study faces logistical, technological, communicational, and financial challenges that have made it difficult to achieve target values for closing client deals, with logistical and technological factors being the primary ones. Several studies also confirm these empirical findings, such as that of Zeng et al. (2025), which point to technological and communicational barriers (inconsistent information flows, lack of data standardization, dependence on physical documents, etc.) that generate various difficulties for importers, such as delays, dispatch errors, and additional costs. The research by Karmelić et al. (2025) reports logistical (port congestion and internal transport) and communicational causes for difficulties in executing more efficient import processes, while that of Yang and Yu. (2025) reports that the adoption of technologies (such as blockchain) affects the financial aspects of the supply chain and operational performance.

Mapping the complexity of the challenges analyzed shows that when it is high, it is related to negotiation, such as the target agreed with the client, getting the cargo into the country of origin, and the deadline negotiated with the client; when the complexity is medium, the challenges are more dependent on technologies and technical aspects, such as document validation and confirmation of arrival with airlines and shipping companies. When complexity is low, the challenges are more bureaucratic, such as document release and the

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assertiveness required for follow-up. This gradation is influenced by several factors, as shown by studies such as those by Pant et al. (2025) and Grondys and Kot (2025), which examine both internal and external environments.

The overall research results confirmed that logistics costs and freight volatility (Costa et al., 2025; Vilarinho et al., 2024; Veiga et al., 2024), regulatory complexity and customs bureaucracy (Morini et al., 2024; Barbary; Tawfiq, 2024; Wang et al., 2024), and low technological capacity and difficulties in digitalization (Morini et al., 2024; Veiga et al., 2024) are the main challenges to be faced and overcome by the organization under analysis, as predicted by the study's theoretical framework. No references were found regarding infrastructure, logistical insufficiency, and low intermodal integration (Vilarinho et al., 2024; Costa et al., 2025; Wang et al., 2024), nor regarding the dependence on waterways and climatic vulnerability of Amazonian importers, as pointed out in the studies by Lima et al. (2024), Maciel et al. (2024), and Fontes et al. (2025).

5. Conclusion

This study analyzed the challenges of the import process of an Amazonian freight forwarding company. The results showed nine challenges, faced by all its core business units, because the obstacles represent small parts of the organizational macro-challenge, which is to achieve the target negotiated with clients, whose causes are logistical, technological, communicational and financial difficulties, and with high complexity in those involving negotiation, medium in those related to technical and technological dimensions and low complexity in those about bureaucratic problems. The organization's approach to facing its challenges aligns with the scientific literature: most originate from the external environment, which is uncontrollable, and require organizations to develop and execute contingency plans to prevent these challenges from becoming threats.

The logistical specifics of the Amazon region were not mentioned by the respondents, suggesting that its challenges are less salient than those associated with typical international trade obstacles. These findings indicate that the

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institutional, global dimensions of international trade and the import process are more prominent than regional aspects, such as the Amazonian modal infrastructure and its hydrographic network, and organizational elements, such as storage capacity and inventory management. This consequently explains why logistical costs and freight volatility, regulatory complexity and customs bureaucracy, and low technological capacity and difficulties in digitization, in general, are the main challenges for the execution of the import process for the company studied.

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