The Definitive Guide to eCommerce Shipping

How to set up shipping operations for success

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Introduction

Are you thinking about opening an online store? Growing the one you have? Or simply improving your operations and providing better customer service? In any case, shipping is fundamental to your customer experience—and therefore your success.

Wherever you are in your eCommerce journey, this guide will help you understand virtually every aspect of shipping's central role:

- The importance of shipping to your customer experience
- The shipping ecosystem and popular workflow/process options
- Shipping service providers and technologies
- Selection criteria and vendor evaluation

Why Do I Care about Shipping?

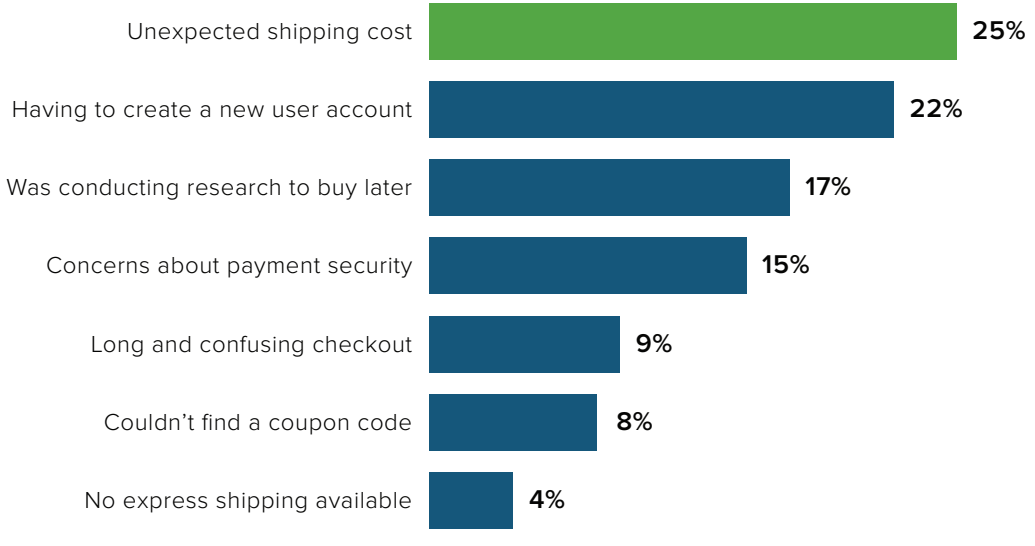
Shipping makes everything else you do tangible to your customers.

You can provide the greatest shopping experience, the best prices, and outstanding customer service, but it's your shipping process that ultimately allows your customers to touch your products. Any steps you take to make shipping more reliable and efficient directly impact this critical physical connection between your customers and your products- and therefore you!

Shipping costs and options matter to your customers.

Online shoppers care deeply about shipping costs and delivery options. It is their No. 1 pet peeve and the reason named more than any other for cart abandonment. Shipping can be the difference between success and failure for eCommerce retailers. It matters.

Why US Consumers Abandon Shopping Carts



Source: VWO eCommerce Cart Abandonment Report 2016 http://bit.ly/cartabandonreport

Why Do I Care about Shipping?

A robust shipping solution creates significant value for both you and your customers.

Solution Benefits

Integration with every one of your selling platforms and inventory sources

Automation of many aspects of the shipping process—creating savings you can share with customers, and reducing your order processing time

Inventory Management to help you optimize carrying costs and avoid stock-outs (and their negative customer experience effects)

Order Management including sorting, filtering, splitting, combining, batching, and matching them to the best inventory source (e.g., dropship, or a specific fulfilment center)

Improved Accuracy of order contents and customer information—reducing customer-frustrating incidents such as incorrect addresses, incorrect products, and incomplete orders

Better Shipping Rates which provide more savings you can share with your customers

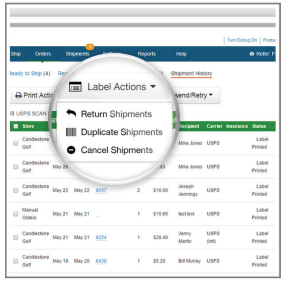
Improved Carrier Selection helping you select the least expensive carrier for a given shipping service level—again providing savings you can share with your customers

Improved Tracking Information allowing your customers to know exactly where their orders are and when they should arrive (and allowing you to troubleshoot if something goes wrong)

Customer Management to help you identify purchasing trends, segment your customers, and target them with more relevant communications and campaigns

What Capabilities Do I Need to Consider?

In order to consider the ideal set up and processes for your shipping environment, let's understand the three main components of the shipping ecosystem and how they interrelate:



Selling Environment

Your selling platform is your primary online interface with your customer.

It's important to the shipping ecosystem because it's where you'll present shipping-related options, including:

- Carrier and delivery speed
- Shipping costs
- Shipping offers
- Shipping flexibility (e.g., multiple addresses)
- Shipping instruction fields

It's also the source from which your shipping platform will retrieve and download customer and order information.

Shipping Environment

Your shipping platform is where you'll manage most aspects of order fulfillment and returns.

It's the connection point between:

- The selling platform
- Other business systems (e.g., accounting)
- The physical environment

A robust shipping platform allows you to:

- Manage inventory
- Manipulate order data from the selling platform
- Split, combine, and hold orders
- Generate pick and pack documents and sequences
- Route orders to preferred fulfilment process and shipping selections
- Efficiently route orders to the physical environment
- Understand, segment, and communicate with customers
- Update other systems as needed

Physical Environment

In the physical environment, data from the shipping platform is acted upon to:

- Print pick and pack lists and printing labels
- Pick
- Pack
- Weigh
- Affix label
- Route orders to appropriate carriers to be shipped

What Capabilities Do I Need to Consider?

Whatever you're selling—and regardless of the size of your business—shipping-related capabilities often have implications for more than one environment. The following table gives you an idea of some of the key capabilities related to shipping and how they are relevant to the environments in the shipping ecosystem:

		Relevance		
	Capability	**Selling Environment**	**Shipping Environment**	**Physical Environment**
CUSTOMER FACING	Single vs. multiple stores	✓	✓	✓
	International shipping	✓	✓	✓
	Delivery service level options	✓	✓	✓
	Shipping pricing options	✓	✓	✓
	Delivery flexibility	✓	✓	✓
	Returns	✓	✓	✓
INTERNAL	Data integration	✓	✓	✓
	Inventory management	✓	✓	✓
	Carrier selection	✓	✓	✓
	Fulfillment location	✓	✓	✓
	Generate pick list, packing slip, and shipping label	✓	✓	✓
	Picking process	NA	NA	✓
	Packing process	NA	NA	✓
	Customer management	✓	✓	NA
	Analytics and reporting	✓	✓	NA

We'll now go through each capability and provide more detail on its relevance to each environment.

Single Store vs. Multiple Stores

For many online sellers, distributing products across multiple stores/marketplaces is a good way to broaden reach and increase sales.

- **Multiple Stores:** If you sell on multiple sites, having a shipping solution is an invaluable way to consolidate orders from all sources, simplify their management, and increase the efficiency (and ROI) of your fulfillment processes. Working from multiple back ends is tedious, complicates training of your shipping staff, and requires your shipping process to support the quirks of the various selling platforms—making it more difficult to optimize.
- **Single Store:** Even with a single store, a shipping solution will allow a direct integration with your store—and, more importantly, your orders. This direct integration will eliminate the copying and pasting of addresses and order details while enabling updates of inventory and tracking information back to your store along with updates related to each order's status (e.g., "shipped" vs. "awaiting fulfilment").

Capabilities to Consider

Selling Environment

- There may be multiple platforms, but typically they are not integrated with one another
- Most platforms provide no real order management capabilities

Shipping Environment

- Integrate with each of the selling platforms
- Allow aggregation of order data from any number of platforms into a single view, where it can be managed and manipulated
- Communicate inventory data back to any number of platforms to ensure stock levels are properly represented in store experience(s)
- Communicate order status data back to any store(s) for presentation to customer

Physical Environment

- May fulfill different selling platform orders from different fulfillment locations
- May need to print a different pick list, packing slip, and/or shipping label for different stores (e.g., a store-specific logo on the packing slip or a store-specific gift with purchase is included in the package)

International Shipping

If you have products that are in demand outside the country in which you operate, offering international shipping obviously benefits your customers in those countries—as well as your sales volume. There are many variables to consider, but if the demand exists and you can cover (or charge the customer for) the incremental shipping, handling, and governmental costs, selling internationally can be straightforward to enable with a robust shipping platform. For a detailed discussion of international shipping, please refer to the ShippingEasy eCommerce Seller's Guide to International Selling & Shipping. http://bit.ly/international-guide

Capabilities to Consider

Selling Environment

Support for international selling and shipping options:

- Multi-currency checkout
- International addresses
- International payment gateway
- Location-based duties and taxes
- Multi-language capabilities

Shipping Environment

Support for generating documentation required to move goods from one country to another:

- International shipping labels
- Customs forms
- Electronic trade forms

- Support for auto-populating critical but repetitive details, including:
- Harmonized code
- Country of manufacture
- Content type (commercial, merchandise, gift, etc.)
- Signature

Support for the electronic filing or printing of all required documents

Physical Environment

Ability to print and accurately affix all international documentation to packages and route to the appropriate international carrier

Why sell internationally?

95% of the world's population lives outside the United States

Delivery Service Level Options

While the majority of customers select more economical, longer-delivery-time ground shipping options*, an even larger majority expect to have the option of expedited delivery when they check out—a critical customer experience insight for eCommerce sellers. To decide how many service levels to offer, you should balance what your specific customers want versus the complexity and cost of offering multiple options. Notice that the decision to offer multiple service levels is separate from how you should structure the associated fees and thresholds; those topics are covered in the next section, "Shipping Pricing Options."

Delivery service level options typically include:

- **Standard/default:** the least expensive and slowest option, often defaulting to USPS or the slowest option on a private carrier
- **Expedited:** typically a trackable 2-3 day service like USPS Priority Mail or UPS Second Day Air, offered at an incremental shipping cost—or free as part of a subscription service (e.g., Amazon Prime) or as a promotional incentive
- **Overnight:** trackable next-day delivery with the highest incremental shipping charge

Capabilities to Consider

Selling Environment

- Showcase various service levels and their respective pricing
- Determine whether or not to disclose the carrier for each service level
- Allow the customer to select the service level he/she desires
- Provide clarity on overall order shipping cost as early in the process as possible

Shipping Environment

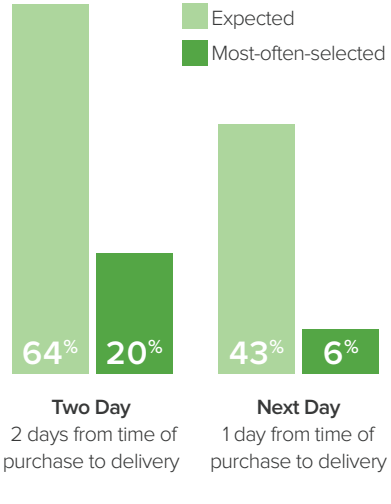
Select the best carrier based on the customer's requested service level and package weight, dimensions, and destination:

- Manual selection: provide information and let shipper decide
- Semi-automatic selection: make a rules-based recommendation of best carrier, but shipper must confirm or change
- Automatic selection: create shipping label based on rules

Physical Environment

- Route label to carrier-specific printer, if applicable
- Route package to the selected carrier

Expected and most-often-selected shipping options



Source: UPS Pulse of the Online Shopper™ 2016; Tech-savvy shoppers transforming retail http://bit.ly/UPSpulse

Shipping Pricing Options

Customers want free shipping; in fact, most of them are willing to accept a seven-day delivery timeframe to get it*. Your decision as to how to price your shipping options should be based on a combination of what your particular customers want and what your business model can support. Here are the typical pricing options and key points to consider for each; notice that if you offer multiple service levels (see previous section), your pricing model will need to reflect these options.

