

Sales Analysis Project

Business Requirements

NO#	As a (role)	I want (request/demand)	So that I (user value)	Acceptance Criteria
1	Sales Manager	To get dashboard overview of internet sales	Can follow better which customers and products sells the products sell the best	Dashboard that updates data once a day
2	Sales representative	A detailed overview of internal sales per customers	Can follow up my customers that buys the most and who we can sell to	Dashboard that able to filter data from each customer
3	Sales representative	A detailed overview of internet sales per products	Can follow up the products that sells the most	A power BI dashboard that can filter data for each product
4	Sales Manager	A dashboard overview of internet sales	Follow sales over time against budget	A dashboard with graphs and KPIS comparing against budget

Data Cleansing and Transformation With SQL

SQL Code for collecting, cleansing, and Transforming data

Calendar:

```
1  SELECT
2      [DateKey],
3      [FullDateAlternateKey] as Date,
4      --,[DayNumberOfWeek]
5      [EnglishDayNameOfWeek] as day,
6      --,[SpanishDayNameOfWeek]
7      --,[FrenchDayNameOfWeek]
8      --,[DayNumberOfMonth]
9      --,[DayNumberOfYear]
10     [WeekNumberOfYear] as WeekNr,
11     [EnglishMonthName] as Month,
12     LEFT(EnglishMonthName, 3) as MonthShort,
13     --,[SpanishMonthName]
14     --,[FrenchMonthName]
15     [MonthNumberOfYear] as Monthn,
16     [CalendarQuarter] as Quarter,
17     [CalendarYear] as Year
18     --,[CalendarSemester]
19     --,[FiscalQuarter]
20     --,[FiscalYear]
21     --,[FiscalSemester]
22  FROM
23      [AdventureWorksDW2019].[dbo].[DimDate]
24  Where
25      CalendarYear >= 2019
```

Customer Detail:

```
1  SELECT
2      c.CustomerKey as CustomerKey,
3      --[GeographyKey],
4      --[CustomerAlternateKey],
5      --[Title],
6      c.FirstName as [FistName],
7      --[MiddleName],
8      c.LastName as [LastName],
9      --[NameStyle],
10     --[BirthDate],
11     --[MaritalStatus],
12     --[Suffix],
13     Case c.Gender when 'M' Then 'Male' When 'F' Then 'Famale' End as Gender,
14     --[EmailAddress],
15     --[YearlyIncome],
16     --[TotalChildren],
17     --[NumberChildrenAtHome],
18     --[EnglishEducation],
19     --[SpanishEducation],
20     --[FrenchEducation],
21     --[EnglishOccupation],
22     --[SpanishOccupation],
23     --[FrenchOccupation],
24     --[HouseOwnerFlag],
25     --[NumberCarsOwned],
26     --[AddressLine1],
27     --[AddressLine2],
28     --[Phone],
29     c.DateFirstPurchase as [DateFirstPurchase],
30     --[CommuteDistance]
31     g.city as [CustomerCity]
32 FROM
33     [AdventureWorksDW2019].[dbo].[DimCustomer] as c
34     Left Join dbo.DimGeography as g
35         on g.GeographyKey = c.GeographyKey
36 Order By CustomerKey Asc;
```

