

Excel Insights

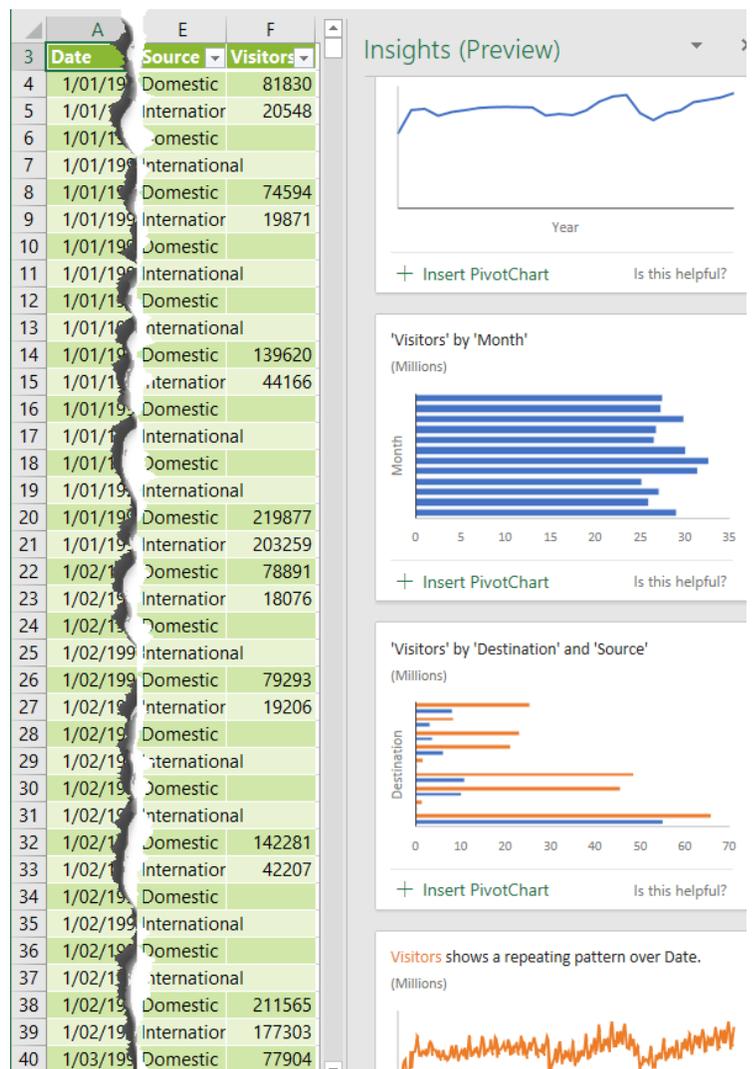
Understanding your data and creating Excel charts has never been easier with Excel Insights.

Excel Insights is an AI powered service that automatically identifies patterns in your data and provides you with charts you can insert into your workbook. And because it is powered by machine learning it will provide increasingly advanced analysis as usage grows.

Note: This feature is being made available on a gradual basis over several weeks. It will first be available in English to [Office Insider](#) participants, and later to [Office 365](#) subscribers. If you are an Office 365 subscriber, [make sure you have the latest version of Office](#).

In the image to the right, you can see the data on the left in the Excel Table and on the right, the Insights pane with just a few of the 36 different charts returned by Insights.

You can simply click on the '+ Insert PivotChart' button below the charts to add the insight to my workbook. Note: Not all insights are returned as PivotCharts, some may be regular charts if your data set is simple enough that it doesn't need aggregating.

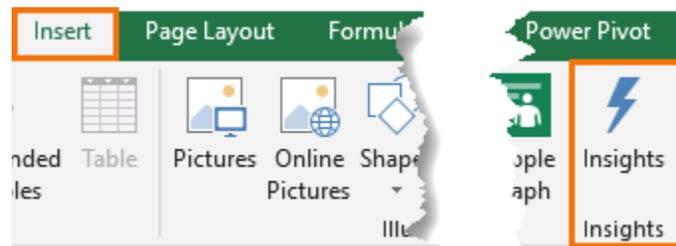


Working with Excel Insights

Insights work best with data in a [tabular format](#) in an [Excel Table](#). The more category type columns you have the more insights you're likely to get returned, as the categories will give Excel more opportunities to group the data and find interesting correlations, trends and patterns.

If you get the error "We couldn't find any significant patterns in your data to show as an Insight. Try using a larger dataset with more variation in it." This typically means you don't have enough columns for Excel to group and classify your data by in order to detect any patterns.

To generate Insights, you first select your data, or if your data is formatted in an Excel Table you can just click on one cell > Insert tab > Insights:



When first using Insights you'll be asked to turn on Intelligent Services (note: you'll need an internet connection for Excel to connect to said Intelligent Services):

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Use Intelligent Services?



Turn on intelligent services to let Office help you be more productive, powered by Microsoft services.

Turn on

Not now

Intelligent services work across all Office apps to help you be more productive.