	Relevance		
Capability	**Selling Environment**	**Shipping Environment**	**Physical Environment**
Free/Flat Rate—no threshold The same rate (which can be $0) is applied to all orders regardless of value or other parameters.	• Promote the offering throughout the buying process • Present offering details • Include offering details in the order summary page • Flag excluded items/conditions/locations	• Select most cost-effective carrier for given package weight (and dimensions, if relevant) • Browse and compare rates to select the lowest rate with ease and maximize margins	Route package to best carrier, comprehending service level, if appropriate (see "Delivery Service Level Options" section).
Order Total Threshold-based Different flat rates are applied to different total order value ranges (e.g., $5 shipping on orders up to $75, $0 shipping on orders totaling more than $75).	• Promote the offering throughout the buying process • Encourage customer to add items to cart by presenting the gap between his/her current order value and the value needed to reach the shipping threshold • Present details, compute correct shipping cost based on order total, include in order summary page, flag excluded items/conditions/locations	• Select most cost-effective carrier for given package weight (and dimensions, if relevant) • Browse and compare rates to select the lowest rate with ease and maximize margins	Route package to best carrier, comprehending service level, if appropriate (see "Delivery Service Level Options" section).
Actual Cost The customer pays what it actually costs to ship, sometimes with a handling surcharge.	• Accept customer zip code • Present details, compute correct shipping cost based on item weight/dimensions and packing rules, and include in order summary page	• Select most cost-effective carrier for the given package weight (and dimensions, if relevant) • Flag discrepancies if cost computed by the shipping platform differs from cost computed by the selling platform	Route package to best carrier, comprehending service level if appropriate (see "Delivery Service Level Options" section).

**Source: UPS Pulse of the Online Shopper™ 2016; Tech-savvy shoppers transforming retail http://bit.ly/UPSpulse*

Delivery Flexibility

Customers increasingly look for the ability to have orders split between addresses, to have items with different fulfilment times consolidated into a single delivery, to ship to locations other than their home address, and to change delivery dates or have packages rerouted once shipped.

Capabilities to Consider

Selling Environment

Allow customer to indicate:

- Ship certain items to certain addresses
- Ship to an address other than their home address
- Specify signature not required
- Consolidate orders and items into as few packages as possible to reduce shipping costs
- Specify alternate delivery location if not home
- Change delivery dates with carrier after package is in transit
- Have package delivered to a different location after order is in transit

Shipping Environment

Download customer shipping and delivery data/notes; update changes in real time, including:

- Shipping address(es)
- Shipping paid
- Shipping requested service
- Delivery preferences
- Order notes

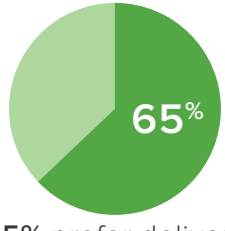
Leverage and apply shipping and delivery data to:

- Determine and apply preconfigured shipping rules
- Select the optimal carrier for the actual packages that need to be shipped
- Generate related pick list and packing slip(s)

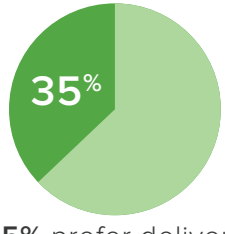
Physical Environment

Route the package to the best carrier

Delivery Location Preference



65% prefer delivery to home/residence



35% prefer delivery to an alternative location

**Source: UPS Pulse of the Online Shopper™ 2016; Tech-savvy shoppers transforming retail http://bit.ly/UPSpulse*

Returns

With more than 30% of all products purchased online being returned*, returns are part of selling online. Unlike the physical returns process, where the shopper returns to the store and initiates the return or exchange, shipping is central to the online returns process. As with the popularity of free shipping on the front end, the majority of shoppers like free returns—or at least easy returns.

There are two major decisions you need to make when thinking about your return capabilities:

- Degree of customer self-service: Your selling platform probably allows customers to initiate the return process; you need to decide the level of involvement in the process you need to have in the context of what your selling platform allows. You may, for example, want to manually approve every return and manually issue a Return Merchandise Authorization (RMA) before the customer can send the product back; or, you may allow automatic approval/RMA issuance.
- Pay on use labels vs. post shipping: Your shipping platform will most likely offer you a variety of options for return labels. All major carriers offer the option to print return labels for inclusion in your outbound shipment. These are not charged to your account (UPS, FedEx) or account balance (USPS) until or unless your customer uses the label and it is scanned by the carrier. Hence the name "Pay on Use." Alternatively, you can generate a shipping label on request from your customer post-shipping and email it to them.

30% of all products ordered online are returned

79% of shoppers want free return shipping

**Source: E-commerce Product Return Statistics and Trends [Infographic] http://bit.ly/b2cinfo*

Capabilities to Consider

Selling Environment

- Enable the customer to initiate the return process
- Issue an RMA
- Deliver a return label for print (not common)
- Track and report on returns and exchanges

Shipping Environment

- Generate a return label and RMA on demand
- Provide a "pay on use" return label for selected orders to include in the outbound shipment (enables the customer to use a pre-printed label with the return address)
- You have the option to decide whether you or your customer will pay for a return label

Physical Environment

Process the return and update necessary systems

Data Integration

To provide maximum value, a shipping solution must be able to integrate with the selling platform, with peripherals in the physical environment, and with other relevant software solutions (e.g., accounting) so order and shipping data can flow seamlessly between systems automatically.

Capabilities to Consider

Selling Environment

- An open API to download order, product, and customer data to the shipping system
- Receive updates--such as order status, tracking numbers, and inventory levels--back from the shipping system
- If products lend themselves to calculated shipping costs, accommodate product weight/dimension data to facilitate this
- Support capture of customer data/preferences to support desired options downstream; e.g., multiple recipients for a single order, splitting and combining of orders, tiered delivery service levels, etc

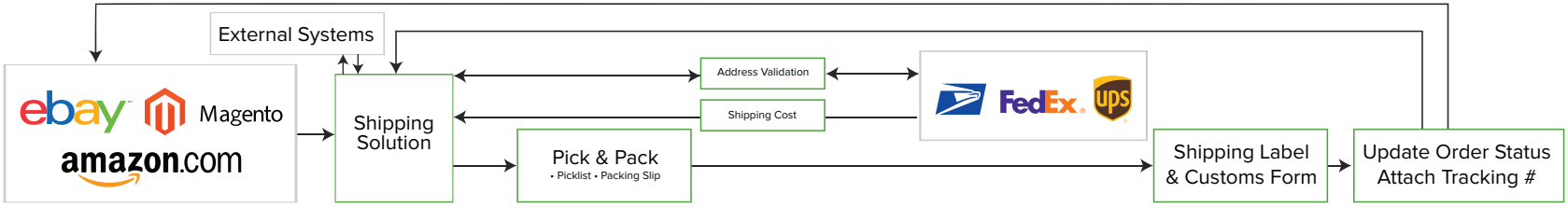
Shipping Environment

- Receive order, product, and customer data from Selling Environment, which will then be managed and processed to ship via the optimal carrier/method
- Integrate with robust address validation software
- Integrate with multiple carrier services to offer:
  - maximum delivery and rate flexibility
  - live rate quoting
  - tracking numbers back to store platform
  - real-time label generation and purchase
  - optional "pay on use" return labels
  - delivery updates
- Natively maintain inventory data (or update inventory management system) to communicate stock levels with selling platform and trigger replenishment operations when low threshold is reached
- Communicate appropriate information to accounting and other systems as orders ship

Physical Environment

Directly integrate peripherals with Shipping System, for example:

- Scanner(s)
- Scale(s)
- Printer(s)



Inventory Management

Effectively managing inventory is crucial to your customers' experience; the only thing worse than not having a product in stock for customers to order is discovering you don't have it in stock after they've ordered it. It's equally crucial to your back office operations, since optimal inventory levels improve staff efficiency, help you make the best use of your warehouse space, and reduce the risk of getting stuck with spoiled, out-of-season, or obsolete products that have to be marked down or discarded.

Inventory management has three main components:

- **Product management** allows you to manage stock levels of individual products, keeping them up to date based on customer orders and incoming product.
- **Supplier management** allows you to manage suppliers, keeping track of which SKUs come from which suppliers and tracking shipments, POs, and payments by supplier.
- **Purchase order management** allows you to generate and send—based on real-time stock levels—purchase orders, then track order status and receive stock into inventory against the order.

Capabilities to Consider

Selling Environment

- Send orders to shipping platform
- Receive inventory quantity-in-stock updates from Shipping Environment and update customer-facing information based on them (e.g., no. of a given product left or item out of stock)
- Locally manage availability messaging based on soft-allocated items (items in cart which customers have a claim on for a period of time)

Shipping Environment

- Update inventory levels based on customer orders, order changes, and cancellations received from selling platform
- Update selling platform with inventory levels for various SKUs
- Update inventory levels when incoming inventory shipment is received at warehouse
- Keep track of product location in warehouse
- Manage supplier-item relationships (multiple suppliers per item, multiple items per supplier)
- Generate POs when items hit low-stock thresholds
- Track order status from supplier to warehouse
- Log receipt of inventory against PO (partial or complete)
- Track levels of available vs. committed vs. sold inventory
- Analyze and report on various inventory levels over time, open and closed POs, supplier information and performance

Physical Environment

- Receive order from shipping platform for physical processing
- Manage physical inventory—receiving, storing, pick/pack/ship
- Update (manually or automatically) shipping platform when order ships
- Manually update shipping platform with non-order-related changes to inventory numbers (spoilage, shelf pulls, etc.)
- Update shipping platform when returns are received back into inventory

Carrier Selection

Selecting the right carrier for a given order can become complex; the variables to consider include the number of carriers you have accounts with, the fulfillment location the order is shipping from (see “Fulfillment Location” below), destination address, order service level, cost, package weight, and sometimes package dimensions. A good shipping platform can help ensure you cost-optimize this critical step in the process.

Capabilities to Consider

Selling Environment

Set up shipping rates and options for selected carriers

Shipping Environment

- Aggregate orders (if you use multiple selling platforms)
- Organize orders based on shipping decision criteria:
  - weight
  - box dimensions
  - age of order
  - value of order
  - number of items
  - address type (residential vs. commercial)
  - requested service level
  - source fulfillment location
  - other criteria relevant to your shipping process
- Apply business and shipping rules to help automate selection of the optimal carrier
- Secure access to lower rates due to aggregate volume

Physical Environment

Route package to the best carrier for the service level

Fulfillment Location

This is a factor only if you fulfill from multiple locations, in which case a good shipping platform can significantly streamline the routing of orders to the right location based on the variables that are relevant to your business.

Capabilities to Consider

Selling Environment

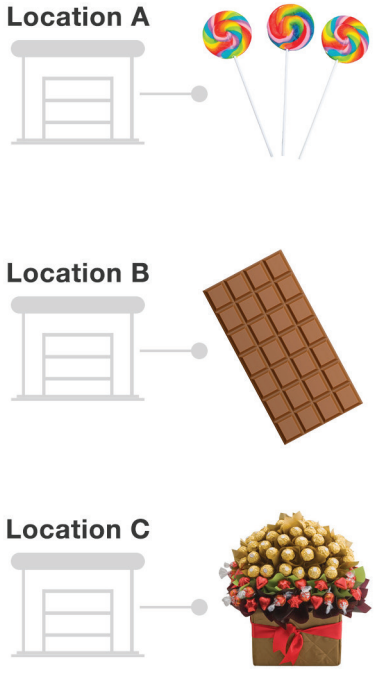
In some selling environments, the customer has the option to select the fulfillment location–and thus fastest delivery–based on the shipping destination. However, for most sellers, this is done via rules set up in the shipping platform

Shipping Environment

- Determine the optimal fulfillment location based on one or more of the following factors:
  - Inventory carried (or remaining) at location
  - Proximity to destination address
  - Service level
  - Order processing capacity/current workload
- Route pick lists, packing slips, and shipping labels to designated printers appropriately

Physical Environment

- Print the lists and labels
- Pick, pack, and ship the order



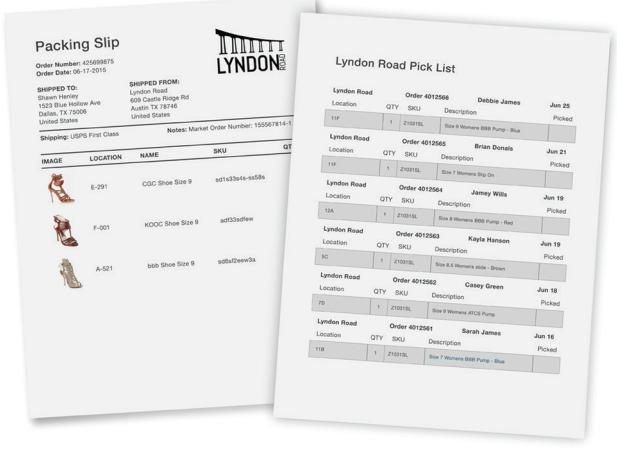
Generate Pick List, Packing Slip, and Shipping Label

A good shipping platform will provide robust tools for designing lists and labels according to the needs of your business and its customers. For large shippers, a pick list with all orders and order items in sync with packing slips and shipping labels ensures an efficient assembly line or end-to-end process. Careful attention should be paid to what details can be included on each document and the sequence in which they will print out.

