

Strategic Intelligence Tools Applicable to Customs Transit Operations

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ABSTRACT

This study explores the application of strategic intelligence tools directed at strengthening the customs transit process. Through a theoretical approach, the research examines how data analysis, risk management systems, and other tools can enhance the capacity to identify and manage risks in these operations. Drawing on the contributions of authors like Sherman Kent and Joao Aguirre, the study evaluates suitable tools for facilitating and controlling customs transit operations. From a theoretical standpoint, it analyzes potential solutions for overcoming obstacles related to the technological resources and specialized training required. This article theoretically examines the advantages and disadvantages of strategic intelligence tools in the customs transit process to support informed decision-making

Keywords: Strategic Intelligence, Customs Transit, Data Analysis, Risk Management Intelligence Cycle Tools and Open Sources.

Context

In the Colombian context, customs transit serves as an essential element of foreign trade; however, it presents significant challenges in terms of facilitation and control (DIAN, 2021). The incorporation of strategic intelligence tools—such as predictive analysis, comprehensive risk management (Barragán, 2018), and data automation—enables more accurate identification of risk patterns (Pérez Marqués, 2014). This article examines the key strategic intelligence tools (Aguirre, 2015) and their applicability within customs transit operations

Research Question:

¿What strategic intelligence tools can be applied to customs transit operations to detect and prevent risk patterns in customs transit?

Specific Research Problem

The specific problem lies in the lack of analysis of strategic intelligence tools applied to customs transit operations. This deficiency limits the ability of the customs transit process to efficiently address the risks associated with facilitation and control (Valderrama & Hurtado, 2020)

Introduction

Due to its complexity, customs transit in Colombia is a vital component of foreign trade, requiring an analysis of tools that assist in identifying risks that traditional control systems are unable to adequately mitigate. In this context, the present research poses the following question: This study is essential, given that conventional methods for analyzing customs transit operations are not designed to manage the increasing volume and sophistication of modern trade, which results in potential risks. Tools such as data analysis and process automation emerge as effective alternatives for more precise detection of atypical behaviors. However, the specific issue lies in the lack of integration (Barragán, 2018) of these tools (Aguirre, 2015) across different stages of national operations (Valderrama & Hurtado, 2020). This study was conducted as part of the master's program in Strategic Intelligence at the “BG Ricardo Charry Solano”

School of Intelligence and Counterintelligence (ESICI) to address the need to generalize the application of strategic intelligence in the business sector.

Purpose

The purpose of this research is to identify and analyze the main strategic intelligence tools applicable to customs transit operations, with the aim of enhancing the detection and prevention of atypical behaviors. This approach seeks to strengthen the capacity for risk detection and prevention. By addressing the lack of integration of these tools across the stages of customs transit operations, this study aims to conduct an analysis of strategic intelligence tools applied to customs transit operations (Ministerio de Hacienda y Crédito Público, 2024)

Main Objective

To identify and examine strategic intelligence tools that can be implemented in the different stages of the customs transit process.

Specific Objectives

- Conduct a documentary analysis on strategic intelligence and customs transit.
- Analyze strategic intelligence tools applicable to the customs transit process.
- Determine which tools demonstrate practical applicability and feasibility

Hypothesis

The analysis of strategic intelligence tools applied to customs transit operations enables the identification of viable tools for potential implementation in the detection of atypical behaviors and operational risks

Theoretical Significance

This study offers a valuable theoretical contribution by proposing the adaptation of strategic intelligence concepts (Valderrama & Hurtado, 2020), typically applied in other sectors, to the customs field to enhance fiscal security. In this regard, it introduces a new perspective for addressing customs vulnerabilities in foreign trade, highlighting the role of strategic intelligence tools in identifying and mitigating customs-related risks

Practical Significance

This research provides an applicability assessment for the formulation of public policies in the foreign trade sector, as it could demonstrate how incorporating strategic intelligence systems (Gutiérrez Sánchez & Arciniegas Londoño, 2022) into customs transit processes could reduce customs gaps. This would enable authorities not only to increase customs revenue but also to strengthen their customs system, making it more robust and transparent in line with international best practices

