# Final Project Proposal

# StockX- Supply Chain Management System

## *I. Overview*

A series of modern management of logistics, information flow, capital flow and trade partnership in the supply chain are organized, planned, coordinated, controlled and optimized. Through those management methods, in the process from raw materials to final product sales, can be the right quantity, the right time for product manufacturing and distribution, reduce the cost of the system, improve the overall level of service, improve the overall performance of the supply chain.

The Supply Chain Management (SCM) system is designed to receive the demand of customers for the first time and react in the first time in order to make supply chain management run more quickly and smoothly. In the same time, that allows customers to buy their favorite shoes faster by their preferences as soon as possible and enables the merchant to obtain the maximum profit. There are several reasons why SCM reaction is slower and slower and the reduced customer satisfaction: The more customer groups and product types, complex product structure, too many departments, too complex job flow, operating system, system periodicity problem. We must consider these questions when we design the system in order to design an effective and fast system.

## *II. Application Key Functionalities and Proposed Entities*

In our first version, we designed two mutually connected parts, the supplier enterprise and factory enterprise. (based on the factory and it may have more than two supplier enterprises). In the first part, Supplier enterprise several organizations. For example, sales organization, store organization, order organization, financial organization, logistics organization. The cross part is that they both have employee and user directory, and they can control the order in this

system. The employee, user and worker directory, these three sections are interacted. And They play different roles, e.g. system admin, normal user, VIP user, sellers and accountant.

The system can recommend the most suitable products to customers based on their browsing history records. If a new user is created, the system will recommend products randomly. Meanwhile, customers will be able to buy shoes by bidding against each other. Sellers will set a starting price, the customer who placed the highest bid will get the product.

In the second part, the factory enterprise has some manufacturing shops and some work-management organization. There will be a delivery system, after the customer successfully places an order, there will be an order status showing the current status of the order. It will start with pending, meaning that the order needs to be distributed by the seller. Once a delivery man picks up the order, the status will become in transit. Finally, when the order is delivered, the status will become completed. After each order is completed, the customer will be able to rate the product and write a review about the product in the product page. Customers can sort the products by highest rate and most reviews.

## *III. Eco-system architecture diagram*