Hamp Crafts is a family-owned craft store that has been serving its community for decades. While limited to their physical store location, to increase sales, the owners desire an online presence to increase sales. The online sales process is new to the owners, and they desire to understand how to implement it into their existing system. By analyzing the current system model, online implementations can be created to help Hamp Crafts achieve its goal with an online store.

Hamp Crafts’ current data flow diagram describes the stores’ current purchase and supply process for their brick-and-mortar store. Upon analyzing the diagram, several conclusions about their purchase and supply process can be drawn. A basic overview shows the process of how a customer interacts with Hamp Crafts by selecting their order and checking out. The next portion of the diagram shows the after-checkout process, which includes developing a shipping plan, choosing a supplier, determining a delivery schedule, and then shipping the product to the consumer.

Further analysis shows the current diagram's sources, sinks, processes, and data flows. The sources and sinks include the customer, carrier, shipper, and supplier. The processes include receiving the customer’s order, checking the customer out, fulfilling the customer’s order, and choosing a supplier. The data flows include the shipping plan, the carrier plan, the delivery plan, and contract negotiations. The shipping plan moves data from check out to the carrier. The delivery plan moves data from fulfilled order to choose supplier. Contract negotiations moves data from choose supplier to supplier. Lastly, carrier plan moves data from carrier to shipper. Once contract negotiations are complete, a shipment schedule can be developed regarding order fulfillment.

Hamp Crafts desires to introduce a new online store that will allow customers to view and purchase products and receive confirmation for their orders. This online store will need to be capable of accepting payments from customers. The online store would also need to include backend support through customer support, updating customer information, and maintaining the website. To implement this website, additional processes, data sources, and databases will need to be implemented.

When creating a new online storefront, additional processes, data sources, data sinks, and data flows need to be generated. Regarding processes, the following should be implemented: log-in, authentication, inventory, payment, and shipping status. Having a log-in system with authentication can help protect the customer’s data from compromise. An up-to-date inventory system is necessary for customers to be able to view the available inventory for purchase. These can be implemented by having functions to browse inventory, select items for purchase, and display the customer’s cart. Payment and shipping status would be like the previous model’s designs. The sources and sinks would include customer, carrier, shipper, supplier, and Hamp Crafts bank account. The ability to have payments processed and get deposited in the Hamp Crafts bank account is necessary for the system to function as intended. The new data flows would include login credentials, payment information, payment, and tracking information. Adding a security database with encryption and authentication should also be implemented to protect customers and Hamp Crafts bank account data.

An administrative backend would help provide the necessary resources should issues arise. The ability of administrators to provide customer support, update customer information, and maintain the website is critical for the proper operation of the online store. These services will be accessed solely by those with administrative controls and should be protected from malicious attacks. Firewalls, data encryption, and other protective features can help accomplish this.

The system that Hamp Crafts has in place works well and shouldn’t be discarded. It should be easy to implement these aspects into the current system with minimal issues. Updating the current system to include the online system will save money and time. Adding to the current system shouldn’t require much, especially since a lot of the current systems can be tailored to fit the online store.

In conclusion, setting up an online store for Hamp Crafts should be relatively simple with several additions to the existing system. While there are benefits to creating a new model for the online system, adding to the already existing system should be simple and easy to accomplish. The current system works well, and with additions, can be implemented online.