

Designing Interactive Reports in Power BI Desktop



Agenda

- Designing Interactive Reports
- Importing Custom Visuals
- Publishing a Project to the Power BI Service
- Using the Publish to Web Feature



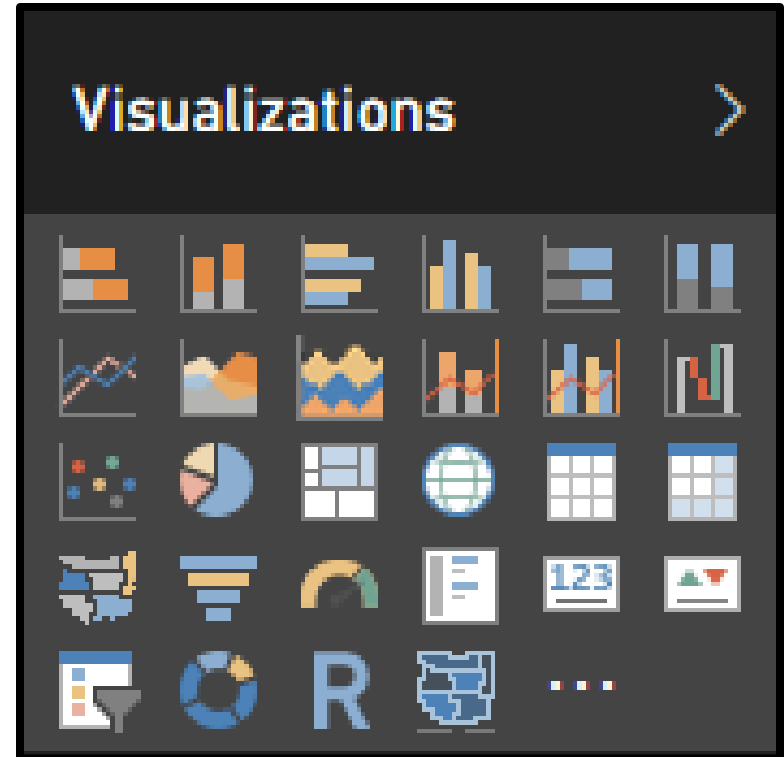
Creating Reports

- Power BI Desktop project contains one report
 - Report within project can contain multiple pages
 - Report pages contains visuals
- Reports can be created using filters
 - You can add filter to a specific visual
 - You can add page-level filters
 - You can add report-level filters
 - You can add interactive filters



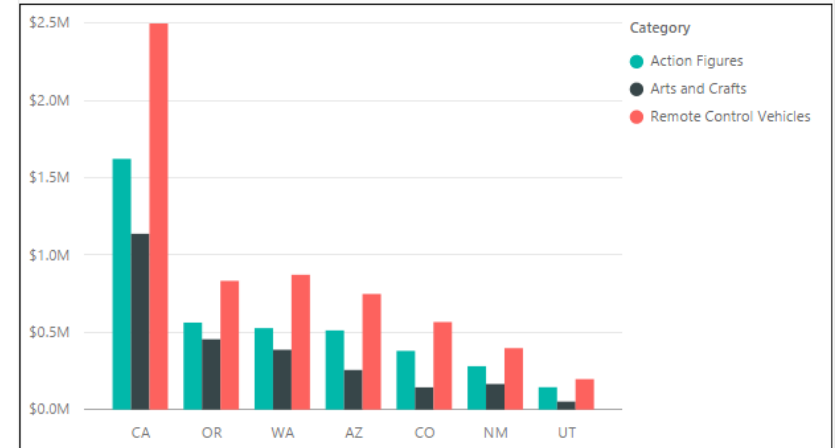
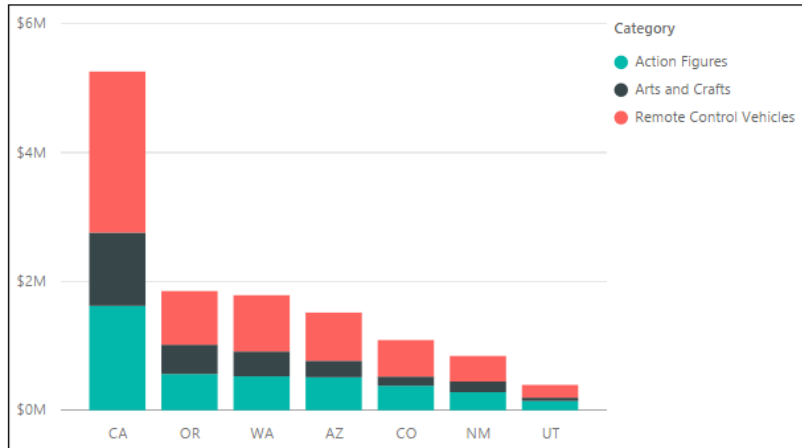
Built-in Visualization Types

- Table and Matrix
- Bar charts and Column charts
- Pie charts and Doughnut chart
- Line chart and Area chart
- Scatter chart and Combo charts
- Card and Multi-row Card
- Treemap
- Waterfall charts
- Funnel charts
- Gauge charts
- Map and Filled Map
- Slicer
- R script visual
- Shape map (in preview)

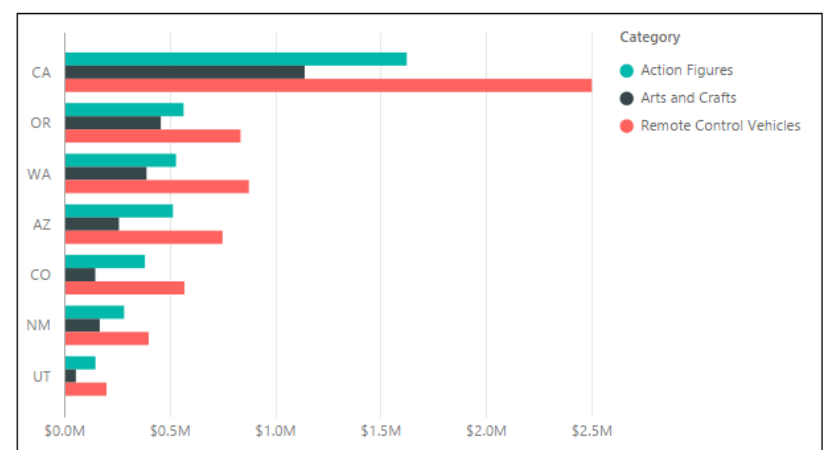
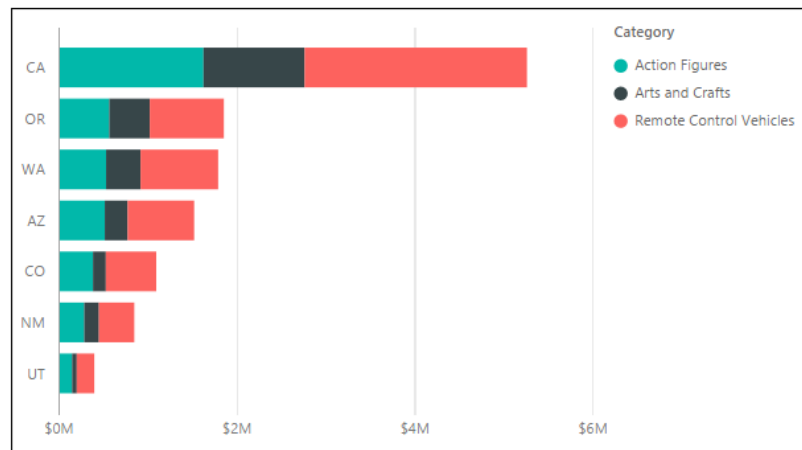


