**Financial Data Analysis**

**Guided Outline**

Account Hierarchies > **Open [1.1\_Account\_Hierarchies\_Starter.twb]**

1. Connect to the Accounts Excel workbook and bring out the Accounts\_Parent\_Child sheet. This is the un-flattened original data.

2. Try pulling out various fields such as Account Type Name, Account Number and Account Parent Key to review data structure.

3. Add a second data source. Re-connect to the Accounts Excel workbook and bring out the Accounts\_Flattened sheet. This is the flattened, prepared data.

4. Try pulling out various fields such as Account Type Name, Account Number and Account Name to review data structure.

Department Hierarchies > **Open [1.2\_Departments\_Hierarchies\_Starter.twb]**

1. Connect to the Departments Excel workbook and bring out the Departments\_Parent\_Child sheet. This is the un-flattened original data.

2. Try pulling out various fields such as Department Key, Department Number, Department Name and Department Parent Key.

3. Add a second data source. Re-connect to the Departments Excel workbook and bring out the Departments\_Flattened sheet. This is the flattened, prepared data.

4. Try pulling out various fields such as Department Key, Department Number, Department Name and Department Parent Key.

Actual vs. Forecast > **Open [1.3\_Exercise\_Actual\_vs\_Forecast\_Starter.twb]**

Bring in the Data

1. Connect to the Export\_Actuals Excel workbook. Create a wildcard union to bring in Export\_Budget and Export\_Forecast.

2. Add both the Accounts and Departments Excel workbook by using the blue Add.

3. Join the Export Union to the Accounts\_Flattened table on Account Number and Account Level 2 Number.

4. Join the Export Union to the Departments\_Flattened sheet on Department Number and Department Level 1 Number.

Create Your Calculations

1. Create a calculated field that grabs Actual amounts.

2. Create a calculated field that grabs Forecast amounts.

3. Create a calculated field that finds the difference between Actual and Forecast amounts.

4. Create a calculated field that finds the percent difference between Actual and Forecast amounts.

Actual vs Forecast – Crosstab Sheets

1. Create Account hierarchy.

2. Create Department hierarchy.

3. Create a Summary sheet at the Account/Department Level 0.

4. Add Account Level 0 Name and Version filters to the sheet.

5. Create a Details sheet at the Department Level 0 and Account Level 1.

Actual vs Forecast – Crosstab Dashboard

1. Drag out the Summary and Details sheets to a dashboard.

2. Change the filters so their selections apply to both sheets in the dashboard.

3. Format as necessary.

Actual vs Forecast – Visual Sheets

1. Create a bullet chart with reference lines showing Variance.

2. Add filters for Period Ending Date, Version, Account Type Name, Department Level 0 Name and Department Level 1 Name.

3. Create a line chart that shows Variance % over time.

4. Create a second bullet chart with reference lines showing Variance broken up by Account.

Actual vs Forecast – Visual Dashboard

1. Drag the sheets out to the dashboard.

2. Set all filters to apply to all three of the worksheets.

3. Add Dashboard Action from Natural Accounts to Variance YTD.

4. Format to taste.

Bonus – Income Statement > **Open [2.0\_Bonus\_Income\_Statement\_Starter.twb]**

1. Review the Starter Income Statement sheet. Note the lack of drill down capability and the calculated fields that have been created.

2. Create a Summary sheet that breaks up Actual, Forecast and Variance by the Account and Department hierarchies created in the Actual vs Budgets/Forecast section.

3. Create a Totals sheet that shows high level Income Statement information.

4. Combine Summary and Totals sheets into a dashboard for analysis.

5. Check out Andy Kriebel's version for another way to visually explore Income Statement data.

Depreciation/Amortization Schedules > **Open [3.0\_Exercise\_Depr\_Amort\_Schedules\_Starter.twb]**

Bring in the Data

1. Connect to the Assets Excel workbook.

2. Use a cross data source join to connect to the Dates Excel workbook.

3. Join the Dates table from the Dates source to the Data table from the Assets source.

Create Your Calculations

1. Create a calculated field for Term Length (months).

2. Create a calculated field for a Date filter.

3. Create a calculated field for Monthly Depreciation.

4. Create a calculated field for Status.

5. Create a calculated field for Asset Count.

6. Create a calculated field for Accumulated Depreciation.

7. Create a calculated field for Asset Cost.

8. Create a calculated field for Net Book Value.

9. Create a parameter called As of Date.

Visual Depreciation Schedule

1. Create the basic structure of the chart by bringing out Monthly Depreciation, Asset Type and Date Value.

2. Let's fix the duplication by bringing out our Date Filter and choosing True.

3. Make the Monthly Depreciation axis independent to better see the data.

4. Bring out a Status filter to allow the end user to choose Active, Closed (Fully Depreciated) or Pending (Construction in Process) assets.

5. Bring out the As of Date parameter.

6. Bring Asset ID to detail in order to see individual asset information.

7. Bring out a Medan with 95% CI to provide dynamic analysis.

8. Format to taste.

Visual Status Changes

1. Bring out Asset Cost, Asset Start Date and Asset ID to begin visualizing all of your fixed assets.

2. Bring out Asset Type and Status to better visualize the breakdown of your assets.

3. Bring out the As of Date parameter.

4. Format to taste.

Asset Detail

1. Bring out Asset Cost and break it up by Asset ID.

2. Bring out the As of Date parameter.

3. Let's fix the duplication by bringing out our Date Filter and choosing True.

4. Bring out the rest of our measures - Accumulated Depreciation, Net Book Value, Monthly Depreciation and Asset Count to give a more holistic view of each asset.

5. Bring out Asset Name, Asset Start Date, Asset End Date and Status to complete the picture.

6. Bring out Totals.

7. Format to taste.

Fixed Assets – Visual Dashboard

1. Drag out our Visual Depreciation Schedule, Asset Status Change and Asset Detail sheets we created in the earlier challenges.

2. Bring out Status and Asset Type filters if they did not appear by default. Set the filters to apply to all worksheets on the dashboard.

3. Enable dashboard actions from the Visual Depreciation Schedule and the Asset Status change to all other sheets on the dashboard.

4. Format to taste.