Justification

This study is justified by the strategic importance of customs transit (Meisel-Lanner, 2023) in Colombia's foreign trade and the need to ensure customs security in the flow of merchandise. The current issue lies in the lack of integration of strategic intelligence tools, which hinders the detection of customs irregularities. The research aims to provide arguments to enhance customs management through methodologies such as intelligence analysis, estimations, comparative analysis, transnational threat assessment, and the adoption of strategic intelligence tools such as data analysis (Pérez Marqués, 2014), foresight intelligence, and process automation (DIAN, 2024), thereby facilitating more effective and robust fiscal security (Rueda Viñas, 2019) for the national economy. Addressing this gap aims to reduce fiscal losses and increase the competitiveness of legal operators

General Significance

This research holds particular importance in the area of fiscal security (DIAN, 2021) in Colombia, as it addresses one of the most significant vulnerabilities in the Colombian customs system: the lack of comprehensive implementation of strategic intelligence tools. By proposing the use of these advanced tools, this study provides customs authorities with effective solutions that will not only enhance the detection of fiscal risks but also optimize the resources allocated to oversight. This will contribute to safeguarding fiscal revenue and establishing a more efficient customs system, thereby strengthening foreign trade, fiscal security, and confidence in the country

Methodology

1. Documentary and Theoretical Review

- **Activities:**
 - Conduct a review of specialized literature, including scientific articles, public policy reports, and guides on customs and fiscal security.
 - Examine approaches by authors such as Sherman Kent on intelligence analysis and strategic estimates; Joao Aguirre on criminal intelligence and network analysis; and Fredy Rivera Vélez on geopolitical intelligence and transnational threat assessment.
 - Analyze current Colombian customs regulations.
 - Review academic documents related to customs transit in Colombia.
- **Tools Used:**
 - **Open-Source Intelligence (OSINT):** Collection of up-to-date information on best practices in customs and fiscal security at global and regional levels using open sources (De Castro & Furlan de Asis, 2024).
 - **Scenario Analysis:** Definition of possible scenarios to study the impact of strategic intelligence on the customs system, facilitating the identification of high-risk areas.
 - **Intelligence Analysis:** Following Aguirre's propositions, this will explore how enhanced interconnectivity in the use of collaborative intelligence (Aguirre, 2015) could optimize risk detection in customs transit.

2. Analysis of Colombian Customs Regulations

- **Objective:** Analyze the regulatory framework for customs transit in Colombia and identify opportunities to implement strategic intelligence tools in line with current decrees and resolutions.
- **Documents Analyzed:**
 - **Decree 1165 of 2019:** Analysis of how strategic intelligence can optimize control and monitoring in accordance with current provisions.
 - **Decree 360 of 2021:** Evaluation of its impact on the fiscal oversight of merchandise in transit and the use of collaborative intelligence and early warnings to anticipate potential fiscal non-compliance.
 - **Resolutions 046 of 2019 and 011 of 2020:** Assessment of the role of process automation and tools such as OCR in regulatory compliance.
- **Analysis Tools:**
 - **Data Analysis:** Applied to the regulations to identify patterns in customs compliance.
 - **OSINT:** Complementary analysis through comparison with other jurisdictions that have implemented strategic intelligence in their customs contexts.

3. Characterization of Strategic Intelligence Tools for Customs Transit

- **Objective:** Theoretically identify strategic intelligence tools that can be applied to fiscal security control in customs transit.
- **Approach:** The tools that could be applied to the customs transit process are framed within certain stages of the intelligence cycle, specifically in the stages of collection, processing, analysis and production. This theoretical study is aligned with the planning and direction stage, as it analyzes environmental elements to define plans and actions (as outlined in the proposed methodology). The results of this article are positioned

within the dissemination stage, providing decision-makers with recommendations offered in the conclusions.

- **Evaluation Stage:** This stage will depend on whether the recommendations from this study are adopted. If implemented, feedback will transition the study from a theoretical to a practical one, considering additional external factors and the feasibility of implementing one or more of the suggested tools.
- **Tools:**
There is no exhaustive list of specific tools; however, there are tools associated with the intelligence cycle stages mentioned in the previous section.

