



Rensselaer

Data Warehouse

<http://www.rpi.edu/datawarehouse/>

Brio Insight 101 Training

Lab Exercises

Lab Exercise 1: Sales Query

Objective:

Create a query that retrieves sales data for the Books product line. Include sales data for the periods between 07/01/99 – 07/15/99 and 08/01/99 – 08/15/99. Also limit the query to the country Germany and cities Berlin and Munich. Create a prompt to select a country and city value when the query is processed. Sort the query by Date (descending) and Product Name (ascending).

Step-by-Step Answers:

The following lists step-by-step instructions in order to complete the exercise for Lab 1.

1. Using Brio Insight, open the BQY file named **Sales Model Star Schema** on the portal.

--Go to the following URL to log into Brio Portal:

<http://vcmr-107.server.rpi.edu:8080/servlet/WebClient/login>

- Once logged into Brio Portal, click the **Browse** tab.
- Click the **Brio** folder.
- Click the **Brio Training** folder.
- Click on the BQY file entitled **Sales Model Star Schema**.

2. Drag the following topic items to the Request line:

--**Full Date, Product Name, Country, City, Product Line, Product Family, Product Category, Unit Sales, and Amount Sales.**

3. **Limit** the query.

--Create a custom list of limit values for **Country**, make the limit a variable, and customize the limit dialog box

- Drag the topic item **Country** to the Limit Line.
- In the Limit dialog box, click the **Show Values** button, select **Germany** as the default value, then click the **OK** button to close the limit dialog box.
- Make **Country** a variable. On the Limit line, click the arrow button, click **Country**, and click the **Var** button.

- Select the Limit item **Country**, right-click, and click **Customize Limit**. In the Customize Limit dialog box, enter **Select a Country** in the Prompt: field and deselect all the Values check boxes, except for **Show Values**. Click the **OK** button to finish.

--Create a variable limit on **City**. When setting the limit, use the **Show Values** button. Customize the Limit dialog box.

- Drag the topic item **City** to the Limit line.
- In the Limit dialog box, click the **Show Values** button, select **Berlin** and **Munich** (use the Ctrl-key) as the default values, then click the **OK** button to close the limit dialog box.
- On the Limit line, click the arrow button, click **City**, and click the **Var** button.
- Select the Limit item **City**, right-click, and click **Customize Limit**. In the Customize Limit dialog box, enter **Select a City** in the Prompt: field and deselect all the Values check boxes, except for **Show Values**. Click the **OK** button to finish.

--Limit **Product Line** to **Books**.

- Drag the topic item **Product Line** to the Limit line
- In the Limit dialog box, click the **Show Values** button, then select **Books** from the list of limit values, and click the **OK** button.

--Limit **Full Date**:

- Drag the topic item **Full Date** to the Limit line
- In the Limit dialog box select **Between** from the pull-down menu, enter **7/1/99, 7/15/99** in the edit field, then click the **OK** button
- Drag the topic item **Full Date** (again) to the Limit line (Do not double-click the topic item Full Date to set the second limit.)
- In the Limit dialog box, select **Between** from the pull-down menu, enter **8/1/99, 8/15/99** in the edit field, then click the **OK** button
- On the Limit line, select **Full Date** and **Full Date2** and click the parentheses button () on the Limit line
- On the Limit line, click the **AND** operator between Full Date and Full Date2 to change it to **OR**.

4. Sort the query.

--Drag **Full Date** and **Product Name** from the Request line to the Sort line

--Double-click the Sort item **Full Date** to sort in descending order.

5. **Process** the query.

--Click the **Process** button in the Standard toolbar

--For Country in the Limit dialog box, click **OK** for **Germany**. For City in the Limit dialog box, click **OK** for **Berlin** and **Munich**. View the dataset in the Results section. There should be 56 rows retrieved.

6. Apply simple **formatting** to the dataset to make it easier to read.

--On the **Edit** menu, click **Select All**, then, on the **Format** menu, click **Column**, then **Auto-Size Width**

--Resize any column by dragging its column edge or double-clicking its border.

7. **Save** the document.

--On the File menu, point to **Save Options**, click **Save Query Results With Document**.

- In the “**Save Query Results With Document**” dialog box, click the **OK** button to accept the settings (to save the results for “Query”).

--On the **File** menu, click **Save As**

- In the Save File dialog box, browse to the desktop, enter **Lab1** as the file name, and click the **Save** button.

Lab Exercise 2: Product Query

Objective:

By store, find the total amount, average unit quantity, and the number of days of reported sales, for a specific product. Create the query so that a user can select a different product when the query is processed. Limit the year to 1999, the product to Blues On the Bayou, and the total Amount Sales to greater than \$20,000. Sort the table by Amount Sales in descending order.

