

Hypothetical Representation of CON-WAY FREIGHT – PRJ 1

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Item (points)	Criteria	Comments
Narrative 30 out of (40)	<ul style="list-style-type: none">- Formatting and presentation is neat and professional, Include a title page with company name, date, team member names- Writing: organization, topic sentences, use of headings, grammar, precise, concise, spelling- The company overview appropriately describes the business context within which the process operates- Includes at least 2 statistics of process volume (e.g. length of time to complete a sale) and at least 2 statistics of transaction volume (e.g. sales per day)	<ul style="list-style-type: none">- Not a bad start, but still lots of work to do. I especially liked your organizational overview.- But your processes are confusing, largely because there are so many terms which are not well explained. I also think you have made this overly complex, and made suggestions in your flow charting diagrams about how you might simplify, please give those careful consideration.- There are also inconsistencies between what is described and what is depicted in your figures. All the models should be consistent.

	<ul style="list-style-type: none"> - The process overview appropriately summarizes the process function (what is accomplished) as well as structure (how it is accomplished) - The process description makes sense with no important gaps - Highlights success factors - The transaction and object list is accurately categorized and adequately describes system data, as well as attributes and correct data types. 	<ul style="list-style-type: none"> - See comments below about writing in writing rubric - Not all data stores are described in transaction and object list - Incorrect datatypes for some of the attributes
<p>Flow Charts 33 out of (40)</p>	<ul style="list-style-type: none"> - Includes one overview diagram and two detailed sub process diagrams - The detail diagrams are non-trivial, reflecting a good understanding of decomposition - Symbols are used as required in the class formalism - Stored data is sensibly described in the computer column - All (and only) class-standard symbols were used - Formatting and presentation is neat and professional - Process is consistent with the process descriptions, and other flow charts. - Every process box in your flow charts begins with a verb. - Documents and data stores are always nouns. - Data stores are consistent with list of objects and transactions. - The process sequence (solid lines) never flows through a document or a data store. - Every process box should have at least one solid arrow pointing into and out of it. You should be able to trace a continuous sequence following solid arrows from the Start bubble to the End bubble with 	<ul style="list-style-type: none"> - Use of the charting notation is fairly well done. I've made suggestions for making the process simpler. You are not obligated to implement everything you model ☺ but you should be able to implement enough of it to accomplish the main goals of your process (turning an order into a dispatch) - The flowcharts contain many sub process symbols but there are no detailed charts for those.

	<p>no process boxes abruptly beginning or ending a process flow.</p> <ul style="list-style-type: none"> - When you use a decision diamond to split the process flow, you must merge them again before reaching End. - All arrows to and from data stores and documents should be dashed lines, and the arrowheads point in the direction of data or document flow. - Process boxes belong in the swimlane of the entity that performs the action. - Symbols are used correctly - Flowcharts labeled by informative captions 	
E-R Diagrams 15 out of (20)	<ul style="list-style-type: none"> - Correctly uses Chen E-R notation to depict the relationship between at least two objects and two transactions - Includes cardinality constraints between entity relationships - Includes attributes for each entity in diagram - Includes an informative caption for your diagram(s) 	Good level of detail. Not a bad start, but some error. See my comments.
Writing Criteria		
Persuasiveness	Entirely convincing, even compelling. Uses logical and/or emotional appeals effectively. Handles all elements of the assignment with skill; develops and supports ideas using well-chosen examples and creative details. Speaks to audience.	The organizational overview is well written and convincing that Conway is a leader in the field. The process descriptions are much less effective
Mechanical	Makes almost no grammatical or syntactical errors.	<ul style="list-style-type: none"> - Writing is generally factual and efficient. - Good use of headings and title