4. Result of Strategic Intelligence Application for Customs

- **Objective:** Propose a conceptual assessment of the integration of strategic intelligence tools into the customs process.
- **Approach:** Following an evaluation of the customs transit process, regarding tools applicable to each stage and their relevance to the intelligence cycle, this study proposes the tools with the highest feasibility based on the advantages they offer to the current process.

Theoretical Framework

Strategic Intelligence

In the business context, strategic intelligence is focused on monitoring critical variables, such as market trend analysis, competitive positioning evaluation, and risk identification, with the goal of ensuring the organization's sustainability and continued growth. Kent (Kent, 1949) emphasizes the importance of having specialized teams that, through an organized and systematic structure, transform data into strategic knowledge. This transformation enables companies to develop proactive policies, anticipate competitors' moves, and adjust strategies to maximize success in both stable and uncertain contexts."

In his article *Strategic Intelligence: A System for Managing Innovation*, (Aguirre, 2015) explains how strategic intelligence can be applied in the business sector to foster competitiveness and innovation. Aguirre proposes an integrated approach that combines tools typically used separately, such as technological surveillance, competitive intelligence, and foresight, into a unified system that enables companies to anticipate market changes and respond with well-grounded strategies. Within this framework, strategic intelligence not only analyzes historical and current information but also projects future scenarios, facilitating informed and proactive decision-making. This, in turn, aids in identifying opportunities and mitigating risks, thereby strengthening the company's position in dynamic markets.

Aguirre also emphasizes the importance of implementing a macro-process that includes diagnosis, design, implementation, and strategic control (Sagalla Reis, 2024), which allows for aligning organizational resources with security and fiscal revenue objectives. Techniques such as data mining, trend analysis, and competitive environment assessment are fundamental within this approach, particularly in emerging economies where innovation and responsiveness to change are essential for business success

In his work *Organized Crime and Multidimensional Security* (Rivera Velez, Seguridad multidimensional en América Latina, 2008), Rivera examines the crucial role that strategic intelligence plays in preventing and mitigating threats in the business sector, especially against risks arising from organized crime. He also highlights that strategic intelligence, understood as a continuous process of information collection, analysis, and application, enables companies to anticipate potential threats and formulate effective responses to safeguard their operations. In this regard, strategic intelligence contributes to identifying risk networks, assessing vulnerabilities, and strengthening corporate security through monitoring systems capable of alerting to suspicious activities.

he author further emphasizes that strategic intelligence is not only focused on the physical protection of business infrastructure but also on data security and corporate fraud prevention, both essential components of multidimensional security. Applied strategic intelligence allows organizations to establish more advanced security protocols and proactively adapt to threats, integrating risk assessments into their business plans. This comprehensive

approach enhances organizational resilience and ensures sustainability in high-risk environments, making strategic intelligence a key tool for informed decision-making and creating safer, more stable business environments.

In addition, in the document *Strategic Intelligence in Colombia*, (Valderrama & Hurtado, 2020) highlight the importance of strategic intelligence in the development of both business and state sectors in Colombia. They note that, in the national security context, strategic intelligence enables organizations to anticipate potential threats and adapt to environmental changes. This approach focuses on the collection, analysis, and application of relevant information to guide strategic decision-making. In the business sector, strategic intelligence is used to identify risks, analyze competition, and forecast market trends, thereby optimizing the resilience and competitiveness of organizations in a globalized environment.

The document also emphasizes that strategic intelligence, beyond being a protective tool, is essential for business innovation and growth. In a context of high competition and shifting threats, Colombian companies benefit from implementing an intelligence approach that encompasses data and trend analysis, as well as monitoring the economic and sociopolitical environment. This approach enables companies not only to react but also to anticipate and seize opportunities, thereby building a sustainable competitive advantage in a market that demands adaptability and precision in strategic planning.