Step-by-Step Answers:

The following lists step-by-step instructions in order to complete the exercise for Lab 2.

1. Using Brio Insight, open the BQY file named **Sales Model Star Schema** on the portal.

--Go to the following URL to log into Brio Portal:

<http://vcmr-107.server.rpi.edu:8080/servlet/WebClient/login>

- Once logged into Brio Portal, click the **Browse** tab.
- Click the **Brio** folder.
- Click the **Brio Training** folder.
- Click on the BQY file entitled **Sales Model Star Schema**.

2. Drag the following topic items to the Request line:

--**Year, Product Name, Product Category, Store Name, Amount Sales, Unit Sales, and Full Date.**

3. **Aggregate** the query.

--Select **Amount Sales** on the Request line, right-click, point to **Data Functions**, and click **Sum**.

--Select **Unit Sales** on the Request line, right-click, point to **Data Functions**, and click **Average**.

--Select **Full Date** on the Request line, right-click, point to **Data Functions**, and click **Count**.

4. **Rename** the Request items.

--Amount Sales as Total Amount:

- On the Request line, double-click **SUM(Amount Sales)**.
- In the Name field of the Item Properties dialog box, overwrite “Amount Sales” in the Name field with **Total Amount** and click the **OK** button.

--Unit Sales as Average Unit Quantity:

- On the Request line, double click **AVG(Unit Sales)**.
- In the Name field of the Item Properties dialog box, overwrite “Unit Sales” with **Average Unit Quantity** and click the **OK** button.

--Full Date as Number of Days:

- On the Request line, double-click **Count(Date)**
- In the Name field of the Item Properties dialog box, overwrite “Full Date” with **Number of Days** and click the **OK** button.

5. **Limit** the query.

--Drag **Year** from the Periods Days topic to the Limit line.

- In the Limit dialog box, click the **Show Values** button, select **1999**, and click the **OK** button.

--Drag **Product Name** from the Products topic to the Limit line.

- In the Limit dialog box, click the **Show Values** button, select **Blues On the Bayou** as the default value, and click the **OK** button. On the Limit line, right-click **Product Name** and click **Variable Limit**.

--Drag **Total Amount** from the Request line to the Limit line.

- In the Limit dialog box, select **> Greater Than** from the pull-down menu, enter **20000** in the edit field and click the **OK** button.

6. **Sort** the query.

--Drag **Total Amount** from the Request line to the Sort line

--Double-click the Sort item **Total Amount** to sort it in **descending** order.

7. **Process** the query.

--Click the **Process** button on the Standard toolbar.

--In the Limit dialog box, click the **OK** button to accept **Blues On the Bayou** as the selected value for the Product Name.

8. **Format** in the Results section to make the data easier to read. The Results section should contain 5 rows.

--Select the **Total Amount** column in the Content pane, right click, and click **Number**. In the Properties dialog box, select **#,##0** from the list of currency formats and click the **OK** button.

--Select the **Average Unit Quantities** in the Content pane, right-click, and click **Number**. In the Properties dialog box, select **#,##0** from the list of formats and click the **OK** button.

--Resize each column by dragging the column margins.

9. **Save** the document.

--On the File menu, point to **Save Options**, click **Save Query Results With Document**.

- In the “**Save Query Results With Document**” dialog box, click the **OK** button to accept the settings (to save the results for “Query”).

--On the **File** menu, click **Save As**

- In the Save File dialog box, browse to the desktop, enter **Lab2** as the file name, and click the **Save** button.

Lab Exercise 3: Table Report

Objective:

Create a tabular style report from the results of the query stored in Lab 1. Display Unit Sales and Amount Sales for products sold in Berlin and Munich and sort the report columns alphabetically. Calculate grand totals and break totals (by City) for Unit Sales and Amount Sales. Add headers, footers and format the report.

Step-by-Step Answers:

The following lists step-by-step instructions in order to compete the exercise for Lab 3.

1. Using Brio Insight, open the document created in Lab Exercise 1 named Lab1.

- Select the BQY file on your Desktop. Right click and select **Open With...**
- Select **Internet Explorer** and click **OK**.

2. Create a report in the Table section.

--On the Insert Menu, click New Table.

--Drag **Country, City, Full Date, Product Category, Product Name, Unit Sales, and Amount Sales** from the Catalog pane to the Outliner.

3. **Sort** the table.

--Click **Sort** on the Section Title bar if the Sort line is not displayed.