Concision	The words chosen are efficient and concise. All statements are relevant. Thus, expressed ideas can be more easily understood.	Terms are used without proper explanation of their meaning (e.g. Inventory is not defined). Additionally, terms are interchanged making it difficult to understand the meaning (e.g. 'data' and 'information' are used in the same sentence to describe something recorded)
Clarity	Entirely clear. The work follows a logical order, which can be easily identified. Background and detail support thesis well; facts and arguments are connected: there are no leaps in logic. Precise language is used.	<ul style="list-style-type: none"> - Diagrams are clear, though in some places are too complex, and missing details <p>Terms are not consistently used throughout. For example, dispatch, delivery and material are all used in the same 'dispatch order' paragraph 'The relationship' is ambiguous, when 2 relationships are depicted in your E-R diagram</p>
Flow	Flows so well that reader does not need to reread any passage.	I had to re-read the narrative several times and compare it to the flow charts & E-R to make sense of this. More effort is needed to make those sections consistent and clear.

General Overview

ORGANIZATIONAL OVERVIEW

Con-way is a global trucking company that specializes in logistics and freight. They provide quality service, being listed as a Fortune 100 company worth \$5.8 billion dollars. Con-way is a growing company, with its revenues growing 15% from 2010-2014. In 2014, Con-way owned and operated 9,500 tractors with 25,000 trailers. The company's president states that "Our people — from customer service representatives to our driver sales professionals — enable Con-way Freight to differentiate ourselves and deliver the exception-free delivery, on-time performance and faster transit times that our customers need to succeed". Con-way Freight is known for providing reliable, regional, inter-regional and nationwide service. Their customer base includes both small and large businesses within their North American network and globally at their five operating locations. What makes Con-way successful is their combination of high performance, day-definite "less-than-truckload" and "full-truck fleet" operations. Con-way's business process is to create an optimized logistic solution for transporting the customer's material. This process includes creating a dispatch order and efficiently transporting the load. Being ranked the 2nd LTL company in the US in terms of revenue, combined with their 30,000 highly trained employees they are industry leading and highly proficient within their field, which gives them a cutting edge advantage within the logistics and freight industry.

PROCESS OVERVIEW

The process overview begins with an inquiry from the customer, which is received via phone, email, or in person. Once required information is received, and order is placed and the order entry process begins. All data is stored in customer records and sales orders records. After the order is entered, the fulfillment process begins and the order is carried out as per the load plan. Inventory is updated when material is shipped, and the invoicing process begins. The customer initiates the payment and the payment process is completed. The reporting process is carried out, which includes finalizing the sale and making sure the customer received their material. When everything is updated, the sale is closed with a transition to customer service. The main output of the entire process is the delivery of materials to the required location, while fulfilling the customer's needs.

Detailed Process Description

INITIATE SHIPPING REQUEST

The first major step would be initiating the shipping request, which the customer does by contacting Con-way via the talking to salesman, over the phone, or email. If the customer is an existing customer, Con-way checks if they are on credit hold and then enter request details. Included is the data about the customer, as well as the information about the freight being shipped. Otherwise, account is setup for the customer. The required output of this step is receiving the information from the customer, and saving it into Con-way's database. A factor of success for this step is accuracy of information received, whether it's about the customer or the goods being shipped.

GENERATE FULFILLMENT ORDER

As soon as a confirmation is sent to the customer, a fulfillment order is generated and stored in the database. The order entails all that needs to happen for the goods to be shipped from point A to point B, such as warehouse locations, inventories, restrictions, etc. This information is then sent to the fulfillment process, which takes handles the delivery. A factor of success in this step is being resourceful and pulling correct and up to date data from warehouses.

REVIEW FULFILLMENT ORDER

The fulfillment order is reviewed by checking available logistics inventory, grouping materials by classification, and grouping by pickup date/location. At this point, it is vital that the logistics team gets its information from the vendors and warehouses quickly and accurately. In the event of a dilemma, the problem will be sent to the risk management staff to either resolve the issue or provide a solution.