Column Chart and Bar Chart Variations

- Stacked Column Chart and Clustered Column Chart

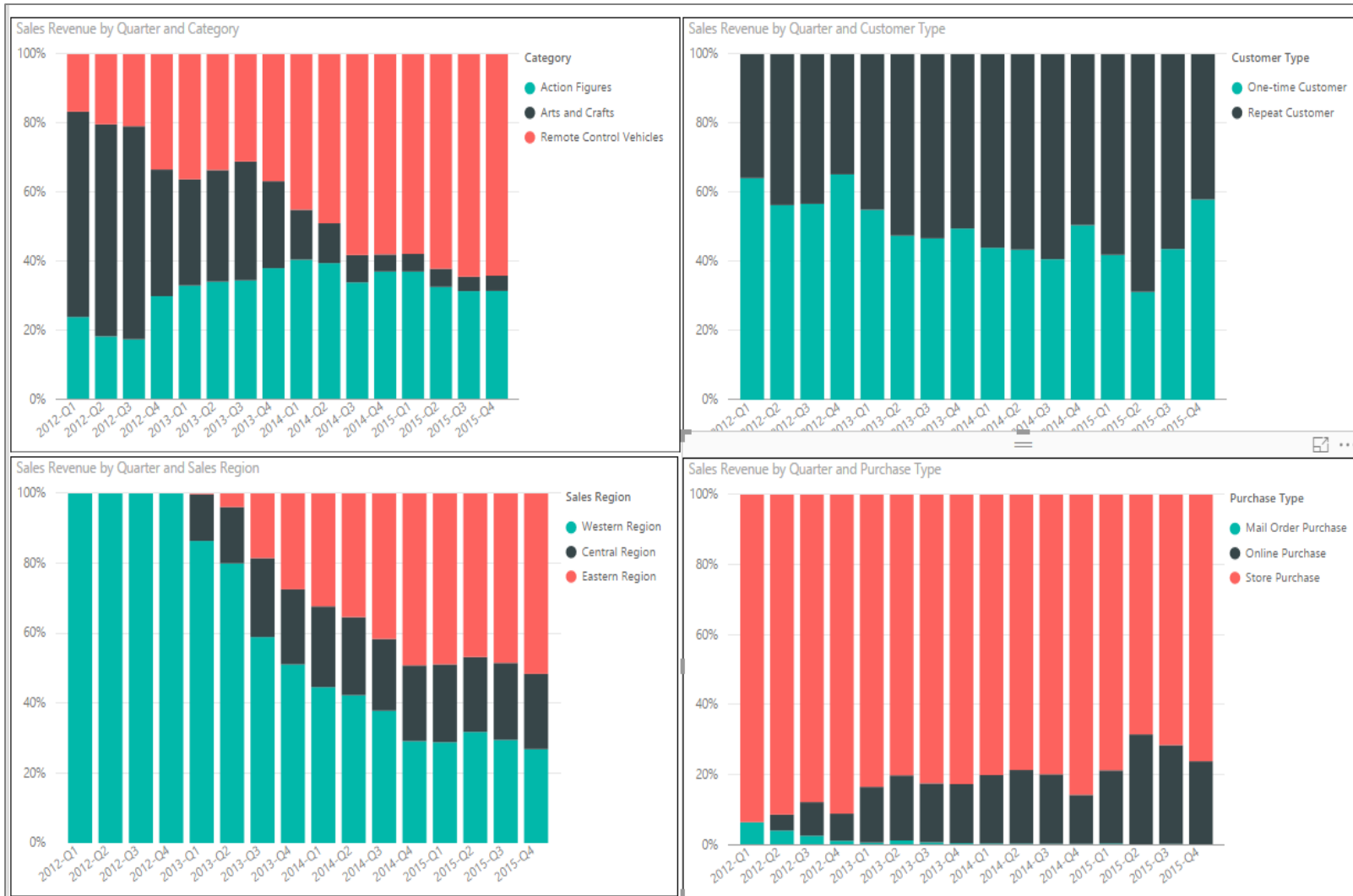


- Stacked Bar Chart and Clustered Bar Chart



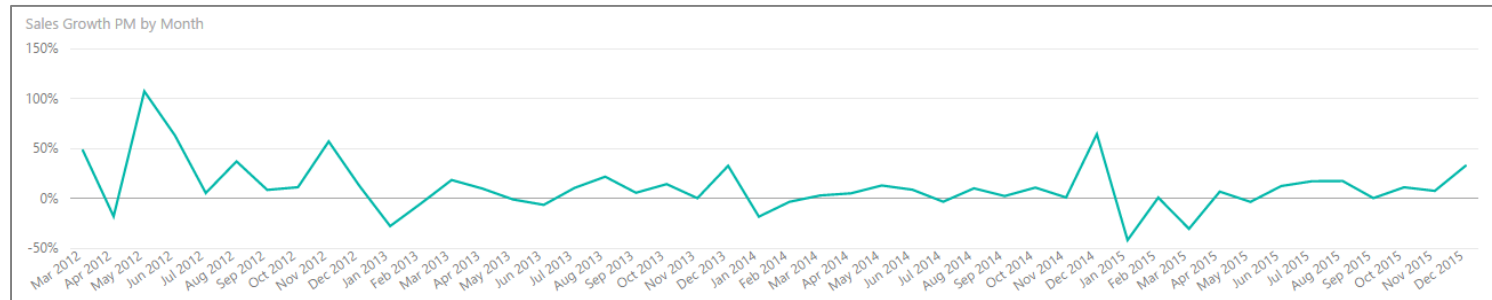
100% Stacked Column Chart

- Used to visual distribution over time across categories

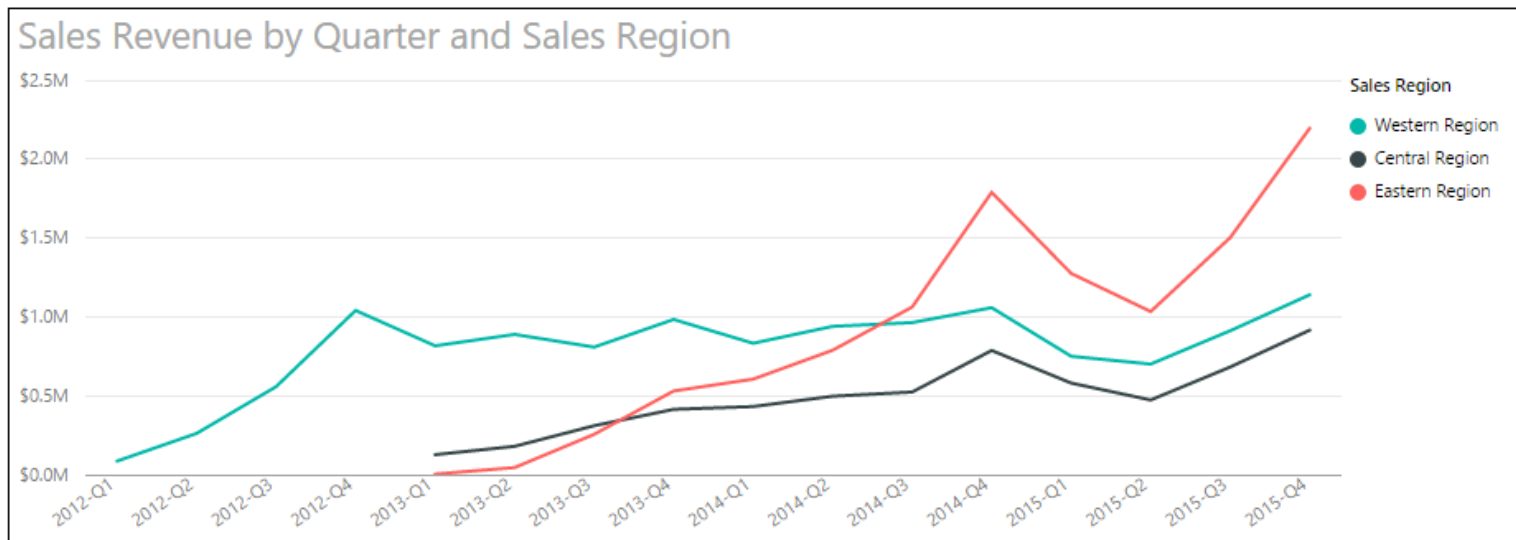


Line Charts

- Visualizes a series of data points across X and Y axis
 - Commonly used for time-based analysis

