Incoterm Decision Matrix for AB InBev

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ABSTRACT

In most global companies, Incoterms, shorthand for International Commerce Terms, are the legally binding terms by which parties involved in the shipment of goods will agree to own said goods. While traditionally used for international trade, many companies (including AB InBev) will use Incoterms to define relationships with domestic suppliers as well. AB InBev's main motivation for this sponsored project is to gain an understanding of how logistics costs are affected by the International Commerce Term (Incoterm) they select for their shipments. The goal is to help AB InBev (ABI) design a tool that will aid in this analysis and decision-making process. The decision matrix was developed with help from ABI stakeholders and MIT researchers and designed to be ABI-specific. Through stakeholder discussions, multiple iterations, and tests of the tool, our team helped illuminate how ABI can better manage supplier relationships going forward.

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1. Introduction

1.1 Background

AB InBev (ABI), with a brewing heritage spanning over 600 years, is a multinational beverage giant headquartered in Leuven, Belgium. The company operates across nearly 50 countries with approximately 155,000 employees and reported 2023 revenue of $59.4 billion (excluding joint ventures and associates). Its portfolio of over 500 beer brands includes global icons like Budweiser, Corona, and Stella Artois; multi-country favorites such as Hoegaarden and Leffe; and regional market leaders including Brahma (Brazil), Castle (South Africa), and Harbin (China).

1.2 Motivation

ABI's main motivation for this sponsored project is to gain an understanding of how logistics costs are affected by the International Commerce Term (Incoterm) they select for their shipments. The Inbound logistics team, our primary stakeholders, has an important role to play in the selection of Incoterms and the management of supplier relationships. Inbound logistics, which accounts for nearly 40% of an organization's annual freight spend, is a critical area for cost reduction and operational improvement (Brown & Yadav, 2019). Given its significant financial impact, ABI is particularly interested in optimizing this aspect of its supply chain.

Incoterms are a set of universal rules that serve as legal terms outlining which party in the logistics process will own the products, the related activities, and costs at each node of a logistics network. They are set by the International Chamber of Commerce and re-evaluated every 10 years (ICC, 2020). For example, under the Incoterm Ex Works the buyer owns most of the responsibility. The seller is responsible only for packing the goods and ensuring they are ready to deliver. The buyer is responsible for activities such as paying the ocean, motor, air, other carrier or third-party logistics (3PL) provider, handling any applicable import/export tax costs, and unloading the goods at the destination. In cases like this, where the buyer owns most of the logistics cost, they are able to negotiate costs more effectively with their suppliers and 3PL providers. Owning costs may impose a surface-level financial burden, but potential

improvements in risk and service level are benefits that businesses, including the sponsor, will consider as offsetting.

1.3 Problem Statement

Currently, there is little visibility into how Incoterm selection affects cost. The main metric that the project team needs to evaluate is the total cost of shipment. In the current state, there is neither insight nor visibility into how ABI should go about selecting the appropriate Incoterm other than historical supplier relationships and agreements. They have not been using data or analysis. The Incoterm decision is given by a global procurement office that has little insight into the nuances of regional or category-specific logistics practices. Given appropriate, specific factors and data, we believe a decision matrix can be constructed that will prescribe a potential Incoterm in accordance with ABI's internal capabilities and the importance of cost.

The problem statement can be defined as: Develop a model that reliably assists ABI's procurement and logistics teams in deciding the most optimal Incoterm for the transaction they are evaluating. The model will serve as a pilot in the USA for a glass supplier, with the idea of developing it internationally in the future.

ABI needs to determine which Incoterm(s) would lower the cost burden that they currently carry. ABI possesses large amounts of data in its transportation management system. However, that data was not being used in Incoterm evaluation. One question that our team sought to answer is which data would be most relevant in our model. We initially thought of choosing certain variables and pairing them with costs to determine the effect each one has on overall cost.

The second main question to consider is a two-part question. We started by determining factors of the logistics process and ABI's standard procedure that most heavily influence the total logistics cost. Once we have identified the appropriate factors, how do we then map them to the costs that different Incoterms might change? Having identified the key cost drivers, we then need to answer the following:

1. To what extent is this factor affecting cost?
2. How does changing from Incoterm X to Incoterm Y reduce or increase the impact of this factor?

Based on the answers to these questions, we were able to build a model that shows how changing from Incoterm X to Incoterm Y will affect cost based on certain factors, such as a change in payment terms. If we work to understand the relationship between the factors and activities of the logistics process and cost, we should be able to help ABI become more prescriptive in how they decide which Incoterm to pursue with certain suppliers.

The sponsor sought to create a decision tool where questions about ABI's internal capabilities influence the output: A desirable Incoterm, or how logistics cost is impacted by ownership changes. For example, the cost of transport lane rates is a large portion of the overall logistics cost. In a situation where these rates are high, using an Incoterm that gives ABI more control of this part of the logistics process may allow them to own the negotiation of lower rates. Based on the inputs, the decision tool identifies the Incoterm that is most beneficial for ABI and where they have power to negotiate lower costs.

1.4 Goals and Outcomes

In our context, ABI decided that ocean transportation is out of scope and that the only in-scope transportation method is road transportation. The primary objective of this project is to develop a proof of concept decision matrix for ABI that identifies the optimal Incoterms focusing on the US glass supplier, Glass Supplier 1. This approach utilizes both quantitative and qualitative analyses, considering many factors that will be determined through the process of stakeholder engagement. We conducted interviews with the stakeholders to determine what costs are most relevant to consider in the decision matrix.

The result of the decision matrix exercise is a recommendation that tells the user which of the competing Incoterms makes the most sense for ABI to choose when evaluating which costs and how much they can (or want to) control them. The decision is based on describing the activities and their associated relevant costs in the logistics process, where the ownership of those costs lies, and how capable ABI is versus their suppliers in managing the activities. A key outcome of the decision making process is

the Incoterm recommendation, but an equally important one is the foundation for broader conversations about the supplier relationship.

This recommendation-based outcome seeks to enable company policymakers to create scenarios that facilitate informed decisions about which Incoterm is best for managing logistics costs. The model is designed to be user-friendly, focusing on supporting the decision-making process rather than automatically choosing Incoterms. To accomplish this, we chose to analyze current processes, consider potential improvements, develop analytical methods, and host productive conversations to identify better solutions. The deliverables for the company include:

- Insights (gathered through stakeholder interviews) for identifying the best Incoterms based on both quantitative and qualitative considerations
- A decision matrix for analyzing various Incoterm scenarios
- A clear usage guidebook to maximize the benefits of optimized Incoterm selection

When implementing the methodology, ABI is expected to see reductions in transportation and warehousing costs and more effective contracts and relationships with its suppliers.

2. State of the Practice

The selection and application of Incoterms plays a critical role in shaping international and domestic logistics strategies. As global trade evolves and supply chains become more complex, companies must navigate a variety of frameworks, methodologies, and cost variables when making Incoterm decisions. This section provides an overview of the current Incoterm framework, reviews decision-making approaches found in the literature, and highlights key cost and capability variables that organizations consider when evaluating Incoterm options.