ISSUE PICKUP DISPATCH ORDER

As soon as the dispatch order is received, the deliveries are grouped by address/zone, a trailer assignment is created, as well as a trailer load plan. The dispatch order is carried out by dispatch and the drivers are assigned and given their orders. The driver then picks up the order and delivers it to the distribution center. At this point, the material is tracked and logistics inventory is updated. When the goods arrive at the distribution center the material is unloaded and staged, which takes the material where it needs to go. This complete this step successfully, the drivers are given accurate information and on time, so that they can make the deliveries on time.

ISSUE DELIVERY DISPATCH ORDER

When the trailer load plan is received, a delivery dispatch order is received. The warehouse staff carries out the load material per trailer and load plan. Drivers are assigned and given dispatch orders to pick up materials from the DC and deliver it to the delivery location. During this process, data is pulled from material tracking and logistics inventory is updated to keep the warehouse up to date. As soon as the material is delivered, the customer signs off on it and sent to the invoicing process.

PAYMENT

The customer information and load information is sent to accounting, where the accountants confirm the delivery of the load, price, and if the delivery service was accurate to that of the proposal. All of the payment information is collected from the customer and entered into Con-way's database. This information is then input into the invoice and the customer can pay via electronic payment or physical monetary funds. This step needs to be quick and quality managed, as an incorrect invoice can harm the company or its reputation. The output of this step is a successful transaction with the customer and closing of the deal.

CUSTOMER AFTERCARE

When the transaction is closed, customer aftercare saves the transaction in the customer database with necessary comments. Customer service contacts the customer and follows up on the shipment, whether everything was shipped accordingly, and whether they are pleased with the service. If there are any errors with the load, the problem is recorded and sent to the risk management staff to resolve the issue by contacting warehouses for missing parts, or whatever the problem might be. In this step, it is important to be pleasant with the customer and make sure the customer is satisfied, which would be the output of the process. A success factor would be a happy and satisfied customer.

List of Transactions and Objects

TRANSACTIONS

- Service order, including purchase date, method, total, delivery date, price, dimensions and duration.
- Processes payment is another transaction, which includes purchase total, payment due by, paid on, payment method.

OBJECTS

- A customer list is maintained including customer names and addresses.
- A service list is maintained including Service weight, name, and category.