Description of the Intelligence Cycle Process

The intelligence cycle is a structured process that facilitates the transformation of data and information into useful knowledge for strategic decision-making. This cycle consists of sequential and cyclical stages that adapt according to the context and specific objectives

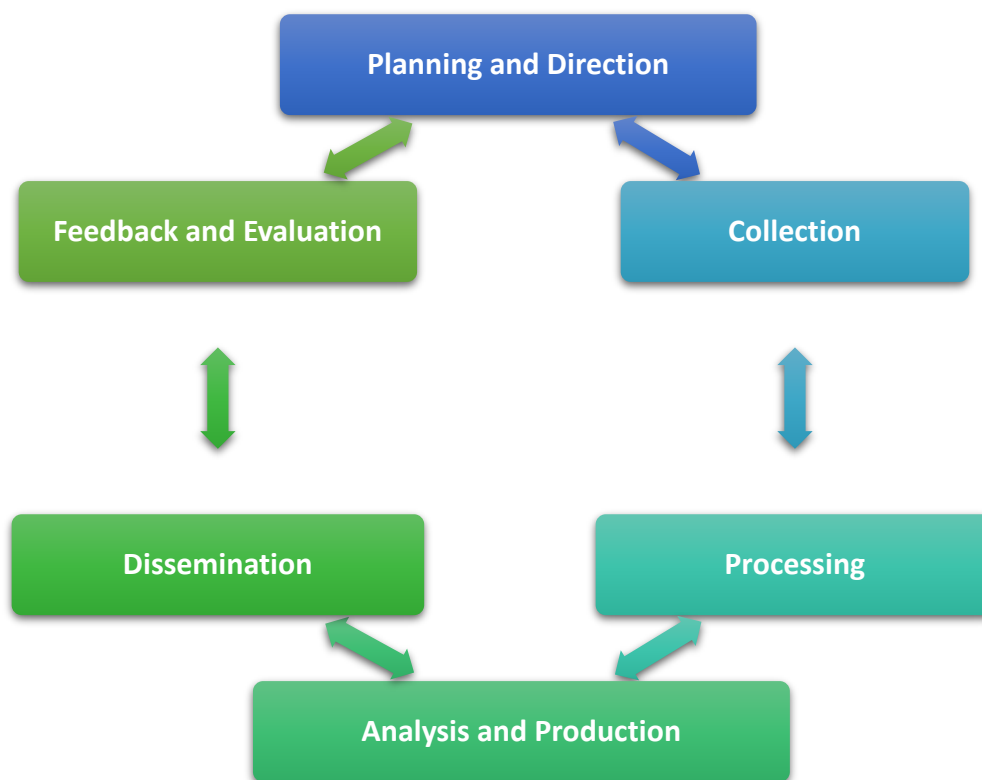


Figure 1. Intelligence Cycle (Bonilla, 2004)

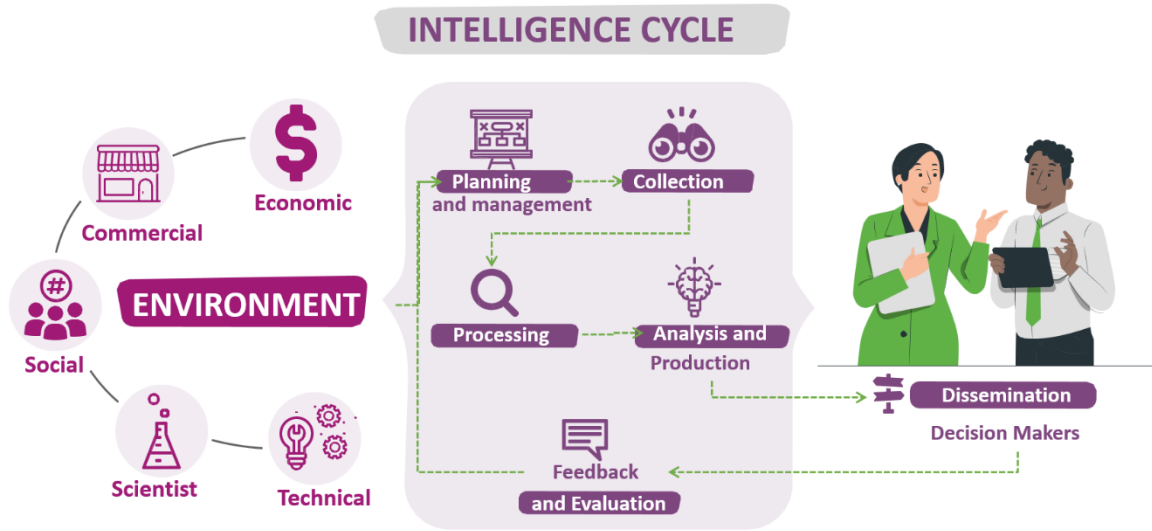


Figure 2. Adapted Intelligence Cycle (Agencia de Educación Postsecundaria de Medellín, 2021)

