**Assignment #4 –Data Analysis Using Excel Pivot Tables**

Falls Department Stores, with corporate headquarters in Portland, Oregon, operates department stores in midsize towns in selected northwestern areas. Although the organization maintains a large computer system for its accounting operations, the sales department often downloads data to complete additional analysis of its operations. Daniel Partner, analyst for the corporate sales department, regularly downloads data by territories and product areas including automotive, electronics, garden centers, and sporting goods. He often presents reports based on his analysis of sales by product areas and territory, best and worst performing product group-periods, and total sales for certain regions and product groups. He asks you to help him compile and summarize the data.

Complete the following:

1. Download the **Falls Department Stores** workbook and save the workbook as **YourNameAssignment 4** in your disk.
2. In the Documentation sheet, enter the date and your name then save the worksheet.
3. Switch to **Q3** worksheet, create an Excel table. Rename the Table as **ProductSales.** Format the Sales column in the Currency number format with no decimal places. Save the worksheet.
4. Switch to **Q4** worksheet and sort the table in **ascending** order by **Territories**, then by **Product Group**, then by **Year**, and then by **Month**. Month should be sorted in Jan, Feb, Mar, … order, **not** alphabetically. Save the worksheet.
5. Switch to **Q5** worksheet. Display records for **Automotive** and **Electronic** products in **2010**, excluding sales in **Vancouver**. Sort this data by Sales in **descending** order. Add a Total row and calculate the **average** sales for the filtered data. Change the label in the Total row to **Average**. Save the worksheet.
6. Switch to **Q6** worksheet. Display subtotals for sales (**Sum**) by **Territory**. Save the worksheet.
7. Switch to **Q7** worksheet. Display **total sales** for **sporting** products, in **Vancouver**, during **2010**. Save the worksheet.
8. Switch to Q8 worksheet. Create a PivotTable similar to the one shown in following figure, displaying **percentage of sales by Product Group, Territories, and Year**. Set grand totals on for columns only. Use a **tabular** layout, inserting subtotals at the bottom of each Product Group. Rename the worksheet as **Q8 Percent of Sales**.

|  |  |  |  |
| --- | --- | --- | --- |
| **Pct of Sales** |  | **Year** |  |
| **Product Group** | **Territories** | **2009** | **2010** |
| **Automotive** |  |  |  |
|  | **Oregon** | **7.91%** | **6.60%** |
|  | **Vancouver** | **5.76%** | **7.24%** |
|  | **Washington** | **5.41%** | **7.41%** |
| **Automotive Total** |  | **19.08%** | **21.25%** |
| **Electronics** |  |  |  |
|  | **Oregon** | **5.93%** | **6.46%** |
|  | **Vancouver** | **5.99%** | **5.13%** |
|  | **Washington** | **6.34%** | **6.88%** |
| **Electronics Total** |  | **18.26%** | **18.47%** |
| **Gardening** |  |  |  |
|  | **Oregon** | **6.45%** | **5.11%** |
|  | **Vancouver** | **6.66%** | **4.39%** |
|  | **Washington** | **7.69%** | **7.39%** |
| **Gardening Total** |  | **20.79%** | **16.89%** |
| **Houseware** |  |  |  |
|  | **Oregon** | **5.40%** | **3.74%** |
|  | **Vancouver** | **6.46%** | **5.71%** |
|  | **Washington** | **8.72%** | **8.49%** |
| **Houseware Total** |  | **20.57%** | **17.94%** |
| **Sporting** |  |  |  |
|  | **Oregon** | **8.13%** | **9.23%** |
|  | **Vancouver** | **6.56%** | **7.91%** |
|  | **Washington** | **6.60%** | **8.31%** |
| **Sporting Total** |  | **21.29%** | **25.45%** |
| **Grand Total** |  | **100.00%** | **100.00%** |

1. Switch to Q8 worksheet. Create a PivotChart of Total Sales By Product Group. Insert this chart in a chart sheet. Rename this chart sheet as **Sales by Product Group**. Create a second PivotChart of total Sales by Territory. Change the chart type to Pie and follow the attached layout. Insert this chart in a chart sheet. Rename this chart sheet as **Sales by Territory**.

1. Using the following figure as a guide, create a PivotTable to show four calculations: **minimum, maximum, average, and total Sales** categorized by **Territories** and **Product Group** and filtered by **Year**. Display the results for **2010**. Rename the worksheet as **Q10 Statistical Summary.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Year** | **2010** |  |  |  |  |
|  |  |  |  |  |  |
|  |  | **Values** |  |  |  |
| **Territories** | **Product Group** | **Average** | **Sum** | **Minimum** | **Maximum** |
| **Oregon** | **Automotive** | **$ 50,196** | **$ 602,354** | **$ 1,825** | **$ 98,358** |
|  | **Electronics** | **$ 49,175** | **$ 590,099** | **$ 7,164** | **$ 95,985** |
|  | **Gardening** | **$ 38,859** | **$ 466,305** | **$ 5,396** | **$ 95,795** |
|  | **Houseware** | **$ 28,428** | **$ 341,139** | **$ 3,374** | **$ 64,982** |
|  | **Sporting** | **$ 70,243** | **$ 842,910** | **$ 26,643** | **$ 91,786** |
| **Oregon Total** |  | **$ 47,380** | **$ 2,842,807** | **$ 1,825** | **$ 98,358** |
| **Vancouver** | **Automotive** | **$ 55,074** | **$ 660,886** | **$ 865** | **$ 99,526** |
|  | **Electronics** | **$ 39,033** | **$ 468,391** | **$ 2,141** | **$ 98,044** |
|  | **Gardening** | **$ 33,419** | **$ 401,027** | **$ 467** | **$ 97,793** |
|  | **Houseware** | **$ 43,473** | **$ 521,678** | **$ 4,046** | **$ 80,035** |
|  | **Sporting** | **$ 60,199** | **$ 722,385** | **$ 29,824** | **$ 94,129** |
| **Vancouver Total** |  | **$ 46,239** | **$ 2,774,367** | **$ 467** | **$ 99,526** |
| **Washington** | **Automotive** | **$ 56,359** | **$ 676,304** | **$ 3,893** | **$ 99,258** |
|  | **Electronics** | **$ 52,307** | **$ 627,680** | **$ 15,485** | **$ 84,624** |
|  | **Gardening** | **$ 56,206** | **$ 674,471** | **$ 5,507** | **$ 94,166** |
|  | **Houseware** | **$ 64,579** | **$ 774,942** | **$ 27,164** | **$ 94,725** |
|  | **Sporting** | **$ 63,189** | **$ 758,272** | **$ 17,919** | **$ 90,879** |
| **Washington Total** |  | **$ 58,528** | **$ 3,511,669** | **$ 3,893** | **$ 99,258** |
| **Grand Total** |  | **$ 50,716** | **$ 9,128,843** | **$ 467** | **$ 99,526** |

1. Save and close the workbook. Submit the finished workbook into Assignment 4 area. Use “**Your\_Name\_Assignment4”** as the title for your submission.

08-09