Capabilities to Consider

Selling Environment

Transfer appropriate order and customer data to the shipping system (see the "Data Integration" section)



Shipping Environment

- Select orders ready for picking and packing
- Generate pick lists, packing slips and shipping labels containing your required data fields
  - Option: print pick list directly on shipping label to reduce paper and margin for error
- Set up printer page formats (e.g., labels per page), including:
  - Label size
  - Potential use of doc tabs
- Route to correct printer in correct order, considering:
  - Single vs. multiple fulfillment locations
  - One-at-a-time vs. batch picking and packing
  - The customization and required content for lists and labels
  - Single vs. multiple printers
  - Carrier-specific printers

Physical Environment

- Print pick lists, packing slips and labels
- Pick items and assemble orders
- Pack orders, including packing slips
- Affix shipping labels
- Coordinate the above efforts to minimize errors

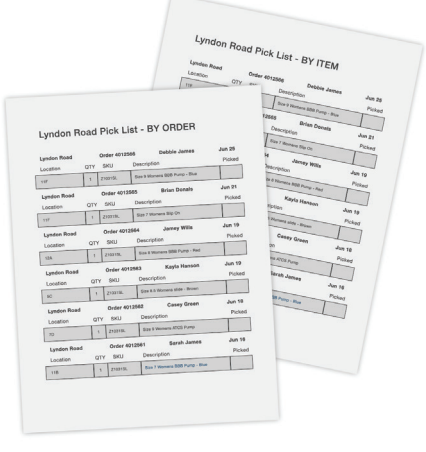
Picking & Packing Process

We'll cover these processes in more detail in the next section, "Which Processes Will Work For Me?" Here we present the main capabilities you need to keep in mind when you set up your physical environment.

Capabilities to Consider

Selling Environment

N/A



Shipping Environment

- If multiple fulfillment locations are available, route pick list to best location (or split across multiple if necessary)
- Support for preferred picking process (see "Which Process Will Work For Me?"), especially these components:
  - Warehouse location
  - Warehouse Bin
  - Pick by order
  - Pick by item
- Support for preferred packing process (see "Which Process Will Work For Me?"), especially these components of the printed packing slip:
  - Order item detail
  - Item images
  - Notes
  - Column order (how the columns are laid out from left to right on the slip)
  - Print sequence of slips
  - Printer routing of slips

Physical Environment

- Set pick and pack methods:
  - Using the packing slips
  - Using the order's content list printed directly on the shipping label
  - Using a standalone pick list
  - Using shipping label doc tabs which present pick list information
- Pick to bin (vs. directly to box or envelope)
- Select single or multiple fulfillment locations
- Consolidate orders (e.g., multiple orders from one customer into one box)
- If applicable, handle digital vs. physical products
- Pick one order at a time vs. in batch (e.g., pick multiple units of each item and allocate them among several orders which contain that item)
- Receive order items in bin from picking process
- Compare physical items for order to those listed on the packing slip
- Select and optimize box, envelope or package selection based on order contents:
  - Dimension considerations given dimensional weight if applicable
- Manage packing materials

Customer Management

There are many tools available for managing customer information and interactions, but your shipping platform is the tool that can help you understand the customer behavior that matters most—actual products purchased, purchase timing and frequency, and returns. A shipping platform aggregates this data across all marketplaces and selling platforms where you manage all your orders, not just those from one sales channel.

You can leverage this information to improve your customer experience by providing more targeted and personal interactions. Your targeted promotions should have a positive impact on conversion rates, average order values, customer lifetime values and, of course, your bottom line.

Capabilities to Consider

Selling Environment

- Provide customers with an interface to update the data attributes they control, such as contact details
- Can act as a channel for targeted promotions (e.g., via display ads to certain segments based on analysis performed in the shipping platform)

Shipping Environment

- Store and maintain customer information such as name, home and ship-to addresses, contact information, account information, preferences, purchase history, interaction history (e.g., communication logs), and internal notes, tags, and metrics (such as lifetime value)
- Analyze and report on various customer information attributes such as products purchased, order frequency, order value, order timing, shipping addresses, and promotion response rate to provide powerful insights into customer behavior, which can then be leveraged for segmentation and targeting purposes
- Advanced shipping platform functionality can include the ability to create and manage email campaigns based on the customer insights emerging from your customer analysis; it can also help you manage support and service interactions, which can often provide valuable information to include in a customer's data record

Physical Environment

N/A

CUSTOMER MANAGEMENT

CUSTOMER SEGMENTATION

EMAIL CAMPAIGN MANAGEMENT

Analytics and Reporting

Shipping platform analytics can provide valuable insights into many aspects of customer behavior and the performance of your shipping process. We'll cover this in greater detail in the "Systems and Services" section, but here we provide some highlights.

Capabilities to Consider

Selling Environment

Incorporate data from shipping platform into sales reports

Shipping Environment

- Analyze data and generate periodic or custom reports on:
  - Demand for SKUs/products across all selling platforms
  - Unshipped orders and SKUs
  - Customers' items or order value by geography/time period
  - Shipping costs and on-time performance by carrier, service level, fulfillment location, etc.
  - Demand trends (to improve replenishment planning across the supply chain)
  - Performance by store/user/fulfillment location
  - Customer behavior across multiple stores/channels (to facilitate Targeting promotions; see also the "Customer Management" section)
- For multiple store situations, a shipping platform's ability to analyze data across all stores is especially powerful

Physical Environment

N/A

167
New Orders Today

383
Unshipped Orders

28
Orders Ready to Ship

Today | **MTD**

Downloaded Orders

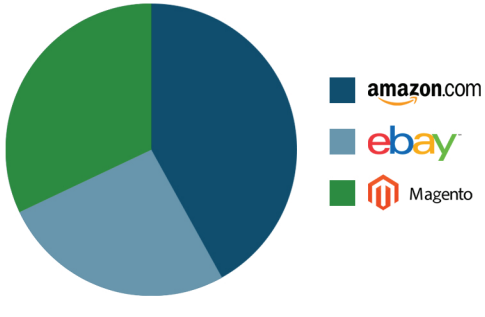
Lyndon Rd.	5,132	**33%**
Amazon	6,998	**45%**
eBay	3,421	**22%**

Today | **MTD**

Shipped Orders

Lyndon Rd.	7,963	**36%**
Amazon	9,290	**42%**
eBay	4,866	**22%**

Order Source



Which Processes Will Work For Me?

Now let's look at the high-level, end-to-end process of taking an order from capture through shipment.

High-level Processes

The capabilities you choose to implement will inform the processes you follow—as well as the technology you select. While there are hundreds of subtle process permutations based on the capabilities we've covered, here are the common high-level steps.

AGGREGATE & MANAGE ORDER INFORMATION

Get the order information from your selling environment(s) into your shipping environment and prepare them for shipment.

You will, for example:

- Validate addresses
- Confirm inventory
- Check customer and internal notes
- Combine orders from the same customer
- Split orders due to out-of-stock items
- Assign orders to categories
- Apply rules/mapping
- Mark as drop shipped
- Sort and/or filter orders by:
  - Warehouse location
  - Number of items
  - Order date
  - Weight
  - Domestic/international
  - Residential/commercial
  - Other attributes relevant to your process
- Manage inventory and communicate levels to selling platform

PICK / PACK / WEIGH / CHOOSE CARRIER / LABEL

The order in which you complete these steps depends on whether you have shipping measurement (item weight and possibly dimensions) data associated with each item, and the ability of your shipping platform to apply rules to this data to determine the preferred carrier. If shipping measurements/ parameters are available and the calculation is feasible, your shipping platform may be able to select the best carrier and generate the shipping label while you print the pick list and packing slip, pick, and pack. If not, you will need to print the pick list and packing slip, pick, pack, weigh, and then select the best carrier.

Potential factors influencing this process:

- Average daily order volume
- Number of SKUs: quantity of products on hand/shipping
- Number of items: in average order
- Item weight accuracy and availability in store platform
- Number of shippers
- Number of carriers
- Number of printers

SHIP

Transfer package(s) to selected carrier(s) and update shipping information to all parties:

- Update order status in selling platform(s) (e.g., mark as shipped)
- Update carrier tracking number in selling platform(s)
- Send shipment confirmation with tracking number to customer
- Update available inventory levels and generate POs when they reach low threshold

Aggregate and Manage Order Information

AGGREGATE & MANAGE ORDER INFORMATION

PICK
PACK
WEIGH
CHOOSE CARRIER
LABEL

SHIP

Basic functionality: no shipping platform available

- In the most basic shipping environment, there is no shipping platform—everything tends to be managed via the selling platform(s) and the carrier's website (e.g., UPS Worldship or FedEx Shipment Manager) or PC Postage provider (e.g., Stamps.com or Endicia). In this case, you would simply log into your selling platform (into each one, one at a time, if there are more than one) and print your packing slip(s), then move to the next step. In some selling platforms (e.g., eBay, Amazon, Etsy), labels can be generated directly from that platform for orders generated there.

Advanced functionality: shipping platform available

- Your shipping platform receives the order data via the Application Programming Interface (API—a software interface that allows one system to easily send and receive data from another system) from the selling platform(s) in real time, including the customer-selected shipping option, customer address, customer messages, order split/merge information, and item weight and dimension measurements, when available. If multiple selling platforms are used, a good shipping solution can aggregate order data from all of them into a single view.
- Your shipping platform updates inventory levels based on order data received from selling platform and actual shipments.
- To guide automated processes, shipping administrator(s) can manage order data by filtering and sorting.
- Multiple administrators can view and manage specific groups of orders, communicate with each other, and collaborate to prep orders for picking, packing, and shipping.
- Your shipping solution applies rules to order data to automate decision-making and repetitive tasks. For example:
  - Assign weight to items/SKUs
  - Add weights to shipments containing promotional gifts
  - Assign categories or "folders" to create groups of similar orders (e.g., expedited shipments)
  - Assign carriers based on weight, dimensions, customer-requested shipping option and/or address type
  - Assign designated orders to a designated user/administration
  - Assign "ship from" address based on order number, SKU, destination, etc.
  - Add signature or delivery confirmation for orders over a certain value
  - Automatically print a unique packing slip template for designated orders
  - Automatically send a promotional shipment confirmation email
  - Flag orders that contain multiples of a specific SKU
- Your shipping solution creates related pick lists, packing slips, and shipping labels, and readies them to print. A good shipping solution allows you to design your pick lists, packing slips, and mailing labels to lay out various data elements from the shipping platform. For example:
  - Pick lists may contain images and/or warehouse locations and be grouped by order vs. by item.
  - Packing slips may or may not contain certain information such as gift messages or product prices, depending on customer intention.
  - Shipping labels may include removable doc tabs with pack list data, or the order number or item details may be printed directly on the shipping label.

Pick, Pack, Weigh, Choose Carrier, and Label Orders

AGGREGATE & MANAGE ORDER INFORMATION

PICK
PACK
WEIGH
CHOOSE CARRIER
LABEL

SHIP

Basic functionality: no shipping platform available

- User takes pick list printed from selling platform and uses it to pick item(s).
- User manually weighs and measures package.
- User enters shipping parameters for package into selected carrier's label-generation webpage, compares available rates/delivery speed, and selects best carrier/service level.
- User packs items into appropriate box using appropriate materials creating a ready-to-ship package.
- User copies customer address from selling platform into carrier or PC postage website.
- User prints and affixes label to package.

Advanced functionality: shipping platform available

- Shipping parameters, including order weight, have most likely processed in last step as part of the API download process from the selling platform.
- Shipping platform (with some level of input from shipping administrator) performs rules-based assignment of shipping box/envelope/polymailer and adjusts order's weight based on this assignment.
- Picker prints pick list and picks similar items for multiple orders (batch picking) or picks per order and places item(s) in a bin.
- Shipping platform determines best carrier based on shipping parameters (weight, dimensions, customer-selected shipping option, address type, etc.) then generates shipping label.
  - Alternatively, shipping platform maps orders/shipments to carrier and service based on shipping rules, or
  - Shipping platform may offer predictive analytics to assign carrier and service selections based on historical patterns.
- If multiple distribution locations exist, a good shipping platform can organize orders by location so pickers at each location can easily select and print their specific pick lists onsite.
- Shipping platform routes shipping labels (and packing slips) for a batch of orders to the appropriate printer based on the selected carrier, then it prints labels. Labels (and packing slips) should print in a predictable order based on:
  - Order number
  - Sequence that an order was selected in shipping platform
  - Sequence the order appeared in a batch
  - Product SKU
  - Product Name
- Shipping platform updates selling platform in real time (via API or other data exchange channel) with:
  - Carrier tracking information
  - Order status update ("shipped")
  - Inventory level changes
- User packs boxes from bins, checks against packing slip, and affixes sequential labels in an assembly line.