The following are the stages that comprise the intelligence cycle:

Table 1. Phases of the Intelligence Cycle in the Customs Process (Bonilla, 2004)

Fase	Description
Planning and Direction	Definition of intelligence objectives and needs; identifying the required information and the methods for its collection, processing, and analysis, considering the available resources.
Collection	Gathering information from various sources (OSINT, HUMINT, SIGINT, IMINT) to collect relevant and verifiable data that supports planning objectives.
Processing	Organizing and structuring the collected information to make it accessible and understandable; includes converting unstructured data into formats that facilitate analysis, such as translation and transcription.
Analysis and Production	Interpreting and evaluating processed data; developing hypotheses, identifying patterns, and creating reports that transform information into relevant strategic knowledge.
Dissemination	Distributing intelligence products to decision-makers, ensuring timely delivery in the appropriate format (reports, charts, presentations).
Feedback and Evaluation	Feedback from end-users on the utility of the products and evaluation of the cycle's effectiveness, allowing for adjustments and improvements in future iterations.

Each stage is essential for the effectiveness of the intelligence cycle, enabling more accurate and appropriate responses to strategic needs.

Customs Transit in Colombia

According to Decree 1165 of 2019 (Ministerio de Hacienda y Crédito Público, 2024) "customs transit" in Colombia refers to the modality (DIAN, 2019) that authorizes the land transportation of domestic or foreign merchandise under customs supervision, from one customs office to another within the national customs territory. The purpose of this

process is to ensure that merchandise are transported from one location to another without alterations, thereby protecting fiscal and customs control and preventing irregularities such as smuggling.

Customs transit activities must comply with various regulations, among which are the mandatory use of security seals and locks on cargo units, as well as the implementation of electronic monitoring devices (DIAN, 2020). These measures aim to ensure that merchandise are neither removed nor added along the route, preventing customs fraud and preserving the integrity of the taxes associated with the merchandise as they move through the country.

According to Colombian customs legislation (DIAN, 2020), customs transit allows the transportation of merchandise under customs control from an entry point to a final destination within the national territory, without requiring the payment of duties during transit. This system aims to facilitate the flow of merchandise and reduce processing times in import and export procedures, providing logistical benefits that ensure efficient and controlled transit to various areas of the country, such as free trade zones and authorized warehouses. However, fiscal security in customs transit poses significant challenges, as the transportation of merchandise without strict control creates opportunities for smuggling and tax evasion.

For this reason, the customs transit system in Colombia requires strict control and supervision measures, such as the use of electronic seals and monitoring technologies, to prevent products from being diverted without complying with fiscal requirements. Through these actions, Colombia's customs administration seeks to protect fiscal integrity and ensure that merchandise completing their transit pay the corresponding taxes when they enter the national market.

Customs Transit Process

The customs transit process in Colombia consists of several essential stages, designed to regulate and supervise the movement of merchandise under customs control from an entry point to an exit point or destination within the national territory, without nationalization occurring. The main phases of this process in the country are detailed below:

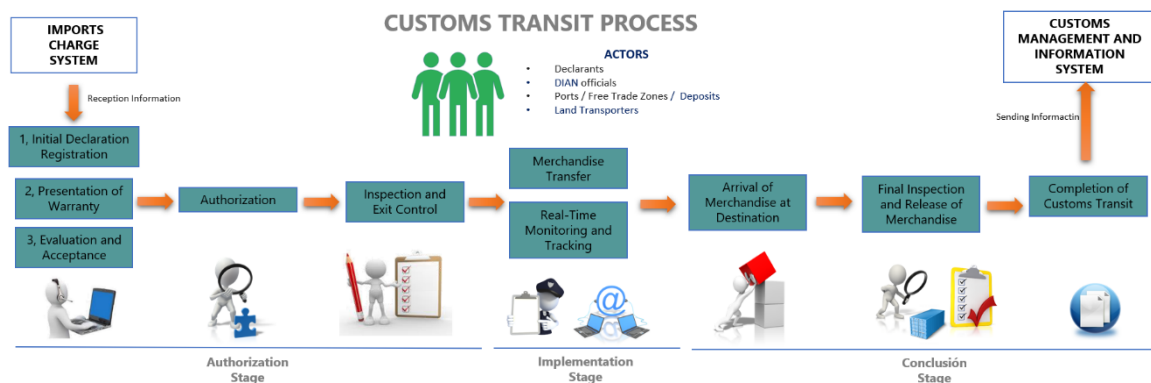


Figure 3. Stages of Adapted Customs Transit (DIAN, 2020)