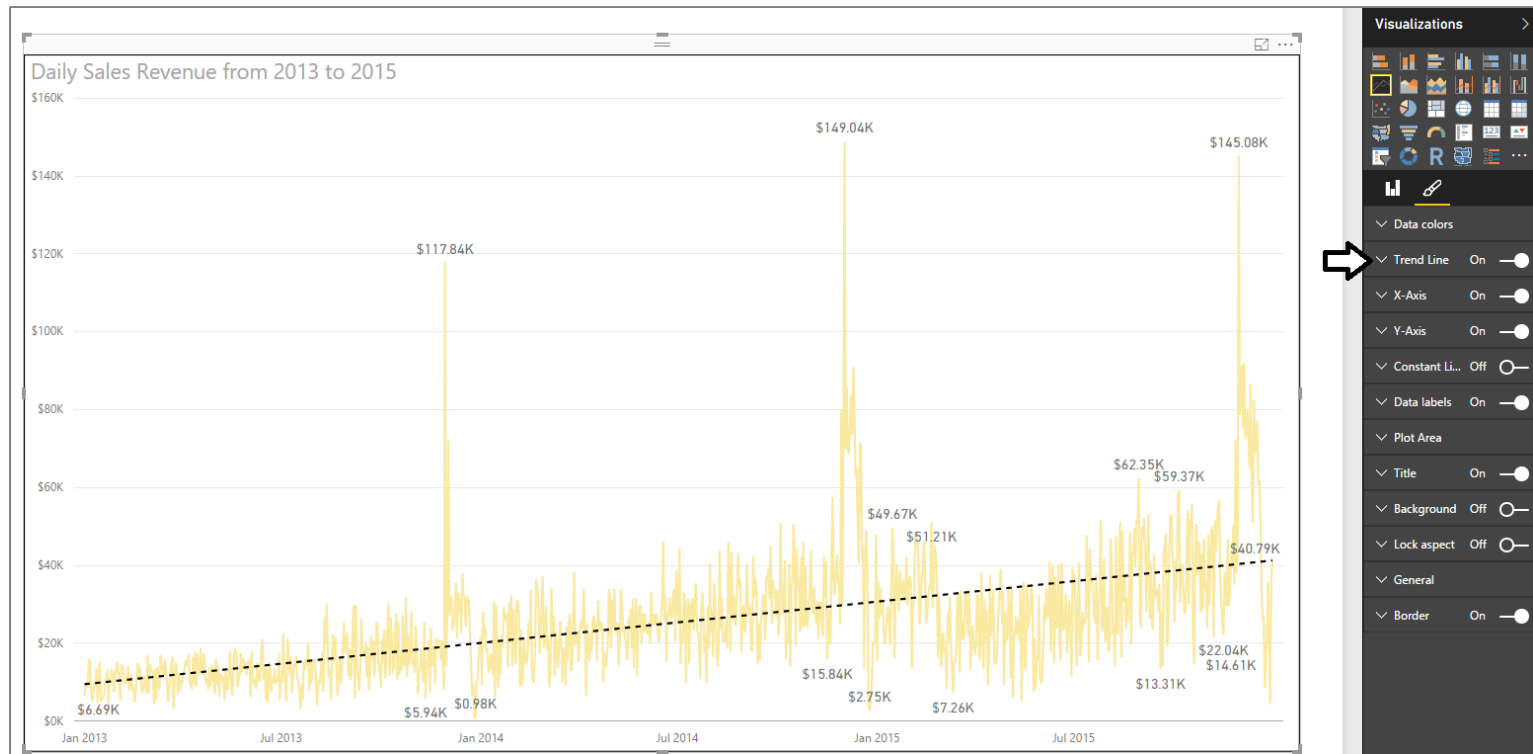


- Add field to Legend to create multiple lines for comparative analysis



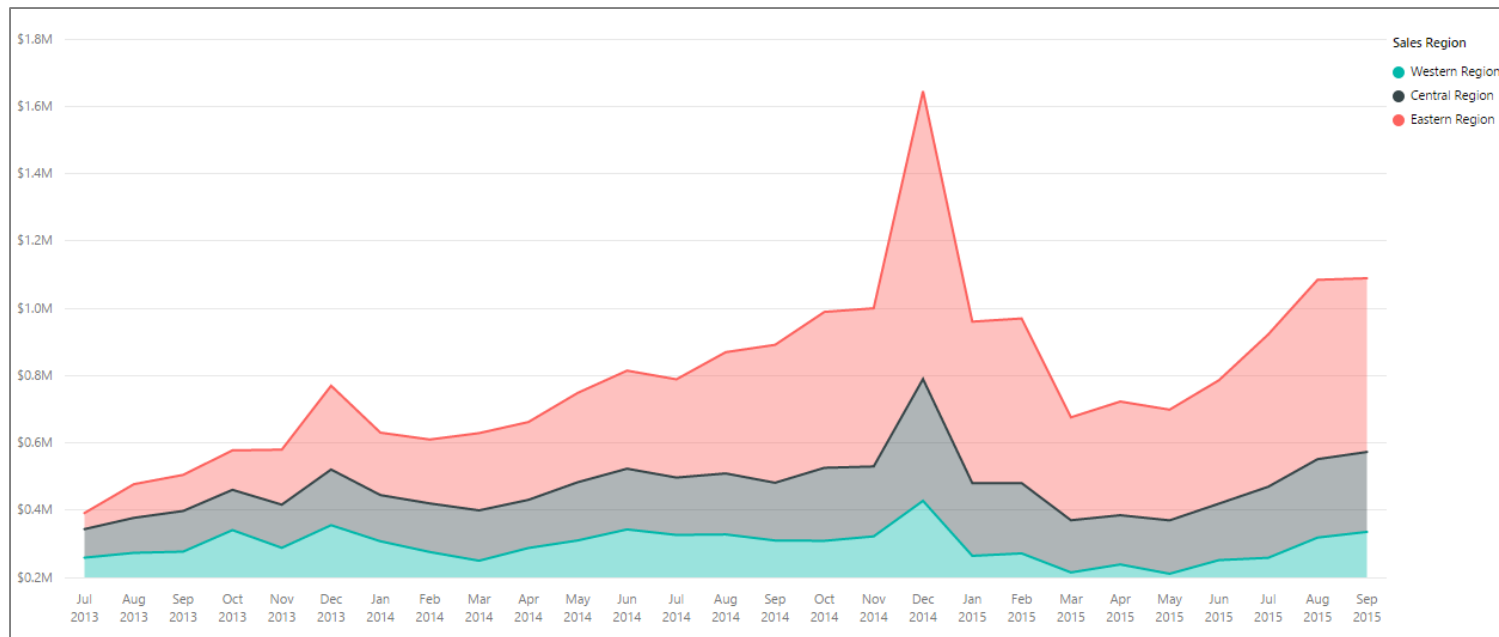
Trend Lines

- Used to visualize trends in series-based data
 - Flattens out the ups and downs
 - Used to determine if values are trending up or down



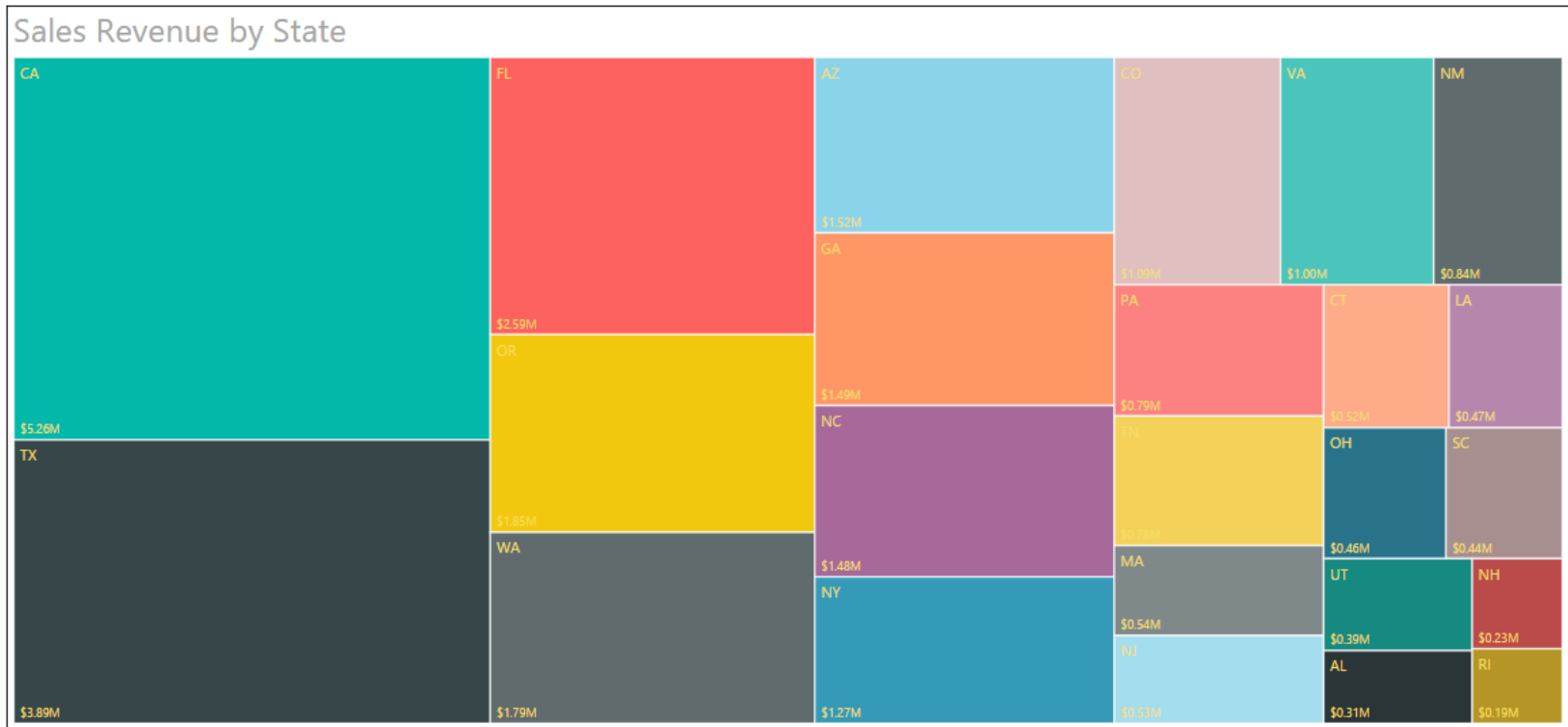
Stacked Area Chart

- Basically, a line chart with a little more personality
 - Areas under lines filled with colors



