**Written Assignment 1 Kaushik Bandaru**

**COMPANY: Hot Wheels AUTOMOBILE Service and SPARES**

# Background

This Company started its journey of selling car spare parts in the year 1995. It has different stores over the United States having the primary store in Seattle. Its objective of this business is to sell spare parts to people and associations. It became very notable across the country in recent times because they decided to digitalize their processes. Not long after that they also started their own one of a kind website which can be successfully be made by the web developers and UI/UX designer experts. Their main products are motor parts, mirrors, tires, brakes, engine parts and some more. They additionally give service options and vehicle support

# Problem of the Company

As of now, they are utilizing Excel Spreadsheets and MS word docs to track their exchanges and logs. There are random and huge sheets which have stock records, value-based records, customer records, and demands records. It is hard to keep up with these sheets and tedious to find the necessary record right away. It is really difficult to refresh or update data physically. As they started getting an ever-expanding number of customers, data started overwhelming these records and spreadsheets. There were mistakes in data as various experts in the organization were invigorating their own one of a kind information to locate the ideal data. This has resulted in data redundancy and data impurities.

A portion of the noteworthy issues looked by the organization were: -

1)Dealing with mistakes, noise and reiteration of information which means data Redundancy.

2)Generating reports with spreadsheets and word docs. This means there is no use of modern technology such as tableau or PowerBI to generate better reports.

3) Mining the data and looking for records as required. This requires a lot of time and time is one of the most important resource in any project.

Consequently, they understood these issues were expanding and chose to utilize Data warehousing and BI tools to improve the operating efficiency of the company.

**ANALYSIS OF THE BUSINESS PROCESS OF INTEREST**

The business is expected to grow and increase their income by understanding the customer’s needs and requirements promptly. They need to understand what the customer is expecting from his products and the consumer behaviour. For which they need a good analysis of huge data. They need to prepare reports every week to monitor the deals and would know which item is being sold more and in which part of the nation.

Generating reports manually considering countless spreadsheets is not at all simple and increases the average time taken to complete a task. Similarly, they need to build another business process according to customer tendency for which they need to see the customer's activity and confine them in gatherings. Due to the absence of related applicable data, they are not getting information to grow their business and anticipate client needs.

The company can get the following insights if the data is collected and well gathered. They can also use this data for further prediction of customer needs and demands.

* What are the sales for every year? Is the sales increasing or decreasing?
* Which city has the highest sales?
* Which product is sold the highest?
* What are the customer needs in specific?
* Which are their best clients and customers?
* Which customer is likely to come back and make another purchase?
* Who are the high spending customers?

Product Sales

Product

type

Consumer

|  |  |  |
| --- | --- | --- |
| Sales Information | Product information | Customer Information |
| Products purchased  By the customer | Product cost | Customer history |
| Sales target is met | Type of products Shipped. | Customer Purchase Records |

# CONNECTION OF BUSINESS PROCESS, KPI, FACTS AND COMMON DIMENSIONS

Primary:

|  |  |  |  |
| --- | --- | --- | --- |
| **Business Processes** | **KPI’s** | **Facts** | **Dimensions** |
| **Product Sales** | Sales Target/Sales Goals | Sales | Per Day  Per Month  Per Year  Per Quarter |
| **Product Type** | Type of the Product | Type and number of products | Per Day  Per Month  Per Year |
| **Consumers** | Customer Purchase History | Customer Information | Per Day  Per Month  Per Year |

Additional:

|  |  |  |  |
| --- | --- | --- | --- |
| Business processes | KPI | Fact | Dimension |
| Customer returns | Products returned | Product quality | Per day, month, year |
| Promo performance tracking | No of products sold under promo offer | Promo popularity | Per day, month, year |
|  |  |  |  |

Common dimensions

|  |  |
| --- | --- |
| Business processes | Common dimensions |
| Sales, Customer returns and promo | Date, Product, Store and promo. |
|  |  |