Brian Engel

Modular Three Assignment

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

The customer is a source. The first process is receive customer order. From there the data flow goes to the second process checkout. Then the data flow splits to a shipping plan and a carrier that is a sink/source. It also goes to the third process of fulfill order. Fulfill order splits into a few data flows. One is delivery plan and the fourth process of choose supplier. Delivery plan has a data flow for contract negotiations to supplier which is a sink/source. Fulfill order also has a data flow for shipment schedule to supplier. The last sink in the DFD is the shipper. It has data flows coming from fulfill order, supplier, and carrier with carrier planning.

* What are the data sources involved in the current process?

The data sources in the current process are the customer, the supplier and the carrier. Basically, any regular box that has a data flow (arrow) coming out of it.

* What additional processes are necessary to integrate an online storefront?

If I understand what Hamp Crafts is asking for correctly, there are only a few additional processes that we would have to add, and it seems that they would all be in between the customer and the first process of receive customer order. There would have to be an add customer, customer log-in, and shopping cart, unless that is already included in receive customer order. To give the customer an order confirmation, we would just have to have a data flow going back to the customer from the checkout.

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

I would assume that Hamp Crafts keeps track of their inventory, and they aren’t doing it with pen and paper, so integrating the already existing inventory system would be the best way to keep track of what is on hand to sell to the online customers. The DFD doesn’t really show us where this system is in the scheme of things but using it as a source for the website would provide the website with the proper information.

* What additional databases, if any, are needed to support the online storefront?

The main database that I think that the new system would need is photos of all the products. This is crucial to any website being able to sell a product. We shouldn’t need one for customer information or shipping information since that seems to be in the original DFD because everything is already shipped.

* 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 using the existing system and adding a few processes to it to implement the online storefront. I would have some questions to ask the owners first about the inventory system and more specifics about the ordering system that they already have, but from what I’ve read it sounds like a good base and there is no need to rework the entire thing.