Ship

AGGREGATE & MANAGE ORDER INFORMATION

PICK
PACK
WEIGH
CHOOSE CARRIER
LABEL

SHIP

Basic functionality: no shipping platform available

- User drops off or places package in pick-up area for selected carrier.
- Daily shipment report is delivered to private carrier: End of Day form and electronic package level detail (PLD) report is printed for private carriers (UPS/Fedex) from carrier website.

Advanced functionality: shipping platform available

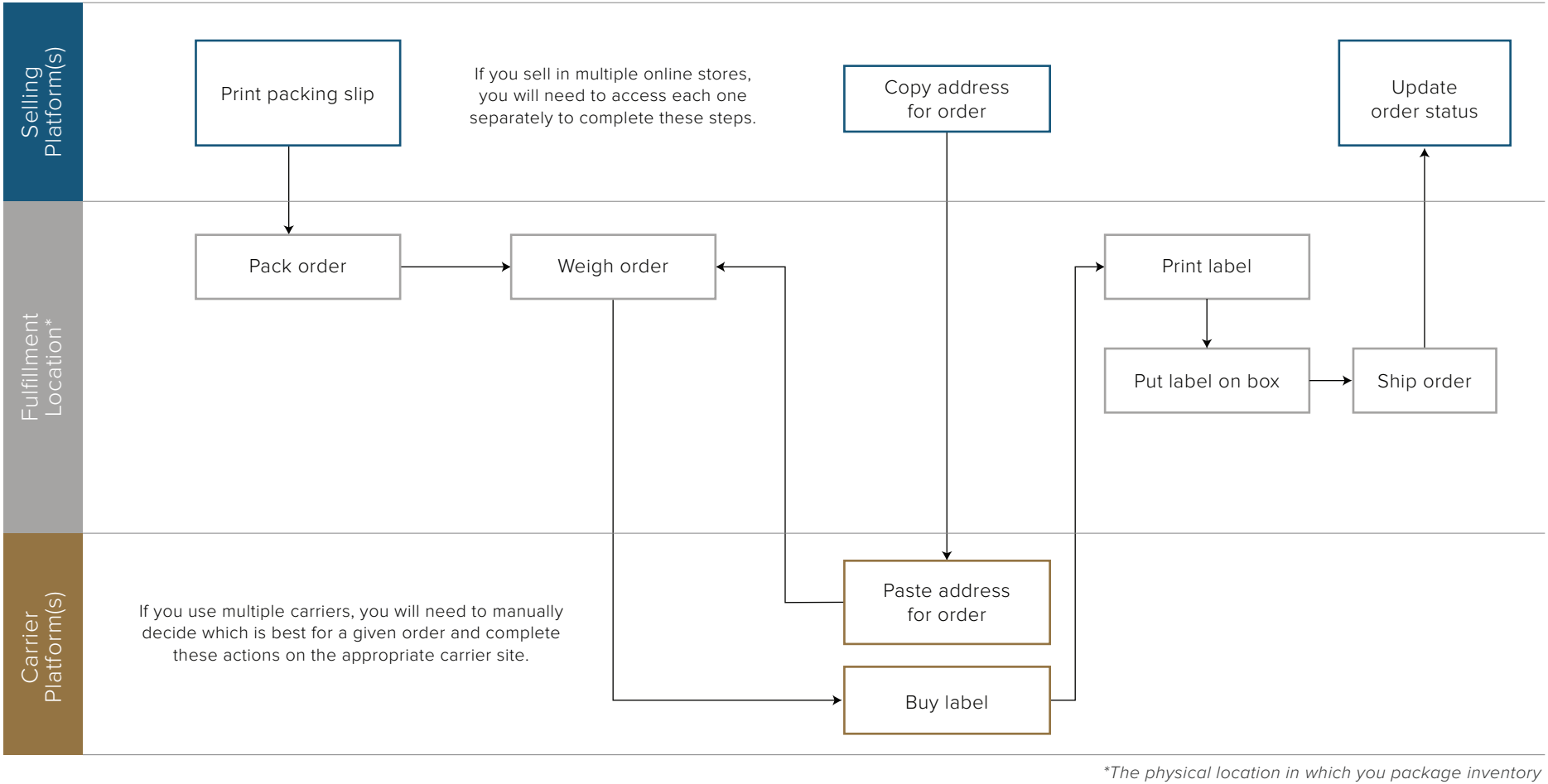
- Assembly line routes each package to appropriate pick-up area for its selected carrier.
- Daily shipment reports are automatically generated or delivered to carriers:
  - Shipping platform automatically sends all shipment information to private carriers (UPS/FedEx) as labels are created
  - User generates a USPS Scan Form for that day's shipments from the shipping platform and prints for USPS pickup
- Shipping platform monitors physical inventory levels and flags need for replenishment when low inventory threshold is reached.

Detailed Processes

Now let's look at some more detailed processes covering a range of common order management and shipping scenarios. The flowcharts in this section will help you visualize the processes.

Most Basic Process: No Shipping Platform

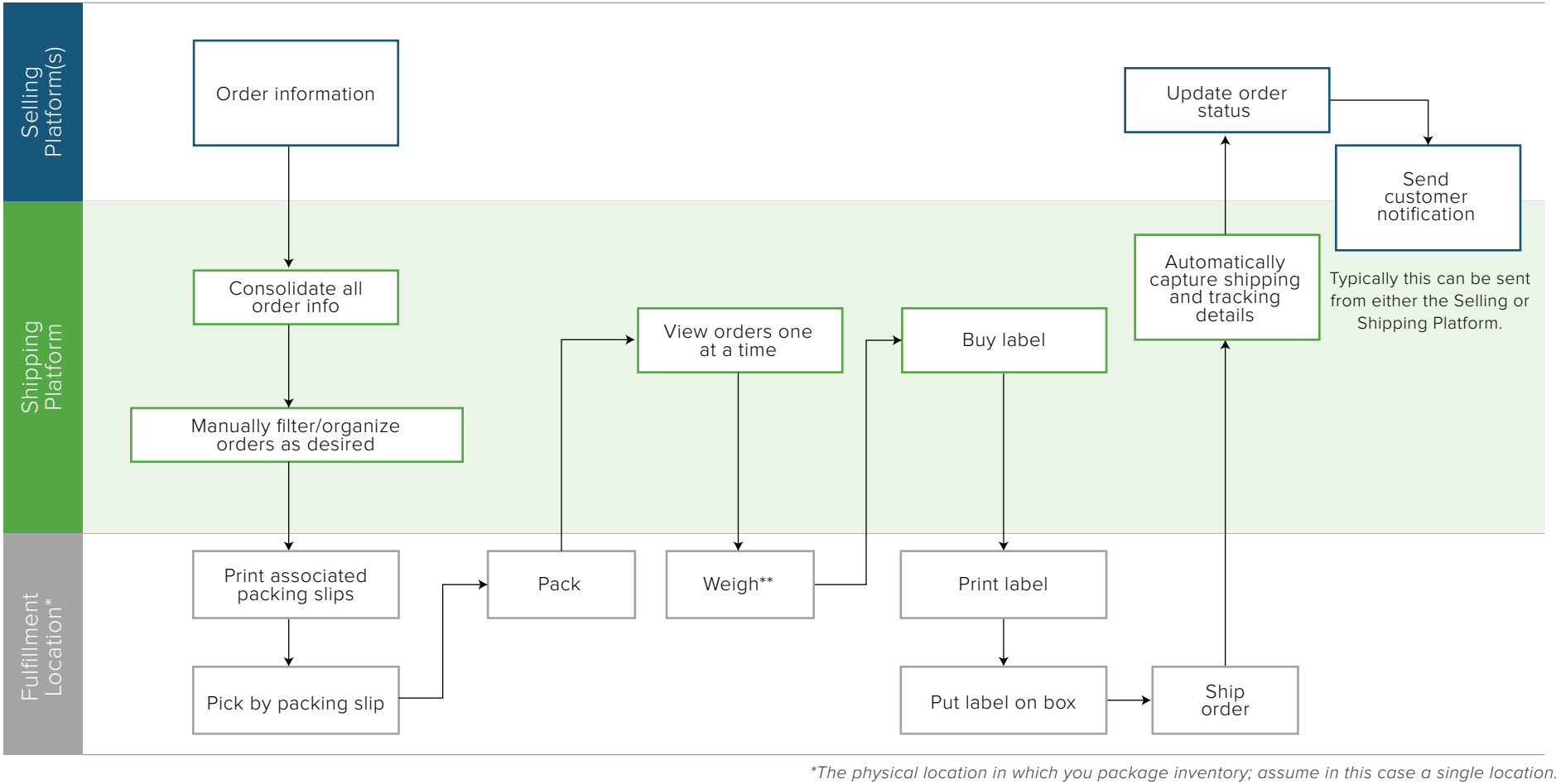
Putting together all the pieces of the most basic process—no shipping solution, one-at-a-time order processing, and using the packing slip to pick—we arrive at an end-to-end process like this:



**The physical location in which you package inventory*

Basic Process With Shipping Platform

The simplest end-to-end process occurs when a shipping platform is available, but orders must be manually weighed and are picked directly from the packing slip and processed one at a time. Here's an example:

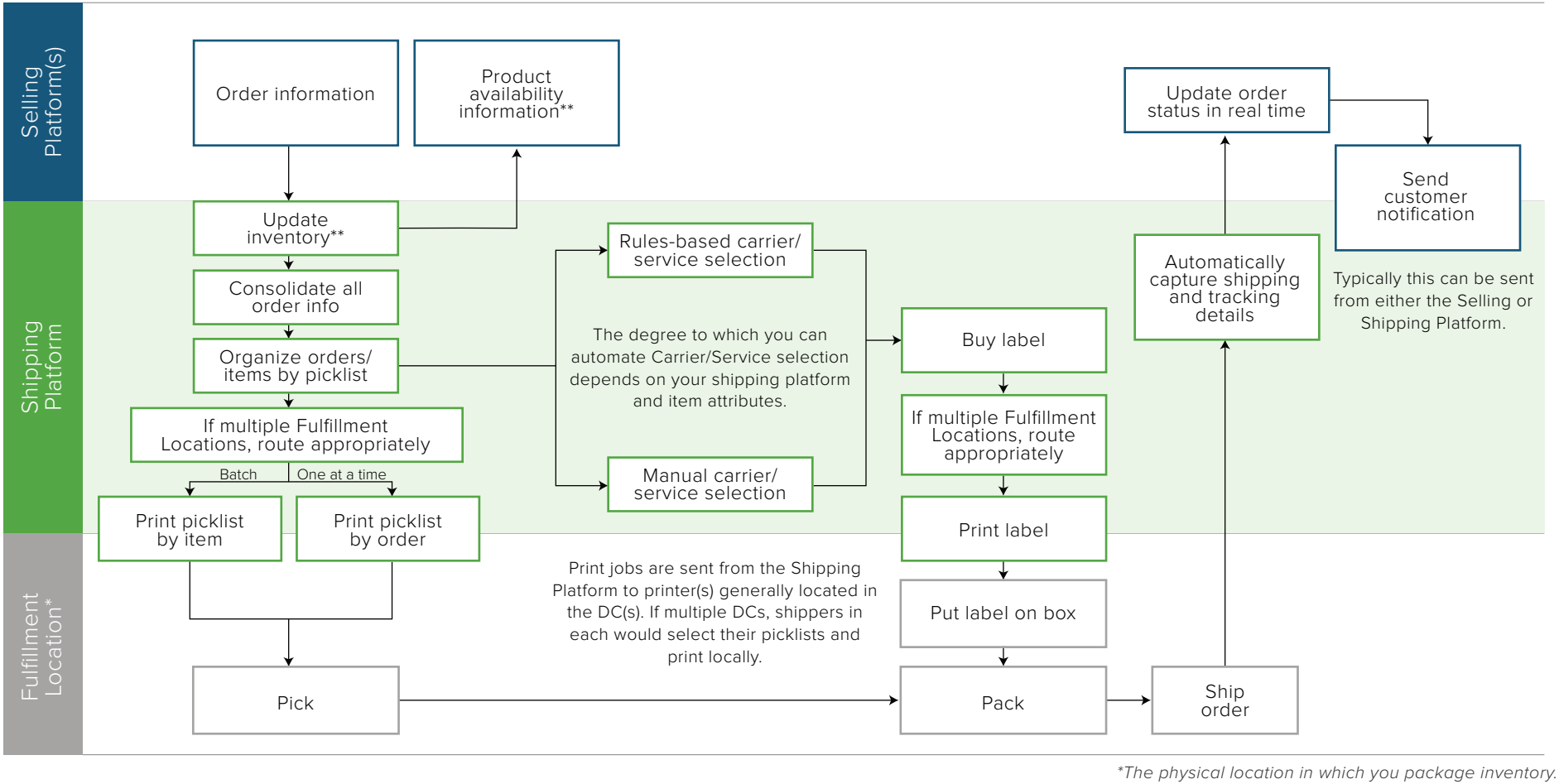


**The physical location in which you package inventory; assume in this case a single location.*

***A seller can reduce shipping workload 20-40% by having weights automatically calculated by the shipping platform versus weighing every single package before it goes out the door.*