E-R DIAGRAM

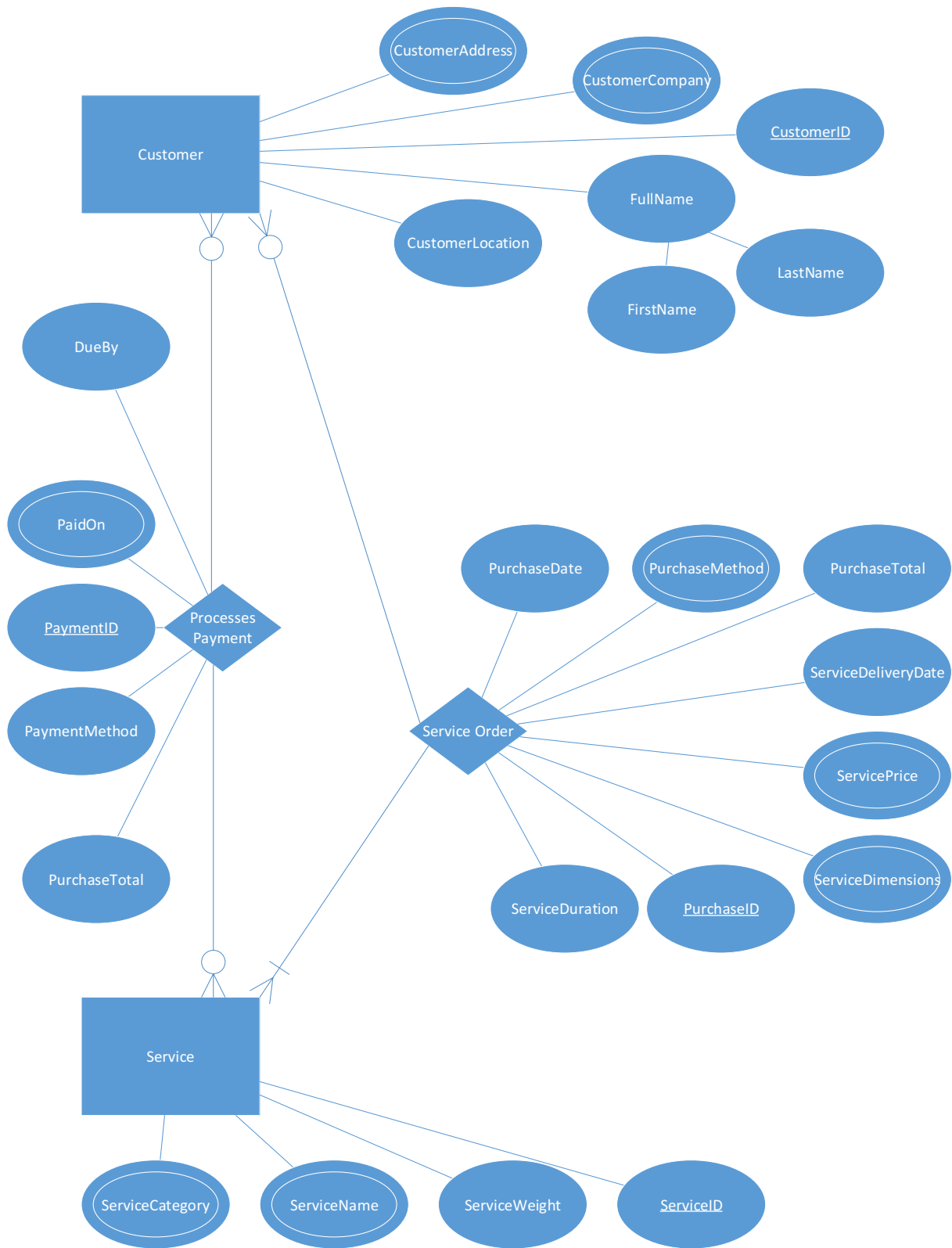


Figure 1. E-R diagram depicts how Con-way sells transportation services to customers that have shipping needs

CONSTRAINTS DEPICTED IN E-R DIAGRAM

- The relationship is a M:N, or many to many.
- Participation is mandatory-minimum for customers, otherwise we wouldn't record data.
Participation is optional for services; customers do not have to purchase every service.
- To elaborate, there may be one or many customer/service entities in each relationship instance.

DATA-TYPES OF ATTRIBUTES

- Alpha-Numeric
 - o DueBy
 - o PaidOn
 - o PurchaseMethod
 - o PaymentMethod
 - o PaymentID – Unique Identifier
 - o ProcessPayment
 - o ServiceCategory
- Currency
 - o ServicePrice
- Decimal
 - o ServiceDimensions
 - o ServiceWeight
- Integer
 - o PurchaseDate
 - o ServiceDeliveryDate
 - o ServiceDuration
 - o PurchaseTotal
- Text
 - o FullName
 - FirstName
 - LastName
 - o ServiceName
 - o CustomerID – Unique Identifier
 - o PurchaseID – Unique Identifier
 - o ServiceID – Unique Identifier