2.1 Current Incoterm Framework

Though Incoterms change every 10 years, and each change provides an opportunity to update business practices, the changes do not legally invalidate the

previous ways of doing business. (ICC, 2020) In other words, Incoterms 2010 would still be permissible should the buyer and supplier agree to use them. Also, these terms are intricate and must be thoroughly understood before being applied. Otherwise, they can lead to unintended consequences for the parties moving the goods, disrupt communication, and complicate payments related to the services and goods involved (Vogt, 2018). Many companies fall into this state of Incoterm neglect. It is common practice for logistics departments and their suppliers to simply inherit the Incoterms used by their predecessors or default to industry practice, just for the sake of simplicity (Yang, 2021).

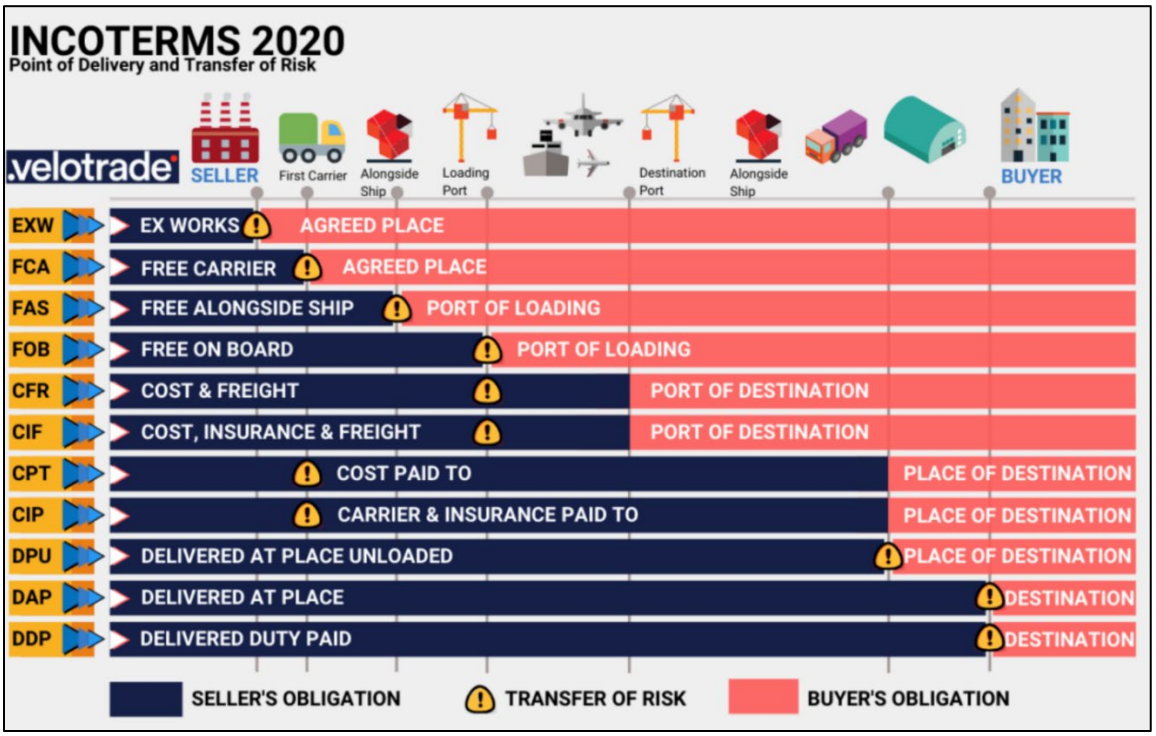
It is also widely accepted that Incoterms are an opportunity to achieve cost reduction. Organizations that pay little attention to Incoterms are at risk of missing out on these potential gains (Rojas & Cano, 2022). Incoterm decisions are rarely treated as cost-saving measures, mostly just as legal definitions of responsibility for goods. Although procurement departments can spend months negotiating contracts with logistics carriers, raw material suppliers, and other service providers, they often neglect Incoterm decisions in these efforts.

2.2 Decision Framework Literature

Common Incoterms are Ex-Works (EXW), Free Carrier (FCA), Free on Board (FOB), Cost and Freight (CFR), Cost, Insurance, and Freight (CIF), Carriage Paid To (CPT), Carriage and Insurance Paid To (CIP), Delivered at Place (DAP), Delivered at Place Unloaded (DPU), and Delivered Duty Paid (DDP).

Rojas & Cano (2022) examine a series of equations for analyzing Incoterms and their associated costs. These equations are iterative over each Incoterm flowing from Ex-Works (most responsibility with the buyer) to DDP (responsibility lies mostly with the seller). For example, the cost of the Free-Carrier (FCA) Incoterm for the seller is a function of the cost of Ex-Works (EXW) plus some additional costs, such as the cost of loading the merchandise. A visual representation of this progression (see **Figure 1**) can help illustrate how responsibilities and costs accumulate across Incoterms. The colored sections of the visualization serve as a good representation of the costs that each party in the logistics process owns.

Figure 1. Incoterms 2020 Chart (Velotrade, 2020)



In the literature, the selection of Incoterms is often analyzed by considering how costs and responsibilities are distributed between buyers and sellers. Researchers highlight that the optimal Incoterm depends on factors such as cost allocation, risk management, negotiation power, and the operational capabilities of each party. It is also recognized that different categories of goods, regions, or organizational structures may require different Incoterm strategies, and that a one-size-fits-all approach is rarely effective.

2.3 Relevant Costs and Capability Variables

To apply these methodologies in practice, it is important to identify the relevant cost categories and operational variables that influence Incoterm selection. Studies emphasize that companies should evaluate both direct and indirect costs, as well as their own capabilities and those of their suppliers, when making Incoterm decisions.

2.3.1 Determining Relevant Costs

Relevant costs in logistics often include transport lane rates, warehouse logistics costs, costs associated with loading and unloading, insurance, and other variable or overhead costs. For international shipments, costs such as port handling and customs clearance are also considered. The literature suggests that companies should focus on the costs most significant to their specific mode of transport and supply chain structure (Rojas & Cano, 2022).

A strategic approach is recommended, where organizations identify and validate relevant costs through internal data analysis and, if possible, benchmarking against industry standards. This ensures that Incoterm selection aligns with the company's financial and operational priorities (Yang, 2021).

2.3.2 Key Variables for Evaluation

Key variables commonly evaluated in Incoterm selection include:

- *Transport Lane Rates.* Which Incoterms were most cost-effective in terms of road transport lane rates? For example, EXW places all transport costs on the buyer. This clearly delineates responsibilities by requiring the buyer to manage costs from the seller's premises onward; however, it may be disadvantageous if the buyer lacks the leverage to negotiate lower rates at the origin.
- *Warehouse Logistics Costs.* Which Incoterms most significantly influenced warehouse logistics costs, including storage, handling, and movement of goods? For instance, while DAP might shift some handling responsibilities to the seller, potentially reducing costs at an intermediate warehouse, clarity is needed regarding whether these savings are realized at the buyer's facility or elsewhere. The analysis had to distinguish between activities at the origin, intermediate warehouse, and final destination.
- *Logistics Performance (Fleet Productivity).* Which Incoterms allow for the most efficient use of fleet productivity? Incoterms that place more responsibility on the seller, like DDP and DAP, might ensure smoother delivery schedules but may

result in inefficiencies if the seller doesn't have local fleet management capabilities.