Advanced Process: Product Shipping Information Known

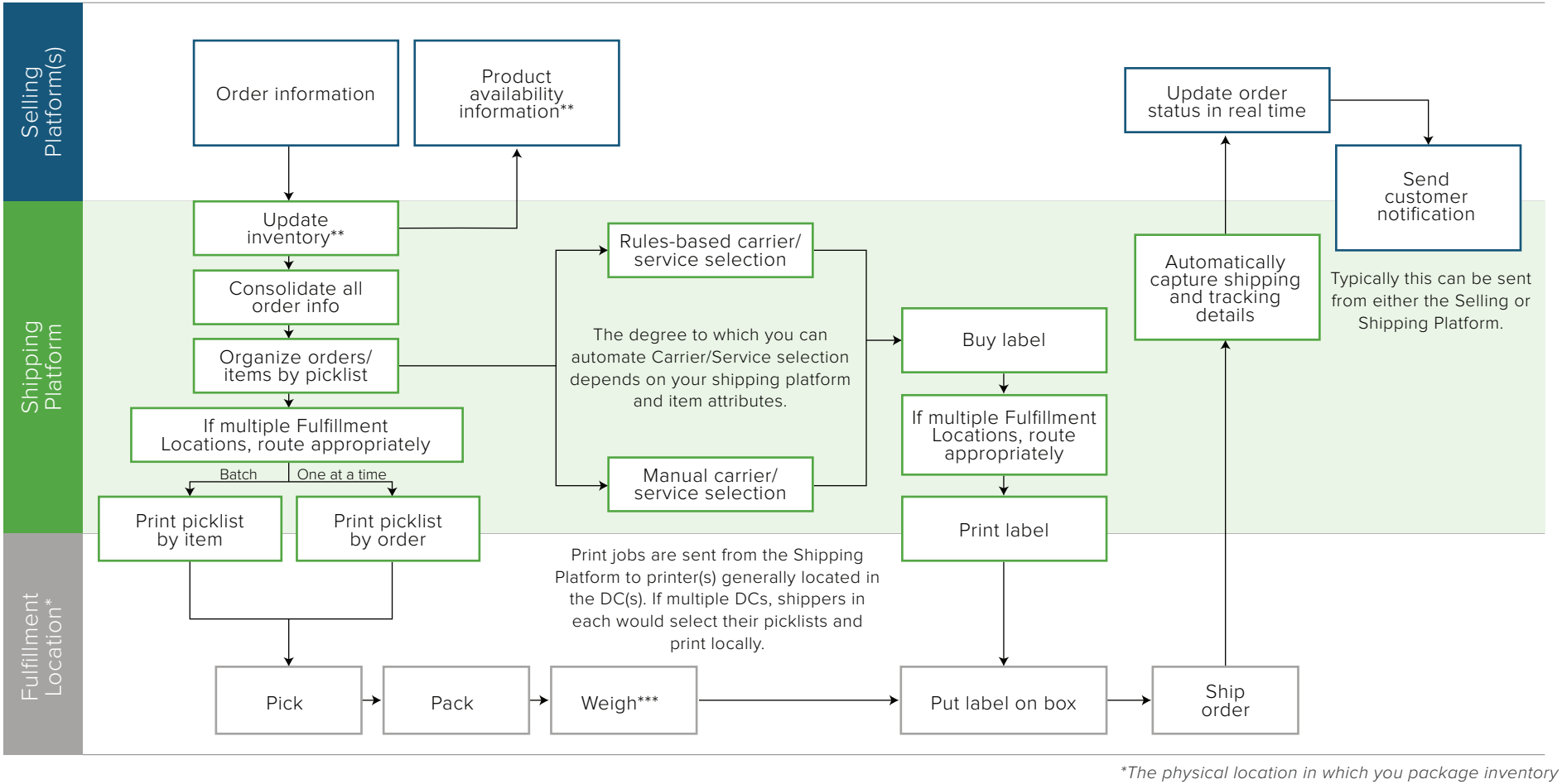
What follows is the end-to-end process for a more advanced scenario, where product weight and dimensions are included in the product data feed from the selling platform(s) to the shipping platform. Having this information in the order data feed allows a seller to reduce their shipping workload by 20%-40% versus having to manually weigh each order. Here's the process:



**The physical location in which you package inventory.*
***Only applies if shipping platform supports inventory management.*

Advanced Process: Product Shipping Information Unknown

Here's the end-to-end process for a more advanced scenario, where product weight and dimensions are not included in the product data feed from the selling platform(s), thus requiring that each order be weighed after packing:



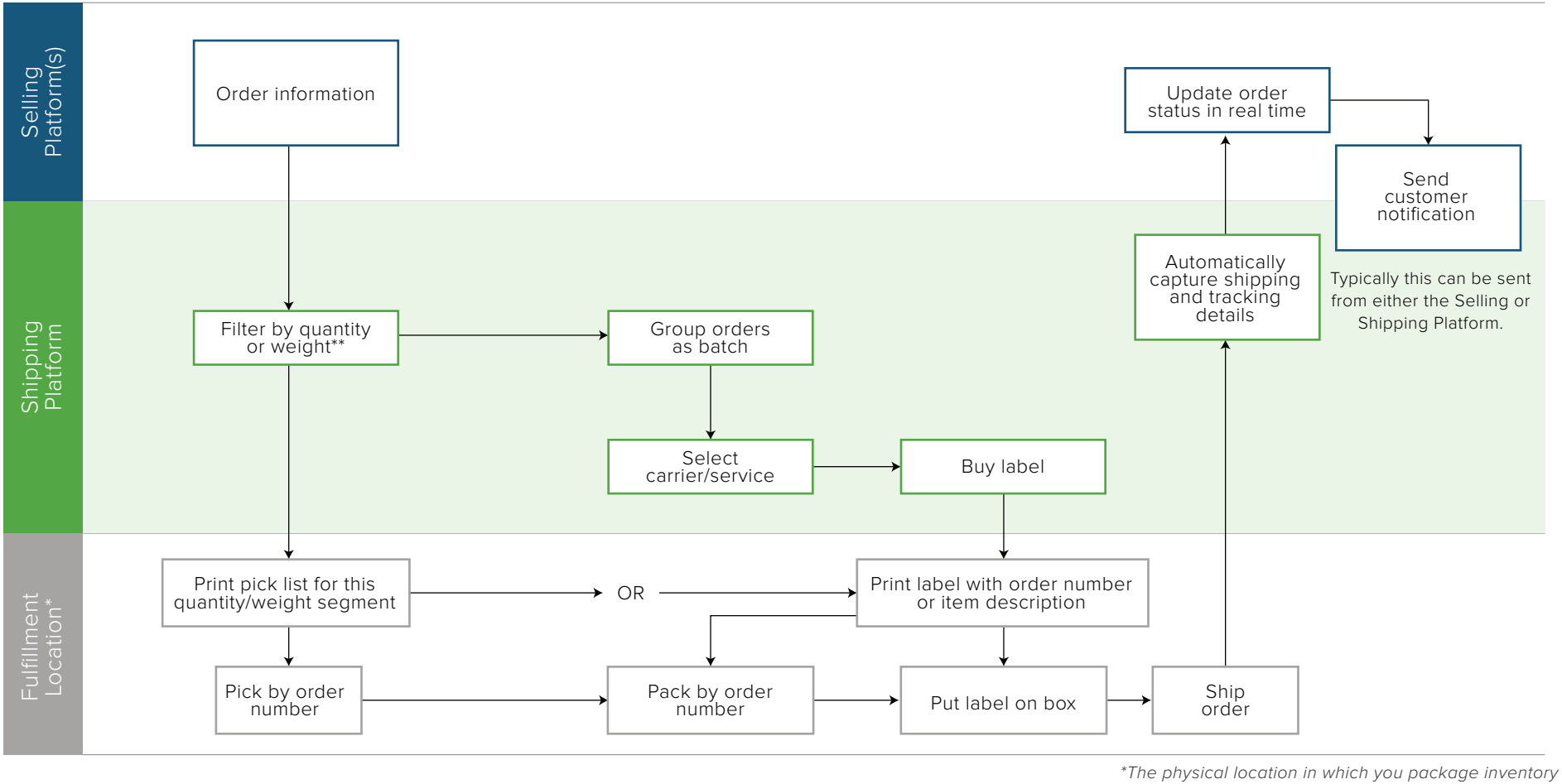
**The physical location in which you package inventory*

***Only applies if shipping platform supports inventory management*

**** A seller can reduce their shipping workload by 20-40% by having weights automatically added vs. weighing every single package before it goes out the door.*

Monthly Subscription Process

What follows here is the process for a Monthly Subscription selling model, which is a simpler process because all items in a given deal will be identical, meaning physical weighing is unlikely to be required. Because Monthly Subscription sites don't compensate sellers until the products have been shipped, Monthly Subscription sellers benefit greatly from the automation, efficiency and data integration offered by a good shipping solution:

