

# Chapter 1

## INTRODUCTION

Inventory management is a critical aspect of any business that deals with physical goods. It refers to the process of overseeing and controlling the amount of stock a business holds. This includes tracking inventory levels, orders, sales, and deliveries. The goal of inventory management is to ensure that a business has the right amount of inventory at the right time, in order to meet customer demand and maintain profitability.

Effective inventory management helps a business avoid stockouts, which can lead to lost sales and disappointed customers. It also helps a business avoid overstocking, which can lead to wasted resources such as storage space and capital tied up in excess inventory. Additionally, effective inventory management allows a business to make better decisions about ordering, pricing, and product mix.

In this report, we will delve deeper into the concept of inventory management and its importance for businesses. We will discuss the various inventory management techniques and strategies that can be employed, as well as the tools and technologies available to assist with inventory management. We will also look at some of the common challenges faced by businesses when managing inventory, and provide recommendations for overcoming these challenges. Ultimately, the goal of this report is to provide a comprehensive understanding of inventory management and its role in the success of a business.

### 1.1 Overview of Database Management Systems

A Database Management System (DBMS) is a software system that is designed to manage and organize large amounts of data. It allows users to create, modify, and query databases, as well as control access to the data stored within them. The DBMS is the foundation of many business and organizational systems, providing a way to efficiently store and retrieve data.

There are several different types of DBMSs, including:

- **Relational Database Management Systems (RDBMS):** The most widely used type of DBMS, RDBMSs store data in tables with rows and columns. Each row represents a single record, and each column represents a specific field within that record. RDBMSs use SQL (Structured Query Language) to interact with the data stored in the tables.