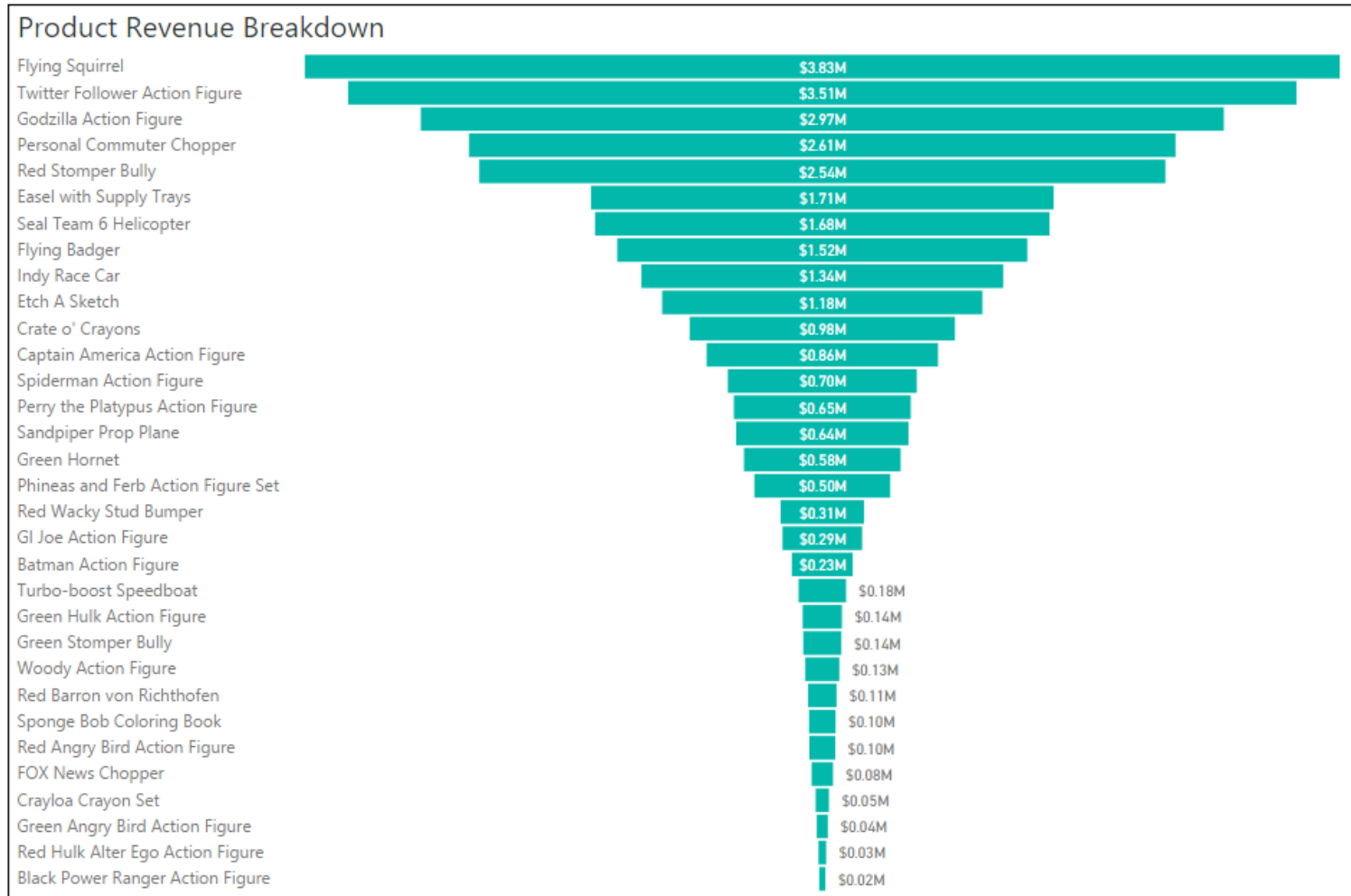
Treemap

- Simple visualization of category distribution



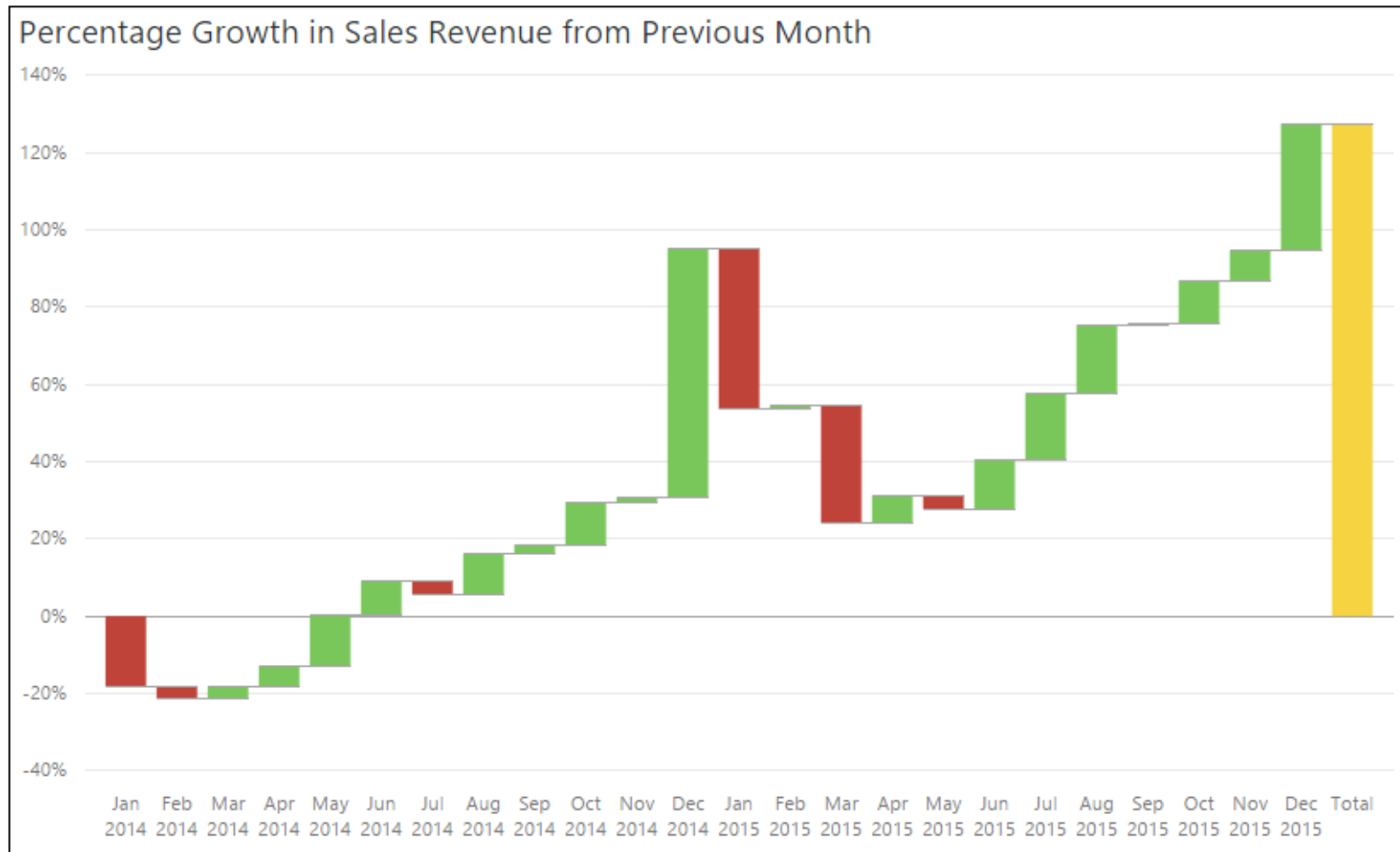
Funnel

- Visualizes distribution across categories as percentage of top value



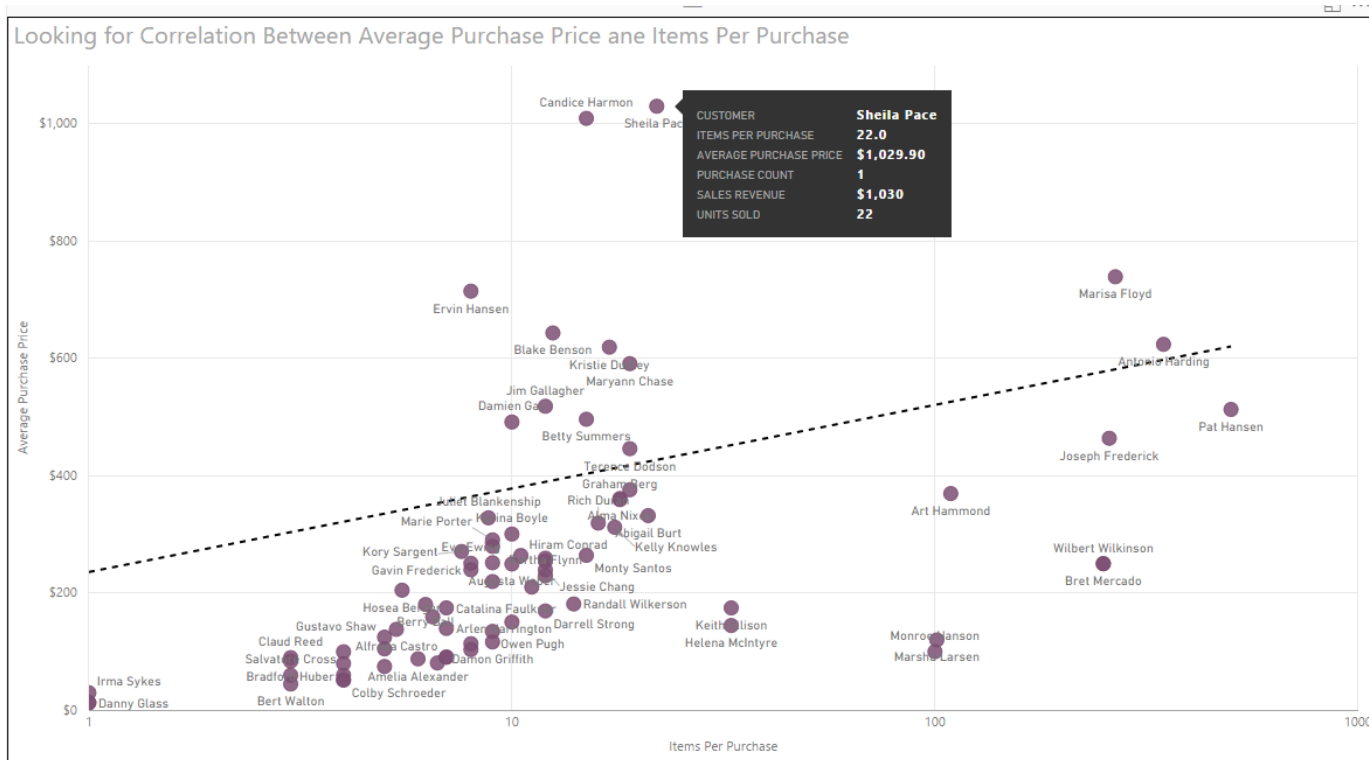
Waterfall

- Visualizes series-based data with positive and negative values



Scatter Chart

- Visualizes set of data points when looking for correlation
 - Scatter chart used to discover correlation between two variables
 - Each data point has two values which are mapped to X and Y axis

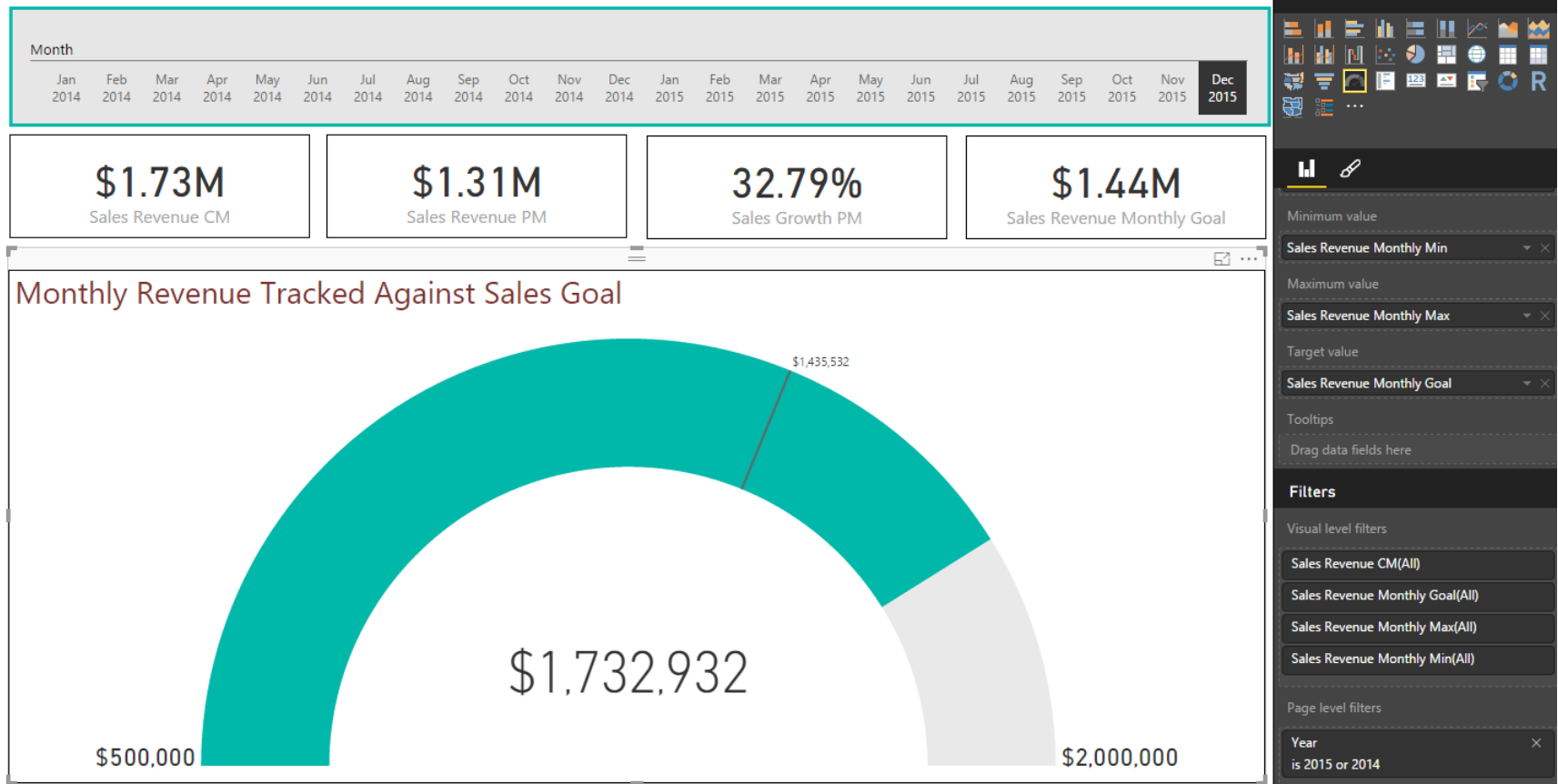


se price?



