

Proof of Delivery

Company Overview

International Paper (NYSE: IP) is a global leader in packaging, paper and fluff pulp with manufacturing operations in North America, Europe, Latin America, Russia, Asia and North Africa. IP's businesses include industrial and consumer packaging, fluff pulp, and uncoated papers.

As a global leader in the paper and packaging industry, International Paper provides sustainable solutions to meet the needs of businesses and customers worldwide. Our success is driven by the integrity of our people and their commitment to doing what's right.

International Paper's Global Supply Chain (GSC) is responsible for the planning and execution of outbound shipments and transportation for IP paper mills and converting locations. The GSC also manages capacity to meet demands and lower costs as well as successfully execute our enhanced supply chain model.

The Users

- **Facility** – the location where the order merchandise is being shipped from
- **Carrier (Not IP owned)** – the company who ships the inventory from the facility to the customer
- **Customer** – the procurer of the IP merchandise
- **Account Executive (Customer)** – representative of the customer for this process
- **Customer Service (IP)** – the person of contact if the Account Executive sees any discrepancies in the order
- **Transportation Planner** – the planner of the shipment from the facility to customer
- **Driver** – works for the carrier and transports the shipment from the facility to the customer

The Process

When International Paper is ready to ship an order to the customer using a truck carrier (truck is the only mode of transportation in scope for this project), the transportation planner prepares for the order to be shipped out. He includes all necessary data (i.e. Customer, Customer Order, Customer Address, etc.) and documentation and sends the information to the facility. The shipping facility then supplies the driver with the documentation (BOL and Packing List) needed in order to deliver the shipment. Upon delivery of the customer order, the driver gets the signature and time of delivery from the customer representative. The process ends with the driver turning in the appropriate signature to carrier's company and then the carrier entering the delivery validation information into our system, which is referred to as the carrier portal. If there are any discrepancies in the order or if the order is not received in the specified time, the customer's account executive communicates with International Paper's Customer Service to find out what went wrong and what actions need to be taken. If there happens to be a complaint or dispute with the verification of delivery from the customer, the Customer Service representative must go to the carrier portal to gather information regarding when the order was delivered, if it was delivered at all.

The Problem

Currently, the carrier is responsible for submitting the delivery information to the carrier portal, where an IP representative will go to gather delivery validations. However, since the driver may have multiple stops and no way to turn in the correct paperwork to the carrier company in real time, this creates a severe time lag. If the Account Executive contacts IP asking to verify delivery information, it is International Paper's responsibility to gather this information from the carrier portal. If the information is not there, because the driver has yet to deliver his paperwork to the carrier company, or worse, misplaced his paperwork, then International Paper may be susceptible to fines. Without the validation information received from the carrier portal, IP will have no way to prove that the order was delivered on time, or even delivered at all. This is the part of the process that our planners have decided needs improvement.

Project Objective

The planners suggest that there has to be a better, more time efficient way to execute this process and get the correct validation information in a timely manner. They have contacted the IT team in order to find out what can be done to better streamline this process. The planners would like more real time information when the delivery is actually completed and the proof of delivery from the actual customer (meaning the customer's signature). They have asked for research to be done to see what process changes and technologies can be implemented to help mitigate or even eliminate the time lag.

Key Points

1. The following information is required to present to the Customer to validate the order:

<u>Fields:</u>
Customer
Customer Order
Shipment Number
BOL Number

2. The following information needs to be returned to our system

<u>Fields:</u>
Customer Signature
Time of Signature
Date of Signature
Shipment Number
BOL Number

3. What changes to the process do you believe are necessary?
4. What steps should the GSC take to improve the process?
5. What technologies could be used to automate this process?
6. What security problems do you believe will arise and what will your IT team do to prevent any breaches in the integrity of the data?
7. What metrics will be important for this process and how will the technology that you have suggested help these metrics?