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CIS 3050

Amazon's Database System

## **Scope and Scenario:**

In this project, I will be designing a database system for Amazon with a focus on their warehouse department. For many years, newer and older business owners have a targeted way to reach their customers on Amazon. But before an Amazon product is shipped to a buyer, it has to go through their warehouse department. Within their department, employees will go through their database systems where it will track suppliers, deliveries, and fulfilled orders. There are also other aspects of the design that will need to be implemented depending on the project. There will be different relationship tables with entities and relationships to Product, Supplier, Order, Inventory, Stock, Price, and Customer information that will be useful to Amazon users and business owners. In terms of using this database, all information from both Amazon business owners and customers will be kept confidential so all their information is safe and secured for both parties. According to Ayse Demir in the University of Wales, Amazon has used Management Information Systems as a vibrant tool to streamlines its management activities and that at the same time has ensured that the customers are offered with diversified services through its MIS (Cao, 2011).

## Purpose:

The purpose of this database is to improve Amazon's warehouse operations by implementing a database. Amazon would be able to reduce many different roles and tasks by utilizing their database. Amazon would be able to identify issues with new and current suppliers by keeping better track of their business relationship. Also order shipments would be faster than before. The primary purpose of the database

implementation is to improve the workflow of the Amazon warehouse so products can be packaged and shipped directly to the buyer.

### Benefits:

The biggest benefit about utilizing the database for the Amazon warehouse is so that many Amazon businesses can succeed and focus on efficiency. While many Amazon employees' workload is reduced, many businesses in Amazon can automate their orders and deliveries rapidly so business owners can benefit from managing their growth. Also data collected in a database could potentially be used to improve revenue. According to Amazon Web Services Chief Evangelist Jeff Barr, Amazon is now using AWS databases because it reduced its cost by 60% and its latency of consumer applications was reduced by 40%. He also said that with AWS databases, it would be easier to scale its advertising data, which previously would have taken months, and its buyer fraud data now has the same or better performance at half the cost (Chan, 2019).

## **Example of Existing Database:**

There are many database engines that may be used when designing relational databases, but one app that will be helpful for all Amazon users is Amazon AWS. According to Amazon user Lex Crosett, AWS makes choosing and tuning the right database simpler and less expensive than commercial database engines by providing both ease of experimentation and transparent pricing (Crosett, 2019). Amazon AWS also uses DynamoDB where it also allows you to create a database to record each customer, order, and shipper. Amazon AWS will be very helpful for all Amazon business owners and customers.

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