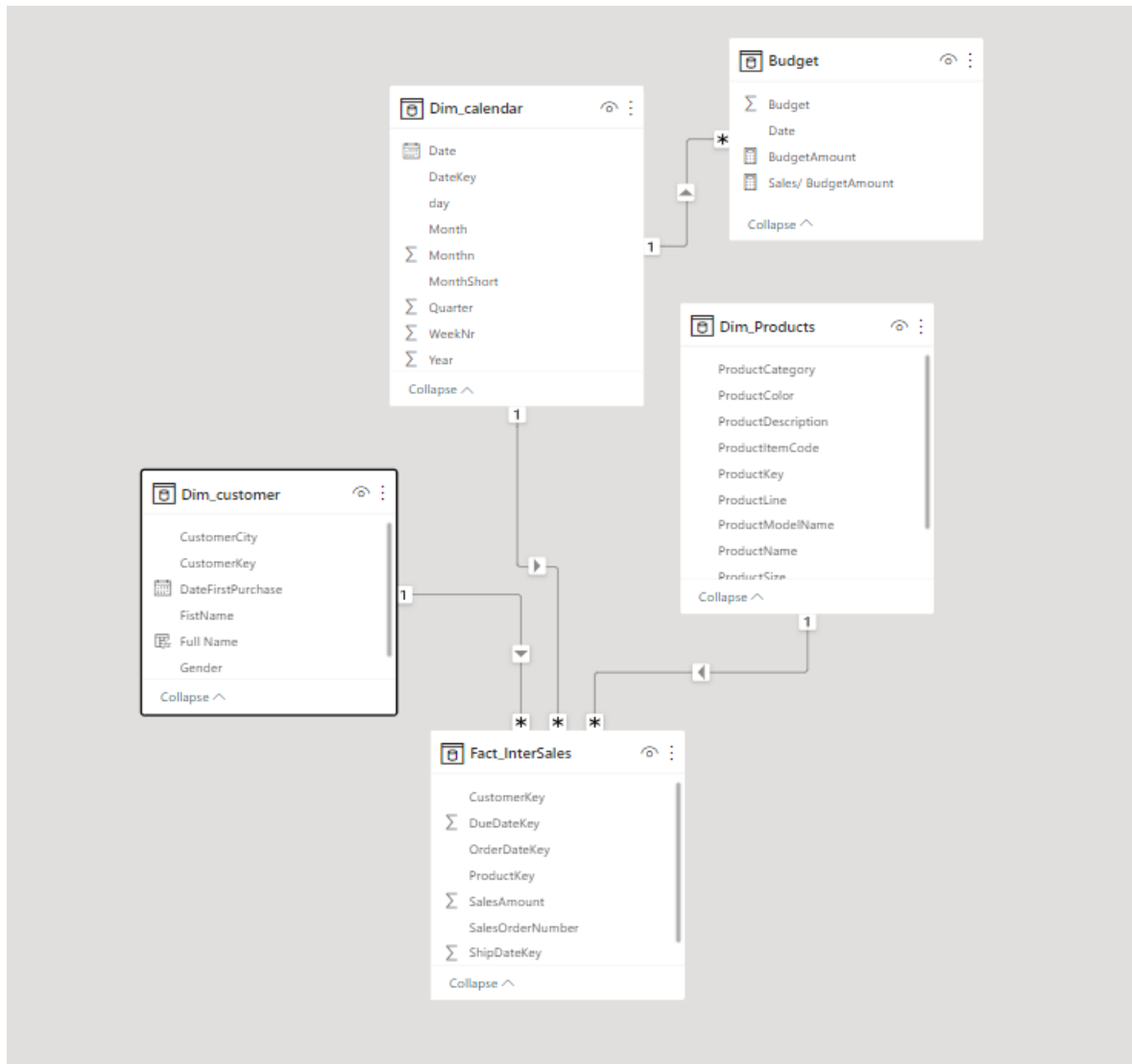
Products:

```
1  SELECT
2      p.[ProductKey],
3      p.[ProductAlternateKey] as ProductItemCode,
4      --[ProductSubcategoryKey],
5      --[WeightUnitMeasureCode],
6      --[SizeUnitMeasureCode],
7      p.[EnglishProductName] as ProductName,
8      ps.[EnglishProductSubcategoryName] as SubCategory,
9      pc.[EnglishProductCategoryName] as ProductCategory,
10     --[SpanishProductName],
11     --[FrenchProductName],
12     --[StandardCost],
13     --[FinishedGoodsFlag],
14     p.[Color] as ProductColor,
15     --[SafetyStockLevel],
16     --[ReorderPoint],
17     --[ListPrice],
18     p.[Size] as ProductSize,
19     --[SizeRange],
20     --[Weight],
21     --[DaysToManufacture],
22     p.[ProductLine] as ProductLine,
23     --[DealerPrice],
24     --[Class],
25     --[Style],
26     p.[ModelName] as ProductModelName,
27     --[LargePhoto],
28     p.[EnglishDescription] as ProductDescription,
29     --[FrenchDescription],
30     --[ChineseDescription],
31     --[ArabicDescription],
32     --[HebrewDescription],
33     --[ThaiDescription],
34     --[GermanDescription],
35     --[JapaneseDescription],
36     --[TurkishDescription],
37     --[StartDate],
38     --[EndDate],
39     --[Status]
40     ISNULL (p.Status, 'Outdated') as ProductStatus
41 FROM
42     [AdventureWorksDW2019].[dbo].[DimProduct] as p
43     Left join DimProductSubcategory as ps on ps.ProductSubcategoryKey = p.ProductSubcategoryKey
44     Left join DimProductCategory as pc on ps.ProductCategoryKey = pc.ProductCategoryKey
45 Order By
46     p.ProductKey Asc;
```