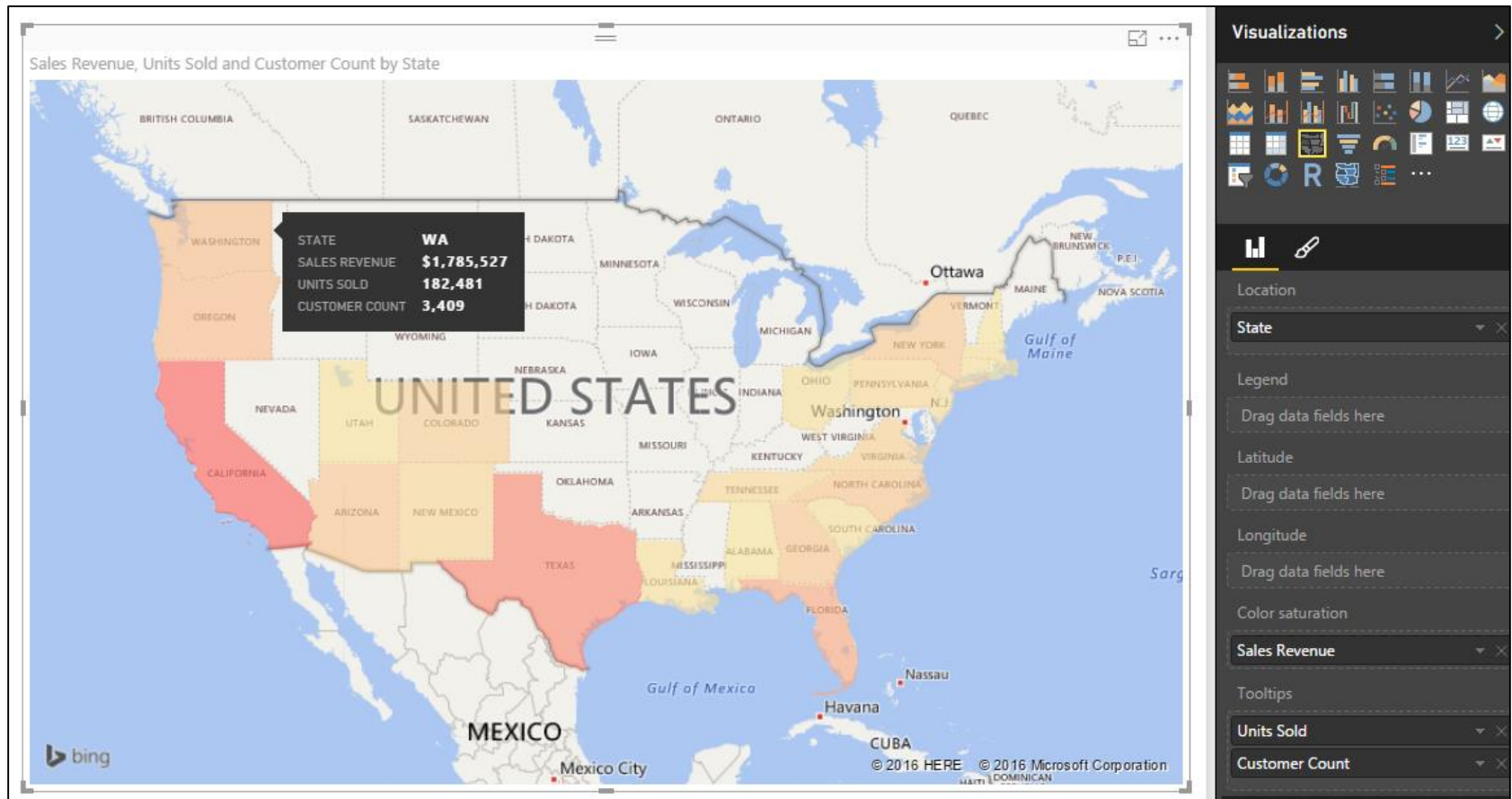
Gauge Visual

- Visualizes how measured value is tracking against goal or budget



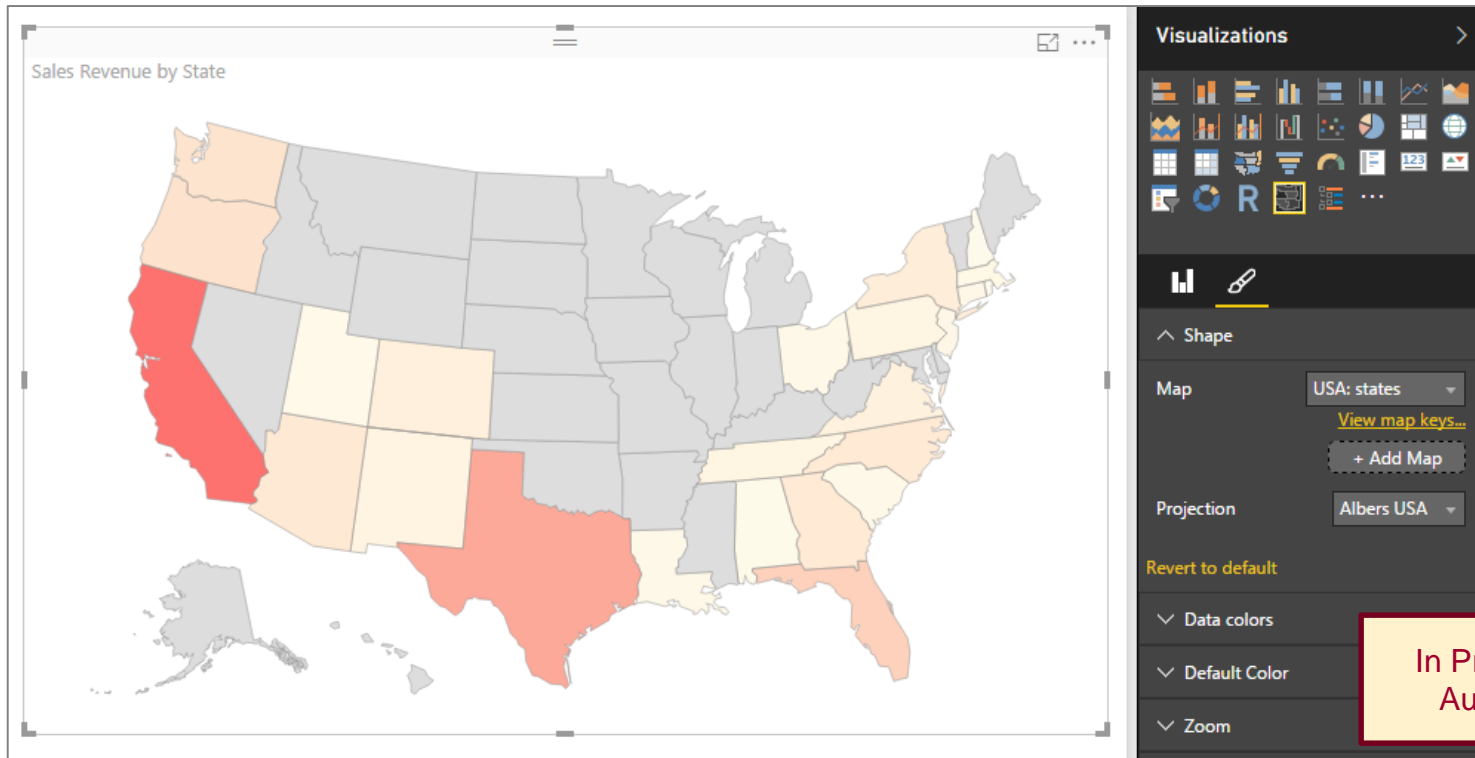
Filled Map

- Visualizes distribution across states and countries



Inline Shape Map

- Similar to filled map with a few important exceptions
 - Based on **TopoJSON** map format created by ESRI
 - Allows for creation of custom maps using JSON
 - Create maps for geography, seating arrangements, floor plans, etc.