- *Overhead Costs of Internalizing Logistics.* Some Incoterms will result in higher overhead costs for internalizing logistics operations. For example, EXW might require the buyer to handle all logistics, potentially leading to higher internal management costs, whereas DAP or DDP may minimize internal logistics overhead for the buyer.
- *Service Level – Transport.* Which Incoterms provide the best transport service levels, particularly in terms of delivery speed and reliability? Although DDP requires the seller to manage transportation from both the origin and destination, which could standardize delivery times, this arrangement may not be advantageous for ABI. By relinquishing control, ABI could miss the opportunity to negotiate better rates and maintain oversight, which is crucial given their size and capabilities.
- *Service Level – Warehouse.* How did different Incoterms impact warehouse service levels such as order fulfillment speed, accuracy, and processing time? It was necessary to clarify that this evaluation focused on the intermediate warehouse where goods are processed before final delivery to ABI. While DAP and DDP might, under certain conditions, streamline processing at this warehouse, the assumption that seller-controlled deliveries are inherently faster or more predictable requires further validation.
- *Logistics Technology Capabilities (ABI vs Suppliers).* Which Incoterms align better with the company's logistics technology capabilities, such as ABI's route optimization and real-time tracking? Incoterms that require a lot of buyer responsibility, like EXW, might make it harder to implement advanced tech solutions across the entire supply chain, whereas DAP and DDP might offer better visibility through the seller's logistics systems.

2.4 Stakeholder Engagement and Pilot Application

Best practices in the literature recommend that companies engage relevant stakeholders from procurement, logistics, and supply chain management when

evaluating Incoterm options. This collaborative approach helps ensure that all operational realities and strategic objectives are considered in the decision-making process.

When applying Incoterm methodologies, organizations typically identify the most frequently used Incoterms for their mode of transport and region. For example, for road transport, commonly used Incoterms include EXW, FCA, CPT, and DDP (ICC, 2020). The selection process may involve scenario analysis, cost modeling, and qualitative assessments of supplier relationships and service levels.

Case studies in the literature often illustrate how companies adapt their Incoterm strategies to address specific challenges, such as negotiating better lane rates, improving service reliability, or leveraging technological capabilities for greater supply chain visibility. These examples underscore the need for a tailored, data driven approach to Incoterm selection.

3. Methodology Development & Selection

This project followed a structured plan of work developed with ABI stakeholders to create and apply a decision matrix for optimizing Incoterm selection. The plan included aligning on goals, preparing and analyzing data, improving the model, and validating results through stakeholder engagement, with regular updates provided via biweekly reports and weekly meetings (see **Figure 2** for the plan of work).

Figure *2*. Project Methodology

3.1 Measure Definition and Data Collection

3.1.1 Decision Matrix Rationale and Evolution

The project began with the goal of equipping ABI stakeholders with a comprehensive toolkit for Incoterm analysis during supplier selection or contract renegotiation. The original concept included two complementary tools:

- **Tool A: Quantitative Cost Analysis**

  Tool A is represented in Table 1, which serves as an example of its layout. In this tool, users compare two Incoterms side by side in a spreadsheet. They input weights for various cost factors and rate ABI's ability to manage each cost. The tool calculates a weighted average that results in a recommendation of either "Buyer" or "Seller" owning the activities or costs. This design minimizes the subjectivity that could influence the weighting process. To support this, a document was created to gather specific cost and service-level data. These values are compared to calculate percentage differences, which are then translated into a rating that feeds into this tool.

Table 1: Original Decision Tool

ExWorks vs. DDP						
Decision Factor	3					
TERM	RELEVANT COSTS	% TOTAL COST	DEFINED OWNER	OWNER CAPABILITY (1-5)	DETERMINED OWNER	
DDP	Lane Rates	0.78	Seller	2	Buyer	DECISION
	WH Cost per Site	0.1	Seller	2	Buyer	Buyer
	Shuttling	0.12	Seller	3	Buyer	

- **Tool B: Qualitative Decision Tree**

  The initial plan for Tool B involved creating two decision trees, one for when Tool A recommended "Buyer" and another for when it recommended "Seller." The design was based on a series of yes/no questions derived from stakeholder interviews. Questions were grouped into three tiers: Tier 1 questions address fundamental considerations (for example, whether a current contract expires within one year or allows for Incoterm changes), while Tiers 2 and 3 include more detailed follow-up questions. The decision tree was intended to guide the user step-by-step toward a specific Incoterm recommendation or a decision to maintain current terms.

After stakeholder review, it became clear that incorporating a financial component and reducing subjectivity needed to be prioritized. To properly weigh the factors and address the subjectivity that could influence the weighting, the model conducts a mathematical exercise to compare ABI's capability with that of the sellers (see Table 2). A document was then developed to capture specific numerical data related to costs and service levels. Users enter these values so that percentage differences between ABI's figures and the suppliers' can be calculated. These percentage differences are then translated into ratings, which serve as standardized scores reflecting the relative performance of ABI versus the supplier for each cost or service criterion. A higher rating indicates that a party (ABI or the supplier) is more effective or efficient in managing that particular activity, such as achieving lower costs or better service levels, while a lower rating signals a competitive disadvantage. By converting raw percentage differences into ratings, this matrix enables objective, side-by-side comparison of Incoterm scenarios, helping users identify which party should own each cost or responsibility to optimize overall logistics performance and cost savings.

Table 2: First Iteration of Decision Matrix Incorporating Percentage Difference

Category	Item	ABI	Supplier	% Difference	Rating			% Difference Scale (Cost: lower is better)	Score
Cost	**Frieght Rate**	1.51	2.29	-52%	5			-20%	5
Other	**OTIF *service level [OTIF...]**	0.75	0.65	13%	3			0%	4
Cost	**WH Cost per site**	3	2	33%	2			10%	3
Cost	**Cost per KM**	0.43	0.4	7%	4			33%	2
Cost	**Cost per weight**	0.55	0.59	-7%	5			50%	1
Other	**DMRs**	100	120	-20%	5				
Cost	**WH Loss**	50000	20000	60%	1			**% Difference Scale (Other: higher is better)**	
Cost	**Theft**	25000	30000	-20%	5			-20	1
Cost	***Writeoffs***	100000	94000	6%	4			0	2
								10	3
								33	4
								50	5

*Note: All numbers are fictional and for demonstration purposes only.

From there, users would again proceed to Tool B, the decision tree itself. Tool B would have two separate decision trees, one for if the output from Tool A was "Buyer" and the other for if the output was "Seller". The user would still select the appropriate decision tree and follow a series of yes/no questions to ultimately arrive at an appropriate Incoterm or path forward.

After presenting this approach to stakeholders, it became clear that the lack of financial impact detracted from the matrix's usefulness. They recommended a simpler, consolidated decision matrix (See Table 3) that could clearly illustrate the impact on costs. In the revised model, users entered costs and key values for each in-scope Incoterm on one sheet, and the model calculated the total cost for direct comparisons (see Table 3). Although the interface was a straightforward cost comparison chart, the back-end performed robust calculations.

