

## Business Context:

The organization that we have considered is a freight forwarding company. The name of our freight forwarder company is FFC. A freight forwarding company facilitates shipments of goods / materials between two parties ,i.e exporter and importer. The goods are shipped in containers in large carrier ships (also known as vessels) from the port of loading to the port of destination. The freight forwarder is responsible for documentation, inward & outward movement of goods, and handoffs.

## Scope:

We have only considered exports of sea consignments for the purpose of this project. The customer in the current scope is the Exporter. The words “customer” and “exporter” have been used interchangeably in the project description. For this project, The FFC’s scope ends once the estimated time of arrival (ETA) at the destination has been updated to the exporter.

## Key Assumptions & Business Rules:

**Note:** There are gaps in the AS-IS process and some of the below mentioned business rules and assumptions have not been incorporated in the AS-IS process - these are the gaps we want to address in our TO-BE process. However, to avoid redundancy, we have listed all relevant applicable assumptions and rules. All of these assumptions and business rules are incorporated in the proposed TO-BE process. The Enhanced ERD is based on the following rules & assumptions.

1. The customer lead is received online through the website only.
2. The customer has to fill up the online query form before getting accounted in the database.
3. All the necessary documents required for shipping have to be provided by the customer online through the website portal.
4. Customers can submit the query without providing any document. However, this delays the process of shipping. Since the shipment document (See item 13 & 14 below) can only be prepared on the basis of the packing list provided by the customer.
5. Customer leads are processed in the FIFO (First In First Out) method.
6. On receiving the customer lead, the sales executive opens the case (Case Status = Open) and assigns a case id.
7. A shipment refers to goods or cargo that are shipped together. The words “shipment” and “consignment” are used interchangeably in this project.
8. Shipments (consignments) are transported (shipped) in containers.
9. One consignment can be shipped in one or more containers. However, every container can be associated with one and only one consignment.
10. Containers are kept in the shipping vessels owned by shipping lines. A shipping line can have zero or more shipping vessels. Each vessel can be owned by one and only shipping line.
11. Each customer can have zero or more shipments. However, each shipment will be associated with one and only one customer.

12. Each consignment will be associated with one and only one shipping line. One shipping line can have zero or more consignments.
13. Each shipment will be carried on one and only one vessel and each vessel can carry one or more consignments.
14. A freight forwarding company issues a shipping document (referred as Bill of Lading henceforth) (B/L) to the exporter. The B/L contains the name of the port of loading, port of discharge, cargo description, cargo weight, cargo volume, number of packages, container id, and the name of exporter. One B/L can include one or more containers. A container can have one and only one B/L
15. An exporter provides a packing list for a consignment to help freight forwarding company prepare the (B/L). The packing list contains the number of packages, cargo weight, cargo volume, INCO terms and cargo description.
16. One shipment can have one or more packing lists combined. However, each packing list can be associated with one and only one shipment.
17. Each vessel can carry one or more containers. But each container will be linked to one and only one vessel.
18. One B/L can have one or more packing lists combined. However, each packing list can be associated with one and only one B/L.

## Key Stakeholders, User Requirements, and User Responsibilities:

**Note 1:** Some of the stakeholders are not present in the AS-IS process. These process gaps and additional enablers are accounted for in the TO-BE process. However, we have highlighted the responsibilities of the stakeholders as per the TO-BE Process.

**Note 2:** In As Is Process, the Customer Service Executive performs the responsibilities of sales, operations, and support together. There are multiple customer service executives. All these three roles are separately added and mentioned in the TO-BE process.

Stakeholders - As Is Process	Stakeholders - To Be Process
Customer (Exporter)	Freight Forwarding Company
Customer Service Executive	Shipping Line Company (Liner)
Documentation Executive	Customer (Exporter)
	Customer Sales Executive
	Customer Operations Executive
	Customer Support Executive
	Customer Documentation Executive

### 1. Freight Forwarding Company / Freight Forwarder:

- A freight forwarding company is an organization that acts as a mediator between the exporter and the shipping line and that coordinates shipments on behalf of the exporters.
- The freight forwarder is responsible for negotiating the freight rates with the shipping line and ensuring the availability of containers required for the shipment.
- However, freight forwarders do not own containers or do not operate /own vessels.
- The freight forwarder prepares the required shipment related documents that are necessary to complete the shipment and are mandatory for the importer to take control of the cargo at the destination port. These documents are handed over to the exporter, who then sends these documents to the importer /consignee.

### 2. Shipping Line / Liner:

- The shipping line is a company that owns the shipping vessels & containers which facilitate the shipment of cargo / goods from one port to another. The shipping line is also called "Liner".
- Liners allot space for containers to be shipped on a particular vessel.

- c. The freight rates are fixed by the shipping lines / liners based on the industry they are operating. For **e.g.** the rates for shipping chemical materials would be higher than the rates for shipping of consumer durable goods.
- d. Liners are responsible for ensuring that the consignment reaches the destination port as per the planned schedule.
- e. Once a shipping vessel and container is assigned to the shipment, as mentioned in the B/L, the liner must ensure that the shipment is not moved to any other container due to exigency such as lack of space or delay in schedule.
- f. Liner provides the necessary documents / proofs in order for the exporter to go for a claim in instances where the vessel has met with an accident and there has been damage to the cargo / goods.