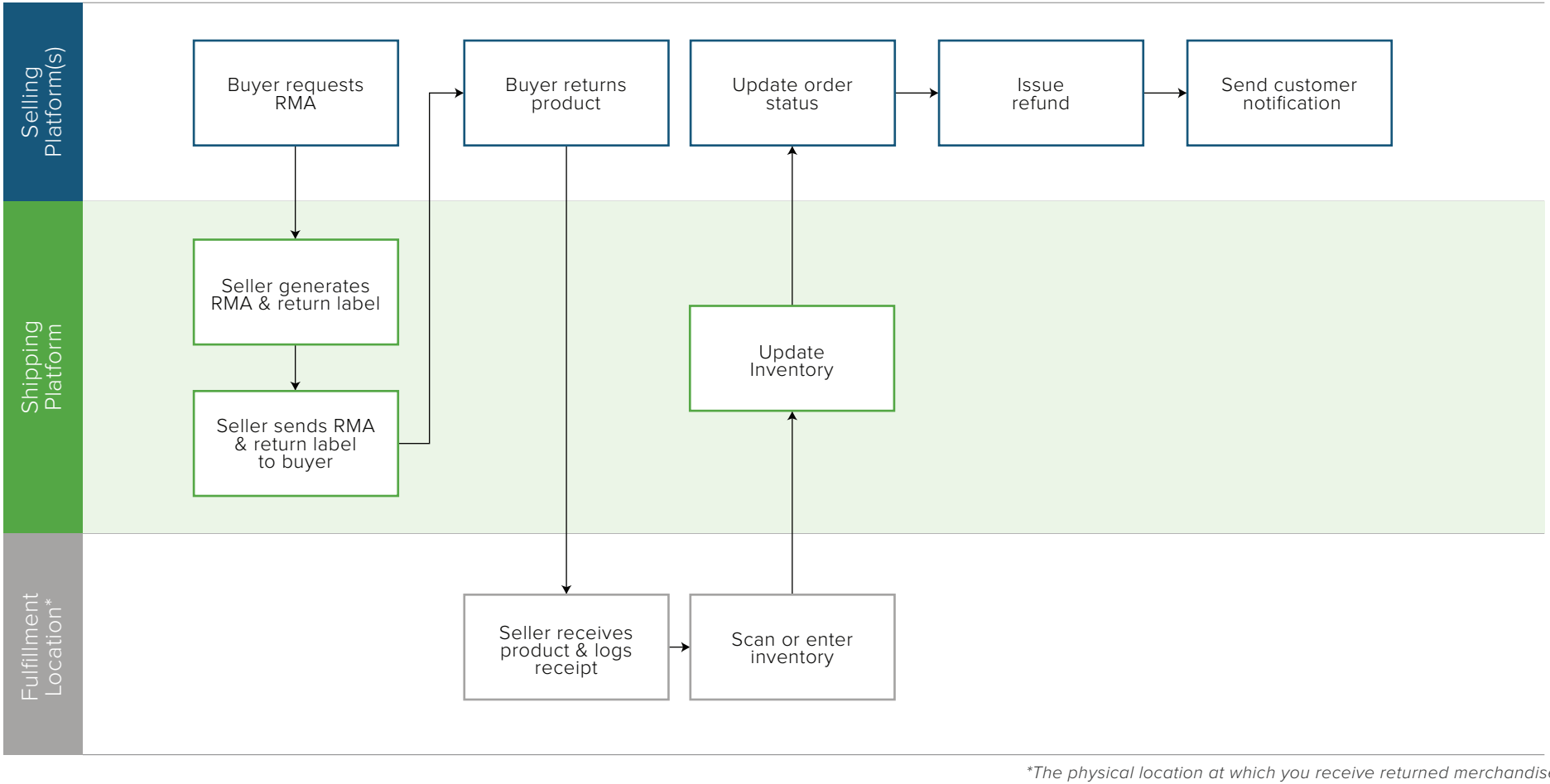


*The physical location in which you package inventory

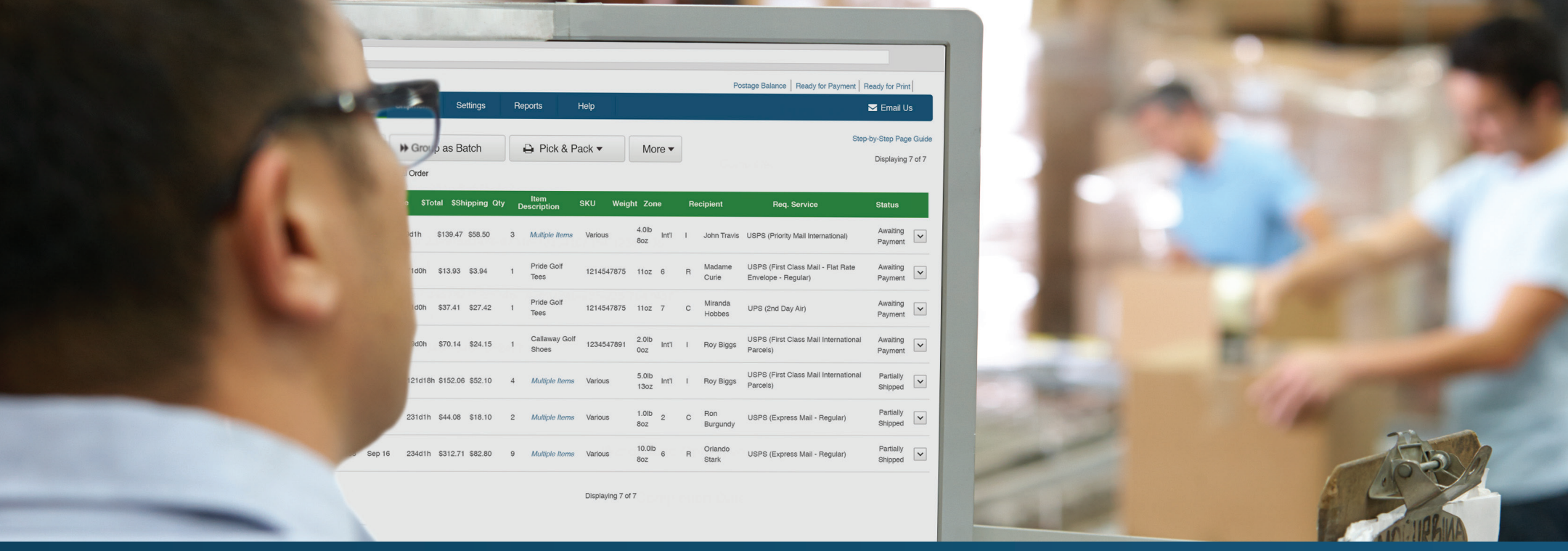
**Allows batching shipments by known package size/weight category

Returns Process

A shipping platform can help automate your returns process given that it's the system of record for your shipments and it integrates directly with your shipping carriers for return-label generation. The process below shows the basic steps for a return merchandize authorization- (RMA)-driven returns process:



The physical location at which you receive returned merchandise



Which Systems and Services Do I Need?

Now let's look at some of the criteria you'll want to think about as you evaluate technologies and service providers to build out or upgrade your shipping ecosystem.

In this section we'll cover:

- SaaS vs. On-premises
- Selling Platforms
- Shipping Platforms
- Carriers
- Peripherals
- Supplies

SaaS vs. On-premises

On-premises software is software that is purchased under a traditional license agreement and physically installed directly on one or more computers at the purchaser's facility. Licenses for on-premises software are typically priced based on the number of users; in some cases, duration of the license and the level of functionality or included support is a factor as well. A good example of on-premises software that many PC users are familiar with is Microsoft Outlook, for which you pay for a license, download the executable file to your computer, install it, and run it locally.

The Software as a Service (SaaS) model of licensing and delivering software has grown significantly in the last 10 years for virtually all types of software, and shipping and selling platforms are no exception. SaaS software is hosted by the provider and typically accessed by the user over the internet using a web browser. As with on-premises software, licensing is typically based on the number of users, duration, and level of functionality and/or support. SaaS licenses, however, are very often structured as monthly or annual subscription fees. A good example of a basic SaaS product is Gmail, which, in contrast to MS Outlook, runs on a server in the cloud and is accessed via a web browser.

Generally speaking, on-premises software offers more customizability at the expense of higher maintenance and infrastructure requirements for the buyer. While SaaS software may offer less customizability, maintenance and infrastructure requirements are virtually non-existent for the buyer. The following illustration shows key differences in the lifecycle of on-premises vs SaaS software.

Key differences in the lifecycle of on-premises vs SaaS software

Up-front activities are largely the same

Operational activities are handled completely by the SaaS vendor

Define Requirements	Select Software	Design Solution	Customize	Integrate	Operate	Patch Upgrade
• Business and technical requirements • SaaS vs. On-prem may be considered here; e.g. your organiztion's ability to manage infrastructure	• Evaluate options and determine best fit • Requirements may clearly steer you toward one model	• User experience and technical design • On-prem is typically more flexible for UX but may involve a more complex technical integration environment	• Customize to meet design requirements • On-prem generally more customizable than SaaS but the gap is narrowing	• Integrate with existing systems • SaaS may offer simpler integration models and/or require fewer integrations	• Hosting • DevOps • Performance • Support	• Install patches and bug fixes • Upgrade when a new version comes out

SaaS vs. On-premises

The following table breaks down the key SaaS vs. On-premises considerations:

Consideration	SaaS	On-premises
Ease-of-use	Generally easier to use because: • Web interface is consistent across all hardware/OS platforms • No installation means no chance of incompatibility with other software on device • Once device is configured, it can be accessed from any location	May be easier to configure local devices, but must configure them for every local instance of the software
Staff access	• Can access from any web browser; this is especially an advantage if you have multiple distribution locations, offices, or if you drop ship, or if any of these will apply to you as you grow your business	Must install on any device where a user requires access
Functionality updates	• You automatically get every enhancement/update/release that comes out in real time	Must manually upgrade software—potentially causing downtime and configuration issues
Integration	• Generally via APIs, so very flexible	Varies
Data access	• Can be accessed from any web browser with appropriate credentials	In order to access beyond the device on which the software is installed, must use a cloud-based workaround
Data security	• With proper encryption and access control, very secure	Can be made more secure since data is only stored locally, but only if industry-standard best practices are stringently followed.
Performance/ Redundancy	Software vendor typically agrees to provide various performance service levels. For example: - Uptime: the vendor should guarantee a certain level of uptime (e.g., time the platform is available for you to work on.) Typically this is greater than 99% and often includes redundancy and automatic data backup. - Response time: the vendor should also guarantee response time (e.g., how long it takes to get a given task done)—so that you will never have to worry about the time it takes you to process a single order becoming longer because you have a larger-than-expected number of orders to process.	Performance and redundancy are entirely up to you: • Uptime: if your system goes down, you will not be able to process orders. • Response time: an unusually large number of orders (which you want!) may overwhelm your local infrastructure, slowing down your order-processing time. If your business is growing, you will need to plan to upgrade infrastructure periodically to handle the volume.

Selling Platforms

Here are some of the key evaluation criteria to consider when selecting or upgrading your selling platform:

- **Transaction volume:** The platform should be cost effective for the number of transactions you anticipate (allowing for growth over a multi-year time horizon); see the related, previously discussed SaaS vs. on-premises considerations.
- **User experience**: Platforms vary in the degree to which (and difficulty with which) they allow you to customize the user experience (e.g., page layout, navigation). You may prefer a less customizable site for its simplicity, or a more customizable site that you can make better represent your brand or serve your customer's specific needs, e.g. the easy bundling of products into a "kit."
- **Design and themes:** Select or customize the look and feel of your online store to best represent your brand and feature your product portfolio. Most SaaS platforms provide easy design theme installs and add to them on a continuous basis. You can choose from free and premium options.
- **Hosting and security:** Some platforms will include domains, hosting packages, SSL certificates, fraud protection, cloud backup, and/or PCI compliance features. You will need to decide whether you want to use the platform package or a 3rd party vendor.
- **Payments and shopping cart:** Most platforms offer cart solutions and this is the main reason you need a selling platform since it enables customers to add items to a shopping cart and allows merchants to accept credit cards.
- **Order management:** This is where you will process orders and handle returns directly from the application. Selling platforms don't generally provide functionality as robust as that which is provided by shipping platforms in this area, so you may want to focus your order management requirements on your shipping platform selection process.
- **Inventory management:** This capability allows you to automatically keep track of inventory levels as they fluctuate due to sales, shipments, returns, and the arrival of new inventory. As with order management, the most logical place to handle inventory management is within a robust shipping platform that has visibility into all the events that impact inventory levels.
- **Customer management:** Organize and manage your customers and their unique needs. Selling platform support varies broadly here, but the most logical place to manage customers is from within your shipping platform, which has access to not only all the customer data managed by the selling platform, but also detailed data on customer orders and shipments.
- **Marketing and promotions:** If growing sales is important, look for a platform that makes it easy to reach more shoppers via social media tools, automated SEO, email marketing applications and the ability to push your products to additional channels.
- **Analytics:** Some platforms will provide reports and analytics on where your customers are shopping, what they are buying, conversion and cart abandonment metrics and more.
- **Apps and integrations:** Most eCommerce platforms provide third-party integrations for features they don't already provide out of the box; primary here is the ability to integrate with a robust shipping platform as discussed in the next bullet and in great detail in the next section, "Shipping Platforms."
- **Shipping platform support:**
  - Integration: Data fields needed, integration mechanisms, supported marketplaces, carts and platforms
  - User experience support: Present international shipping, support presentation of multiple shipping pricing models, etc.

Shipping Platforms: Integration With Other Platforms

Given the shipping platform's central role in the eCommerce ecosystem, it needs to integrate with the ecosystem's many other software components. The following table discusses each of these components and the shipping platform's integration goals related to each:

Software	Integration Goals
Selling Platform	• Seamless order download to shipping solution with all details relevant to shipping (order details, order status, item descriptions including color/sizes, item weight, customer/gift/internal notes, requested shipping service) • New items included in an order are populated automatically to product catalog in shipping solution • Real-time order status updates and shipping tracking information back to store
Accounting	• Write order data from shipping solution into your accounting software to create financial transactions; typically select from: - Sales Receipts, - Sales Orders, or - Sales Invoices • Order detail syncs to accounting solution from shipping solution, including: Customer Name, Address, Email, Order Number, Product Line Items, Order Date, Date Paid, Order Total, Shipping Cost
Inventory (when external system used rather than managing inventory within shipping platform)	• Negates the need to integrate individual store(s) with shipping solution—order data is pulled directly from inventory solution • Automatically read and download designated orders from your inventory solution to your shipping solution • Map order status from inventory to appropriate status in your shipping solution • Updates inventory solution with status updates and shipment tracking numbers in real time
Electronic Data Interchange (EDI)	• Seamless order download to shipping solution with all details relevant to shipping (order details, order status, item descriptions including color/sizes, item weight, customer/gift/internal notes, requested shipping service) • New items included in an order are populated automatically to product catalog in shipping solution • Real-time order status updates and shipping tracking information back to EDI solution
Point of Service (POS)	• Shipping solution enables seamless Comma Separated Value (CSV) file upload of POS orders that require shipping • CSV upload process supports one-time mapping that is saved and enables one-click upload after setup • As demand for a direct integration grows, leading shipping solutions will integrate directly with leading POS systems
Customer Relationship Management (CRM)	• Orders download from CRM to shipping solution automatically • Shipping solution uploads the status, shipping method, and tracking information to CRM system in real time
Order Management	• Seamless order download to shipping solution with all details relevant to shipping (order details, order status, item descriptions including color/sizes, item weight, customer/gift/internal notes, requested shipping service) • New items included in an order are populated automatically to product catalog in shipping solution • Real-time order status updates and shipping tracking information back to order management system

Shipping Platforms: Data Elements

The purpose of integration between platforms is to allow data to flow optimally between the platforms. Here we discuss the main types of data—and associated data elements—that need to flow between the shipping platform and other components of the ecosystem.