Table 3: Sample Decision Matrix

	Input Data
16	Length of the contract (months)
8.2%	Country Annual Interest rate
12	months per year
252	working days per year
0.7%	Country Monthly Interest rate
0.03%	Country Daily Interest rate

Objective: Compare financial impact considering possible incoterms

		DDP		CPT		FCA		Ex Works	
Group	**Metrics**	**Value**	**Owner**	**Value**	**Owner**	**Value**	**Owner**	**Value**	**Owner**
Cost	Freight Rates	1000	Supplier	1000	Supplier	1000	Supplier	800	ABI
Cost	Warehouse Rates	400	Supplier	400	Supplier	500	ABI	500	ABI
Cost	Shuttle Rates	300	Supplier	250	ABI	250	ABI	250	ABI
Service	Delivery Service Level	10	Supplier	10	Supplier	10	Supplier	5	ABI
CWC	Average Inventory levels	0	Supplier	0	Supplier	25	ABI	25	ABI
CWC	Payment terms - freight	0	Supplier	0	Supplier	0	Supplier	20	ABI
Risk / Cost	Assessorials D&D	1000	Supplier	1000	Supplier	800	Supplier / ABI	800	ABI
Risk / Cost	Material Losses - Overhead	500	Supplier	500	Supplier	500	ABI	500	ABI
People OH	People Transport	200	Supplier	200	Supplier	200	Supplier	200	ABI
People OH	People WH	100	Supplier	100	Supplier	100	ABI	100	ABI
People OH	People Shuttle	100	Supplier	100	ABI	100	ABI	100	ABI
	Total Cost	**3,610**		**3,560**		**3,485**		**3,300**	

The final matrix is structured to allow side-by-side comparison of all relevant Incoterms (e.g., EXW, FCA, CPT, DDP) across key cost and risk categories. Each row represents a cost or operational variable (such as lane rates, warehouse costs, shuttle rates, service level, payment terms, supply chain overhead, demurrage and detention, people overhead), and each column corresponds to an Incoterm scenario. Users input actual or benchmarked data for each variable, and the matrix automatically computes the total cost and highlights which party (ABI or supplier) is best positioned to manage each activity.

The matrix also includes fields for qualitative notes separately, such as supplier willingness to negotiate, contract flexibility, or operational constraints, ensuring that non-financial considerations are incorporated into the decision.

3.1.2 Data Sources and Collection

Data was gathered from multiple sources to ensure a comprehensive analysis:

- Internal ABI records (costs, inventories, KPIs)
- Stakeholder interviews to capture qualitative insights and operational realities
- Supplier data for benchmarking and scenario analysis

To ensure rigor and completeness, the data collection process was designed to combine both quantitative and qualitative sources. Quantitative data included:

- Transport lane rates (from ABI TMS, supplier bids, market benchmarks)
- Warehouse and shuttle costs (from ABI WMS and SAP/ERP)
- Payment terms and inventory levels (from finance and procurement systems)
- Service level metrics such as OTIF and NST (from ABI and supplier performance dashboards)
- Assessorial charges (demurrage and detention) and supply chain overhead (from internal and supplier reports)
- People overhead (FTE counts and productivity metrics for logistics operations)

Qualitative data included:

- Structured stakeholder interviews across procurement, logistics, finance, and operations (capturing negotiation leverage, contract flexibility, operational risk factors, and supplier relationship dynamics)
- Feedback from regular biweekly with ABI project sponsors, category managers, and subject matter experts

Benchmarking data included:

- Internal vertical benchmark: Metal Can Corporation (MCC) was used as a reference point for best-in-class performance on lane rates, service level,

demurrage & detention, and supply chain overhead, with adjustments to account for differences between vertical and external supplier relationships.

- External benchmarks and proxies: Where direct data was unavailable (e.g., breakage rates, international warehouse costs), proxies such as Mexico glass breakage data or Gartner industry benchmarks were used.

To validate data quality and ensure comparability, the project team implemented outlier detection for lane and warehouse rates, and cross-checked values against both internal and external benchmarks. Where data gaps existed, the project team used proxy values and documented assumptions, ensuring transparency in the analysis. ABI stakeholders, including finance and operations leads, reviewed and signed off all key variables and calculations to ensure alignment with business realities.

It was essential not only to capture static cost data, but also to account for the dynamic impacts that Incoterm changes can have on rates, service levels, and the overall cost structure. For example, lane rates and the cost of goods may vary depending on whether ABI or the supplier manages specific logistics responsibilities under different Incoterms. To address this, the decision matrix was designed to allow users to flexibly adjust key inputs, such as transport rates or service metrics, enabling scenario planning and reflecting potential outcomes from supplier negotiations.

All relevant numerical data on costs and service levels were systematically collected and organized in templates. This approach enabled the calculation of percentage differences between ABI and supplier performance, which were then translated into objective performance ratings within the matrix. These ratings provided a clear, data driven basis for comparing Incoterm scenarios.

Throughout the data collection and model development process, close stakeholder engagement was maintained. Initial discussions with ABI's Global Logistics Director and cross-functional teams provided critical insight into current processes and business priorities. Their input guided the selection of the US glass bottle category for focused analysis and helped refine the scope to the most relevant Incoterms for road transport (EXW, FCA, CPT, DDP). This collaborative approach ensured that variable

selection and matrix design were directly aligned with ABI's operational realities and strategic objectives.

3.1.3 Operationalization of Variables and Calculation Methodology

This subsection details the process of deciding on and defining the variables used in the Decision Matrix, which serves as the core analytical tool for evaluating the financial and operational impacts of various supply chain strategies. The variables and calculation methodologies described here are grouped according to key categories identified during the project. Each category represents a distinct aspect of the supply chain under analysis, and the variables within each category are defined and quantified using specific formulas and approaches. Each category was introduced, its significance explained, and the calculation method for its impact on overall performance was also provided.

Core Working Capital (CWC): The Core Working Capital (CWC) group is concerned with two primary variables: Inventories and Payment Terms. The objective is to assess how changes in inventory ownership and differences in payment terms between carriers and material suppliers affect ABI's financial performance.

Financial Impact of Average Inventory Levels: The analysis examines whether shifting inventory ownership results in a positive or negative financial impact for ABI. For example, if the supplier holds the inventories, this is considered a positive financial impact for ABI, whereas ABI owning the inventories is considered negative. The financial impact of inventory ownership is calculated using the following formula:

- $(ABI\ Inventory\ value) * (1 + Interest\ Rate)\text{^}(length\ of\ contracts\ in\ months)$

As an example, the average inventories on hand are assumed to be $100M, with a contract duration of 18 months and a country interest rate of 8%. Under these conditions, the financial impact of the inventory variable was estimated to be $0.5M. This example illustrates how the category used realistic figures to translate inventory management into monetary terms.

Financial Impact of Payment Terms: Payment terms are evaluated based on the differential between the time ABI pays suppliers and the time it receives payments from customers. The impact is quantified as follows:

- $Freight\ Yearly\ Cost * (1\ + Country\ Daily\ Interest\ Rate)^{difference\ in\ days}$

The Payment Terms variable compared the differences between carrier and material supplier terms. In the following case, carrier payment terms were set at 80 days while material supplier payment terms were 100 days, based on a freight spend of $100M and the same 8% interest rate. This scenario resulted in a calculated financial impact of approximately $0.061M, highlighting that positive financial outcomes would occur if the material supplier managed the logistics, and negative outcomes if ABI took on that role.

Risks and Costs: This group examined two main components: “Material Losses – Overhead” and “Assesorials - Demurrage and Detention (D&D)”. Material Losses – Overhead is the term ABI uses for ad-hoc costs associated with supply chain activities. In the context of this project, “Assesorials - Demurrage and Detention (D&D)” are charges associated with keeping the shipment idle for an extended, unplanned period. The primary concept was to assess the risk that comes with shifting ownership of certain process elements, which could lead to either increased or decreased costs. To achieve this, the project team employed relative key performance indicators (KPIs) to benchmark ABI’s performance against other operations and suppliers, ensuring a more objective assessment. They are listed below.