### **3. Customer:**

- a. The customer (also called as exporter) contacts the freight forwarding company online to initiate the export shipment process
- b. Receives quotes from the freight forwarder after submitting the shipment details
- c. Provides following information while filling up the online form that includes shipment details. The details to be provided before the shipment include:
  - i. H.S. Code of the cargo
  - ii. Cargo Weight
  - iii. Cargo Volume
  - iv. Cargo Description
  - v. Cargo Ready Date (CRD)
  - vi. Type of Container Required
  - vii. Material Safety Data Sheet (MSDS) - for hazardous cargoes
- d. After the liner is finalized and the container assigned to the shipment, the shipment is said to be confirmed. The exporter is now responsible for picking up the empty containers from the liner using booking confirmation. The exporter will bring the loaded containers to the port of loading.
- e. After the shipment is confirmed, the exporter is responsible for coordinating with the freight forwarder and providing the required consignment details well in advance
- f. Exporter verifies the shipment documents prepared by the freight forwarder, ensures necessary changes are made before approving the same to proceed with the final documentation
- g. Exporter hands over the final documents along with the shipment. The final documents are to be produced at the destination port by the importer.

### **4. Customer Sales Executive:**

- a. Opens the case when a new customer query comes online and assigns case number
- b. Gathers customer's input through the form filled online. This is required to identify relevant shipping lines and the type of services required for the customer.

**5. Customer Operations Executive:**

- a. Uses customer cases generated by customer sales executives to connect with multiple shipping lines.
- b. Operations executives connect with multiple shipping lines to gather the best possible freight rates and shipping vessel schedules for every given case number.
- c. Ensures that the empty container is available for pick up by the exporter if the shipment is confirmed

**6. Customer Support Executive:**

- a. Connects with the exporter with available shipping rates and vessel schedules
- b. Negotiates the final rates with the shipping line and the exporter
- c. Takes confirmation of the shipping order from the customer.
- d. Requests the customer for additional shipment details if the shipment has been confirmed
- e. Sends the booking confirmation to the customer
- f. Updates the customer about changes in vessel schedules and estimated time of arrival (ETA) and closes the case (Case Status = Closed)

**7. Customer Documentation Executive:**

- a. Creates a job corresponding to the shipment / consignment
- b. Requests the customer for additional documents such as packing list (PL)
- c. Prepares the drafts for the shipment documents based on the PL
- d. Sends the drafts of the shipping documents to the exporter for approval
- e. Submits the final approved shipment details to the shipping line

## **As Is - Business Process:**

Mentioned below is a step by step description of the process of container booking and coordination of shipment to be exported by the freight forwarding company:

**Note :** There are multiple customer service executives and each executive performs the role of sales, operations and customer support executives in the AS-IS process

**Step 1:** The exporter contacts the freight forwarder and requests for the freight rates after providing the basic shipment details

**Step 2:** The customer service executives checks for the freight rates with the shipping line and provides the rates based on the shipment details

**Step 3:** The customer service executive quotes the freight rates to the exporter after confirming the availability

**Step 4:** The exporter either accepts the rates or declines the offer.

**Step 5:** If the exporter accepts and confirms the rates, the customer service executive places the booking with the shipping line.

**Step 6:** Once the booking confirmation is received from the shipping line , the customer service executive forwards it to the exporter and requests for additional shipment details.

**Step 7:** The exporter provides the additional information and makes arrangements for picking up the empty container.

**Step 8:** Concurrently the documentation executive creates a job against this consignment.

**Step 9:** The documentation executive prepares the B/L draft (shipment document) for the consignment and sends it to the exporter for approval.

**Step 10:** The exporter verifies the B/L draft (shipment document) and either approves it or requests for corrections in the B/L draft.

**Step 11:** The shipping document drafts are then sent to the exporter for approval

**Step 12:** The exporter either confirms the drafts or requests for corrections

**Step 13:** Once the drafts have been verified by the exporter, the documentation executive submits the final shipment details to the shipping line.

**Step 14:** The documentation executive prepares the final shipment documents and hands it over to the exporter.

## Issues with As-Is Process:

**Issue 1:** Too many dependencies on Customer Service Executive

**Affects:** FFC and Exporters

**Business Impact:**

1. High **and** Negative Impact on FFC Revenue
2. High **and** Negative Impact on Customer Net Promoter Score (NPS)

**Issue Description:** In the as-is process, there are many responsibilities on the customer service executives. This leads to bottlenecks in the processing of the customer cases. Overall, the FFC is able to process far fewer cases than possible. The customer (exporter) experiences poor & slow service and there is an opportunity loss for the FFC.

