In the retail service industry, speed of delivery of a particular service is a critical metric tied directly to customer satisfaction. While waiting for services, customers will exit queues should they believe the time spent in the queue is or will be too long. Customers who pay prior to receiving a service and are then subjected to unacceptably long throughput times are unlikely to return. The combined customer wait time is tied to their perception of the quality of the service.

This research first attempts to define and parameterize the wait times that a customer experiences. It then explores the performance of the retailer to meet customer expected wait times. Finally, this research the case of a customer who has flexibility and discretion in selecting a time to arrive at the store and will adopt a strategy to minimize expected wait yet is constrained to arrive between 8 and 9AM.

In order to accomplish these research objectives an observational study was performed over a 6 week time period which resulted in over 3,000 observations. This data was then analyzed, modeled and simulated to answer the initial research questions in addition to propose process changes to the retailer to improve their customers satisfaction through decreased wait times. (Received September 08, 2013)