DATABASE DESIGN OF CROCS (CASE STUDY)

Introduction:

Amazon is one of the biggest online retailers in the world. Today company are looking into Amazon Canada, an e-commerce retail outlet, to understand the needs of customers and make startegies for better holitic growth.

The name of the company is "CROCS"

Mission __-At Crocs, the main focus on delivering exceptional customer experiences and driving business growth. We aim to maintain a safe, convenient and scalable items and provides actionable insights to innovate our product offerings and enhance our global supply chain.

The requirement of mission - in this era, each of these stores keeps its own set of important information, like what products they have, how many they sold, and stuff like that. It's like each sibling has their own secret ideas and doesn't share it with the others.

This factors some problems. For example, if one store runs out of something, the others might not know about it, so they can't help. Also, if they want to plan something better—like a sale, they give discounts ,it's hard to coordinate because they're not sharing their plans with each other.

Objectives

1. The data collected from multiple Crocs to improve data accessibility:

The meaning of collection all the essential information from every

Crocs and

putting it in one place where everyone can easily find it. So, instead of each store

keeping their own separate records.

2. Ensure consistent inventory management across all stores: This objective is

about making sure that every store keeps track of their products in the same way.

3. Stay up-to-date customer database for all stores: Here, the goal is to

keep track of all the customers who shop at Crocs. This helps the stores understand their customers better and provide personalized service.

Benifits of these objective -

1. Better Access to Information: Everyone can easily find and use the same

information, like how many products are in stock or what customers like to buy.

2. Consistent Inventory: Each store knows exactly what they have,

run out of popular items, and they can keep track of everything more easily.

3. Knowing Customers Better: By keeping track of who shops at Crocs

can offer better service and products that customers like.

Establishing Table Relationships

Keys are mainly used to establish and enforce data integrity and relationships between tables. They ensure that every record in a table is uniquely identified.

There are four main types of keys. However, our main focus in the database is primary and foreign keys.

Candidate Key

Primary Key

Foreign Key

Non Keys.

Step 1: Specifying primary key - each table needs to include a column or set of columns uniquely identifying each row stored in the table. In most cases, it is called a unique identification number (ID) in our tables, such as a Customer ID number or a Product ID number. In a database concept, this information is called the primary key of the table.

A primary key needs to have a value at all times. If a column's value can become unassigned or unknown (a missing value) at some point, it can't be used as a component in a primary key.

Enitity relationship diagram (ERD)-

For our Crocs (the company) database, we created an

AutoNumber column for each of the tables to serve as the primary key: CustomerID for the Customers table, ProductID for the Products table, OrderID for the Orders table, StoreID for the Stores table, ReviewID for the Reviews table, EmployeeID for the Employees table, and DepartmentID for the Departments table.

Customers

Items

Orders

Stores

Staff

Department

Overall, the ERD provides a visual representation of how different entities are

connected in the database, helping to understand the relationships and structure of the

data model.