**Design Procedures for Security Concerns and Nonfunctional Requirements**

The following explains procedures needed to address the nonfunctional requirements of the system with a special emphasis on security requirements. Nonfunctional requirements refer to behavioral properties or characteristics that the system needs to have. These can be operational, performance, security, and cultural/political requirements.

* **Customer Information**
  + **Description: how the system will handle customer information securely**
  + The main two points of interaction for customer information will be the Joomla! content management system and the Azure database. Joomla! will handle sensitive information that customers enter to the extent before it is entered to the database. Joomla! also provides a free guide to standard security procedures, specifically for its system. Azure will handle all stored customer information, insured by Microsoft, and also provides documentation on how to use Azure Security Center to prevent, detect, and respond to security threats.
* **Financial Information**
  + **Description: how the system will handle financial information securely**
  + For all finance information of the customers and Karoline, Square ensures a variety of financial security features. They handle PCI compliance, encryption of payment information, processing in their own environment, and proactive compliance practices. This not only ensures security, but helps with releasing liability from Karoline with legal ramifications of security risks.
* **System Value Estimate**
  + **Description: entails the loss of value of the business if the system were to go down for a period of time**
  + The system if critical to the business process if Karoline is to adopt the system as a whole, but she may be able to conduct business as she has in the past to maintain some revenue. In Feasibility Considerations, we calculated the new revenue with system implementation would be $155 per week, which would be lost revenue for each week the system is down. The number is accurate but may be offset if Karoline was to manually process and fulfill customer orders for business continuity, which was calculated as $120, then netting a loss of $35.
* **Access Control Requirements**
  + **Description entails the access to data by system user**
  + All order, customer, financial, and site information/modification will be limited to admin accounts, namely Karoline. A new admin account may be created if Karoline wishes to allow an analyst or other worker to view such data relative to the website. Karoline may also have external accounts for Joomla!, Square, and Azure that only her account will be able to view.
* **Encryption and Authentication Requirements**
  + **Description: entails the processes of data encryption and where authentication will be needed to access data**
  + Payment and customer information will be encrypted on processing and storage by Joomla!, Azure, and Square through respective company policies and features. To view data relative to the website or these system components, Karoline will have to log in using her own admin account or user account.
* **Virus Control Requirement**
  + **Description: entails the virus control of the system**
  + Each external system component organization will have their own antivirus standards when processing data entered on the site. We have prepared for Karoline to have Avast antivirus software on her personal devices from which she will be viewing sensitive data and logging into the system components