**SRI LANKA INSTITUE OF**

**INFORMATION TECHNOLOGY**



**ID No: IT20237486**

**Name: Gunarathne H.M.Y.B**

**Batch: DS weekday Assignment: 02**

# Step 1: Data source

Data warehouse designed at the Assignment I is used as the data source for this assignment. Data warehouse consists of 5-dimension tables and one fact tables to represent Super Market data altogether.

Graphical user interface, application, chat or text message

Description automatically generated

## ER Diagram for the source system

Diagram, schematic

Description automatically generated

# Step 2: SSAS Cube implementation

## Data Source View

Diagram

Description automatically generated

Data source view has been configured with its relevant tables as per the above design.

## Cube Design

Diagram

Description automatically generated

### KPI Creation

KPI is designed on Total attribute of Measures. It checks if the total is more than $1000.If so value is set to success (True) else set to fail (False).

Graphical user interface, application

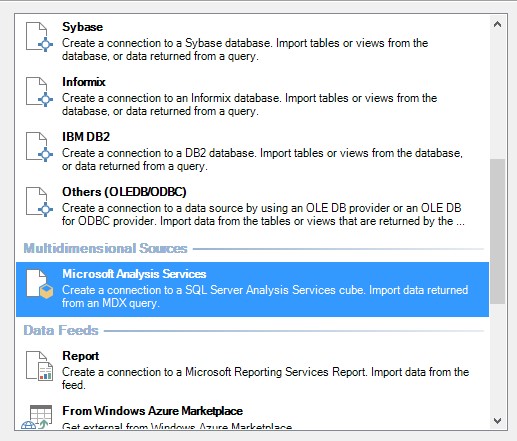
Description automatically generated

Table

Description automatically generated

# Step 3: SSAS Cube implementation

In the data tab of excel Microsoft analysis services are selected from other sources. There is the relevant database to create the pivot table i.e SUPERMARKET\_Cube database is selected. Then the data there gets imported as a pivot table report.



## I. Roll-Up

It can be seen Gross Income and Quantity displayed for each Product Sub category. High level understanding can be obtained.

Table

Description automatically generated

Chart, bar chart

Description automatically generated

## II. Drill-Down

It can be seen about Unit Price and Quantity of each Product Category.

Table

Description automatically generated

Chart, bar chart

Description automatically generated

## III. Slice

Income, Unit Price and Quantity applying the Product Sub Category can be filtered as below.

Chart, bar chart

Description automatically generated

## IV. Dice

Income, Unit Price and Quantity applying the Product Category of Product Subcategory can be filtered as below

Graphical user interface, application

Description automatically generated

Graphical user interface, table, Excel

Description automatically generated

# Step 4: SSRS Reports

## I. Report 1: drill-Through Level 01 report

Graphical user interface, text, application

Description automatically generated

Table

Description automatically generated

Graphical user interface, application

Description automatically generated

Chart, bar chart

Description automatically generated

## II. Report 2: Product Income drill-down Report

Table

Description automatically generated

Table

Description automatically generated

## III. Report 3: Gross Income Matrix

Text

Description automatically generated

Graphical user interface, application

Description automatically generated

## IV. Report 4: drill-Through Level 02 report

Graphical user interface, application

Description automatically generated

Table

Description automatically generated with low confidence

Chart

Description automatically generated