--Drag the columns **City, Full Date, and Product Name** in the Content pane to the Sort line.

4. **Limit** the table data.

--Click **Limit** on the Section Title bar if the Limit line is not displayed.

--Drag the **Product Category Column** from the Catalog pane to the Limit line.

- In the Limit dialog box, click the **Show Values** button and select the following values: **Drama, Entertaining, Fitness, Games, Humor, Movies, Music, and Theatre**.
- Click the **OK** button to finish. There are now 14 of 56 rows displayed.

5. **Total** and **subtotal** the Unit Sales and Amount Sales columns.

--Select a column in the Content pane, right-click, and click **Grand Total**.

- In the Insert Grand Total dialog box, select **Sum** as the data function, select **Unit Sales**, and click the **OK** button.

--Select a column in the Content pane, right-click, and click **Grand Total**.

- In the Insert Grand Total dialog box, select **Sum** as the data function, select **Amount Sales** from the list of columns, and click the **OK** button.

--Double-click the cell that intersects the **Product Name** column and the **Unit Sales** grand total row. In the Custom Function dialog box, enter "**Total Unit Sales**" (include quotations) and click the **OK** button. In the Modify Total Function, click the **OK** button.

-- Double-click the cell that intersects the **Product Name** column and the **Amount Sales** grand total row. In the Custom Function dialog box, enter "**Total Amount Sales**" (include quotations) and click the **OK** button. In the Modify Total Function, click the **OK** button.

--Select any column in the Content pane, right-click, and click **Break Total**.

- In the Insert Break Total dialog box, select **City** from the first pull-down menu, **Average** from the second pull-down menu, select **Unit Sales** and **Amount Sales** from the list of columns, and click the **OK** button.

--Select any column in the Content pane, right-click, and click **Break Total**.

- In the Insert Break Total dialog box, select **City** from the first pull-down menu, **Sum** from the second pull-down menu, select **Unit Sales** and **Amount Sales** from the list of columns, and click the **OK** button.

6. **Format** the report.

--On the **Edit** menu, click **Select All**, then, on the **Format** menu, click **Column**, then **Auto-Size Width**

--Select the columns **Country** and **City** in the Content pane, right click, and click **Suppress Duplicates**.

--Select the column **Unit Sales** in the Content pane, right-click, and click **Number**.

--In the Properties dialog box, select **#,##0** as the format under the Number category and click the **OK** button.

--Select the column **Amount Sales**, right-click, and click **Number**.

- In the Properties dialog box, select **\$\$,##0** as the format under the Currency category and click the **OK** button.

--Click **Select All** from the **Edit** menu. On the **Format** menu, click **Border and Background**. A properties dialog box appears.

- Select **3 pt** and the **dark blue** color for the Border.
- Select **light-grey** for the background color
- Select **white** as the alternate color, and select **1** to alternate colors every row.
- Click the **OK** button to finish.

7. Add headers and footers.

--On the **File** menu, click **Print Preview**.

- NOTE: In Print Preview, it may be necessary to exit and then re-enter Print Preview to see certain changes take effect. For example, if you change the page orientation from Portrait to Landscape, you may not see the change on your screen until you exit Print Preview, and then re-enter it. Re-entering Print Preview causes the page to refresh.

--Change the Page Orientation from Portrait to Landscape

- While in Print Preview, right-click anywhere and select Page Setup from the available menu items. Set the Orientation to Landscape and click OK. Note: As described above, you may need to exit and then re-enter Print Preview to see this change take effect.

--On the **View** menu, click **Section/Catalog** to provide more working space in the Print Preview mode.

--Adjust the page margins.

- On the **View** menu, point to **Zoom** and click **75%**.
- Drag the left and right margins outwards until the entire report fits on the page.
- On the **View** menu, point to **Zoom** and click **100%**.

--On the **Insert** menu, click **Page Header** to add the first header

- In the Edit Header dialog box, enter **Product Sales by City** and click the **OK** button.

- Select the header in the content area and on the Formatting toolbar, select font size **12** and **bold**.

--On the **Insert** menu, click **Page Header** to add a second header. Another Edit Header dialog box appears.

- Enter **Cities:**, then click the **Limit** hotstamp button.
- In the Limit Values dialog box, select **Query—City** and click the **OK** button.
- Press the **Return** key on the keyboard to begin a new line in the same header.
- Enter **Product Categories:**, then click the **Limit** hotstamp button.
- In the Limit Values dialog box, select **Results—Product Category** and click the **OK** button.
- In the Edit Header dialog box, click the **OK** button to finish.
- Select the second header, then click the **Justify Left** and **Italic** buttons on the Formatting toolbar.

