**Chapter 2**

**THEORETICAL FRAMEWORK**

**2.1 Introduction**

A computerized Sales and Inventory system can help the company in managing their products in an ordered way and making their daily transaction more efficient.

The following theory is the key that will lead to develop the system, this include the database normalization, Database management system, MySQL, Transaction processing system (TPS), Networking, sales and inventory. Each theory aims to meet the requirements of the company that has been analyzed by the developers for the improvement and efficiency of the system.

**2.2 Database Normalization**

Normalization is a process of removing the redundancy in every table that the user created it is also the way of organizing the table in a database. This includes the creating tables and establishing the relation of each tables according to the design made by the user. The objectives is to isolate data so that additions, deletions, and modification of an attribute can be made in just one table and then propagated through the rest of the database using the defined foreign keys.

**2.3 Database Management System**

The DBMS can offer both logical and physical data independence. That means it can protect users and application from needing to know where data is stored or having to be concerned about changes to the physical structure of data (storage and hardware). A DBMS can limit what data the end user sees, as well as how that end user can view the data, providing many views of a single database schema. End users and software programs are free from having to understand where the data is physically located or on what type of storage media it resides because the DBMS handles all requests.

**2.4 MYSQL**

Pronounce either My S-Q-L or “My Sequel” is an open source relational database management system. It is based on the structure query language system (SQL), which is used for adding, removing, and modifying relation in the database Standard SQL commands such as ADD, DROP, INSERT and UPDATE can be used with My SQL. It is an open source relational database management system that runs as a server providing multi-user access to a number of databases

**2.5 Transaction Processing System (TPS)**

Transaction Processing System or TPS is a computerized information system that was developed to process large amount of data for routine business transactions such as inventory. It is also the computerized information system for business transaction which involve the collection, modification, and retrieval of all the transaction data. Also defined as a set of policies, procedures, equipment, and technology designed to facilitate transaction. Transaction Processing System is an information system which processes predefined transactions, one at a time, with direct, on-site entry transactions into a terminal, and which procedures predefined outputs and maintains the necessary database. The field of Transaction Processing is therefore has become a very important part of effectual business management.

**2.6 Sales**

Sales is the act of selling something, the exchange of goods, services, or property for money. It is the total amount of money that the business receive from selling all the goods and services that they have. In general, it is an agreement between the buyer and seller on the price of the security.

**2.7 Inventory**

Inventory or Stock is referred to the goods and materials that the company had in their warehouse. Inventory is there raw materials, work-in-process products and finished goods that are considered to be the portion of a business's assets that are ready or will be ready for sale. Inventory represents one of the most important assets of a business because the turnover of inventory represents one of the primary sources of revenue generation and subsequent earnings for the company's shareholders.

**2.8 Summary**

By these Theories, it will be the guide for the developers to accomplish the requirements for the Computerized Sales and inventory with monitoring delivery for Rich R General Merchandise. The following theories has been analyzed and understood by the developers to gain the proper knowledge to complete the needs of the said proposed system to make it more efficient for the user. This chapter indicates the explanation of the theoretical backgrounds and frameworks that were used as the key principles in developing the system.