Table 2. Stages of the Customs Transit Process in Colombia (DIAN, 2020)

Etapas	Description
Initial Declaration Registration	The declarant (importer, exporter, or customs agent) submits the transit declaration to DIAN through the customs information system, including details about the merchandise, origin, destination, and transportation. This step aims to prevent irregularities

Presentation of Warranty	The declarant provides a warranty covering potential taxes or penalties in case of irregularities during transit, allowing DIAN to recover any unpaid taxes if the transit is not completed.
Evaluation and Acceptance of Declaration	Customs authorities review the documentation manually or through the SIE to confirm compliance with requirements. Additional information or corrections may be requested, along with an initial risk assessment to determine the need for inspection
Authorization of Customs Transit	DIAN grants authorization for transit from the origin to the designated destination, setting a specific timeframe for the arrival of the merchandise.
Inspection and Exit Control	Depending on the risk, a physical or documentary inspection may be conducted before departure. If no irregularities are detected, the merchandise are authorized to continue to their destination.
Merchandise Transfer	The goods are transported under customs supervision without unloading, repackaging, or modification, unless authorized. Transport vehicles must be identified and monitored, and the transporter must comply with the specified timelines
Real-Time Monitoring and Tracking	During transit, monitoring systems such as GPS are used to ensure that the goods follow the authorized route, preventing deviations into illegal markets or smuggling activities.
Arrival of Merchandise at Destination	The warehouse notifies DIAN of the arrival. A documentary verification is conducted to ensure that the transport vehicles and cargo units match the declaration. Penalties may be applied for irregularities such as delays or discrepancies.
Final Inspection and Release of Merchandise	DIAN conducts a final documentary or physical inspection (if applicable) to confirm compliance with transit regulations. If no irregularities are found, the goods proceed to their next stage.
Completion of Customs Transit	The warehouse, through the SIE, confirms the completion of transit, concluding the modality and allowing the goods to proceed with the import process.

Strategic Intelligence Tools

The following is a list of various tools that, while not explicitly defined in the literature as 'strategic intelligence tools,' can be associated with strategic intelligence based on an analysis of each tool and its role within the stages of the intelligence cycle

- Advanced Data Analysis (Pérez Marqués, 2014)
- Dynamic Risk Profiling (Barragán, 2018)
- Non-Intrusive Inspection Technologies (DIAN, 2020)
- Surveillance Systems (Mora Navarro, 2022) and Real-Time Monitoring (Meisel-Lanner, 2023)
- Predictive Analysis (Rivera Velez & Barreiro Santana, Inteligencia Estrategica y Prospectiva, 2010)
- Online Automatic Validation Systems for Electronic Documents (DIAN, 2016)
- License Plate Reader System (Valencia Villa, 2019)
- Artificial Intelligence (AI) (Salazar Vega & Figueroa Medina, 2023)
- Early Warning Indicators (Salazar Vega & Figueroa Medina, 2023)

Tools directly aligned with strategic intelligence should be considered, as they are enhanced and strengthened by this group of tools used in the customs process.

Intelligence Network Analysis: Strengthening interconnectivity between customs authorities through an information network.

Risk Management System: Designing a continuous risk assessment and classification framework in compliance with regulations.

Prospective Intelligence: Creating a unit to anticipate customs scenarios and develop preventive control strategies.

Collaborative Intelligence: Leveraging the expertise of officials combined with data generated by the entity to enhance analytical capabilities.

Open Source Intelligence (OSINT): Collecting relevant data with minimal investment.