--On the **Insert** menu, click **Page Footer** to add a footer. An Edit Footer dialog box appears.

- Click the **Date** hotstamp button and press the Enter key.
- Click the **Time** hotstamp button and press the Enter key.
- Click the **OK** button to finish.
- Scroll down to view the footer.

8. **Save** the document.

--On the File menu, point to **Save Options**, click **Save Query Results With Document**.

- In the “**Save Query Results With Document**” dialog box, click the **OK** button to accept the settings (to save the results for “Query”).

--On the **File** menu, click **Save As**

- In the Save File dialog box, browse to the desktop, enter **Lab3** as the file name, and click the **Save** button.

Lab Exercise 4: Pivot Report

Objective:

Using the data stored in the document named Sales Model Meta Topic, create a pivot report that displays semi-annual sales information for regions in Europe and North America during fiscal year 2000. Include a percentage increase or decrease comparison of revenues across the first and second halves and a revenue total for the entire year. Use color, font styles, text justifications, number formats, text styles, and borders to create a report.

Step-by-Step Answers:

The following lists step-by-step instructions in order to compete the exercise for Lab 4.

1. Using Brio Insight, open the BQY file named **Sales Model Meta Topic** on the portal.

--Go to the following URL to log into Brio Portal:

<http://vcmr-107.server.rpi.edu:8080/servlet/WebClient/login>

- Once logged into Brio Portal, click the **Browse** tab.
- Click the **Brio** folder.
- Click the **Brio Training** folder.
- Click on the BQY file entitled **Sales Model Meta Topic**.

2. Drag the following topic items to the Request line:

--**Amount Sales, Region, Territory, Fiscal Year, Fiscal Quarter, and Product Line.**

--Limit **Product Line** to **Books**.

- Drag the topic item **Product Line** to the Limit line
- In the Limit dialog box, click the **Show Values** button, then select **Books** from the list of limit values, and click the **OK** button.

3. **Process** the query.

--Click the **Process** button in the Standard toolbar

--The Query returns 7,880 rows

4. **Create** a pivot report.

--On the **Insert** menu, select **Insert New Pivot**.

--Drag **Region** and **Territory** from the Catalog pane to the Side Labels panel of the Outliner.

--Drag **Product Line**, **Fiscal Year**, and **Fiscal Quarter** to the Top Labels panel of the Outliner.

--Drag **Amount Sales** to the **Facts** panel of the Outliner

5. **Format** the report.

-- On the **Edit** menu, click **Select All**, then, on the **Format** menu, click **Auto-Size Width**

6. Change the **Number** format.

--Click any “cell” of data to highlight all five columns of data. Then, right-click and select **Number**. In the **Properties** dialog box, select **\$#,##0;(S#,##0)** from the list of **Currency** formats and click the **OK** button.

7. **Focus on/Hide**: focus on **Fiscal Year 2000** data and hide **Asia Pacific** data.

--Select the label **2000** in the report, right-click, and then click **Focus on Items**.

--Select the label **Asia Pacific** in the report, right-click, and click **Hide Items**.

8. **Group**: group together Quarter labels to create semi-annual labels.

--Select **Q1** and **Q2** (use the Ctrl key) in the report and click the **Group Items** button on the Pivot menu.

- Double-click ***Q1**, enter ***First Half** in the Set Label Item dialog box and click the **OK** button. (NOTE: including * indicates that the information is grouped.)

--Select **Q3** and **Q4** (use the Ctrl key) in the report and click the Group Items button on the Pivot menu.

Double-click ***Q3**, enter ***Second Half** in the Set Label Item dialog box, and click the **OK** button.

9. **Create Totals**: add totals for **Region**, **Territory**, and **Fiscal Quarter**.

--Select the handle for **Region**, right-click, and click **Add Totals**.

--Select the handle for **Territory**, right-click, and click **Add Totals**.

- Double-click the **Total** label for **Territory**.
- In the Set Label Item dialog box, enter **Subtotal**, then click the **OK** button.

--Select the handle for **Fiscal Quarter**, right-click, and click **Add Totals**.

10. Create a **% Increase** column.

--Select the pivot handle for **Fiscal Quarter**, right-click, and then click **Add Totals** (again).

--Alt-click the second **Total** label for **Fiscal Quarter**, right-click, point to **Data Function**, and then click **% Increase**.

--Alt-click the **% Increase** label, right-click, and then click **Number**. In the Properties dialog box, select **USA** as a locale, select **Percentage** from the list of Categories, select **0%** from the list of formats, and then click the **OK** button.

