Dashboard Planning Document - Example

SiCling - Sales & Purchases Overview Dashboard Planning

1. Dashboard Requirements Summary

Target Audience	How many concurrent users will be accessing the dashboards?	How timely must the data be?	How many records are there in your largest table?
Sales & Purchases Executive	Up to 30	Daily Update	229

2. Dashboard Objectives - Main Business Objectives

* **Business Objective -** Concrete goals. Describes the short term actions.

● Help increase sales and revenue and to track inventory levels

3. KPI Architecture

* **Key performance indicators (KPI) -** Business metrics which support decision making. KPIs are used to evaluate factors which are crucial to achieve the business objectives.

* **Measures -** Quantifiable values which can stand alone or when composed with other measures, form KPI's.

* **Dimensions -** Business entities that categorize measures to enable users to answer business questions.

KPI	Measures		Dimensions		Viz Type
	Formula	Source table	Content	Source table	
Total Sales	Sales = sum([REVENUE])	Fact_SALES			Indicator
Total Orders by Product	Total Orders = count([SALESORDERID])	Fact_SALES	*NAME	Dim_PRODUCTS	Bar/Column
Total Online and In-Store Sales by Employee	Sales = sum([REVENUE])	Fact_SALES	*EMPLOYEENAME *SALETYPE	Dim_EMPLOYEES Fact_SALES	Bar/Column Stacked
Total Discount $ over Time	Total Sales = sum([REVENUE]) Total Discount = sum([TOTALDISCOUNT])	Fact_SALES Fact_SALES w/ TOTALDISCOUNT = UNITPRICEDISCOUNT * UNITPRICE * ORDERQTY	*Date (Months)	Dim_DATES	Line & Column Combination - Dual Axis
Business Day Sales by Region	Business Day Sales = sum([REVENUE])	Fact_SALES	*REGION **BusinessDay = 1	Fact_SALES (or) Dim_LOCATIONS Dim_DATES	Pie / Donut
Business Day Online Sales by Country	Business Day Online Sales $ = ([Total REVENUE],[BusinessDay] = 1) % Share of Total Online Sales = ([Total REVENUE],[BusinessDay] = 1) / [Total REVENUE]	Fact_SALES (w/ US_HOLIDAYS), Dim_DATES Fact_SALES, Dim_DATES	*REGION *COUNTRY **SALETYPE = Online	Fact_SALES (or) Dim_LOCATIONS Fact_SALES	Table / Pivot

% of Stocked Quantity by European Countries	Size: % Stocked Quantity = [Total STOCKEDQTY] / (([Total STOCKEDQTY], ALL([COUNTRYNAME])))	Fact_PURCHASES, Optional: *Dim_LOCATIONS*	*COUNTRYNAME **REGION = Europe	Fact_SALES (or) Dim_LOCATIONS Fact_SALES (or) Dim_LOCATIONS	Geo Map with Scatter Points
	Color/Details: Stocked Quantity = sum([STOCKEDQTY])	Fact_PURCHASES			
In-Stock Inventory per Product Category by Month	In-Stock Inventory = RSUM([Total STOCKEDQTY]-[Total ORDERQTY])	STOCKEDQTY from Fact_PURCHASES _ARRIVAL_DATE ORDERQTY from Fact_SALES	*Date (Months) *CATEGORYNAME	Dim_DATES Dim_PRODUCT_CATE GORIES	Stacked Area
Average Fulfillment Time by Vendor	Average Fulfillment Time in Days = AVG(SUM([PURCH ASEORDERID],DDiff ([Days in ARRIVALDATE],[Da ys in PURCHASEDATE])))	Fact_PURCHASES	*VENDORNAME	Dim_VENDORS	Table/Pivot
	Total Purchase Orders = COUNT([PURCHAS EORDERID])	Fact_PURCHASES			

