



Microsoft®

Excel

Dashboard Creation

#280 – 1855 KIRSCHNER ROAD
KELOWNA, BC V1Y4N7
250-861-8324
TOLL FREE: 1-877-954-8433

INFO@POWERCONCEPTS.CA
WWW.POWERCONCEPTS.CA

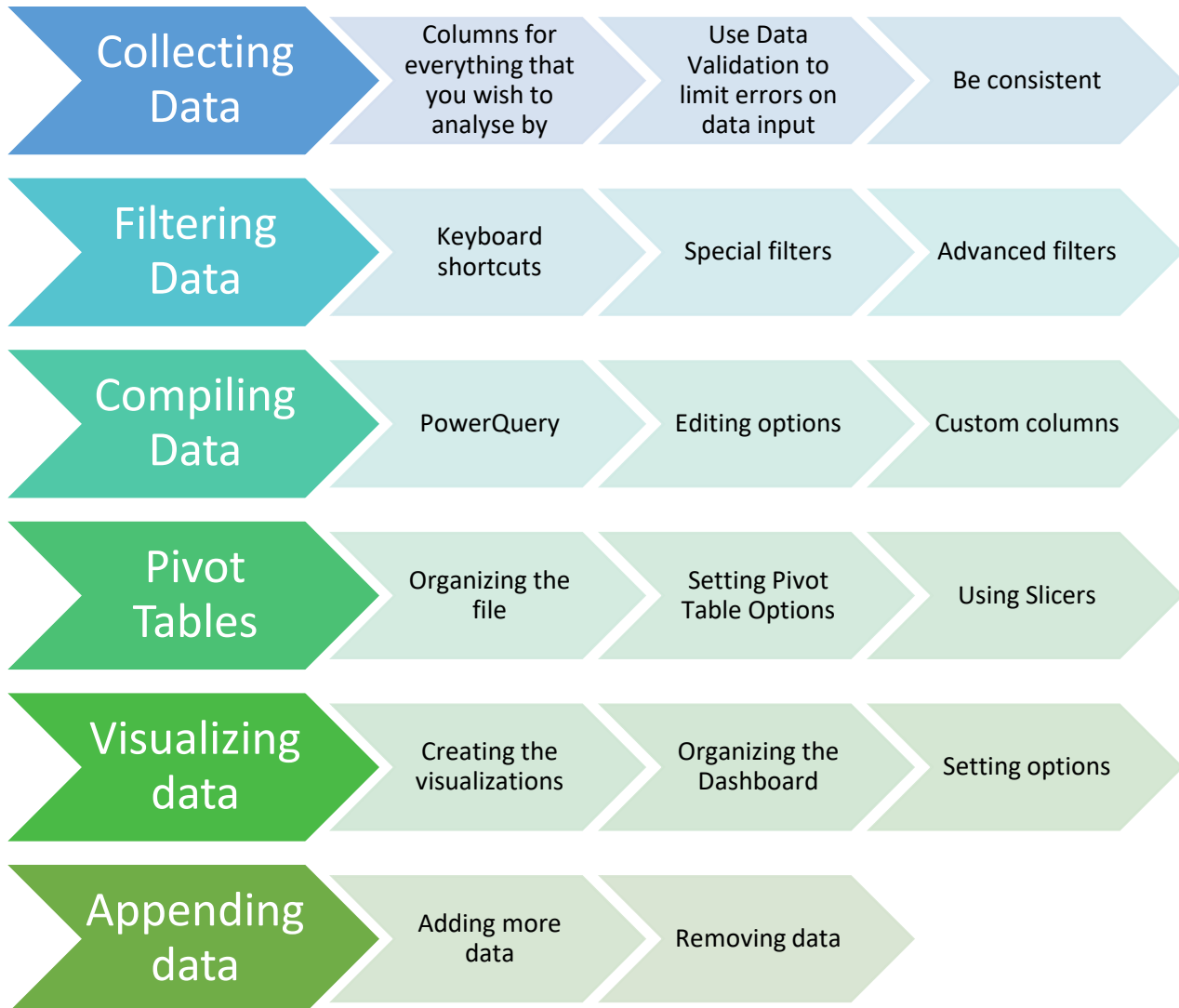


Dashboard Creation

Contents

Process Overview	2
Setting up Excel	3
Collecting Data	3
Power Query	4
Filtering Tips.....	4
Create a Pivot Table	5
Line Chart – Regions by Time.....	5
Bar Chart – Region and Facility	5
Stacked Column Chart – Department by Facility	5
Pie Chart – Region Total.....	6
Clustered Column – Departments by Hospital	6
Adding Slicers	6
Assembling the Dashboard	7
Update Data	8
Cleaning Up The View	8

