# Database Systems Development and Implementation Plan

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# Database Systems Overview

## General business environment

Walmart is one of the largest retail corporations in the world operating in a dynamic and

complex business environment that is constantly changing.

Walmart’s operation is in a industry which is highly competitive with major competitors

such as Amazon, Target, and Costco. These competitors are using various strategies for

gaining market share and competing with Walmart in terms of price, product offers, and

customer experience.

Walmart is one of the largest retail corporations in the world, with over 10,000 stores

in 27 countries. The company was founded in 1962 by Sam Walton and has grown into a

multinational retail giant with a diverse range of products and services.

In terms of its current market, Walmart is a leading player in the retail industry, with

a significant presence in the United States and other countries. The company operates a

variety of retail formats, including discount stores, supercenters, and neighborhood markets.

Walmart's primary focus is on providing customers with low-priced products and services,

which has helped the company establish a loyal customer base.

Walmart's corporate objectives are centered around its mission to save customers

money so they can live better. The company aims to achieve this by offering a wide range of

products at low prices, improving the customer experience through innovative technology,

and investing in its employees to provide better training and benefits.

In recent years, Walmart has also taken steps to improve its sustainability practices by

reducing its greenhouse gas emissions, increasing its use of renewable energy, and improving

its supply chain practices. The company has set ambitious goals to reduce its environmental

impact and has made progress towards achieving these goals.

The rise of e-commerce has significantly impacted the retail industry, and Walmart

Adapted its business model for staying competitive in the market. Walmart has invested in

its online presence, offering e-commerce options such as online ordering, grocery pickup,

and delivery services. (Elizabeth, 2012)

Walmart's success is closely tied to the customer base’s spending habits. Social and demographic trends like aging population, changing family structures, and increasing diversity can all impact sales and marketing strategies of Walmart. (Elizabeth, 2012)

## Database system goals and objectives

Walmart is one of the largest retail corporations in the world. So, they use a variety of

database management systems such as Oracle, Hadoop, Teradata for managing its vast

operations and data. (Allie, 2017)

Walmart's database systems aims to provide centralized data management that allows

to efficiently and accurately access data, storage, and retrieval which helps to ensure that the

correct information is available to the right people at the correct time.

Walmart's database systems aim to enhance data security by implementing robust security

protocols and access controls. This helps protect sensitive data from unauthorized access,

hacking, or other security breaches.

Walmart's database systems aim to improve operational efficiency by automating

repetitive tasks and streamlining business processes. This helps reduce manual errors, save

time, and optimize resources. (Allie, 2017)

Walmart's database systems aim to provide better customer insights by capturing and

analyzing customer data, such as purchasing patterns, demographics, and preferences. This

helps Walmart make data-driven decisions to improve customer experiences and increase

customer loyalty.

Walmart's database systems aim to enhance supply chain management by tracking inventory

levels, optimizing product delivery, and monitoring supplier performance. This helps

Walmart ensure timely and efficient delivery of products to its stores.

Overall, the goals and objectives of Walmart's database systems align with its broader

business objectives of providing high-quality products, enhancing customer experiences,

optimizing operations, and driving business growth while also making efforts to improve its

sustainability practices. (Allie, 2017)

## How database addresses business problems

Databases are critical components of many business operations and can address a wide range

of business problems.

Walmart uses a variety of database systems to manage its vast operations and data. Some of

the database systems used by Walmart include:

Teradata: Walmart has used Teradata as its primary data warehousing and analytics platform

since the 1990s. Teradata is a relational database management system (RDBMS) that enables

Walmart to process large amounts of data and generate insights to inform its business

decisions.

Oracle: Walmart also uses Oracle database systems for various applications, including

inventory management, finance, and supply chain management. Oracle is an RDBMS that

offers high performance, scalability, and reliability for large enterprise applications.

Hadoop: Walmart uses Hadoop, an open-source distributed computing platform, to manage

and analyze large volumes of unstructured data, such as social media data, customer reviews,

and product images. (Allie, 2017)

MongoDB: Walmart uses MongoDB, a NoSQL database system, to store and manage large

amounts of unstructured and semi-structured data, such as product descriptions and reviews.

Overall, Walmart uses a mix of database systems to support its various business

functions and data management needs. These database systems allow Walmart to process,

store, and analyze large amounts of data, enabling the company to make data-driven

decisions and improve its business operations.

Databases can help businesses for organizing, storing, and managing large amounts of

data, like customer information, sales data, inventory levels, and financial transactions.

Databases provide a centralized location for data analysis and reporting which is

helping businesses for making informed decisions based on insights gained from the data.

Databases can improve business efficiency by streamlining processes and reducing the

time and resources required to complete tasks. For example, using a database to manage

inventory levels can help reduce the amount of time and effort required for manual

inventory tracking. (Allie, 2017)

Databases can facilitate collaboration by allowing multiple users to access and update

data simultaneously. This can be especially useful for teams working on projects or tasks that

require real-time updates.

Databases can help businesses to scale their operations by providing a platform for

managing larger volumes of data and supporting increased user activity.

Overall, databases are a critical tool for businesses to manage their data, improve their

processes, and make more informed decisions based on insights derived from the data.

## How database system aligns to mission statement and strategic goals.

As a large retail corporation, Walmart has a mission statement that focuses on providing

customers with low prices and a wide variety of products. To achieve this mission, Walmart

needs to have an efficient and effective supply chain management system that enables the

company to keep costs low and maintain inventory levels.

Database systems play a critical role in supporting Walmart's mission statement and

strategic goals. For example, Walmart's supply chain management system relies heavily on

data analysis to optimize inventory levels and reduce costs. The company uses databases to

store and analyze data related to sales, inventory, and logistics. This data is then used to make

decisions about when to order new products, how much inventory to stock, and how to

allocate resources. (Allie, 2017)

In addition to supply chain management, Walmart also uses database systems to

support other strategic goals, such as improving customer service and enhancing the in-store

experience. For example, Walmart uses databases to store information about customer

preferences and purchase history, which can be used to personalize the shopping experience

and make recommendations for new products. (Elizabeth, 2012)

Overall, Walmart's database systems are aligned with its mission statement and

strategic goals by providing the company with the data and analytical tools it needs to make

informed decisions about inventory management, customer service, and other critical aspects

of its business.

References

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