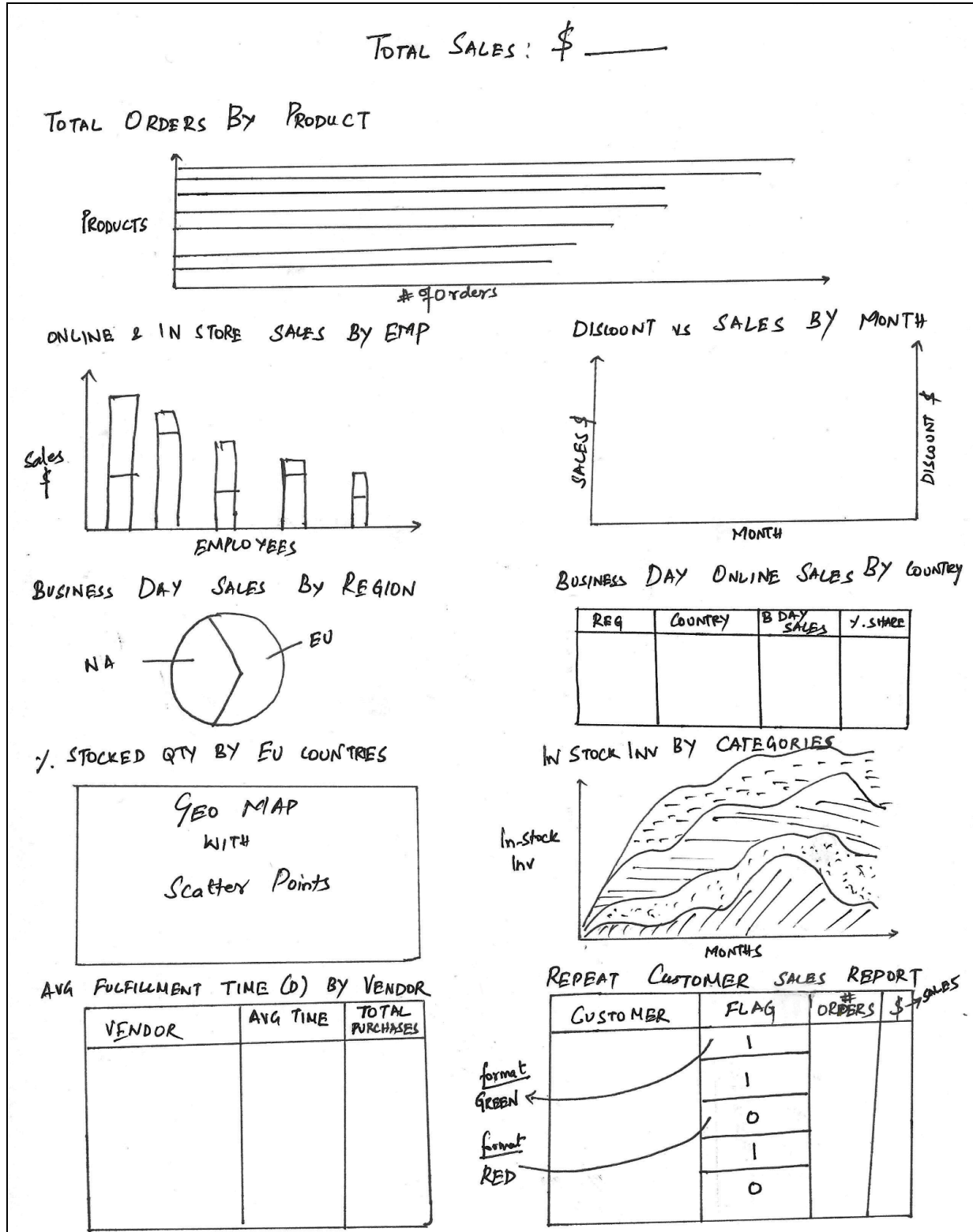| Repeat Customer Sales Report | Repeat Customer Flag = CASE WHEN [# of unique SALESORDERID] > 1 THEN 1 ELSE 0 END | Fact_SALES | *CUSTOMERNAME | Dim_CUSTOMERS | Table with Conditional Formatting.