11. **Format:** hide the data labels in the report.

--On the Format menu, point to **Data Labels** and click **None**.

12. **Spotlight** increase values less than zero.

--On the **Format** menu, click **Spotlighter**.

--Alt-click the **% Increase** label in the report to select the entire column.

--Configure the Spotlighter window, then click the green check mark button.

- Select **<** from the list of operators.
- Enter **0** in the Value field.
- Select the color **red** from the text color pull-down menu.
- Select **light green** from the fill pull-down menu.
- Click the **bold** button.
- Click the green check mark button to activate the color-change.

--Close the Spotlighter window by clicking the **X** in the upper right-hand corner of the window.

13. **Format:** apply color, font styles, and border styles.

--*Color:*

- Select the handles for **Region, Territory, Product Line, and Fiscal Year** (using Ctrl-click), and select **white** from the **Fill** pull-down menu on the Formatting toolbar.
- Alt-click on the label ***First Half** and select **light purple** from the **Fill** pull-down menu on the Formatting toolbar.
- Alt-click on the label ***Second Half** and select **light purple** from the **Fill** pull-down menu on the Formatting toolbar.
- Alt-click on the label **Total** and select **light yellow** from the **Fill** pull-down menu on the Formatting toolbar.
- Alt-click on the label **% Increase** and select **light green** from the **Fill** pull-down menu on the Formatting toolbar.
- Select the handles for **Product Line** and **Fiscal Year** (using Ctrl-click), then select **blue** from the **Text Color** pull-down menu on the Formatting toolbar.
- Alt-click on the **Subtotal** label for **Territory** and select **white** from the **Fill** pull-down menu on the Formatting toolbar.

--*Font Size, Font Style, and Justification:*

- Select the pivot handles for **Product Line** and **Fiscal Year** (using Ctrl-click), and then click the **Bold, Italic, and Justify Right** icons on the Formatting toolbar. Next, change the font size to **12**.
- Alt-click the **Total** label for **Regions** and click the **Bold** icon on the Formatting toolbar. Increase the font size to **12**.
- Alt-click on the **Subtotal** label for **Territory**, select font-size **10**, and click the **Bold** icon on the Formatting toolbar. Next, right-justify the text.
- Ctrl-click the pivot handle for **Fiscal Quarter**, select font-size **10**, click the **Bold** icon on the Formatting toolbar. Next, right-justify the text.

--*Borders:*

- Select the entire report, except for the Product Line and Fiscal Year pivot handles.

-- Ctrl-click the pivot handles for Region, Territory, and Fiscal Quarter. Then, Ctrl-click any “cell” of data to add the columns of data to the selection.

--On the **Format** menu, point to **Borders**, and then click **Horizontal**.

- Select the handles for **Product Line** and **Fiscal Year** (using Ctrl-click), then on the **Format** menu, point to **Borders** and click **None**.

14. **Save** the document.

--On the File menu, point to **Save Options**, click **Save Query Results With Document**.

- In the “**Save Query Results With Document**” dialog box, click the **OK** button to accept the settings (to save the results for “Query”).

--On the **File** menu, click **Save As**

- In the Save File dialog box, browse to the desktop, enter **Lab4** as the file name, and click the **Save** button.

Lab Exercise 5: Pivot Analysis

Objective:

Using the data in the document **Plan vs Actual Query**, create a pivot report that displays the monthly planned and actual costs for year 1999. In addition, find the average costs by region, the territory with the highest costs, the number of superstores in North America, and the name of the manager with the lowest costs for superstores in North America.

Step-by-Step Answers:

The following lists step-by-step instructions in order to complete the exercise for Lab 5.

1. Using Brio Insight, open the BQY file named **Plan vs Actual Query** on the portal.

--Go to the following URL to log into Brio Portal:

<http://vcmr-107.server.rpi.edu:8080/servlet/WebClient/login>

- Once logged into Brio Portal, click the **Browse** tab.
- Click the **Brio** folder.
- Click the **Brio Training** folder.
- Click on the BQY file entitled **Plan vs. Actual Query**.

2. Create a pivot report.

--On the insert menu, click **New Pivot**.

--Rename the Pivot by selecting it, right-clicking, and choosing **Rename Section**. Type Pivot-Cume in the Section Label window and click **OK**.

--Drag **Year** from the Catalog pane to the Top Labels panel of the Outliner (Notice the data is limited to year 1999.)

--Drag **Region** and **Month** from the Catalog pane to the Side Labels panel of the Outliner.

--Drag **Costs Plan**, **Costs Actual**, and **Month Sort** from the Catalog pane to the Facts panel of the Outliner.