Flow Charts

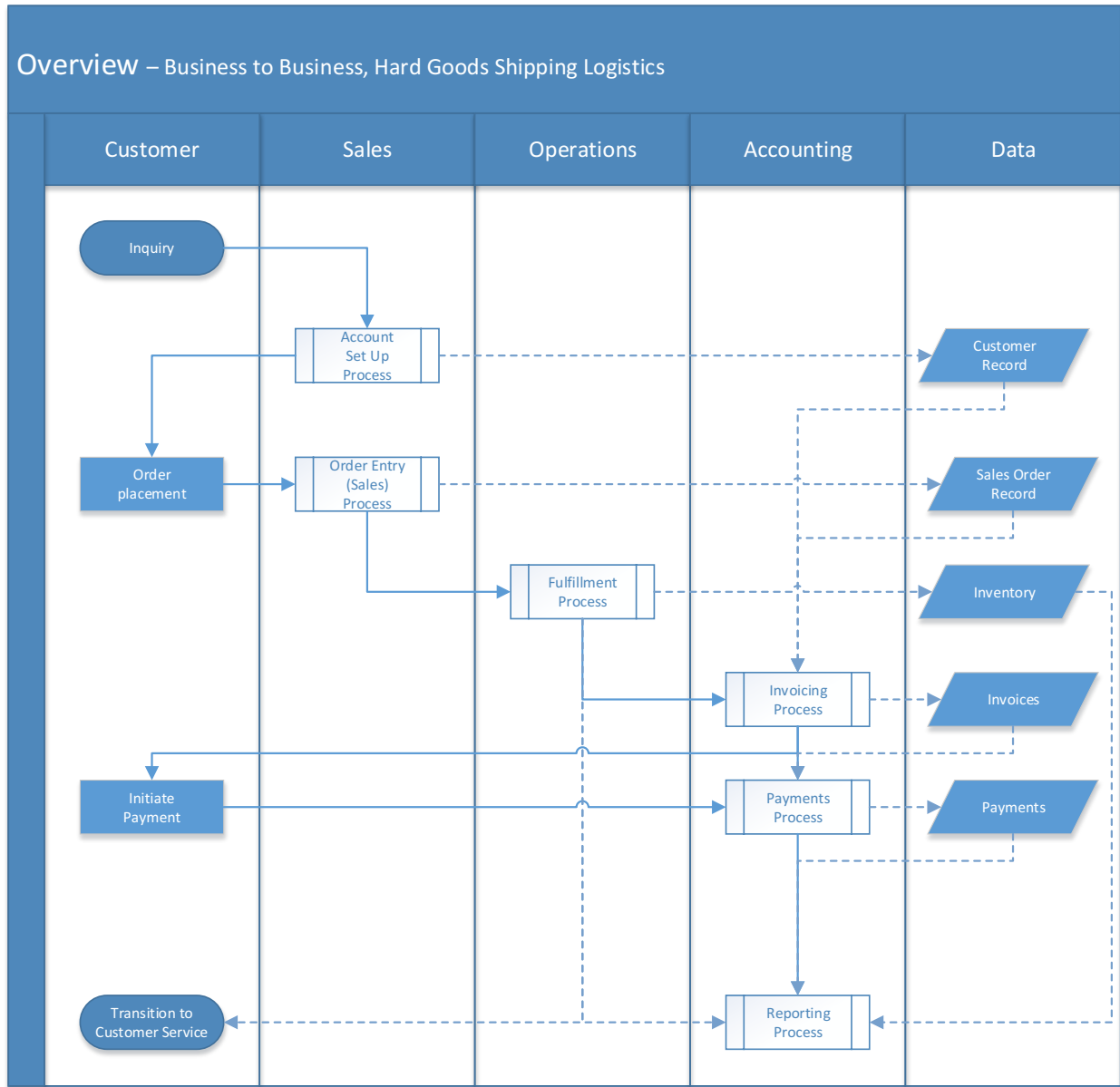


Figure 2. Flow chart depicts the overview of interactions between the customer, Con-way, and the database.

