Cristian Alvarez

SNHU

CS-255

Module 3: Evaluate a Process Model

Describe Hamp Crafts’ current purchase and supply process by responding to the following prompts.

1.Interpret the provided data flow diagram. What does it show? What does the current purchase and supply process entail?

Hamp Crafts’ current operation DFD shows four processes, with one source and three sinks, connected through various data flow mechanisms. The process begins with a customer (data source)placing an order, the receipt of said order(1.0), then checking out(2.0). Which sends shipping plan data to the carrier (data sink). Outside of the scope but relevant is the Carrier(data sink) sending planning information to the shipper(data sink). Then, the data flow continues to the process for order fulfillment. The Supplier(data sink) shares information regarding the shipment scheduling to the fulfill order process and process(3.0) sends delivery plan data to the Choose Supplier process. Finally, the Choose Supplier(4.0) process sends Contract negotiation data to the Supplier(data sink) and the Supplier then sends information over to the Shipper finalizing the DFD.

2.What are the data sources involved in the current process?

The current data sources are the Customer(Source), from there data is changed/manipulated by processes 2.0, 3.0 and 4.0 to create the Shipping Plan, Delivery Plan, and the Contract Negotiations.

For the new online storefront, Hamp Crafts’ owners want to ensure that customers can easily view products, pay for them, and receive confirmation of their orders. The owners want to be sure that any payments will be transferred to Hamp Crafts’ business account. You have also suggested adding an administrative backend to provide customer support, update customer information, and maintain the website.

In order to add this functionality, you will need to consider Hamp Crafts’ current purchase and supply process. Then you will need to determine the additional requirements needed to support an online storefront by responding to the following prompts:

3. What additional processes are necessary to integrate an online storefront?

* The customer needs to be able to login to their account via a website.
* Customers have to be able to view products, select and add items to their cart, and securely check out from the website.
* Provide a confirmation for the customer and generate processing requests for delivery scheduling.
* Verify roles to ensure that administrators can manage and assist with the website while ensuring others cannot manipulate the system.
* Automated verification of funds, processing and transferring to the appropriate business account.
* Automate internal and external invoicing to ensure inventory accuracy and so the website can be updated automatically as stock goes in and out.

4.What additional data sources would the system need to access the products and inventory?

4(a).What additional databases, if any, are needed to support the online storefront?

* A database would be needed for inventory control. This would allow the website to be accurate and ensure that out of stock items are listed appropriately and allow for local inventory management, which would integrate with a more automated process for purchase orders and customer purchases.
* A database for customer and user accounts, that secures logins and validates user permissions.
* A database to store payment processing (inbound, outbound, refunds, cancellations, etc.)
* A database to store information from Carrier, Supplier and Shipper vendors so the process can be more refined.

Finally, determine how to integrate the new online storefront into Hamp Crafts’ current purchase and supply process by responding to the following prompt:

5. Would you recommend creating a separate new system for the online storefront or incorporating elements of the online storefront into the current process model? Explain your reasoning.

I would recommend creating a new system, the new system still begins with a customer logging in, placing an order and checking out. Although this can now be done as a single process which would also include a customer confirmation and generation of an order process request which would be accessible by warehouse workers. The order process request would entail picking, packing, loading and shipping the order, preferably with order stages describing the orders current stage. (Ordered, Picked, Shipped, Received/Delivered). Thus, data communications with the Carrier, Shipper and Supplier all come from the same processing stage since they are all related to each other.

Fundamentally, I believe this creates a better and more efficient system. This new system would automate aspects of the inventory control, order processing, payment process, and shipping coordination. This would reduce the probability of human error and increase workflow productivity for all staff by removing redundancy and optimizing.