Sales:

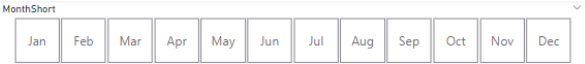
```
1  SELECT
2      [ProductKey],
3      [OrderDateKey],
4      [DueDateKey],
5      [ShipDateKey],
6      [CustomerKey],
7      --[PromotionKey],
8      --[CurrencyKey],
9      --[SalesTerritoryKey],
10     [SalesOrderNumber],
11     --[SalesOrderLineNumber],
12     --[RevisionNumber],
13     --[OrderQuantity],
14     --[UnitPrice],
15     --[ExtendedAmount],
16     --[UnitPriceDiscountPct],
17     --[DiscountAmount],
18     --[ProductStandardCost],
19     --[TotalProductCost],
20     [SalesAmount]
21     --[TaxAmt],
22     --[Freight],
23     --[CarrierTrackingNumber],
24     --[CustomerPONumber],
25     --[OrderDate],
26     --[DueDate],
27     --[ShipDate]
28  FROM
29      [AdventureWorksDW2019].[dbo].[FactInternetSales]
30  Where
31      Left (OrderDateKey,4) >= YEAR(GETDATE()) -4
32  Order By OrderDateKey ASC;
```

Data Model



Dashboard Overview

Sales Overview



Customer City

All

Sub Category

All

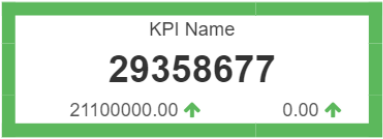
Product Category

All

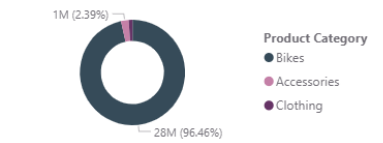
Product Name

All

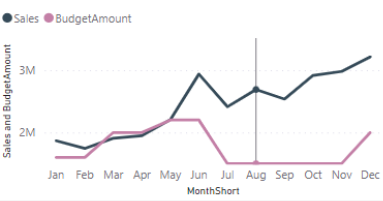
Sum of SalesAmount and BudgetAmount



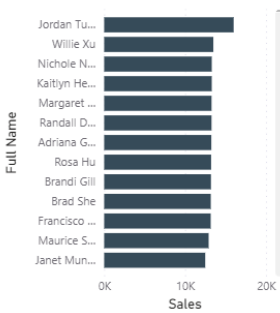
Sales by Category



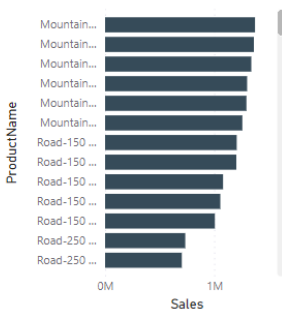
Sales and BudgetAmount by MonthShort



Sales by Customer



Sales by Product



Sales by City