Process Overview



Setting up Excel

1. Put Quick Access tool bar below ribbon
2. Add sort buttons
3. Add create from selection from Formulas tab
4. Add data validation from Data tab
5. Add clear filter from Data tab

Collecting Data

1. Open a file and name Sheet 1, Data
2. Add a second sheet and rename Lists
 - a. Start a list called Hospital and name some hospitals
 - b. Make table
 - c. Name range
 - d. Go to column E and start a list called Departments, name some departments
 - e. Make table
 - f. Name range
 - g. Go to column G and start a list called Account Code, name some Accounts
 - h. Make table
 - i. Name range
 - j. Set up hospital data, put City and Health Region columns beside Hospital
 - k. Name the table
3. Create a fresh column for everything you want to analyze by
4. Enter column for Record, Date, Hospital, City, Health Region, Department, Account Code, Budget, Actual
5. Add the first row
 - a. Record =ROW()-1
 - b. Date – Data Validation
 - c. Hospital – List
 - d. Department – List
 - e. Account Code – List
 - f. City – use VLOOKUP
 - g. Health Region – use VLOOKUP
 - h. Move the columns City and Health Region to the end using SHIFT + Drag
6. Make into a Table
7. Test update

Power Query

1. Create a new folder called Reports
2. Take 4 files from sample data and move in to Reports folder
3. Open a blank Excel file and Save As (any where except the Reports folder), name Summary Report
4. Go to Data, Get Data, From File, From Folder
5. Browse to Reports and select OK
6. Select combine and edit
7. Select the sheet, Data1
8. Use first row as headers
9. Select the first column, and remove column
10. Check all the column types
11. Go to the Hospital column and filter out the null
12. Select Close and Load
13. Sort by Date
14. Check the bottom records
15. Open Edit Query
16. Filter Hospital column and uncheck Hospital
17. Add May from Data folder to Reports folder
18. Right click on the sheet and select refresh
19. Open Edit Query
20. Add a new custom column with Variance
21. Round Actual
22. Close and Load

Filtering Tips

1. Rename sheet to Data
2. Use ALT + Down Arrow and
 - a. press E to get in to Search
 - b. type underlined letter to go to specific menu option
3. Advanced filter
 - a. Add 6 rows on the top
 - b. Copy headings in columns A to I and paste in A1
 - c. Enter criteria in to rows for AND Statement
 - d. Enter criteria in separate rows for OR Statements
4. Common search parameters:
 - a. = Equal to
 - b. < > Not equal to
 - c. < Less than
 - d. < = Less than or equal to
 - e. > Greater than
 - f. > = Greater than or equal to
5. Delete rows with filter criteria at the top

Create a Pivot Table

1. Make a pivot from the table
2. Call the sheet PivotSource
3. Call the Pivot Table PivotSource
4. Date in the rows
 - a. Group by months and years
5. Remove date and years
6. Hospital in the Rows
7. Amount in the Values
 - a. Format the values
 - b. Right click on data/Value Field Settings
 - c. Number Format/Number with 1000's separator
8. Add the future slicers into the filters
 - a. Years, AccountCode and Health Region
9. Go to Analyze, Options
 - a. For empty cells show 0
 - b. Uncheck autofit column widths on update

Line Chart – Regions by Time

1. Copy the Pivot Sheet and rename "LineChart"
2. Rename the Pivot "LinePivot"
3. Rows are Years and Date
4. Columns are Regions
5. Make a Pivot Chart – line chart
6. Right click on filters and hide all field buttons
7. Put legend at the top
8. Add a title

Bar Chart – Region and Facility

1. Copy the Pivot sheet and rename sheet "BarChart"
2. Rename the Pivot "BarPivot"
3. Rows are Regions and Facilities
4. Columns are Blank
5. Create a Bar Chart
6. Hide the field buttons and legend
7. Sort the grand totals in the pivot table to smallest to largest
 - a. Note that the bars represent the sum of the bars