Inventory Supply Chain Overhead (SCOH) - Material Losses: We analyzed performance by comparing SCOH relative to the total inventory value and against a predefined "Above Maximum" policy. The term "Above Maximum" refers to losses that exceed the predefined acceptable threshold for material loss, as established in ABI’s internal standards. In one illustrative example, it was assumed that ABI’s subsidiary, Metal Can Corporation (MCC), performed 5% better in SCOH than the suppliers, with the SCOH figure set at $10M. Under these assumptions, the financial impact was estimated at approximately $0.5M, highlighting the significance of efficient inventory management in cost reduction.

Assesorials - Demurrage and Detention (D&D): These charges are, simply put, costs associated with unplanned waiting while the goods are not in transit. Similar to the above, the Demurrage and Detention component evaluated delays, such as waiting times for unloading, by benchmarking these metrics against overall deliveries. In an example scenario, the assumption was that MCC outperformed the suppliers by 10% in terms of demurrage and detention, with the D&D value considered at $6M. This led to a calculated financial impact of around $0.6M. These examples illustrate how improvements in operational efficiency could directly translate into measurable financial benefits.

People Overhead: The term “People Overhead” is used by ABI to refer to personnel or labor costs for managing freight, warehouse, and shuttle operations, focusing on optimizing staffing levels to achieve cost savings. Productivity metrics were used to estimate full-time equivalent (FTE) needs and convert workload into measurable cost impacts.

For example, if a network of 100 lanes is managed by five people, meaning each person was responsible for 20 lanes. With an assumed cost of $30,000 per person, the financial impact was estimated at approximately $150,000. This example demonstrates how workload variations, such as the number of trips or pallets handled per person, could significantly affect overall labor costs. However, an outside discussion must occur to determine if the cost of additional FTE’s is valid or not. Consider a scenario with 100 lanes and four people. If there are only four people on this team, is it worth another FTE to get 20 lanes per person, or is it more cost-effective for four FTEs to manage 25 lanes? This is another example of the qualitative discussions that arise from the use of the matrix that ABI must have in order to better manage logistics.

Costs: This section is distinct from "Risks and Costs" and focuses specifically on direct costs. Direct costs focused on translating on time, in full (OTIF) metrics performance into a measurable financial impact. The underlying concept was that improvements in OTIF delivery for materials could reduce average inventories, thereby lowering carrying costs. The project team applied a methodology like the core working capital approach to convert these service improvements into a financial metric.

Financial Impact of Service Level:

- $(ABI\ Inventory\ value - Supplier\ Inventory\ value) * (1 + Interest\ Rate)\text{^}(length\ of\ contracts\ in\ months) - (ABI\ Inventory\ value - Supplier\ Inventory\ value)$

For example, in one scenario, a 5% increase in OTIF was assumed to reduce average inventories by $50 million. Using an 8% country interest rate over an 18-month period, this improvement was calculated to yield a financial benefit of approximately $0.275 million. This example demonstrated how enhancements in service performance could lead to tangible cost savings.

3.2 Application of Methodology

3.2.1 Rationale for Piloting and Supplier Selection

The application of the methodology centered on piloting the decision matrix with a real-world supplier to validate its effectiveness and generate actionable business insights. The pilot phase was designed not to test the appropriateness of the overall business case or policy, but to focus on operational and logistical issues. Specifically, to determine how the decision matrix could identify improvement opportunities and cost savings.

The pilot case focused on Glass Supplier 1, a supplier with an established ABI relationship but noted challenges in lane rate management. Stakeholder skepticism about Glass Supplier 1's capabilities created an opportunity to demonstrate the value of the decision matrix. Historical data provided included lane rates, payment term execution, and service levels (OTIF). Through ongoing meetings, the project team refined key variables, such as shifting service level metrics to reflect US operational realities and clarifying how to compare service and material loss data.

The initial candidate for the pilot was Glass Supplier 2, a new supplier with a recently executed contract and no legacy Incoterm commitments. This "clean slate" scenario would have allowed the project team to focus on the methodology itself, minimizing confounding factors from historical relationships. However, after extensive stakeholder consultation, the project team pivoted to Glass Supplier 1. This supplier had a much larger spend (approximately $200 million total, with $20 million in inbound

logistics) and was identified by ABI leadership as underperforming in key areas such as lane-rate negotiations and OTR (on-time, in-full) execution. The selection of Glass Supplier 1 was strategic: it offered greater potential for cost savings, negotiation leverage, and a more compelling case study to demonstrate the matrix's value.

3.2.2 Pilot Implementation Process

The pilot followed a structured process, consistent with guidance for piloting new supplier models. The project team began by gathering all relevant quantitative and qualitative data for Glass Supplier 1. This included internal ABI records, such as costs, inventories, payment terms, KPIs, supplier data, and insights from stakeholder interviews. Special attention was paid to ensuring the accuracy and comparability of data across cost categories and service levels.

Once collected, the consolidated decision matrix was populated with this data. Users entered costs and key values for each in-scope Incoterm, allowing the model to calculate total costs and perform direct comparisons. The matrix's backend executed robust calculations for each group (Core Working Capital, Risks and Costs, People Overhead, and Service Level) translating operational realities into financial impacts. For example, changes in inventory ownership, payment terms, supply chain overhead, and OTIF performance were all quantified using the formulas and approaches detailed in Section 3.1.3.

Alongside the quantitative analysis, the project team incorporated qualitative decision criteria derived from stakeholder interviews. These included considerations such as contract flexibility, supplier willingness to negotiate Incoterms, and operational risk factors. The matrix's design allowed for these factors to be weighed alongside cost data, ensuring a holistic evaluation of supplier performance and relationship dynamics.

To validate the model, the project team completed the following steps:

- Benchmarked supplier data against internal verticals (MCC) and market references, using percentage differences to estimate financial impacts.
- Ran a "mini-bid" for transport rates to test ABI's ability to achieve better rates than the supplier and compared warehouse and shuttle costs across scenarios.

- Tested the model's recommendations through scenario planning and stakeholder review, ensuring that both financial and operational realities were reflected.
- Solicited feedback from ABI's steering committee and sponsor company through biweekly meetings, adjusting the model and pilot process as needed.

Throughout the pilot, the project team maintained regular communication with stakeholders via biweekly progress reports and weekly core team meetings. Feedback from these sessions informed iterative refinements to the matrix and the pilot process, ensuring alignment with ABI's strategic goals and operational realities.

3.2.3 Insights and Lessons from the Pilot

The pilot with Glass Supplier 1 demonstrated several key benefits of the methodology. By benchmarking Glass Supplier 1's performance against internal standards and other suppliers, such as MCC, the matrix revealed specific areas where ABI could improve outcomes by shifting cost or activity ownership. For instance, if Glass Supplier 1 underperformed in inventory management or incurred higher supply chain overhead, the matrix quantified the potential financial benefit of ABI taking on those responsibilities.

The data driven approach also provided ABI with concrete evidence to support renegotiation of Incoterms and cost ownership. This not only strengthened ABI's position in discussions with Glass Supplier 1 but also set a precedent for future supplier negotiations.

The pilot phase allowed the project team to address operational and logistical issues in the methodology, such as data collection challenges, calculation nuances, and the integration of matrix features. Lessons learned from the pilot were used to adapt and evolve the decision matrix, ensuring it was robust and ready for broader rollout.