DEMO

Exploring Power BI Visuals

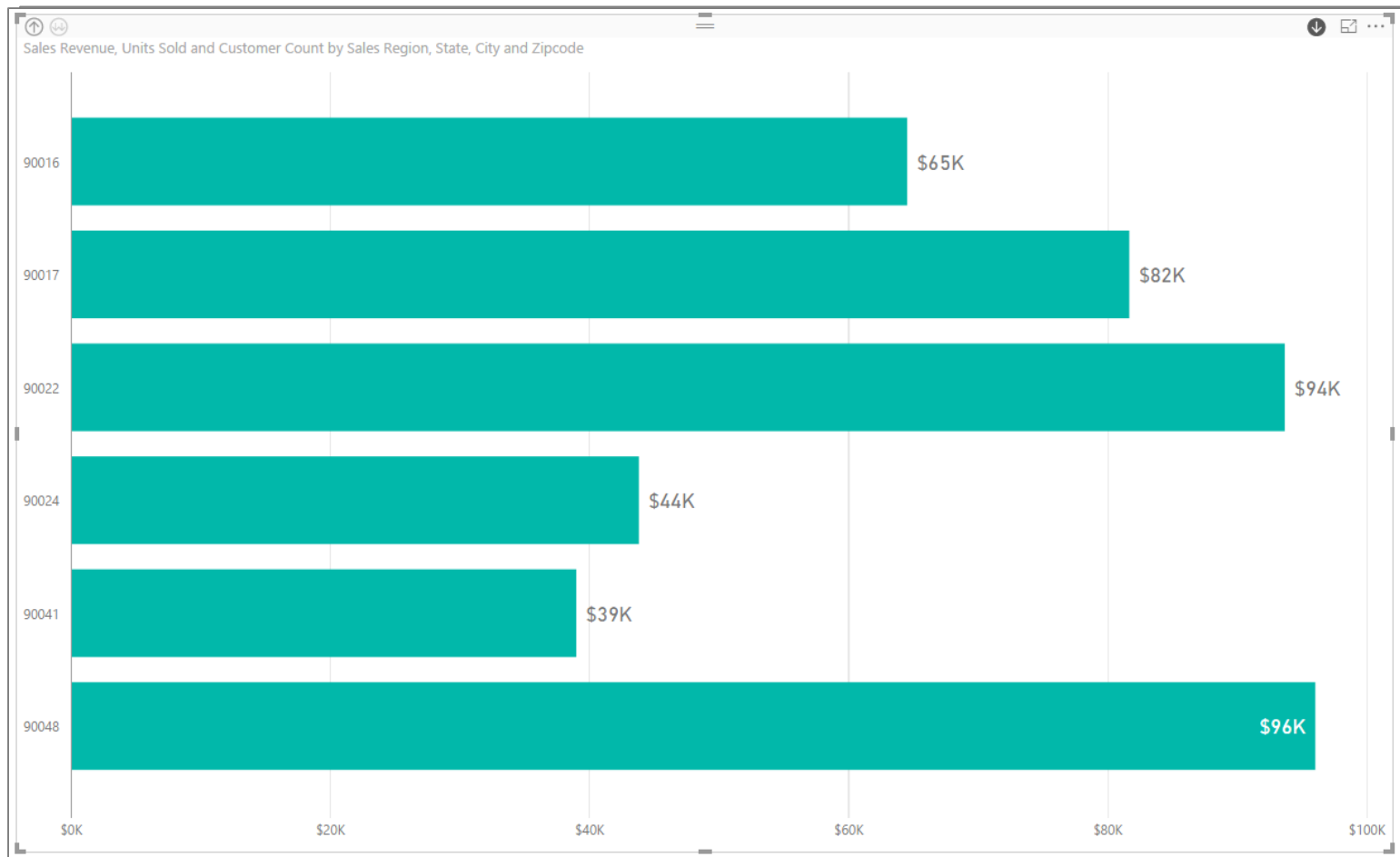
User Interaction with Slicers & Highlighting

- Provides user with interactive filtering control



User Interaction using Drill Actions

- Drill Actions supported when using hierarchies
 - You must enable drilldown mode in visual



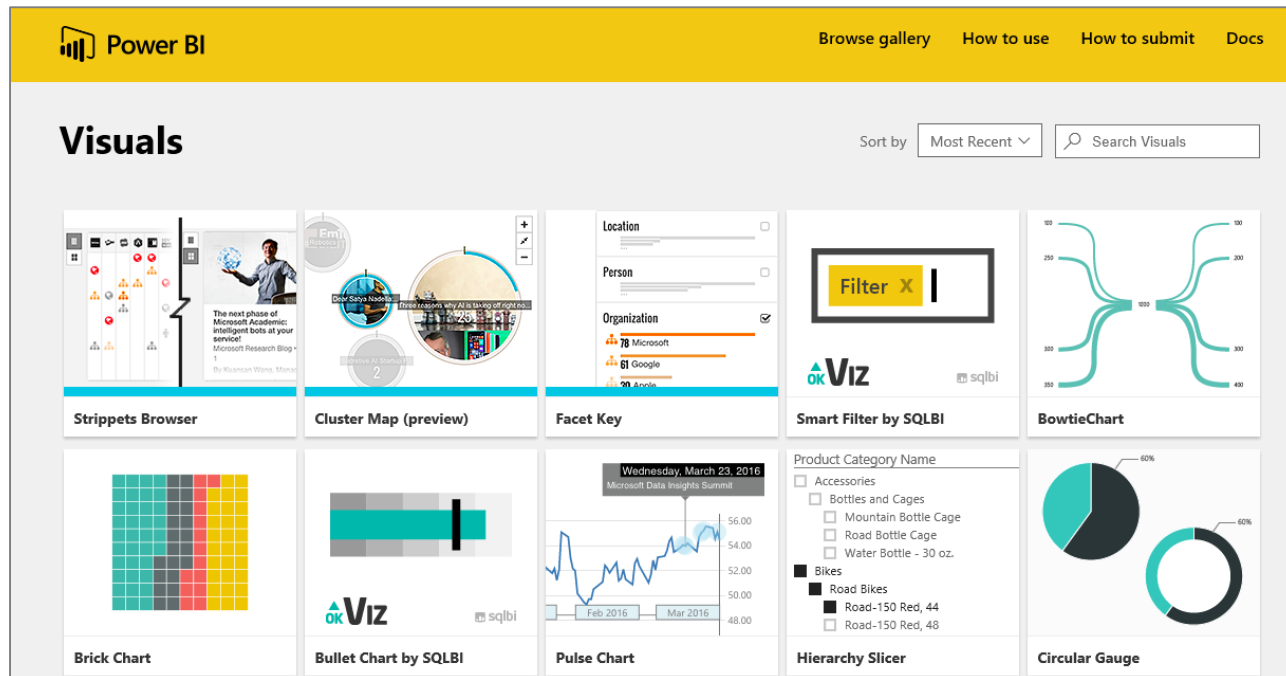
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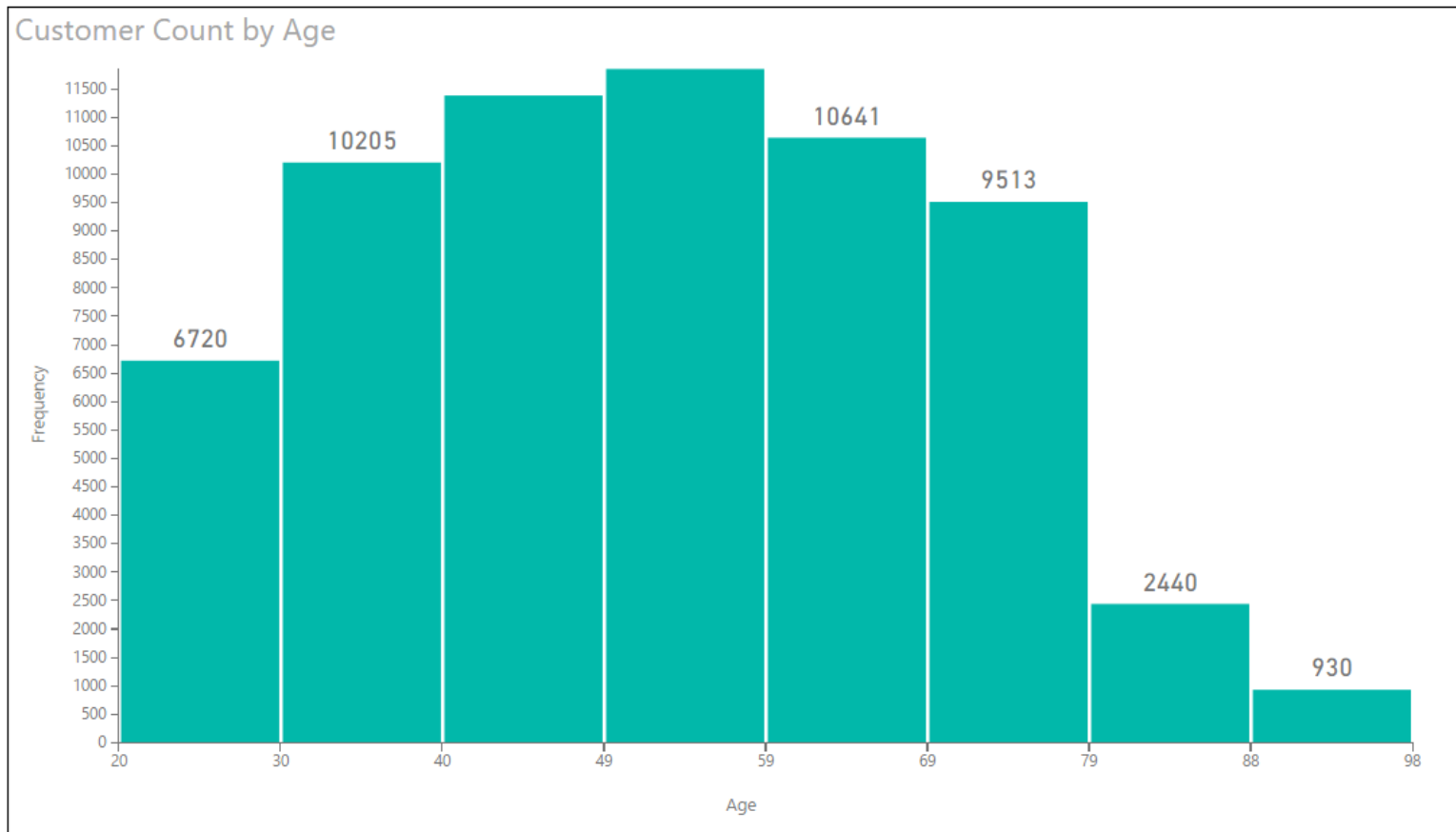
Custom Visual Gallery

- Power BI Framework for Visuals is Extensible
 - Developers can extend Power BI with Custom Visuals
 - Microsoft Hosts gallery of custom visuals
 - Gallery located at <https://app.powerbi.com/visuals/>