Stacked Column Chart – Department by Facility

1. Copy the Pivot sheet and rename sheet "DeptByFacility"
2. Rename the Pivot "StackedColumnPivot"
3. Rows are Departments
4. Columns are Health Regions
5. Create a Stacked Column Chart

6. Hide the field buttons
7. Resize to show all facilities

Pie Chart – Region Total

1. Copy the Pivot sheet and rename sheet “RegionTotal”
2. Rename the Pivot “RegionTotalPivot”
3. Rows are Regions
4. No columns
5. Create a Pie Chart
6. Hide the field buttons and legend
7. Change chart title to Total Expense by Health Region
8. Select the add elements, chart elements, data label options, more options
 - a. Check category name
 - b. Check value
9. Click on one of the labels and make Bold with keyboard shortcut Ctrl + B
10. Rotate slice 60 degrees with right click on a section and choose Format Data Series
11. Place labels

Clustered Column – Departments by Hospital

1. Copy the Pivot sheet and rename sheet Column Chart
2. Rename the Pivot “Column Pivot”
3. Rows are Department
4. Columns are Hospital
5. Create a Clustered Column Chart
6. Hide all field buttons and legend

Adding Slicers

1. In the Clustered Column sheet go to Analyze tab, insert slicer for Hospital
2. Make the Hospital slicer 4 columns wide
3. Apply and clear slicer
4. Reorganize Objects

Assembling the Dashboard

1. Rename Sheet 1, Dashboard
2. Move sheet to the right of PivotSource
3. Select a1 – t1 and format dark gray
 - a. Add Title and make bold, large and white
4. Paste Pie chart around C2
5. Paste Stacked Column around K2
6. Paste Bar Chart around C20
7. Paste Line Chart around K25
8. Make column B twice the width
9. Click on bar chart and insert slicer for Year, Date, Region and Account Code,
 - a. Resize and position to the left
 - b. Use Alt to have them snap to the grid
 - c. Allow extra space in the Years slicer for more data
 - d. Right click on slicer and go to Year and Date slicer settings
 - e. Hide items with no data
 - f. Make them 2 columns wide
 - g. Recolor the slicers
10. Click on the Years slicer and go to report connections
 - a. Connect all Pivots
11. Go to Account Code slicer and go to report connections
 - a. Connect all Pivots
12. Go to Health Region slicer and go to report connections
 - a. Connect all items
 - b. Test Health region slicer
 - c. Notice that applying the Health Region slicer to the pie chart doesn't make sense
 - d. Clear filters
 - e. Go to report connections and uncheck pie chart
13. Go to Date slicer and go to report connections
 - a. Connect all items except LinePivot
14. Resize shapes using Alt while dragging
 - a. Pie chart C2 to J18
 - b. Stack Column K2 – T23
 - c. Bar chart C19 – J42
 - d. Line chart K – T42
 - e. Make Column T a little wider
 - i. Note the charts resize as well.
15. Resize Pivots
 - a. Go to Slicer settings on Date Pivot
 - b. Change Caption to Month
16. Turn off Gridlines
17. Apply a style (with dark background)
18. Format Each shape with an outline color and make it a width of 6
19. Change Vancouver Health to Green in each chart
20. Change other regions

21. Create a common legend
 - a. Use Shapes
 - i. Text Box
 - ii. Color each box
 - b. Use Alt to snap
 - c. Use Ctrl to copy
 - d. Use Shift to move them straight
22. Get rid of legends in shapes
23. Adjust units of Axis
 - a. Right click and format axis
 - b. Display units as thousands
 - c. Repeat on all graphics to have consistent units
24. Resizing
 - a. It is possible to select shapes and then format and specify the sizes
 - b. If you adjust a row width the shapes will change.
 - i. In the format shape options you can disable this.
25. Changing Charts
 - a. Take the Stack Column Graph and change it to clustered column to compare Health Region spending

Update Data

1. Move new files into reports folder

Cleaning Up The View

1. View
 - a. Gridlines
 - b. Formula bar
 - c. Ribbon
2. File / Options / Advanced
 - a. Hide scroll bars
 - b. Hide sheet tabs
3. Protection
 - a. Right click on slicers and disable moving and resizing
 - b. Protect the sheet but enable Pivot tables and Pivot charts
 - c. Hide other sheets and protect the work book