Importantly, the pilot's ultimate goal was not just to optimize costs but to use the findings to improve the overall relationship with Glass Supplier 1. The matrix's insights enabled ABI to answer critical questions about the current relationship, such as whether it was optimal, in which areas Glass Supplier 1 excelled, and where ABI might be better

suited to take ownership. These answers informed a more strategic, mutually beneficial supplier partnership.

4. Discussion of Results

This chapter presents an analysis of the findings derived from the application of the decision matrix and the methodologies described in the previous sections. The discussion begins with a summary of the main results, followed by an interpretation of their significance in the context of ABI's supply chain strategy. Comparisons with industry benchmarks and prior research are included to contextualize the results, and the implications for operational efficiency and financial performance are explored. The chapter concludes with recommendations for future actions and areas for further research.

4.1 The Hybrid Incoterm/Bidding Model

Through stakeholders' involvement, the project team evaluated a "hybrid approach" to supplier management. This approach seeks flexibility within the supplier relationship (regardless of the Incoterm) and can lead ABI to discover where it could insert itself into the process to increase efficiency. The hybrid approach combines standard Incoterm definitions with ABI's negotiation and bidding expertise. Under the current Glass Supplier 1 Incoterm (normally DAP), Glass Supplier 1 manages most transport, but ABI often runs the bid process while "soft tolling" the logistics line items, effectively capturing some performance savings without full operational ownership. By codifying which party owns each cost element (lane rates, warehouse handling, shuttle, etc.) yet allowing ABI to bid on those components on behalf of Glass Supplier 1, the matrix surfaces the incremental benefit of shifting each cost bucket. The matrix itself does not show where the hybrid approach is used, just where opportunities exist (i.e., where the supplier underperforms). The decision to use this hybrid approach must be a discussion involving multiple stakeholders and determining if the appropriate people are willing to own new costs or activities.

This hybrid designation reflects the reality that true cost optimization often requires splitting responsibilities rather than choosing an all-or-nothing Incoterm.

Instead of forcing a binary choice, either full buyer ownership (EXW) or full seller ownership (DDP), the matrix enables a blended arrangement, where ABI can selectively internalize high-value bidding activities while leaving lower-impact operations with the supplier. This flexibility ensures ABI captures maximum savings on rate-sensitive lanes yet avoids unnecessary overhead on segments where supplier performance meets or exceeds internal benchmarks.

4.2 Results & Implications

A key takeaway from the initial pilot is that ABI is better positioned to manage more aspects of the relationship with Glass Supplier 1. Transitioning from DAP (the current Incoterm, where the supplier manages most logistics) to Ex Works resulted in a net savings of $390K USD (Appendix A) for ABI. This confirmed that ABI's internal logistics capabilities outperform those of Glass Supplier 1, validating stakeholder concerns about the supplier's performance gaps and their cost impact on ABI.

As the project evolved, it became clear that ABI was keen to understand more than just cost saving opportunities. New stakeholders brought additional ideas to the discussion, and as the project team worked through those discussions, frameworks for use and development of tools related to how they think about defining logistics cost ownership started to form.

Beyond cost savings, the pilot highlighted the need for a broader, more strategic approach to logistics cost ownership. As new stakeholders joined the project, the team developed frameworks and tools to support structured decision-making around Incoterm selection and cost allocation. Previously, Incoterm selection and logistics cost ownership were not systematically considered in supplier relationship evaluations at ABI. The matrix now provides a structured, data driven method for assessing supplier relationships, identifying leverage points, and informing decisions about cost and responsibility allocation.

Engaging the right stakeholders and focusing on relevant questions enabled ABI to clarify what it values in supplier relationships and how to capitalize on its strengths. While ABI seeks mutually beneficial supplier partnerships, it is equally important to maintain clear standards and processes for relationship management.

Stakeholders gained a clear view of how each cost driver, transport lane rates, warehouse logistics, service performance, overhead and people-cost overhead, behaves under different Incoterms. For example, moving from DAP to EXW shifts negotiation leverage for lane rates to ABI, while DDP may internalize overhead but could increase warehouse and shuttle costs.

Subject matter experts (SMEs) contributed insights on performance metrics that matter most in day-to-day decisions. These inputs directly informed which variables were prioritized in the decision matrix. For instance, leadership focused less on nominal payment term days and more on how differences in payment terms actually affect total costs.

Senior leadership recognized the tool's strategic potential for procurement and logistics, envisioning its use in a wide range of contract negotiations. The matrix enables ABI to objectively assess:

- What is ABI best at? What is the supplier best at?
- What investment is required for ABI to make the most of this relationship?
- What further analysis or data is needed to make an informed decision?

An example of further analysis was completed using the matrix for Glass Supplier 1. The project team performed a detailed lane-by-lane analysis of logistics costs, a first for the glass category at ABI. The team specifically analyzed the cost of operating an AB InBev-dedicated fleet compared to using the spot market. In cases where the spot market was a more cost-effective option, the matrix guided ABI in determining which logistics activities to internalize and which to leave with the supplier, supporting evidence-based negotiation and cost allocation.

To ensure consistent application across ABI's global teams and transform the decision matrix into an enduring tool rather than a one-off analysis, we packaged the core methodology into the Incoterm Decision Matrix Usage Guide, a practical "playbook" for structured Incoterm conversations (see Appendix A). It is formatted as a slide deck because the project team believed that this format would be easiest to understand for potential matrix users who were not part of the development of the decision matrix. By starting with an outline of the benefits of the decision matrix, potential users will be able

to learn more about the merits of the exercise. And by discussing the conditions and considerations up front, potential roadblocks and duplicative work may be avoided.

Key sections of the Usage Guide include:

- Articulating Model Purpose & Pre-Use Checks: Clarifies when to run an Incoterm review, contract conditions for change, and baseline performance requirements.
- Detailed Step-by-Step Execution: Walks users through data inputs, matrix operation, and ownership mapping for transport, warehousing, shuttle, and other cost buckets.
- Guide for Outcome Interpretation: Translates dollar-impact outputs into negotiation talking points and contract-clause options.
- Highlights of a Hybrid Approach: Prompts users to pinpoint where ABI's bidding and operational strengths can be inserted to unlock extra savings.

By codifying decision checkpoints and framing the essential questions like:

- Who owns (or should own) lane-rate bidding?
- Which service penalties matter most?
- Where can ABI step in?

The playbook ensures procurement, logistics, finance, and supplier relationship management teams engage in structured, data-backed negotiations rather than debating raw numbers.

The playbook is intentionally designed to be accessible to individuals not familiar with the background of this project. It begins by outlining the appropriate circumstances for using the matrix, along with the necessary conditions for its effective application. These guidelines reflect key insights gathered through our stakeholder conversations. Throughout the drafting process, we carefully considered the priorities of ABI, especially those of the logistics team, to ensure the playbook aligns with their needs.

4.3 Limitations

A core element of the Incoterm decision matrix methodology is benchmarking-comparing supplier performance against internal standards to identify improvement opportunities and quantify potential cost impacts. In this project, benchmarking begins with ABI's internal "vertical" operation, Metal Can Corporation (MCC), by establishing reference performance on key KPIs (lane rates, service level measured via OTIF, demurrage & detention, and supply-chain overhead). The project team then compared Glass Supplier 1's historical metrics against MCC's, calculating the percentage differences and translating those into financial impacts to estimate the potential benefits or risks associated with different Incoterm scenarios. This approach was necessary because data was sometimes limited or unavailable, so using internal benchmarks allowed ABI to make informed assessments of supplier performance. To populate those benchmarks, the project team ran a "mini-bid" for Glass Supplier 1 transport rates, while initial warehouse-rate comparisons showed little spread. Service-level benchmarking was recast from OTIF to NST to better reflect U.S. operational realities.