Conditions:

Repeat Customer Flag = 1, then GREEN

Repeat Customer Flag = 0, then RED |
	Total Orders – *Same as above*	Fact_SALES			
	Total Sales – *Same as above*	Fact_SALES			
* Categories / Rows / Columns / BreakBy ** Widget Filters					

Dashboard Filters:

- Product Category (Dim_PRODUCT_CATEGORIES) > Product (Dim_PRODUCTS) - Dependent filters
- Months - Date (Dim_DATES) - w/ Background filter: excluding 12/2024

Drill Hierarchies:

- REGION > COUNTRYNAME > STATENAME - Dim_LOCATIONS

4. Dashboard Mockup

TOTAL SALES: $ ____

TOTAL ORDERS BY PRODUCT

PRODUCTS

# of Orders

ONLINE & IN STORE SALES BY EMP

Sales $

EMPLOYEES

DISCOUNT vs SALES BY MONTH

SALES $

DISCOUNT $

MONTH

BUSINESS DAY SALES BY REGION

NA   EU

BUSINESS DAY ONLINE SALES BY COUNTRY

REG	COUNTRY	B DAY SALES	%.SHARE

%. STOCKED QTY BY EU COUNTRIES

GEO MAP
WITH
Scatter Points

IN STOCK INV BY CATEGORIES

In-stock Inv

MONTHS

AVG FULFILLMENT TIME (D) BY VENDOR

VENDOR	AVG TIME	TOTAL PURCHASES

REPEAT CUSTOMER SALES REPORT

CUSTOMER	FLAG	# ORDERS	$ SALES
	1		
	1		
	0		
	1		
	0		

format GREEN

format RED

5. ElastiCube Tables

Which data elements will be required for achieving the above KPI's?

* **Fact Tables** contain the **business metrics** (i.e., numerical measurements). They are highly changing, usually the **largest** tables (in number of rows) in the schema.

* **Dimension Tables** contain attributes that describe business entities. (e.g., Customer Name, Region). We use them to analyze, segment, plot or filter our data. They also contain primary keys that identify each member.

#	Data Source Type	Table Name	Content	Max # of Rows	Fact / Dim	Unique ID
1	Snowflake	TB_SALES	Sales Records - In Store and Online	**229**	**Fact**	SALESORDERID
2	Snowflake	TB_NA_PURCHASES	Purchase records of North America	121	**Fact**	PURCHASEORDERID
3	Snowflake	TB_EU_PURCHASES	Purchase records of Europe	79	**Fact**	PURCHASEORDERID
4	Snowflake	TB_EMPLOYEES	List of Employees	11	**Dim**	EMPLOYEEID
5	Snowflake	TB_PRODUCTS	List of Products	37	**Dim**	PRODUCTID
6	Excel	DimDates-2023&2024.xlsx	List of Dates with its attributes for 2023 & 2024	731	**Dim**	DateNum / Date

7	CSV	US_HOLIDAYS.csv	List of Holiday dates in 2023 and 2024	26	**Dim**	Date
8	Snowflake	TB_EMPLOYEE_TEAMS	List of Teams for Employees	3	**Dim**	TEAMID
9	Snowflake	TB_CUSTOMERS	List of Customers and their attributes	180	**Dim**	CUSTOMERID
10	Snowflake	TB_PRODUCT_CATEGORIES	List of Product Categories	7	**Dim**	CATEGORYID
11	Custom	PURCHASES	All Purchases from EU and NA combined	TBD	**Fact**	PURCHASEORDERID
12	Custom (Optional)	VENDORS	All Distinct Vendors from Purchases table	TBD	**Dim**	VENDORNAME
13	Custom (Optional)	LOCATIONS	Distinct Location data like STATENAME, COUNTRYNAME and REGION	TBD	**Dim**	STATENAME

6. Implementation Constraints

This is the place to mention any general constraints you may have on your analysis and limitation in terms of the data model (Data Security, Frequency of Use, Fiscal year etc)

● Data Security on **TEAMMANAGER** (Dim_EMPLOYEE_TEAMS) - Measures on the widgets + List of Employees (Dim_EMPLOYEES) are the sensitive data that needs to be secured by this row level data security and Dashboard filter members from Dim_PRODUCTS, Dim_PRODUCT_CATEGORIES, Dim_DATES and other dimension tables need not be protected.

Thanks for taking the time to complete this important document.

Please don't hesitate to contact your designated Engagement Manager for any questions related to this document.