## Matthew Muller

- Describe Hamp Crafts' current purchase and supply process by responding to the following prompts:
  - Interpret the provided data flow diagram. What does it show? What does the current purchase and supply process entail?
  - What are the data sources involved in the current process?

Hemp Crafts' current process for their physical storefront starts with data flowing from the customer (an external entity) to the business through the process of receiving the customer order. The data received in the order then flows to the check out process, which then sends data to two different locations. It sends the data to the carrier external entity through the shipping plan data flow and it also sends the data to the fulfill order process. The carrier then completes that data flow by sending data to the shipper external entity through the carrier planning data flow. After the fulfill order process, data flows to three locations: to the choose supplier process through the delivery plan data flow, to the supplier through the shipment schedule data flow, and to the shipper. Finally, the choose supplier process sends contract negotiations data to the supplier, who then completes the purchase and supply process by sending data to the shipper.

- Determine the additional requirements needed to support an online storefront by responding to the following prompts:
  - What additional processes are necessary to integrate an online storefront?
  - What additional data sources would the system need to access the products and inventory?
  - What additional databases, if any, are needed to support the online storefront?

The only additional processes that Hemp Crafts would need to integrate is receiving an online customer order and an altered check out process. After this, the order can then go through the same set of processes (fulfill order and choose supplier) as orders at the physical store. In order for the system to access products and inventory, Hemp Crafts' different suppliers will need to be used as data sources to determine what products and how much of each product is available. Hemp Crafts will need to set up and maintain databases that contain all of the products that they offer and how much inventory of each product they have so that it can be updated as purchases are made and items are added to stock. Also, they will need to set up a database to hold all customer and order information, in which security will be an important consideration.

- Finally, determine how to integrate the new online storefront into Hamp Crafts' current purchase and supply process by responding to the following prompt:
  - 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 believe that Hemp Crafts will be able to effectively incorporate online ordering into their current process model by integrating a few new elements. Since an online order would follow the same processes (fulfill order and choose supplier) as orders at the physical store following checkout, Hemp Crafts would only need to incorporate the online order process, supplier data sources, and inventory and customer order databases into their current process model. This should allow for a seamless integration of online ordering to supplement their physical location sales.