However, the benchmarking process faced several limitations. In some cases, ABI's own data was difficult to benchmark because certain data points were not tracked at the supplier level or were only available in aggregate for the entire category. For example, average inventory figures were sometimes missing, making it challenging to establish a clear baseline. Without a reliable "as-is" state, it is difficult to accurately measure the impact of changing Incoterms or cost ownership. These data challenges highlight the importance of establishing consistent and granular data collection processes for future analyses.

5. Conclusion

5.1 Problem Summary and Outcomes

Before the start of this project, ABI had different stakeholders and teams with incongruent attitudes towards Incoterms and supplier relationships. Bringing the various teams together and organizing thoughts around priorities served as a great start to redefining what successful supplier management looks like in the logistics and

procurement space. The project team determined what conversations go into an Incoterm evaluation or relationship discussion. We explored topics like cost ownership, capability assessments, and contract negotiation applications of the matrix. These conversations led to key stakeholders' understanding of what goes into their overall supplier relationship management strategy. By providing ABI with insights into their logistics capabilities and guidance on what needs to be considered in managing supplier relationships, the project delivered value by illustrating where ABI can capitalize on their strengths in the logistics space.

5.2 Recommendations for ABI

The project's success heavily depended on collaboration between ABI's technical experts and supply chain managers, who will ultimately make the final decisions regarding Incoterms and how they decide to use the model we intended to develop. Their insights, gathered through virtual interviews, were vital during the development of the methodology.

The results of this analysis give ABI the data to substantiate its ability to manage costs more effectively than the supplier. If the supplier requests to retain ownership of a specific cost area, ABI can use the analysis to negotiate for reductions or concessions in other parts of the contract, supporting a balanced and data driven negotiation process. Approaching a negotiation with analysis is imperative in large-dollar-value contracts, and the decision matrix analysis serves as a solid way to evaluate performance for multiple data points.

5.3 Future Analysis & Next Steps

To ensure the matrix methodology remains robust and relevant, ABI should continue to validate and refine the approach through additional supplier analyses and broader applications. The following steps are recommended to strengthen the business case and support ongoing improvement:

- Supplier-Level Validation: Before pushing the matrix into new categories, ABI should rerun the analysis on at least one additional U.S. glass supplier similar to Glass Supplier 1. If the same Incoterm is again identified as the lowest-total-cost

option, this would support standardizing that term across the entire glass category, offering simplicity and data-backed justification. However, if a different supplier points to a different optimal Incoterm, those results will help identify which cost drivers vary by supplier and inform further model refinement.

- **Expansion to New Geographies and Categories**: With the methodology established in the U.S. glass category, the next logical step is to apply the matrix to other regions and product categories, such as Brazil Malt or Steel Coil, which involve more complex, multimodal logistics. Each new application will require adapting the cost metrics. For example, this involves incorporating ocean freight, customs brokerage, duty exposure, and recalibrating weights for region-specific risks like port congestion or currency volatility. Running these scenarios will help determine whether a standardized set of Incoterms can be applied by category while maintaining analytical rigor.
- **Data Validation and Benchmark Governance**: To improve scalability and reliability, ABI should implement a clear, mandatory data-validation process before each use of the decision matrix. This process should assign data owners for each source system (such as TMS for lane rates, WMS for warehouse and shuttle costs, and SAP/ERP for payment terms), automate checks for completeness and accuracy, and maintain a centrally approved library of market benchmarks and proxy values for cases where primary data are missing. Regular data-health reviews, jointly managed by logistics and category management teams, will help ensure the inputs remain accurate and audit-ready for senior leadership.

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APPENDIX (A)

			DAP (current)		Ex Works	
Group	Metrics	Reference Value	Value (M USD)	Owner	Value (M USD)	Owner
Cost	Freight Rates (M USD)	8.470	-	Supplier	-	ABI
Cost	Warehouse Rates (M USD)	2.654	-	Supplier	-	ABI
Cost	Shuttle Rates (MUSD)	1.417	-	Supplier	-	ABI
Service	Materials OTIF (%)	88%	-	Supplier	(0.008)	ABI
CWC	Average Inventory (M USD)	3.900	-	Supplier	(0.277)	ABI
CWC	Payment Terms Difference (days)	-10	-	Supplier	(0.016)	ABI
Risk / Cost	Assessorials D&D (M USD)	-	-	Supplier	-	ABI
Risk / Cost	Obsolescence (M USD)	0.270	-	Supplier	-	ABI
Risk / Cost	Breakage (M USD)	-	-	Supplier	-	ABI
People OH	People Transport (M USD/FTE)	0.090	-	Supplier	(0.090)	ABI
Total Cost			-		**(0.390)**	

APPENDIX (B)

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Model Intention: Why do we use this tool?

Before using the matrix, it is important to understand the goals of the tool. Why are we comparing logistics cost ownership?

✓ Comparing suppliers based on logistics costs gives us a way to compare suppliers in the same category “apples to apples”

✓ Benchmarking allows us to capitalize on opportunities to push suppliers to deliver on service OR cost

✓ Reclaiming ownership of certain activities allows us to play to our strengths instead of letting suppliers have control over activities that we excel at

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Things to consider before using the tool

1. **Contract Situation (To determine if changes can be made)**
    a. **Does the current contract allow for changes in ownership? If not, when does it expire?**
    b. **Do we have history with this supplier? Do we have datapoints to back up our case for change?**
    c. **What is the suppliers market share? Do we have the leverage, or do they have leverage? How much of their business comes from ABI?**

No matter what the results of The Tool or our analysis yield, if there are legal bottlenecks blocking change, usage of The Tool does not make sense.

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Things to consider before using the tool (cont.)

2. **Does ABI perform better than the supplier?**
    a. **Does the supplier have higher amount of inventory writeoffs?**
    b. **Does the supplier deliver satisfactory OTIF?**
    c. **Is there any strain in the relationship with this supplier? What causes that strain?**
    d. **For this supplier's industry, are there industry benchmarks we can leverage and score them against?**
    e. **How are the supplier's' risk mitigation plans? Has there been a major disruption that's affected our business? Was it avoidable? Would it have happened if ABI was "in charge"?**

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Things to consider before using the tool (cont.)

3. Does ABI have the capacity or capability to own this cost?

a. **Under our current structure, do we have people/teams to manage a new activity in the logistics process without incurring new costs?**
b. **Would we have to hire new people to take ownership of new activities or the relationship with the supplier?**
c. **Does ABI own these activities or costs with other suppliers? If so, in what capacity? How is that going?**

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How to Use The Tool

- The idea for The Tool is to use it as a guide/conversation starter when evaluating the relationship with a supplier. It should serve as a catalyst for helping the business uncover opportunity to reduce logistics costs in the future.
- The idea is to use Incoterms as a framework to understand cost ownership. Just because the model output gives you “FOB” does not mean that you should seek to change Incoterms to solve all your problems. It just means you should consider opportunities to take over responsibility from the supplier in exchange for a reduction in service costs.