--Sort **Month** by **Month Sort** using SUM, ascending.

--Hide the Month Sort fact. In the Outliner, right-click Month Sort and select Hidden Item.

3. Create **Cume** Columns.

--Select the **Costs Actual** column in the report, right-click, and click **Add Cume**.

- In the Pivot Cume dialog box, select **Region** as the scope and click the **OK** button.

--Select the **Costs Plan** column in the report, right-click, and click **Add Cume**.

- In the Pivot Cume dialog box, select **Region** as the scope and click the **OK** button.

4. Add totals by **Region** for **Costs Actual** and **Costs Plan**.

--Select the handle for Month, right-click and choose Add Totals.

--Alt-click the Total to select the entire row and change the text style to **Bold**.

5. Change the number format for all of the data columns.

--Select all of the data columns by Ctrl-clicking within each one. Then right-click and select Number. In the Properties dialog box, select **#,##0** from the list of currency formats and click the **OK** button. Widen the columns as needed by dragging or double-clicking the column margin.

6. **Save** the document.

--On the **File** menu, point to **Save Options**, click **Save Query Results With Document**.

- In the “**Save Query Results With Document**” dialog box, click the **OK** button to accept the settings (to save the results for “Query”).

--On the **File** menu, click **Save As**

- In the Save File dialog box, browse to the desktop, enter **Lab5** as the file name, and click the **Save** button.

Step-by-Step Answers To Additional Questions:

The answers below assume the user begins with Lab 5 (created above) and works sequentially through the questions.

1. Find the average Cost Plan and Cost Actual in each region:

--Duplicate the Pivot-Cume report to preserve the original. Select the Pivot-Cume section in the Section pane and on the **Edit** menu, click **Duplicate Section**.

--Rename the new section Pivot-Surface. Select the new **Pivot** section in the Section pane and on the **Edit** menu, click **Rename Section**. Type Pivot-Surface and click **OK**.

--Alt-click the Total label to highlight the entire total row.

--Right-click, point to **Data Function**, and click **Average**.

--Delete both Cume columns by Ctrl-clicking the label for each and pressing the **Delete** key on your keyboard.

--On the **Pivot** menu, click **Use Surface Values**.

- Use Surface Values is needed to calculate the averages in the total row based on the values in the report, and not in the Results section

The Costs Plan amounts are displayed in the total row:

- Americas: \$2,921,508
- Asia Pacific: \$1,412,650
- Europe: \$2,165,750

--Next, with Surface Values still turned on, drill into any month to show the Store Names.

- Select any month in the report. Right-click, select Drill Anywhere and choose Store Name. The average displayed is now at the Store Level (the lowest level of detail in the Results section). Turn Surface Values off and you'll notice that the average remains the same.

2. Identify the Territory with the highest costs:

Duplicate the Pivot-Cume report again. Rename the new section Pivot-Costs.

--Select the **Americas** label in the report, right-click, and click **Drilldown into Territory**.

--Position the Territory column to the right of the **Region** column in the report by dragging the Territory handle to the left.

--Delete both Cume columns by Ctrl-clicking the label for each and pressing the **Delete** key on your keyboard.

--Using the Sort line, sort **Territory** by **Costs Actual** using **Sum** in **descending** order.

--The sort order indicates that **North America** costs the most.

--The total for North America in the Costs Actual column is **\$31,817,280**.

3. *Find out how many superstores are in North America:*

--First add store type data: Select the label North America in the report, right-click, point to **Drill Anywhere**, then click **Store Type**.

--Select the **Month** handle in the report and click the **Remove** button on the Standard toolbar.

--Select the label **Superstore** in the report, right-click, point to **Drill Anywhere**, and click **Store Name**. Widen the Superstore column in the report. There are **4** superstores in North America:

- Los Angeles
- New York
- Vancouver
- Westwood

4. *Identify the manager of the store with the lowest costs:*

- Sort **Store Name** by **Costs Actual** using **Sum** in **ascending** order.

The report indicates that the **Vancouver** store costs the least.

The total cost for the year is **\$4,078,800**.

--Lastly, identify the manager for the Vancouver store:

- Select the **Vancouver** label in the report, right-click, point to **Drill Anywhere**, and click **Drill to Detail**.
- In the dialog box, click the **OK** button to continue.
- In the “Select Column(s) to retrieve” dialog box, click the **Stores** check box, then click the **Store Manager** check box, and click the **OK** button.

The store manager is named **Green**.

5. **Save** the document.

--On the **File** menu, point to **Save Options**, click **Save Query Results With Document**.