The most important integration between the selling platform and the shipping platform involves the movement of order data; order data consists of:

- Unique order number
- Customer shipping address(es)
- Customer delivery service level requested
- Financial aspects of each order, including order total cost, item cost, discounts applied, shipping paid
- The unique ID and description of each product included in the order, including color, size
- The warehouse or bin location of each product
- Status of each order (e.g., awaiting payment, awaiting fulfilment, awaiting shipment, partially shipped)
- The weight of each product in the order, if your shipping system will determine carrier and/or calculate shipping cost based on this (versus the actual package weight obtained as part of the packing process)
- Customer messages
  - Gift
  - Special delivery instructions
  - Product-related
- Internal notes made in selling platform
- Inventory levels for each item

Order data is commonly transferred from the selling platform to the shipping platform in one of three ways:

- Direct integration: Via an application programming interface (API) call or a custom integration, the order data is automatically transferred, in real time or batch, from the selling platform to the shipping platform.
- File upload: The selling platform outputs a batch of order data periodically (e.g., at the end of each day) to a file, typically a CSV file, which is then manually uploaded into the shipping platform.
- Manual entry: A user copies the data for each order from the selling platform user interface and pastes it into the shipping platform user interface.

Shipping Platforms: Analytics and Reporting

Your shipping data holds enormous power for your overall business, so the ability to analyze it and report against it is a critical capability of any shipping platform. Here are the critical data elements you will want your shipping solution to be able to report on:

Data Element	Description
Ship Date	Date the shipment enters the mail stream (should match the date on the shipping label)
User	Which user created the shipping label
Order Date	Date the customer placed the order on your website
Order Total	The total amount your customer paid to you including item cost, shipping charge and taxes (should match the Order Total on your website)
Store	The website that the order was placed from
Order Number	Unique order identifier (should match the order number on your website for quick recognition)
Ship From Name	The Return Company/Name on the shipping label
Ship From Address	The Return Address on the shipping label
Recipient	The Ship To name on the shipping label
Purchaser Billing Address	The Billing Address associated with the payment method for the order
Recipient Shipping Address	The Ship To Address on the shipping label
Email Address	The email address is typically associated with the recipient to receive the shipment confirmation email
Carrier	The mail carrier who is transporting and delivering the package
Rate Provider	Which postage account the label postage was charged to

Shipping Platforms: Analytics and Reporting

Critical data elements, continued:

Data Element	Description
Service Type	The carrier service of the package (typically determines how quickly the shipment will be delivered)
Package Type	The package option selected for the shipping label (should match the actual package of the shipment)
Confirmation Option	If you pay an additional fee for extra delivery confirmation (e.g., Signature Confirmation), will list the add-on
Quantity	Number of items shipped in the order
Weight (oz)	The weight (in ounces) of the shipment (helpful for accurate postage cost, but also for future reference to understand the items in the package)
Zone	Relates to the distance between the origin and delivery address (in general, the smaller the zone number, the closer the delivery; the larger the number, the farther away)
Destination Country	Helps to distinguish between domestic and international shipments (can be useful to determine the percentage of shipments you send out of the country)
Tracking Number	Unique reference number to determine delivery status of a particular shipment
Shipping Paid (By Customer)	How much your customer paid you for shipping
Postage Cost	How much you actually paid for the shipping label
Insurance Cost	If you added insurance, will list the amount you paid (directly relates to the declared value for coverage)
Total Shipping Cost	The cost of the shipping label plus any insurance and additional confirmations
Shipping Margin	The difference between how much your customer paid you for shipping and the amount you paid for the shipping label: Did you make or lose money? (This helps to determine how much you should charge on your website)
SKU	Unique identifier of your items (helps to determine your most popular items and can be used to manage inventory)

Shipping Platforms: Analytics and Reporting

There are many areas where a shipping platform can analyze and report against these data elements to offer valuable insights about your operations and customer behavior; here are some of the key analysis areas to consider:

Shipping analysis

- Shipping patterns by geography, service level, product type, carrier, and/or distribution center: Analyze these attributes to understand demand related to each and to find opportunities to optimize inventory levels by geography or distribution center, or to seek better terms from certain carriers or certain product levels.
- Shipping costs and margins: Analyze these attributes to understand how your chosen shipping pricing model is performing. Refer to the "Shipping Pricing Options" section in this guide for a full discussion of this topic.
- Geographies, service levels, and carriers: Free shipping is popular; fast shipping is impressive. Analyze these attributes to determine which service gets the order to its destination fastest and most cost-effectively. For example, USPS Priority Mail Regional Rate may be the fastest and least expensive for zones 1-4; but USPS PM Flat Rate may be the fastest and least expensive for zones 5-9.

Customer analysis

- Order value or products bought versus geography: Analyze these attributes to determine your most profitable areas of the country and consider targeting promotions in those areas.
- Order value or products bought versus season (or other temporal construct): Analyze these attributes to determine your most popular products at various points in the year. You can use this information to run promotions during those times.

Inventory management

- This is a critical capability, especially if you manufacture what you sell, or if you sell high-velocity inventory that needs to be frequently replenished. Advanced shipping platforms have inventory management functionality built in, as discussed in the "Inventory Management" section of this guide.
- If your platform doesn't support—or you are not using—the Inventory Management functions we've discussed, consider the following inventory-related analytics, which can help streamline your operations:
  - Report on unshipped orders so you can build or order to demand. You'll want to be able to select all orders scheduled for future shipments. The report should include SKU, Item Description, and Total Quantity to help ensure that you have enough product in stock to ship out all scheduled orders.
  - Report on shipped orders to help manually manage inventory by exporting a CSV file of all the items you've shipped in a given time frame. The report should include SKU, Item Description, and Total Quantity so you can manually compute available inventory and re-order (or build) SKUs as they deplete.
  - Report on oldest unshipped orders so you can see how long your customers have been waiting and how much earned revenue you're missing out on by not getting these orders out—not to mention the potential customer backlash if the oldest order is simply too old. Keep in mind, most customers expect to see shipments go out within two to three business days of purchase (unless otherwise specified). The report should include Store, Order Number, Order Date, SKU, Item Description, Total Quantity, and Order Total so you can determine the next shipments to go out and calculate potential delayed revenue.

Store reports

- If you sell on multiple stores/websites, having aggregate shipping data in a shipping platform allows you to report on each store's relative performance (versus downloading data from each store, consolidating it, and analyzing it in a spreadsheet); this report allows you to:
  - Compare your sites to see which one is the most popular/profitable
  - Identify the characteristics of successful sites that may be implemented to improve performance of less successful sites
  - Compare which customers are purchasing from which sites so that you can target them with promotions from your other properties

Employee-related reports

- Evaluate the efficiency/workload of individual shippers (by login). Find out which shipper is generating the most labels. This information can help you to adjust each shipping station so they're all as efficient as the best shipper. Also, if you're getting reports of inaccurate deliveries (undelivered, postage due on delivery, etc.), you can check to see which user shipped the package and retrain the specific employee accordingly.

Promotions

- Analyze shipping data to understand customer behaviors (such as affinity for certain products or product categories, repeat purchases, purchase behavior at certain times of the year, and purchase behavior by shipping address) in order to provide them with targeted promotions and in turn, increase sales.

Shipping Platforms: Carriers

Whether or not you are an eCommerce seller, you are probably familiar with the major carriers—USPS, UPS and FedEx. Below are some of the key criteria to consider when selecting your carrier(s). Carrier service offerings and pricing can vary based on each criterion, so for each criterion that is relevant to the products you sell, it pays to evaluate how each carrier would support your specific requirements.

- **Markets:** Do you ship domestically, internationally, or both? For a detailed discussion of this topic, please see the ShippingEasy eCommerce Seller's Guide to International Selling & Shipping: http://bit.ly/international-guide
- **Tracking:** Do you or your customers require tracking and/or delivery confirmation?
- **Weight:** What are your maximum, minimum, and most common package weights?
- **Package Dimensions:** What are your maximum, minimum, and most common package dimensions? Can your typical shipments fit into carrier-supplied packaging? Will dimensional weight come into play?
- **Insurance:** What is your average order value and to what extent will a given carrier's included insurance cover it? How will you source and fund any additional insurance required? For a detailed discussion of this topic, please see the ShippingEasy eCommerce Seller's Guide to Shipping Insurance: http://bit.ly/shipping-insurance
- **Signature:** Do you or your customers require signature confirmation?
- **Ship to Address Type:** Will you be shipping primarily to residential or business addresses? Some carriers apply a surcharge for residential delivery.
- **Pickup preferences:** Where on a given carrier's route is your business and what is the estimated pickup time?
- **Pickup fees:** Does your volume meet the minimum or will a pick-up fee be applied to your monthly cost?
- **Software:** Does the carrier provide shipping software or will they pay a monthly subscription to a multi-carrier shipping solution if you require one?
- **Supplies:** Does the carrier provide free supplies relevant to the type of shipping you do? This might include boxes, envelopes, and labels.
- **Saturday delivery:** Do you or your customers require weekend delivery? Some carriers have significant surcharges for Saturday delivery.
- **Address Accuracy:** Does the carrier charge for a non-deliverable package? Can you update an address after you've shipped?

Destination

- Domestic, International or both
- Residential or Business
- % City vs Rural (surcharges)

Product & Package Type

- Weight: Average, Max, Min
- Dimensions: Average, Max, Min
  - Relevance of Dimensional Weight
- Contents: Fragile, Hazardous, Liquid
- Supplies: Suitability of Free Supplies

Service Options

- Insurance
- Tracking
- Signature Confirmation
- Hold for Pick Up
- Saturday/Sunday Delivery
  - Surcharges
- Pick Up Frequency and Timing
- Pick Up Charges

Peripherals

There are two peripherals that no eCommerce seller can do without: printers and scales. In this section we'll look at the available options for each, and how to select one that's right for your business. We'll also cover scanners, which can help optimize order processing, especially for higher-volume sellers.

Printers

There are three categories of printers: inkjet, laser, and thermal. We discuss each in detail in the sections that follow.

Inkjet

Inkjet printers are the most common printers for home use.

• Advantages of using an inkjet printer:

- Inkjets usually support full-color printing (whereas full-color printing is generally a high-cost premium feature for laser printers).
- Inkjets are inexpensive. Entry level printers can be purchased for under $100.
- Inkjet print quality is usually high.
- Inkjets are multi-use. They can print packing slips and shipping labels.
- You probably already own one.

• Disadvantages of using an inkjet printer:

- Slow print speed: The pages per minute (PPM) rate of inkjet printers is typically low, especially compared to laser printers and thermal printers if you are mainly printing labels.
- Starts inexpensive, and gets expensive fast: Because inkjets typically require proprietary ink cartridges, replacing cartridges can be expensive. Also, the page limit for ink cartridges is typically much smaller than that of a laser printer, which can usually print thousands of pages before its toner cartridge needs to be replaced.
- Shipping label stock for ink jet and laser printers can be expensive when compared to thermal label rolls.

Inkjet printers are best for low-volume shippers, or shippers who are just getting started and not yet ready to invest in a more expensive option.

Printers **(continued)**

There are three categories of printers: inkjet, laser, and thermal.

Laser

Laser printers are the most common printers for office use.

- Advantages of using a laser printer:
  - Fast print speed: Laser printers typically have higher PPM ratings; this is especially true of black-ink-only models.
  - Toner (ink) capacity is significant, typically allowing thousands of pages to be printed per refill. While toner cartridges are more expensive than inkjet cartridges, a laser printer's price per page is typically lower.
  - Multi-use: You can print pick lists, packing slips, and shipping labels with a single printer.
- Disadvantages of using a laser printer:
  - Color is typically a premium feature for laser printers and if you want color for packing slips, it can increase the initial printer cost.
  - While a laser printer's average cost per page is lower than an inkjet's, it's still higher than a thermal printer.

Laser printers are preferable to inkjets, but the two models share disadvantages when it comes to cost and speed versus thermal printers.

Printers **(continued)**

There are three categories of printers: inkjet, laser, and thermal.