Results

Strategic intelligence tools have applications across various stages of customs transit, optimizing key processes for identifying, monitoring, and preventing illicit activities. The following details the stages in which these strategic tools could be implemented along with their respective functionalities

1. Initial Declaration Registration

- **Tool to Apply:** Advanced Data Analysis (Big Data and Analytics).
- **Use:** This tool enables the analysis of risk patterns in transit declaration information, detecting possible inconsistencies or anomalous behaviors in commercial transactions.
- **Advantage:** Enhances initial risk assessment, facilitating the prioritization of goods that may require more thorough inspection.

2. Evaluation and Acceptance of Declaration and Presentation of Warranty

- **Tools Applied:** Risk Management Systems (RMS) and Open Source Intelligence (OSINT).
- **Use:** RMS, based on strategic intelligence, enable the automatic classification of declarations according to their risk level. Using historical data and previously identified fraud patterns, the system can be supplemented with information collected through open sources.

- **Advantage:** Facilitates decision-making on whether a more thorough inspection is necessary or if goods can continue their transit without interruption.

3. Authorization of Customs Transit

- **Tool Applied:** Dynamic Risk Profiling.
- **Use:** Strategic intelligence helps develop and adjust dynamic risk profiles for importers, declarants, and transporters. Depending on the assigned risk profile, automatic or conditional authorization for transit may be granted.
- **Advantage:** Facilitates swift and effective decision-making, based on compliance history and risk assessments

4. Inspection and exit control

- **Suggested Tools:** Non-intrusive inspection technologies (such as scanners and X-rays) and artificial intelligence (AI).
- **Implementation:** Scanners and X-rays can be used to conduct non-intrusive physical inspections of goods, while AI can automatically analyze the captured images, efficiently identifying any anomalies.
- **Advantage:** Optimizes inspection times and improves accuracy in detecting contraband or undeclared goods without the need to open containers

5. Goods Transfer

- **Suggested Tool:** Surveillance and Real-Time Monitoring Systems
- **Implementation:** The incorporation of satellite monitoring systems enables real-time tracking of goods transportation throughout transit, ensuring that no route deviations or unauthorized handling occur.
- **Advantage:** Increases transit security and protects the integrity of goods on their route to the destination, reducing the risk of deviations or losses."

6. Real-Time Monitoring and Tracking

- **Suggested Tools:** Predictive Analysis and Intelligence Network Analysis
- **Implementation:** Through strategic intelligence and predictive analysis, authorities can anticipate risk behaviors, such as unusual routes or unjustified delays. Network analysis helps identify transporters, consignees, or routes associated with illicit activities.
- **Advantage:** Facilitates the early detection of transit risks, allowing authorities to anticipate and mitigate potential deviations or customs fraud attempts

7. Arrival of Goods at Destination

- **Suggested Tools:** Online Automatic Validation Systems for Electronic Documents and License Plate Reader System
- **Implementation:** Automatic validation systems allow for comparison between initial declarations and documents presented upon arrival, verifying information consistency.
- **Advantage:** Optimizes document verification time and minimizes human error, ensuring alignment between the received goods and the previously declared information.

8. Final Inspection and Release of Goods

- **Suggested Tool:** Artificial Intelligence (AI)
- **Implementation:** AI facilitates rapid analysis of data linked to goods transit, providing alerts in case of discrepancies between the inspected cargo and the initial declared information.

- **Advantage:** Automates the final inspection, increasing process accuracy and reducing the risk of fraud or documentation errors

9. Completion of Customs Transit

- **Suggested Tool:** Advanced Data Analysis
- **Implementation:** This analysis enables evaluation of the closure process to identify trends and irregular behaviors, generating reports that strengthen future control processes.
- **Advantage:** Contributes to the continuous improvement of customs control strategies and allows for adjustments in strategic intelligence methods based on obtained results

Evaluation of Results

Based on a theoretical analysis of the applicability of various strategic intelligence tools to strengthen customs transit and enhance fiscal security, an evaluation was conducted for each tool in terms of technological viability, field applicability, regulatory compliance, and requirements for trained personnel.

Among the tools with high viability in the Colombian context are advanced data analysis, early warning indicators (I&W), risk management systems (RMS), and optical character recognition (OCR) software. These solutions could effectively address the need for optimization in customs control of transit operations, and their implementation in Colombian customs would require a reasonable investment in infrastructure and organization.