Order Entry – Business to Business, Hard Goods Shipping Logistics

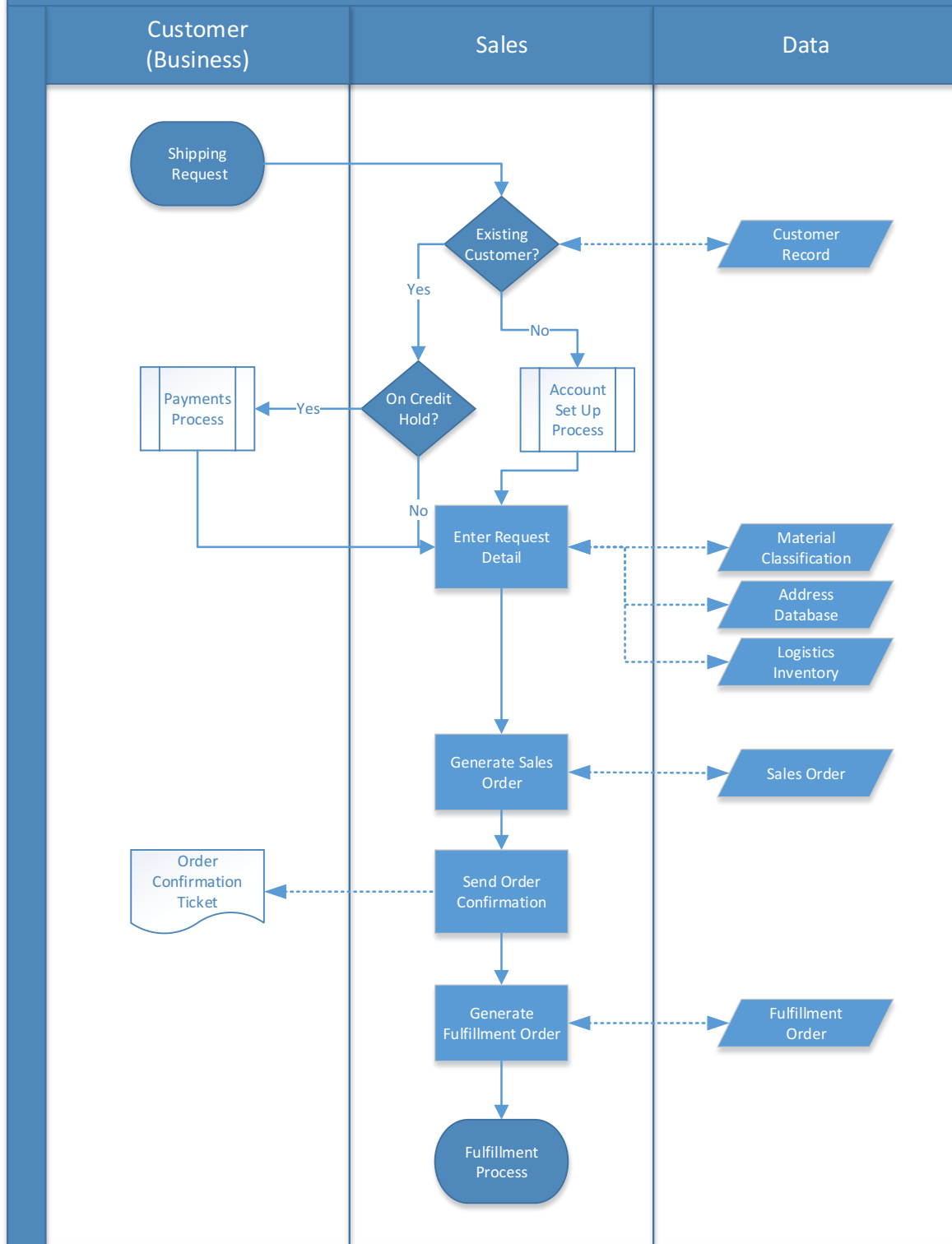


Figure 3. Flowchart depicts the process of customer order entry, Con-way's customer credit verification process, and the order generation process.