- In the “**Save Query Results With Document**” dialog box, click the **OK** button to accept the settings (to save the results for “Query”).

--On the **File** menu, click **Save As**

- In the Save File dialog box, browse to the desktop, enter **Lab5** as the file name, and click the **Save** button (OVERWRITE THE EXISTING LAB5 DOCUMENT).

Lab Exercise 6: Chart Reports

Objective:

Using the data in the document **Plan vs Actual Query**, create a pivot report that displays the monthly costs for year 1999. For each month, include the number of stores in the business, the planned costs, the actual costs, the actual average cost per store, and the cumulative actual cost.

Step-by-Step Answers:

The following lists step-by-step instructions in order to complete the exercise for Lab 6.

1. Using Brio Insight, open the BQY file named **Plan vs Actual Query** on the portal.

--Go to the following URL to log into Brio Portal:

<http://vcmr-107.server.rpi.edu:8080/servlet/WebClient/login>

- Once logged into Brio Portal, click the **Browse** tab.
- Click the **Brio** folder.
- Click the **Brio Training** folder.
- Click on the BQY file entitled **Plan vs. Actual Query**.

Revenue Chart

2. **Create** a vertical cluster bar chart.

--On the **Insert** menu, click **New Chart**.

--Click **Outliner** in the Section Title bar to display the Chart Outliner.

--On the Section toolbar, select **Vertical Cluster Bar** from the first pull-down menu.

--Drag **Revenue Plan** and **Revenue Actual** from the Catalog pane to the Outliner's Fact panel.

--Drag **Region** from the Catalog pane to the Outliner X-Categories panel.

--On the Section toolbar, select **Legend on Y** from the second pull-down menu.

3. **Rename** the chart title and section name.

--Double-click **Chart** in the Content pane.

- In the Set New Title dialog box, enter **1999 Revenue** and click the **OK** button.

--Right-click **Chart** in the Section pane and click **Rename Section**

- In the Section Label dialog box, enter **Revenue** and click the **OK** button.

4. **Sort** the chart.

--Click **Sort** on the Section Title bar to view the Sort line.

--On the Sort line, select **Region** from the first pull-down menu, select **Revenue Actual** from the second pull-down menu and click the **Descending** button.

5. **Format** the chart.

--Double-click the Content pane. In the **General** tab of the Properties dialog box, deselect the **3-D objects** check box and click the **OK** button.

--Reposition the title **Region** closer to the X-axis labels.

--Select the back and horizontal plane of the chart, and select the **white** fill color on the Formatting toolbar.

--Select any one of the **Revenue Plan** bars, right-click, and click **Properties**. In the **Patterns** tab, select **Vertical** as the fill pattern, select **blue** as the foreground color, and click the **OK** button.

--Select any one of the **Revenue Actual** bars, right-click, and click **Properties**. In the **Patterns** tab, select **Diagonally Up** as the fill pattern, select **red** as the foreground color, and click the **OK** button.

6. Create a **pivot** report.

--On the **Insert** menu, click **Pivot This Chart**

--Format the pivot report and add a **Computed Item** named Difference

--To add a Computed Item, right-click anywhere in the Pivot's Content Pane and select **Add Computed Item...**

--Type Difference in the name field. Click in the **Definition** box, and then click on the **Reference** button. Select **Revenue Actual**, then click OK. Click the **minus** symbol from the group of buttons below the **Definition** box. Click **Reference** again, select **Revenue Plan**, then click OK. Click OK to exit the Computed Item window.

Units Sold Chart

7. Create a pie chart.

--On the **Insert** menu, click **New Chart**.

- Click **Outliner** in the Section Title bar to display the Chart Outliner.
- On the Section toolbar, select **Pie** from the first pull-down menu
- Drag **Territory** from the Catalog pane to the Outliner X-Categories panel.
- Drag **Units Sold Actual** from the Catalog pane to the Outliner Fact panel.

8. **Format** the chart.

--Double-click the chart title in the Content pane, enter **Unit Quantities by Territory** in the Set New Title dialog box, and click the **OK** button. Drag the chart title to the upper left-hand corner of the Content pane.

--Double-click the chart background. In the **General** tab of the Properties dialog box, deselect the **Show subtitle** and **Show legend** check boxes and click the **OK** button.

--Select any pie slice in the Content pane, right-click, and click **Show Pie Values**. Select any pie slice again, right-click, and click **Show Pie Percentages**.

--Click outside of the chart in the Content pane, right-click, and click **Rotate**. Drag the circular arrow upwards to thicken the pie chart. To hide the circular arrow, right-click in the Content pane and click **Rotate** to disable it. Tip: Try zooming the report to 75% before rotating it.