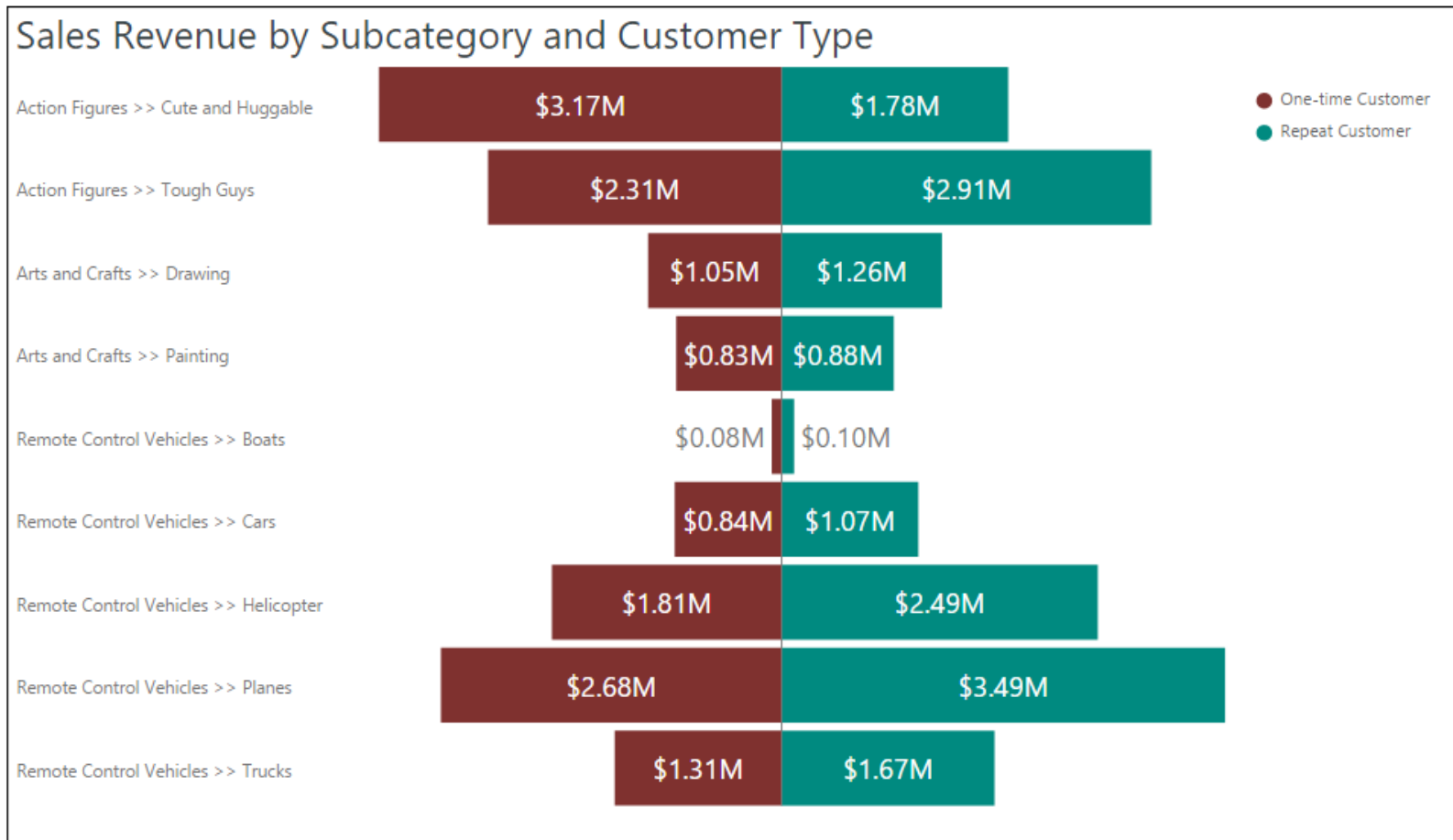
Histogram

- Custom Visual Example 1



Tornado Chart

■ Custom Visual Example 2



Spark Lines

- Custom Visual Example 3

Holiday Season Data Analysis

Daily Sales in Q4 of 2012



Daily Sales in Q4 of 2013



Daily Sales in Q4 of 2014



Daily Sales in Q4 of 2015



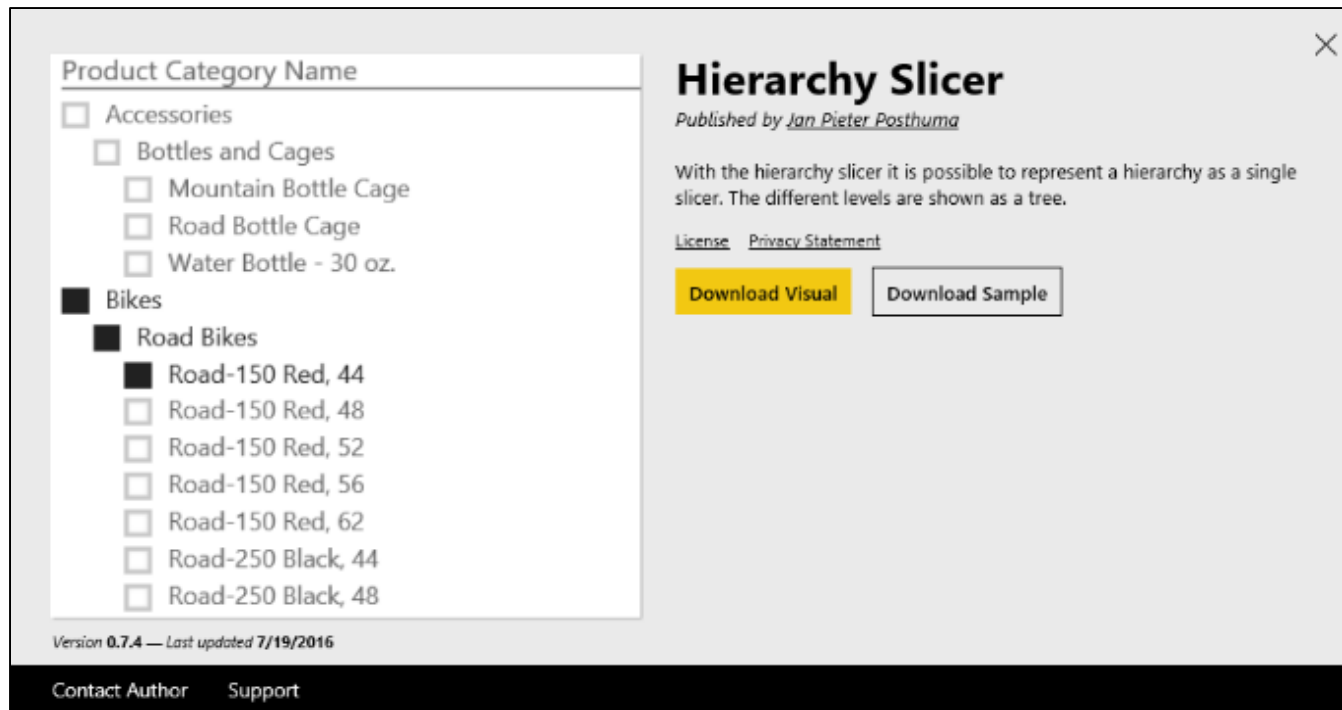
Hierarchy Slicer

■ Custom Visual Example 4



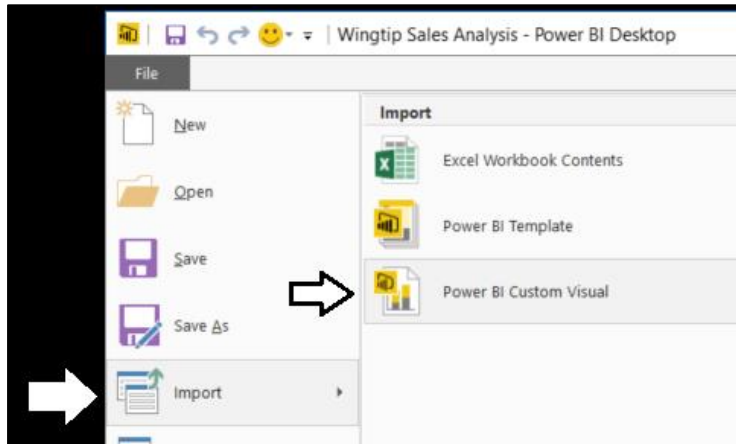
Downloading & Importing a Custom Visual

- Visual must be downloaded from Visuals Gallery
 - Custom Visual files packaged in PBIVIZ File
 - Custom Visual can be imported into Power BI Desktop project
 - Custom Visual can be imported into workspace in Power BI service

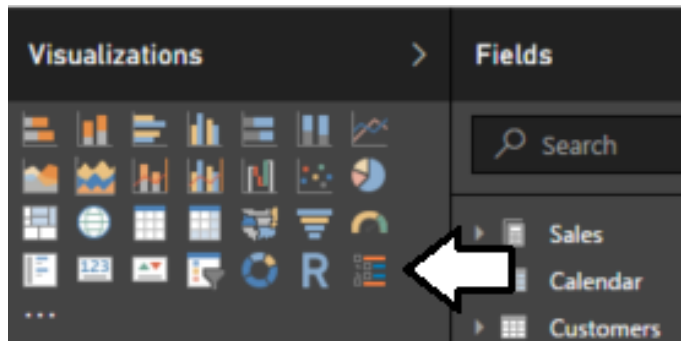


Importing a Custom Visual

- Import custom visual into Power BI Desktop project
 - Execute **Import > Power BI Custom Visual** menu command