In contrast, tools such as intelligence network analysis and collaborative intelligence show limited viability due to the high infrastructure and specialized personnel requirements needed for their proper implementation.

Table No. 3 records the viability of strategic intelligence tools, showing the applicability and technological feasibility of each tool within the customs transit process.

Table 3. Viable Tools displays the feasibility results for each category of tools

Advanced Data Analysis	Applicability	Technological Feasibility	Technological Feasibility
Predictive Analysis	High: Detects risk patterns at various stages of customs transit	High: Requires robust, scalable infrastructure and justifies its investment	High: Requires robust, scalable infrastructure and justifies its investment
Risk Management Systems (RMS)	High: Anticipates risk behaviors in goods in transit	Moderate to High: Requires advanced software, justified for reducing vulnerabilities	Moderate to High: Requires advanced software, justified for reducing vulnerabilities
Dynamic Risk Profiling	High: Classifies risks in evaluation and monitoring, aligned with current regulations	Moderate: Requires investment in monitoring technology, with a high impact on risk reduction	Moderate: Requires investment in monitoring technology, with a high impact on risk reduction
Early Warning Indicators (I&W)	High: Adjusts profiles in real-time, enhancing fiscal control	Moderate to High: Uses existing data, optimizing costs	Moderate to High: Uses existing data, optimizing costs
Open-Source Intelligence (OSINT)	High: Detects risks in advance, enabling a proactive response	Moderate to High: Technology can be integrated with risk management systems	Moderate to High: Technology can be integrated with risk management systems

Advanced Data Analysis	High: Provides accessible and relevant information on suspicious practices	Very High: Low cost due to access to open information and easy integration	Very High: Low cost due to access to open information and easy integration
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Table No. 3 shows the limited viability of strategic intelligence tools, highlighting those tools with operational viability restrictions, emphasizing factors of applicability and required competencies for their implementation in the customs context.

Table 4. Tools with Low Viability presents the feasibility results for each category of tools

Tool	Applicability	Technological Feasibility	Required Training
Intelligence Network Analysis	Moderate: Facilitates the identification of connections between risk actors, though limited by information-sharing constraints	Low: Requires advanced systems and network mapping; limited effectiveness in the current fiscal context and information exchange with foreign counterparts	Personnel with specialized training in network intelligence
Collaborative Intelligence	Low: Requires an institutional paradigm shift, more complex than data analysis	High: Requires a system for managing historical data and information processing	Training in secure information exchange and interagency collaboration
Scenario Analysis	Moderate: Relevant for strategic planning, though with limited application in daily operations	Moderate to Low: Demands specialized software with limited operational use in transit control	Training in foresight and scenario analysis
Automatic Document Validation Systems	Low: Useful for document verification, with marginal contribution to strategic fiscal intelligence	Moderate to High: Requires specific infrastructure, with reduced operational impact	Basic training; limited impact on strengthening fiscal security

Conclusions

1. The application of advanced data analysis, known as Big Data, emerges as one of the applicable tools for data analysis in the stages of customs transit operations. This technology enables the management of large volumes of data in real-time, identifying irregular patterns and atypical behaviors in operations. From Sherman Kent's perspective, data analysis contributes to informed, evidence-based decision-making, allowing authorities to detect fiscal irregularities more promptly in foreign trade.
2. Risk management systems are essential for optimizing the evaluation processes in customs transit operations, as they allow for the automatic classification and segmentation of goods and actors based on their characterization. These systems streamline the analysis process, enhancing process control. Their ability to dynamically adapt to the behaviors of actors increases control accuracy and strengthens fiscal security, thereby improving resource use and minimizing losses.
3. Incorporating the intelligence cycle into customs transit operations is important for creating a preventive strategy. This cycle enables customs procedures not only to respond to ongoing incidents but also to

anticipate and mitigate potential risks. In this way, the adaptability of the customs process is strengthened, facilitating a swift and timely response from actors to potential vulnerabilities.

4. The identification of potential tools for application, along with the stages where their implementation would be feasible, aims to enhance the analysis of this process and optimize the expected outcomes, thereby contributing to the facilitation and control of customs transit operations.

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