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Outcome Interpretation

- The outcome of the tool sould be a dollar value that shows the potential cost savings if a change in ownership (from supplier to ABI or vice versa) takes effect.
- Again, the Incoterm recommendation is just a guide. We understand sometimes suppliers will ONLY accept a DDP Incoterm, but there is room for a HYBRID APPROACH. As in, the supplier can own certain portions or a task or tasks, while ABI can own others.
- While the contract may specify “DDP” as the Incoterm in some cases, it may be worth it to explore opportunities where ABI can say “Hey, if I’m better at task A, will you let me manage that in exchange for X reduction in cost?”

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APPENDIXES

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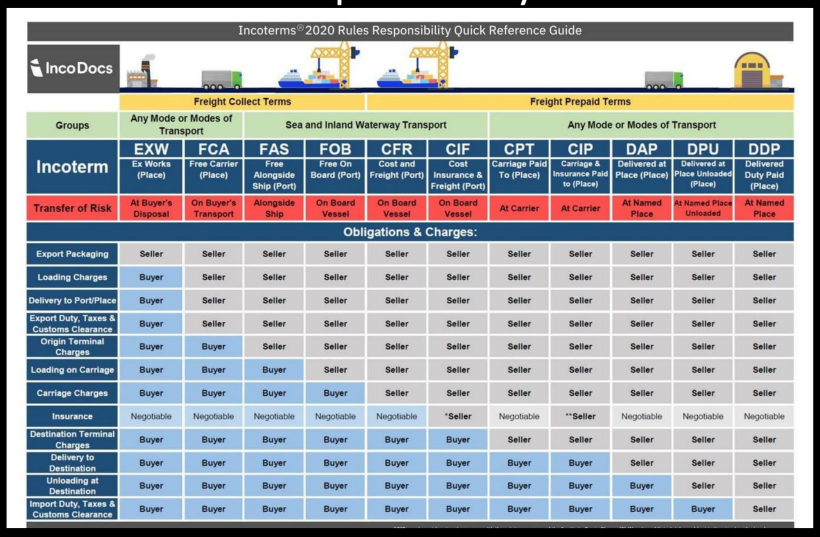
Incoterm 2020 Rules Responsibility



Incoterms® 2020 Rules Responsibility Quick Reference Guide

IncoDocs

	Freight Collect Terms						Freight Prepaid Terms				
Groups	Any Mode or Modes of Transport		Sea and Inland Waterway Transport				Any Mode or Modes of Transport				
Incoterm	EXW	FCA	FAS	FOB	CFR	CIF	CPT	CIP	DAP	DPU	DDP
	Ex Works (Place)	Free Carrier (Place)	Free Alongside Ship (Port)	Free On Board (Port)	Cost and Freight (Port)	Cost Insurance & Freight (Port)	Carriage Paid To (Place)	Carriage & Insurance Paid to (Place)	Delivered at Place (Place)	Delivered at Place Unloaded (Place)	Delivered Duty Paid (Place)
Transfer of Risk	At Buyer's Disposal	On Buyer's Transport	Alongside Ship	On Board Vessel	On Board Vessel	On Board Vessel	At Carrier	At Carrier	At Named Place	At Named Place Unloaded	At Named Place
Obligations & Charges:											
Export Packaging	Seller	Seller	Seller	Seller	Seller	Seller	Seller	Seller	Seller	Seller	Seller
Loading Charges	Buyer	Seller	Seller	Seller	Seller	Seller	Seller	Seller	Seller	Seller	Seller
Delivery to Port/Place	Buyer	Seller	Seller	Seller	Seller	Seller	Seller	Seller	Seller	Seller	Seller
Export Duty, Taxes & Customs Clearance	Buyer	Seller	Seller	Seller	Seller	Seller	Seller	Seller	Seller	Seller	Seller
Origin Terminal Charges	Buyer	Buyer	Seller	Seller	Seller	Seller	Seller	Seller	Seller	Seller	Seller
Loading on Carriage	Buyer	Buyer	Buyer	Seller	Seller	Seller	Seller	Seller	Seller	Seller	Seller
Carriage Charges	Buyer	Buyer	Buyer	Buyer	Seller	Seller	Seller	Seller	Seller	Seller	Seller
Insurance	Negotiable	Negotiable	Negotiable	Negotiable	Negotiable	*Seller	Negotiable	**Seller	Negotiable	Negotiable	Negotiable
Destination Terminal Charges	Buyer	Buyer	Buyer	Buyer	Buyer	Buyer	Seller	Seller	Seller	Seller	Seller
Delivery to Destination	Buyer	Buyer	Buyer	Buyer	Buyer	Buyer	Buyer	Buyer	Seller	Seller	Seller
Unloading at Destination	Buyer	Buyer	Buyer	Buyer	Buyer	Buyer	Buyer	Buyer	Buyer	Seller	Seller
Import Duty, Taxes & Customs Clearance	Buyer	Buyer	Buyer	Buyer	Buyer	Buyer	Buyer	Buyer	Buyer	Buyer	Seller

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Key Considerations for Incoterms

1.Cost Allocation
- Which party covers transport legs, insurance, customs duties, and local delivery fees?

2.Risk & Liability
- At exactly which point in the supply chain does the buyer assume loss or damage risk?

3.Customs & Documentation
- Who prepares export/import paperwork, handles inspections, and pays related fines or delays?

4.Impact on Lead Time & Service
- How does each term affect transit times, carrier choice flexibility, and consolidation options?

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INCOTERM DECISION MATRIX

Our decision matrix is composed of metrics and cost objects that are relevant to consider in an Incoterm decision. All the numerical values shown will be in currency units (USD for now). The Incoterms in consideration line the top of the matrix.

Summary of "Group" Categorization

- **Cost:** Nominal cost values
- **Service:** Calculated values based on service level benchmarks
- **CWC:** Core working capital values based on business decisions
- **Risk/Cost:** Nominal cost values based on losses
- **People OH:** Overhead accounting for the labor involved in the logistics process

5 Group Categorization

NOTE: Values are determined by external or in-matrix calculations

NOTE: The "Owner" column is populated based on the Incoterm in question

NOTE: Groups are categories of variables, based on what the cost affects

		DDP		CPT		FCA		Ex Works	
Group	**Metrics**	**Value**	**Owner**	**Value**	**Owner**	**Value**	**Owner**	**Value**	**Owner**
Cost	Freight Rates	1000	Supplier	1000	Supplier	1000	Supplier	800	ABI
Cost	Warehouse Rates	400	Supplier	400	Supplier	500	ABI	500	ABI
Cost	Shuttle Rates	300	Supplier	250	ABI	250	ABI	250	ABI
Service	Delivery Service Level	10	Supplier	10	Supplier	10	Supplier	5	ABI
CWC	Average Inventory levels	0	Supplier	0	Supplier	25	ABI	25	ABI
CWC	Payment terms - freight	0	Supplier	0	Supplier	0	Supplier	20	ABI
Risk / Cost	Assessorials D&D	1000	Supplier	1000	Supplier	800	Supplier / ABI	800	ABI
Risk / Cost	Material Losses - Overhead	500	Supplier	500	Supplier	500	ABI	500	ABI
People OH	People Transport	0	Supplier	0	Supplier	0	Supplier	200	ABI
People OH	People WH	0	Supplier	0	Supplier	100	ABI	100	ABI
People OH	People Shuttle	0	Supplier	100	ABI	100	ABI	100	ABI
	Total Cost	**3,210**		**3,260**		**3,285**		**3,300**	

NOTE: This is what defines the Incoterm decision

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