Fulfillment – Business to Business, Hard Goods Shipping Logistics

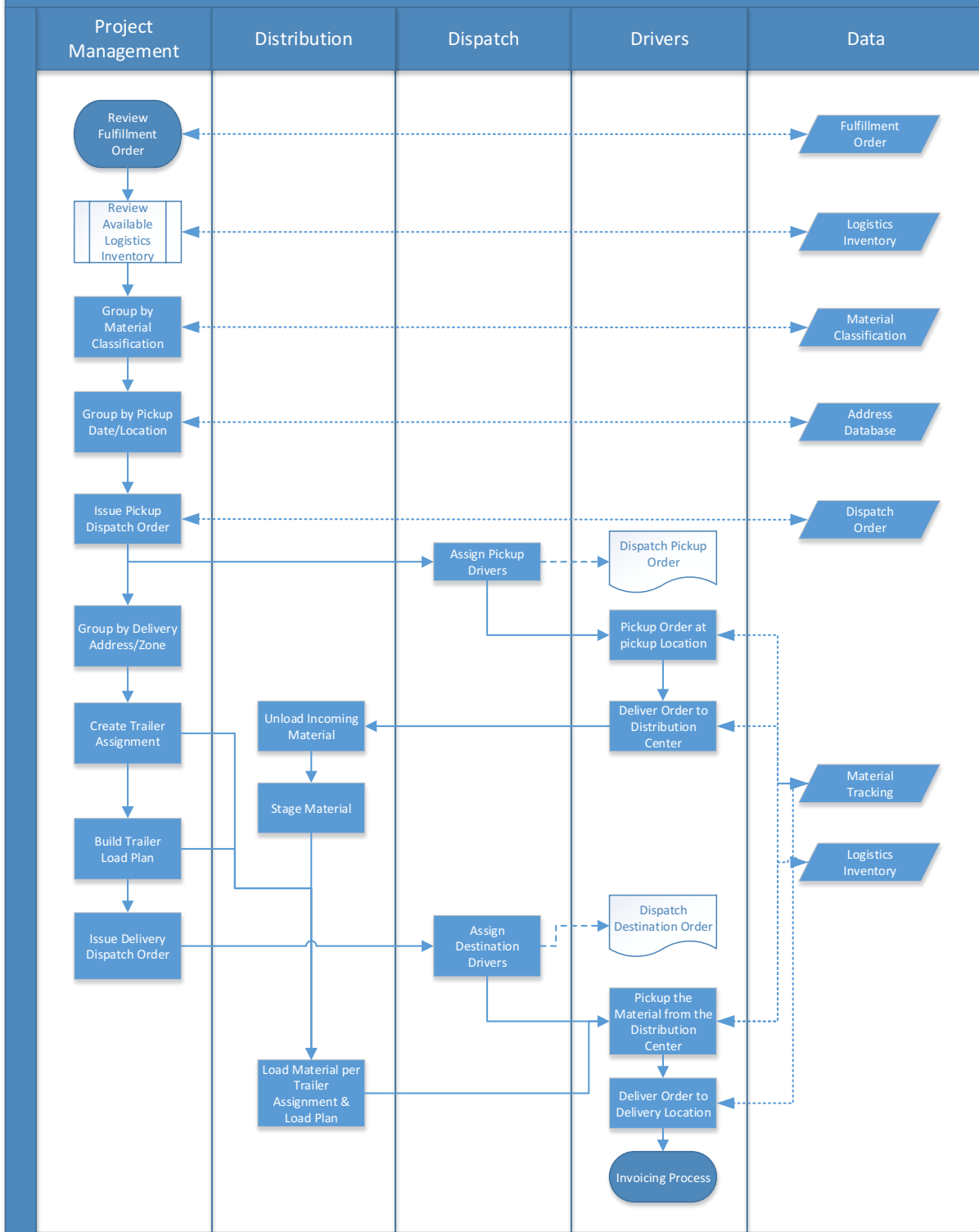


Figure 4. Flowchart depicts building and transporting the order from warehouse, to distribution center, to the customer.