Thermal

Thermal printers are typically designed for one specific function (in the case of shipping, that function is printing shipping labels). There are two types of thermal printers: *Thermal transfer printers* and *direct thermal printers*. Thermal transfer printers transfer images from a thermal ribbon (analogous to the ribbon in an old-fashioned typewriter) to the paper; direct thermal printers require no ribbon because they create images by applying heat to special paper which has a heat-sensitive coating.

• Advantages of using a thermal printer:

- Ink and paper costs: While thermal transfer printers require the purchase of thermal ribbon rolls that are analogous to ink or toner refills, they are significantly less expensive than the ink or toner required to achieve the same number of printed pages. Direct thermal printers require thermal paper, which is typically less expensive than purchasing an equivalent number of shipping labels for use in laser or inkjet machines.
- Durability: Because they have one function and are designed for business use, thermal printers are typically heavier duty and designed for longer service cycles than similarly priced inkjet or laser printers.
- High print speed: Thermal printers are optimized for one function and print on rolls as opposed to sheets of paper, allowing them to attain higher throughput rates and quicker paper-reload times. In many cases the thermal printer's roll of paper also lasts longer than a bin of sheets in a similarly-priced inkjet or laser printer, allowing it to go longer between paper refills.

• Disadvantages of using a thermal printer:

- Thermal printers can't print general-purpose documents.
- Thermal printers generally require a higher initial investment, especially for higher-quality models.
- Thermal printers have some compatibility issues with specific operating systems (for example, they're not always OSX-supported).

Scales

In the shipping industry, weight matters. Typically, the heavier a package, the more expensive it is to ship. Therefore, getting accurate weight measurements for your packages is essential if you don't want to get overcharged for the items you're shipping—or worse, have your carrier reject your package for an incorrect weight reading. For these reasons, a postal scale is a fundamental tool for any person or business that ships daily.

Why you should choose a USB postal shipping scale

While many types of scales are available for purchase, the best scale for eCommerce shipping is a USB (universal serial bus) digital postal shipping scale. Calibrated for accuracy—and specifically for package and parcel shipping—a USB digital postal scale holds multiple benefits over other scales for eCommerce shipping:

- USB connectivity allows you, when you're weighing a package, to directly connect to industry-specific programs and software (e.g., a shipping platform) to eliminate the extra steps of reading and entering weight outputs into your computer from the scale. The result: faster, easier, more accurate weight measurements.
- By allowing you to bypass manually typing in the weight of the package, USB digital postal scales help you avoid errors; the scale's USB connection to your computer and a shipping solution polls the scale 5–10 times per second and updates the order weight based on the scale weight.
- USB digital postal scales are purpose-built so they usually feature a wide, flat surface for package placement and a potentially more accurate reading.
- USB digital postal scales typically measure packages in ounces and pounds to account for shipping services whose rates are based on small-increment weight changes (First Class Mail rates, for example, are based on ounce-to-ounce changes).

Evaluating which USB digital postal scale to purchase

In general, scale prices rise with the weight thresholds they support, so consider your average and maximum package weights when evaluating your scale options. For USB digital postal scales, consider the following evaluation criteria:

- Order volume: If you are weighing fewer than 500 orders per month, a consumer grade scale is a good option. Otherwise, an industrial scale is the better investment.
- Unit of measure: At a minimum, the scale should weigh in ounces and pounds. The smallest unit will ensure you aren't overpaying for postage due to the scale rounding up a package's weight.
- Power: Make sure the scale runs on an A/C adapter. Some smaller scales run on batteries, which will add unnecessary cost and hassle in the long-term.
- Brand reputation: Given the importance of weight to postage cost, it is worth investing in a reputable brand or narrowing your options to only those with exceptionally positive reviews. Even a single ounce can cost you hundreds of dollars per month given high enough shipping volume.

Using your USB digital postal scale

Using a USB digital postal scale is straightforward: You turn it on and place the package to be weighed on top of the scale, then the USB connection works with your computer's software to read and automatically enter the package weight outputs.

Barcode scanners

Barcodes and barcode scanners reduce manual and paper-based data entry in the shipping process, which reduces errors and discrepancies when picking, packing, and labeling. At the most basic level, a barcode involves a symbol (e.g., barcode) that encodes a series of characters corresponding to an order number in your shipping solution or order management system. The barcode scanner scans this symbol and accesses the corresponding order and all related details.

To process barcodes, sellers either place the barcodes on a pick list or packing slip, or they locate the barcodes separately—in close proximity to where the specific item resides—and use a barcode scanner (either handheld or other) to update their inventory management software to indicate that the item has been packed and processed.

The scan result prompts the shipping system to populate that particular order's details to the current screen or step in a process. For example, picked orders travel down an assembly line in bins or boxes for shipping. When the order arrives at the "label" area, the barcode on the packing slip is scanned. The scan registers the order number and allows the handler to weigh the package and have the associated weight automatically populated to that order's details (assuming a USB scale). This eliminates all manual entry in favor of seamlessly sending accurate data to your shipping system.

What to look for in a barcode scanner and in a shipping solution

In eCommerce shipping, investing in a barcode scanner generally becomes cost effective only when you are picking items from a fairly large inventory that requires a lot of organization and space. In this case, the best practice is to use a wireless, non-Bluetooth barcode scanner with a decent amount of range.

At a minimum, barcodes save the time—and potential errors—it takes to manually type in an order number. More advanced shipping solutions not only allow the scan to isolate a specific order number, but also to apply shipping rules triggering the automatic purchasing and printing of a label without human intervention. Barcodes and barcode scanners can be extremely powerful in an environment where a single scan can trigger a printed label with very little work or decision-making in between. eCommerce sellers might start with simple order-number scans to save typing and then automate more of the process from there.

Look for a shipping solution that allows you to scan a barcode from a packing slip with a handheld or other scanner.

Supplies

No matter how great your technology and service providers, your packages need proper packaging to arrive at their destinations. Let's look at key considerations for packaging and supplies.

When to use envelopes
Envelopes are your least expensive option when it comes to package shipping. They are cheaper to purchase than boxes, they require less material to pack (including packing materials and tape), and they are lighter. Therefore, if it is safe to use an envelope—based on the nature of the product being shipped—you will save on both packing and weight-based shipping costs. A lot of eCommerce sellers favor poly mailers, which provide additional flexibility regardless of contents shape.

When to use boxes
Choose a box to ship all fragile items or items that are too large to fit in an envelope. Free boxes from major carriers are typically medium to large in size and generic in shape; USPS tries to combat the lack of smaller-box options by offering unique free boxes like the Priority Shoe Box and the Priority Game Board Box. Use free boxes if their capacity, dimensions, durability, and protective properties are sufficient for the items you ship.

If free boxes don't work for you, consider custom boxes, which are typically needed for very small, very large, and uniquely shaped items, as these box needs are not as well-supported by carriers' free supply inventory. Dimensional weight usually drives the decision to go with custom boxes. If you ship using UPS or FedEx, having wasted space inside your box can lead to huge cost increases across the board. If you find that dimensional weight rules are inflating the cost of shipping beyond what you'd pay based on weight alone, consider custom boxes and evaluate their cost versus what you can save on dimensional weight charges.

Packing materials
Basic packing materials you'll want to have on hand include two-inch box tape, packing peanuts, bubble wrap and envelopes, poly mailers and boxes. While poly mailers and boxes comprise the outer packaging of your shipments, packing peanuts and bubble wrap are recommended to secure any item(s) inside that may have room to move and are at risk of being damaged.

Having your products arrive intact can save you replacement costs and may help you avoid negative reviews on your selling site. If the packaged item is fragile, then it should follow the usual fragile-package guidelines, including proper protection and labelling.

Following these basic steps will help ensure the safe arrival of your more fragile packages:

- Wrap each item individually and securely in bubble wrap.
- If you have more than one item, stack the items and wrap the entire stack in another layer of bubble wrap.
- Fill an appropriate-sized box with enough packing peanuts to completely cover the bottom of the box.
- Place item(s) inside and fill with packing peanuts until the item is secure, but not smashed.
- Tape closed any open seams of the bubble wrap.
- Again, tape closed any open seams.
- Close the box and secure all seams with two layers of tape.
- Write or rubber stamp "FRAGILE" on all sides of the box.

If you or your customers are concerned about sustainability, consider "green" packing materials that combine one or more of the following features: (1) they're made of recycled materials; (2) they're recyclable in standard residential recycling streams; (3) they're biodegradable. Of course, these materials typically cost more and can drive up your shipping costs, so if sustainability isn't so important to your customers that they are willing to pay more, you will likely either have to accept lower profits to keep your shipping costs competitive or accept lower demand due to higher shipping costs you pass through to the customer.

How Do I Decide Between Available Shipping Solutions?

Choosing the right shipping platform is no easy task; there are dozens of options, each with advantages and disadvantages. Throughout this guide we've presented the key capabilities, processes, and solutions/services you need to consider when setting up or improving your shipping ecosystem; addressing all the questions raised in the preceding sections will help you determine the capabilities and processes your shipping platform will need to support. To help you find the right platform for your business, we've prepared the following vendor evaluation tool. It covers all the capabilities we've discussed, so you can use it as a checklist when evaluating potential solutions. To use the vendor evaluation tool, download a copy from http://shippingeasy.com/evaluation-form/. Then:

1. Create a "Vendor Score" column for each vendor you are considering.

2. Determine which capabilities are relevant for your business, and flag them in the "Applies to my business" column.

3. For each applicable capability, use the "Vendor Score" columns you created to assign a value for each vendor, with "3" indicating the vendor is a perfect fit, "2" indicating the vendor is a medium fit, and "1" indicating the vendor is a poor fit for that capability.

4. Sum each vendor column to get an initial idea of which is the best fit. You can then look more closely at the capabilities each vendor did well or poorly on to refine your analysis.

Capability	Applies to my Business? (Yes/No)	Vendor Score 1 = Low 2 = Medium 3 = High	Notes
Multiple store support			
Native inventory management support			
Multiple fulfillment location support			
Drop ship support			
Supports current and anticipated future order volume			
Support for computed weight			
Supports my pick list requirements			
Supports my packing list requirements			
Supports my shipping label requirements			
Integrates with my selling platform			
Integrates with my accounting software			
Integrates with my inventory management software			
Integrates with my customer management software			
Integrates with my product data management software			
Integrates with my order management software			
Integrates with the carriers I use			
USPS pricing discounts			
Insurance discounts			
International shipping			
Delivery service levels			
Split | Combine orders			
Customer address book			
Ship to multiple addresses			
Ship to alternate address			
Specify signature required/not required			
Free returns			
User access controls			
Analytics and reporting			
Printer support			
Scale support			
Scanner support			
Rules engine			
Security			
User interface			
Customer support			
Cost			

How ShippingEasy Can Help

We can make your shipping easy. ShippingEasy is the premier shipping platform for eCommerce retailers. Whether you ship five packages per month or 50,000, we can help you improve your customer experience and increase your ROI on shipping operations through our industry-leading suite of capabilities, which include:

- Access to the lowest USPS rates available—up to a 46% discount to normal rates
- Integration with all major eCommerce platforms, shopping carts, marketplaces, and carriers
- Support for multiple stores and fulfillment locations, international selling, offline orders, and returns processing
- Support for real time or batch order synchronization with selling platform (order download and status updating)
- Built-in inventory management and customer management; can also integrate with external inventory and customer management solutions
- InstantLabels automatically prints shipping labels as orders come into store(s), saving time
- World-class support with full setup and configuration included, plus ongoing help from 7 a.m. to 7 p.m. CST

ShippingEasy provides eCommerce retailers with the easiest cloud-based shipping, inventory management, and customer management solutions, enabling order consolidation across multiple channels and multiple carriers, including USPS, FedEx, and UPS. ShippingEasy integrates with leading online marketplaces, such as Amazon, eBay, Etsy, Shopify, and many others, to allow automated order, tracking fulfillment data, and inventory levels to populate in real time across all systems. ShippingEasy saves time, money, and relieves eCommerce businesses of the many challenges often associated with the critical steps from when a purchase is made to where, when, and how it ships and is accounted for. ShippingEasy does for online merchants what a successful online shopping experience does for consumers – streamlines the steps in favor of an outcome. That means orders in a box and out the door the same day. ShippingEasy offers full automation and robust tools such as shipping rules, a product catalog, endless customization and enhanced reporting.

ShippingEasy offers an Enterprise solution for large sellers with a dedicated account manager. Full set-up, configuration and training included for unlimited channels and unlimited users.

Started in Sydney, Australia and now happily headquartered in Austin, Texas.

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