--Reposition all labels, except for **Scandinavia** and **South America**, on top of the slices.

--Select the **Scandinavia** and **South America** labels, right-click, and click **Line to Label**.

--Select the **North America** slice, right-click, and click **Pull Out Slice**.

--Select any label in the chart, select font size **9**, and the **Bold** button on the Formatting toolbar.

--Right-click section title and click **Rename Section**. Enter **Unit Actuals** in the Section Label dialog box and click the **OK** button.

Monthly Trend Chart

9. Create a bar/line chart.

--On the **Insert** menu, click **New Chart**.

--Click **Outliner** in the Section Title bar to display the Chart Outliner.

--On the Section toolbar, select **Bar/Line** from the first pull-down menu.

--Drag **Costs Plan**, **Costs Actual**, and **Month Sort** from the Catalog pane to the Outliner Y-Facts panel.

--Drag **Month** from the Catalog pane to the Outliner X-Categories.

--Drag **Region** from the Catalog pane to the Outliner Z-Categories.

--Hide Month Sort in the Y-Facts panel

--Sort on Month by Month Sort using SUM, ascending.

10. **Focus on** Asia Pacific data.

--Select the **Asia Pacific** label along the Z-Axis in the chart, right-click, and click **Focus on Item**.

11. **Format** the report layout.

--Double-click the chart title on the Content pane. In the Set New Title dialog box, enter **Monthly Trend**, and click the **OK** button.

--Right-click the section title in the Section pane and click **Rename Section**. Enter **Monthly Trend** in the Section Label dialog box and click the **OK** button.

--Click **Asia Pacific** on the Content pane and select **red** from the **Text Color** pull-down menu.

- Hide the axis labels **Month** and **Region** as well as the Z-Axis value **Asia Pacific** in the report.
 - Double-click the chart background
 - In the Properties dialog box, click the **Labels Axis** tab.
 - In the X-Axis area, deselect the check box for **Show axis label**.
 - In the Z-Axis area, deselect the check boxes for **Show axis label** and **Show values**.
 - Click the **OK** button to finish.

--Select the back and bottom planes of the chart, and select the **white** fill color on the Formatting toolbar.

--Reposition the legend in the upper left-hand corner of the chart.

12. Color the bars and line.

--Select a line marker in the chart, right-click, and click **Properties**. A Properties dialog box appears.

In the **Patterns** tab, select the color **blue** and **3 pt** from the line width pull-down menu; select the **Circle** marker style, size **3 pt**, border color **black**, fill color **red**, and click the **OK** button.

--Select any bar in the chart, right-click, and click **Properties**. In the **Patterns** tab of the Properties dialog box, click the color **red** in the **Foreground** and click the **OK** button.

13. Scale and format the axes.

--Double-click the chart. In the Properties dialog box, click the **Values Axis** tab.

- Rename the left axis label as **Costs Plan**.
- Select the check box for **Show right axis label** and enter **Costs Actual** in the edit field.
- Deselect **Auto** in the Interval area, enter **500000** in the “At every” field and click the **OK** button.
- In the report, select the **Costs Plan** axis label, right-click, point to **Justify**, and click **Horizontal**. Resize the text box. Do the same for the **Costs Actual** axis label.
- Select the **Costs Plan** label and the left axis values (use the Ctrl key), and select the color **red** from the Text Color pull-down menu on the Formatting toolbar.
- Select the **Costs Actual** label and the right axis values (use the Ctrl key), and select the color **blue** from the Text Color pull-down menu on the Formatting toolbar.

14. Add a Cume Chart (OPTIONAL)

- Insert a new PIVOT
- Side Labels:
 - Region
 - Month

- Top:
 - Year
- Fact:
 - Revenue Plan
 - Revenue Actual
 - Month Sort
- Sort:
 - Month by Month Sort, SUM, Ascending
- Add a Cume Column for Revenue Plan and Revenue Actual
- Hide the non-cume facts in the Outliner
- Focus on Americas
- Chart the Pivot (under Insert Menu)
- Chart Type: Bar / Line
- Rename Chart Section:
 - Revenue Plan vs Revenue Actual Cume Chart

15. Save the document.

--On the **File** menu, point to **Save Options**, click **Save Query Results With Document**.

- In the “**Save Query Results With Document**” dialog box, click the **OK** button to accept the settings (to save the results for “Query”).

--On the **File** menu, click **Save As**

- In the Save File dialog box, browse to the desktop, enter **Lab6** as the file name, and click the **Save** button.