- After import, Custom Visual appears in **Visualizations** list



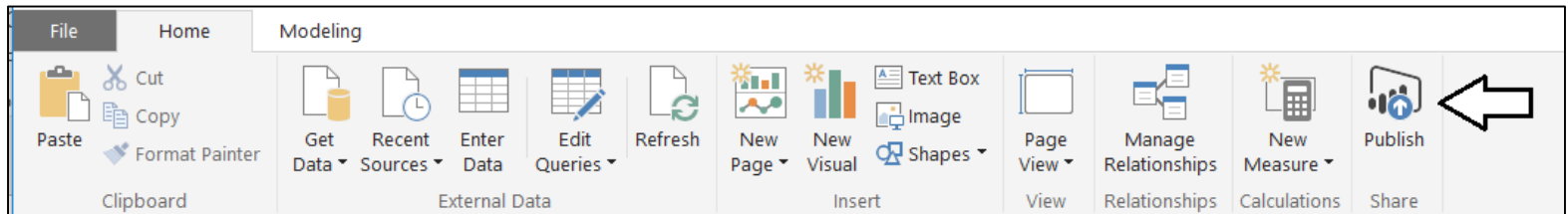
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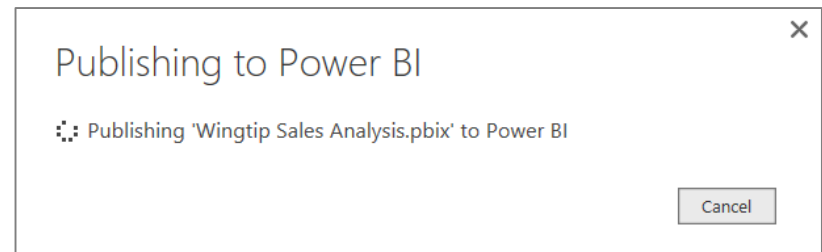
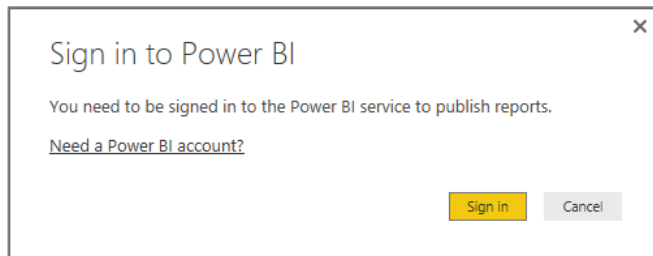


Publishing a Power BI Desktop Project

- Power BI Desktop provides **Publish** command
 - Used to publish project to Power BI service



- Requires logging into your Office 365 account

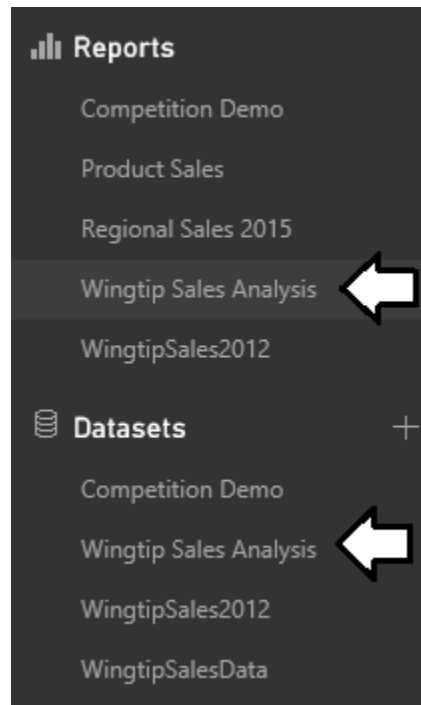


- Published articles added to a specific workspace



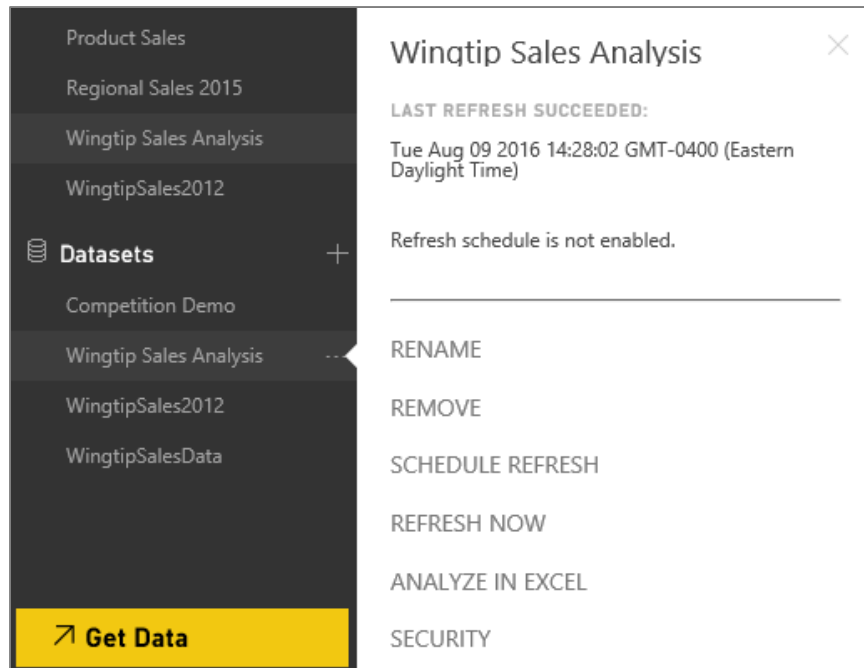
Examining What's Been Published

- What does project publishing add to workspace?
 - One dataset with same name as project
 - One report with same name as project



Dataset Configuration

- You can configure Dataset after its been published
 - Configure data source credentials
 - Configure refresh schedule
 - Configure Row-level Security



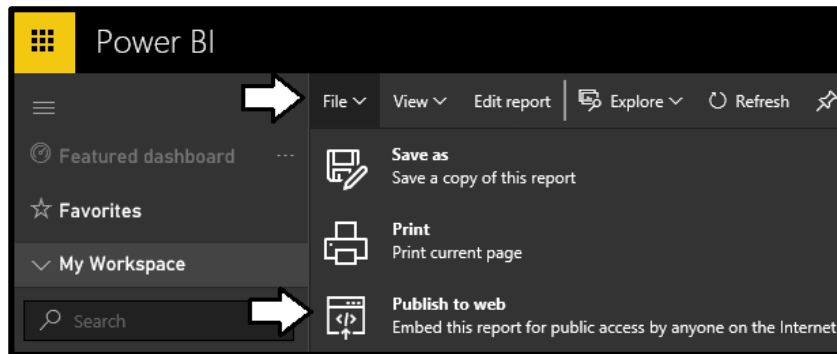
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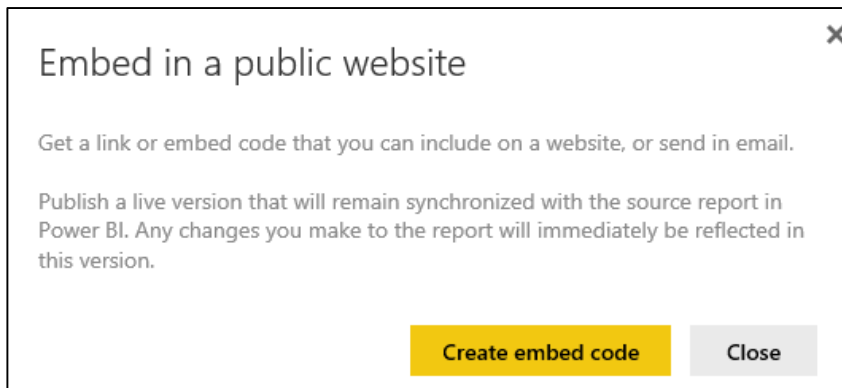


Publish to Web

- **Publish to Web** command available on reports
 - Not supported for reports and datasets which implement RLS



- **Publish to Web** command used to generate embed codes



Generating Embed Codes

- Used to provide anonymous access to report
 - Provide link which can be posted, emailed or texted
 - Provides **iFrame** HTML element for embedding in public web site

Success!

Link you can send in email

<https://app.powerbi.com/view?r=eyJrljoiYTM3YjlkNzctNWY5My00YTUyL>

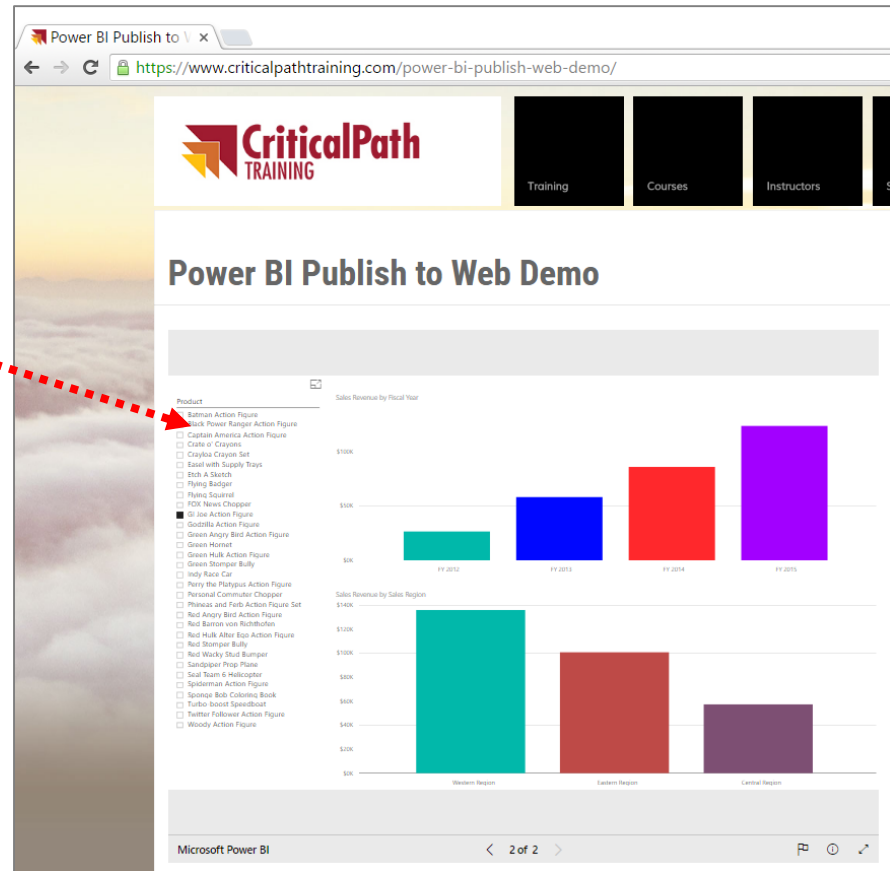
Html you can paste into your blog or website

```
<iframe width="933" height="700" src="https://app.powerbi.com/view?r=eyJrljoiYTM3YjlkNzctNWY5My00YTUyL"
```

Size

933 x 700 px

Close



Summary

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