Low Level Design (REPORTS)

SALES MONITORING SYSTEM

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Prepared by/ Modified by | | Role | | Start Date – End Date |
| Pranjal Chandravanshi | | Team Lead | | 03 Nov 2018 – 22 Nov 2018 |
| Richa Kumari | | SME | | 03 Nov 2018 – 22 Nov 2018 |
| Ekta Bansal | | Point of Contact | | 03 Nov 2018 – 22 Nov 2018 |
| Vaishnavi Sharma, Prerna Sharma | | Designer | | 03 Nov 2018 – 22 Nov 2018 |
| Mishita Juneja | | ETL Developer | | 03 Nov 2018 – 22 Nov 2018 |
| Anish Malik, Kanav Mahajan | | Data Modeler | | 03 Nov 2018 – 22 Nov 2018 |
| Reviewed by | | Role | | Date of Review |
| Visakh Naledath | |  | |  |
| Approved by | | Role | | Date of Approval |
| Arun Ragul | |  | |  |
| Circulation List | To all the ELTP mentors and the applicable trainee teams | | Version number of the template | **V 1.0** |
| **Version number of the work product** | **V 1.0** | | | |

Table of Contents

[SALES MONITORING SYSTEM 1](#_Toc531423632)

[1. INTRODUCTION 3](#_Toc531423633)

[1.1 Description of the Component 3](#_Toc531423634)

[1.2 Document Scope 3](#_Toc531423635)

[1.3 Dependencies/Assumptions 3](#_Toc531423636)

[2. Schema Design 4](#_Toc531423637)

[3. SAMPLE REPORTS 7](#_Toc531423638)

[Revision History 10](#_Toc531423639)

# INTRODUCTION

This document will address the reporting processes to deliver the information from our data warehouse environment according to project requirement.

#### 1.1 Description of The Component

Reports present data that describe the activity of the project. Reports provide information about the current activity of the organization. Reports are generated with the help of an ETL tool. An ETL tool is basically used for querying the data and presenting the data in different formats like graphs, excels etc. We are using Ab Initio as an ETL tool in our project.

# 1.2 Document Scope

This document will cover the logical design details related to generating reports for analytical use.

This document also includes

* The structure of reports.
* The fields of reports (dimensions and facts).
* Join logic between source tables for creation of the schema.

# 1.3 Dependencies/Assumptions

No provision shall be given to dynamically change the number of records in source files. Any authorized user will able to modify records for a Retailer.

**Assumption:**

* + - Data has already loaded properly into the data warehouse.
    - It is assumed that the data present in the database has been verified.
    - The Check constraints and cardinality between the dimensions table are already satisfied.

# SCHEMA Design

The schema design for Sales Monitoring System is as follows:

The tables for the universe creation is

* Dim\_Retailer
* Dim\_City
* Dim\_Salesperson
* Dim\_Salesp\_compensation
* Dim\_Product
* Dim\_Product\_Promotion
* Dim\_Payment\_mode
* Dim\_Order
* Dim\_Time

1. Fact table consist of all the 5 columns and measures includes:

* Retailer\_ID\_key
* Product\_ID\_key
* Order\_ID\_key
* Sales\_ID\_key
* Quantity sold
* Sales\_Amount
* Discount\_Amount
* Margin\_Amount
* Sales\_Profit
* Quantity\_Volume\_Flag
* Age\_of\_Product

**Measures**

* Quantity sold
* Sales\_Amount
* Discount\_Amount
* Margin\_Amount
* Sales\_Profit
* Quantity\_Volume\_Flag
* Age\_of\_Product

**Classes and Object**

* **Retailer**- Retailer ID, Name, Retailer Mgr, City Id
* **Product**- Product ID, Name, Category etc.
* **Order** – ORDER ID, ORDER Date etc.
* **Sales Person**- Sales Person ID, Name, City Id etc.

# SAMPLE REPORTS

1. Total sales in year 2008, 2009, 2010

**Dimensions -** Year

**Measures -** Quantity sold, Sales\_Amount, Sales\_Profit

**Calculated Measures -** Total Sales

**Chart** – Excel

1. Top 5 Retailers with good performance

**Dimensions –** Retailer\_ID\_key, Retailer\_Name

**Measures -** Quantity sold, Sales\_Amount, Sales\_Profit

**Calculated Measures –** Total sales\_amount , Total sales\_profit

**Chart** – Excel

1. The Quarterly sales of ANTRACOL 70 WP quantity per Customer

**Dimensions –** Product\_ID\_key, Product\_Name

**Measures –** Year, Sales\_Amount, Sales\_Profit

**Calculated Measures –** Total Quantity\_Sold

**Chart** – Excel

1. Optimal promotion strategy for which media is working effectively by city wise.

**Dimensions –** City\_Name, Promotion\_ID\_key

**Measures –** Sales\_Amount, Sales\_Profit

**Chart** – Excel

1. Salespersons details who performed best last 5 years

**Dimensions –** Sales\_id\_key, First\_name, Last\_name

**Measures -** Sales\_Amount, Sales\_Profit

**Chart** – Excel

1. Top 10 worst performing products according to quarter.

**Dimensions –** Product\_id\_key, Product\_Name, Year

**Measures -** Sales\_Amount, Sales\_Profit, Quantity\_sold

**Chart** – Excels

1. Display the sales report which includes the salesperson details and product details based on

a) Weekly

b) Monthly

**Dimensions –** Sales\_id\_key, First\_Name, Last\_Name, Year

**Measures -** Sales\_Amount, Sales\_Profit, Quantity\_sold

**Chart** – Excels

1. Product is doing good or bad according to the discount given.

**Dimensions –** Product\_id\_key, Product\_Name

**Measures -**Sales\_Amount,Sales\_Profit, Quantity\_sold, Sales\_Price\_Unit, Sales\_Margin

**Chart** – Excels

1. Product details with promotion ID equal to 2 as well as the margin exceeds 15% of Cost price in a sorted manner.

**Dimensions –** Product\_id\_key, Product\_Name, Promotion\_id\_key

**Measures -** Sales\_discount, Sales\_Profit, Sales\_margin,Sales\_Amount

**Chart** – Excels

1. Top 5 salesperson details who got maximum increment in the current fiscal year.

**Dimensions –** Sales\_ID\_key,Salesperson\_name,Year

**Measures –** Salary,prcnt\_increment\_sal

**Chart** – Excels

# Revision History

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **#** | **Date** | **Version #** | **Section / Page# changed** | **Details of changes made** |
| 1. | 03-Nov-2018 | V1.0 |  |  |