#### **Learning Objectives**

- 1. Data Extracts: How to create, when is it appropriate to use?
- 2. Table calculations, Year over Year Growth Calculations
- 3. Reference lines and bullet graphs for monitoring performance
- 4. Filtering based on ranks. Identifying leading and lagging performers

#### Instructions

#### 1. Data Source

- a. FactSales, Channel, Date, Product and Subcategory, Category, Store and Geography, Promotion
- b. Create Custom SQL (Data-> Covert to Custom SQL)
- c. Remove unnecessary attributes
- d. Change to Extract
- e. Add filters to extract: Year =2008 to 2009, Region = United States, State = Washington, Channel =Store
- 2. Create Sheet: Sales Growth YoY
  - a. Create Product Category Hierarchy
  - b. Use Category Hierarchy as Rows, DateKey as columns and expand to quarters, Sales Amount as Cell values
  - c. Select Sum(Sales Amount) from Marks panel and select Add Table Calculation. Select Percent Difference From as Calculation Type, Dimension for Compute Using , and Check Year as Dimension. The sheet should show growth in sales from previous year.
- 3. Create Sheet: Targets by Category
  - a. Create calculated columns
    - i. YR 2008 Sales Amount: IF [Calendar Year] = 2008 THEN [Sales Amount] END
    - ii. YR 2009 Sales Amount: IF [Calendar Year] = 2009 THEN [Sales Amount] END
  - b. Create Bullet graph with Product Categories as dimension, 2009 and 2008 sales as measures, right click on the vertical axis to swap reference from 2009 to 2008
- 4. Create new sheet: Top Selling Products
  - a. Create calculated field profit as Sales Amount (Total Cost + Return Amount)
  - b. Create calculated field to rank products that exceed 2008 sales targets
    - i. RANK(SUM([YR 2009 Sales])-SUM([YR2008 Sales]))
  - c. Use Product Names as Columns and Sales 2009 and Sales 2008, and Profit as measures

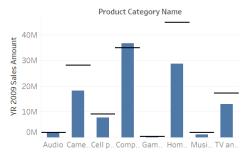
### Sales Performance in 2009 as compared Sales Performance across Product to 2008

Product Category Name	2009
Audio	2.93%
Cameras and camcorders	-34.87%
Cell phones	-14.72%
Computers	4.94%
Games and Toys	-21.26%
Home Appliances	-36.22%
Music, Movies and Audio Books	-41.16%
TV and Video	-24.17%
Grand Total	-22.14%

## Top Performing Products

Product Name	Profit	YR 2008	YR 2009	salesran
Adventure Works	548,958	\$263,502	\$584,680	1
Adventure Works	253,002	\$80,735	\$398,745	2
Fabrikam Laptop	205,159	\$60,951	\$363,891	3
Fabrikam Laptop	212,367	\$72,747	\$373,042	4
Adventure Works	206,966	\$65,591	\$364,191	5
Fabrikam Laptop	321,900	\$165,244	\$448,723	6
Adventure Works	206,813	\$76,186	\$355,585	7
Fabrikam Laptop	464,725	\$214,800	\$491,748	8
WWI Laptop8.9 E	201,171	\$72,160	\$346,522	9
Adventure Works	296,399	\$147,393	\$415,232	10

# Categories



## **Under Performing Products**

Product Na	Profit	YR 2008 S	YR 2009 S	salesrank
Litware Refr	820,951	\$1,041,437	\$213,279	2,130
Contoso Pro	542,264	\$663,140	\$164,322	2,129
Proseware P	387,828	\$518,555	\$68,506	2,128
Proseware P	390,848	\$509,171	\$88,715	2,127
Proseware P	435,286	\$519,244	\$145,733	2,126
Litware Refr	647,128	\$666,398	\$321,119	2,125
Contoso Wa	338,420	\$422,293	\$90,123	2,124
Contoso Pro	414,891	\$484,130	\$152,847	2,123
Fabrikam In	348,697	\$427,652	\$103,892	2,122
Proseware P	439,201	\$494,458	\$176,715	2,121