**Issue 2:** Incomplete Information shared by exporter

**Affects:** FFC, Exporters, and Liners

**Business Impact:**

1. Low to Medium **and** Negative Impact on FFC Revenue and Costs
2. High **and** Negative Impact on Shipping lines operations cost
3. High **and** Negative Impact on Customer shipping timeline

**Issue Description:** Often the exporter does not provide the complete information about the consignment. This leads to multiple follow-ups from the customer service executive's end. This leads to schedule delays which can affect the loading of the containers onto the shipping vessel. This has a cascading negative impact on the shipping liner operations. The shipping liner has a specific number of containers allotted for each vessel. If the exporter fails to provide the complete information within the stipulated time, the containers cannot be loaded onto the vessel. This ultimately affects the shipping line's stowage plan and can also lead to huge losses for the exporter if the cargo does not reach the destination port in time.



## Possible Solutions to Issues:

**Solution 1:** Add distinct roles within the FFC customer service team

**Target Issue:** Addresses Issue 1

**Motivation to Implement the solution:**

1. Positive Impact on Revenue for FFC
2. Higher Customer satisfaction and Net Promoter Score

**Solution Description:** Instead of having multiple customer service executives engaging in the process of shipping end to end. We have compartmentalized the functions. The roles of customer service executives are distributed among sales, operations, and support. We now have the case id assigned to each executive across the three roles and each executive handles more than one case at any given time. However, the scope of each executive is reduced.

**Enablers:**

1. Workflow Design: The workflow is more focused and proper handoffs are provided between the roles performed by the executives.
2. Training & Capacity Building: The executives are trained to develop expertise in one of the three roles. This helps the executives to improve their efficiency and effectiveness in performing their roles.
3. Information System | Enterprise Salesforce software: This will help manage the leads better.

**Other Considerations:** There are tradeoffs between specialization and generalization. We are de-risking the business by having multiple executives work on specific focus fields. In the case of exigency and absence of any executive from a specific functional area (sales, operations or support), the other executive in the same business function can easily pick up and process that specific case.

**Solution 2:** Improved Online Customer Portal

**Target Issue:** Addresses Issue 2

**Motivation to Implement the solution:**

1. Improved user experience can lead to increase in returning customers and lower the cost of development
2. Lower required manual follow ups by the FFC team members, improves the motivation of the staff

**Solution Description:** Previously, the customer service executive would make calls to the customer to request documentation. The FFC now asks for complete shipment details and the documents upfront from the exporter through the online portal. While the customer can request for the rates without submitting all the documents, they are made aware of the requirements upfront and regular follow up emails are sent for missing documentation (excluded from swimlane for simplification). This ensures all the relevant documents are submitted on time.

**Enablers:**

1. Information Systems: Improved online portal with better customer and user experience.
2. Process Redesign: Communication with customers upfront to set better expectations of what is required from them and regular email follow ups.

## **Proposed Improvements to the As Is Business Process:**

Mentioned below is a step by step description of the new improved process of container booking and coordination of shipment to be exported by the freight forwarding company. Steps that have significant changes have been marked in “red”.

## **To Be - Business Process:**

Mentioned below is a step by step description of the process of container booking and coordination of shipment to be exported by the freight forwarding company:

**Step 1:** The customer contacts the shipping company online and enquiries for freight rates after providing the shipment details

**Step 2:** The sales executive opens the case (case status = OPEN) when a new customer query comes online and assigns a case number. The sales executive puts together the shipment information and identifies the appropriate shipping lines / liners.

**Step 3:** The operations executive uses the information provided by the sales executive to connect with multiple shipping lines and collects the freight rates and shipping vessel schedules after confirming the availability of the containers.

**Step 4:** The customer service executive sends out the rates / schedules collected by the operations executive to the exporter / customer.

**Step 5:** The exporter either accepts the freight rates or negotiates for better freight rates. If the rates are not acceptable, the customer drops-off from the FFC. Case Status is updated to CLOSE.

**Step 6:** If the customer provides a target rate , the customer support executive goes back to the shipping line for re-negotiation and tries to match the exporter’s target rates. (following which the exporter gives a shipment confirmation)

**Step 7:** The customer service executive (CSE) places the booking with the shipping line.

**Step 8:** The shipping line processes the booking and issues a booking confirmation

**Step 9:** The customer support executive forwards the booking confirmation to the exporter and requests for additional shipment details (like Packing List / MSDS)

**Step 10:** The exporter makes the required arrangements for picking up the empty containers and sends the required details to the CSE

**Step 11:** Using the details provided by the shipper, the documentation executive creates a job and prepares the draft for the shipment documents

**Step 12:** The shipping document drafts are then sent to the exporter for approval

**Step 13:** The exporter either confirms the drafts or requests for corrections

**Step 14:** Once the drafts have been verified by the exporter , the documentation executive submits the final shipment details to the shipping line.

**Step 15:** The documentation executive releases the final shipment documents (Bill of Lading).

**Step 16:** The final shipment documents are forwarded to the exporter by the documentation executive

**Step 17:** The shipper sends the documents required for collecting the cargo at the destination port to the importer

**Step 18:** The customer service executive updates the exporter changes in vessel schedules and estimated time of arrival (ETA) at the port of destination. The case status is set to SUCCESS.