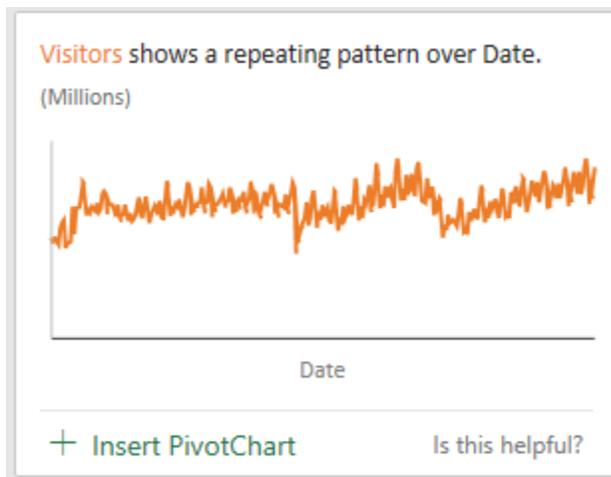
These features also help you improve your writing in Word, deliver dynamic presentations in PowerPoint and prioritize the emails that matter most to you in Outlook. Office will use your searches and document content to support and improve the Intelligent Services for you.

[About intelligent services](#) | [Privacy statement](#)

The Insights pane will then open on the right with a series of charts for you to peruse and insert into your workbook.

There are currently four insight classes;

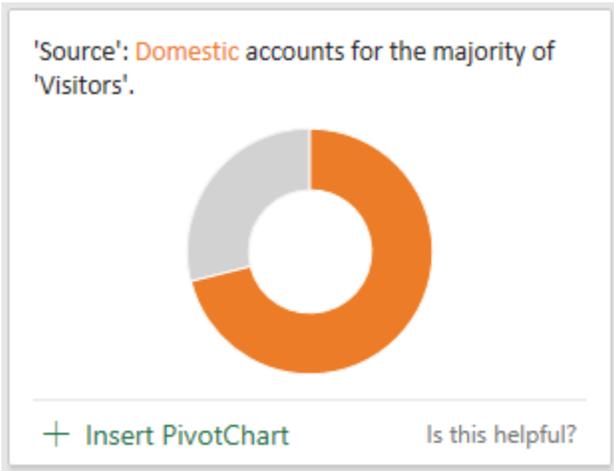
Trends – looks for patterns and trends over time series data:



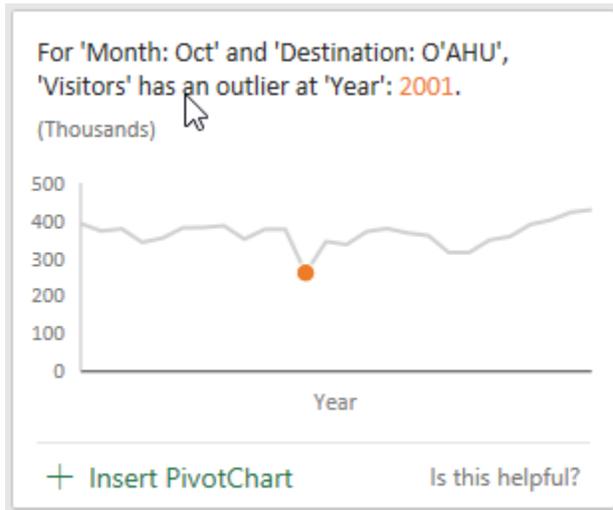
Rank – ranks and highlights items that are significantly larger than the rest of the items:



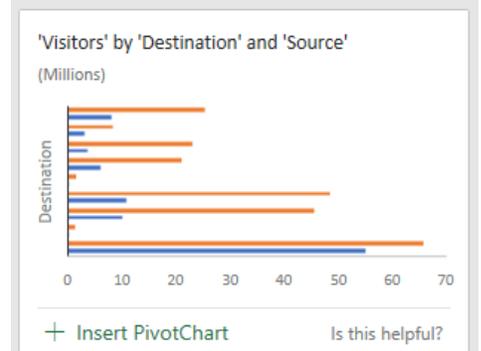
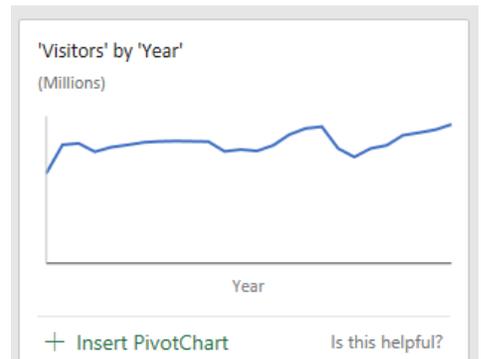
Majority – looks for categories that account for most of a total value:



Outliers – identifies outliers in time series or correlated data:



Excel Insights also returns data in recommended groupings (shown to the right), much like you'd find in Recommended Charts available in through [Quick Analysis](#):



Inserting Excel Insights

When you find an insight you want to keep, you simply click on the '+ Insert....' Link below the chart. Pivot Charts will be inserted into a new worksheet with the supporting PivotTable. Regular charts will be inserted into the sheet containing your source data.

You can cut and paste the charts to move them to another sheet, for example your dashboard sheet.

Once inserted they can be formatted like any other chart and the PivotTables can be modified.

Note: Insights do not obey [Colour Themes](#) already set in your workbook, but the associated PivotTables do.

Once you have all the insights you want in your workbook you can close the pane by clicking the X in the top right. You can always run the insights again if required.

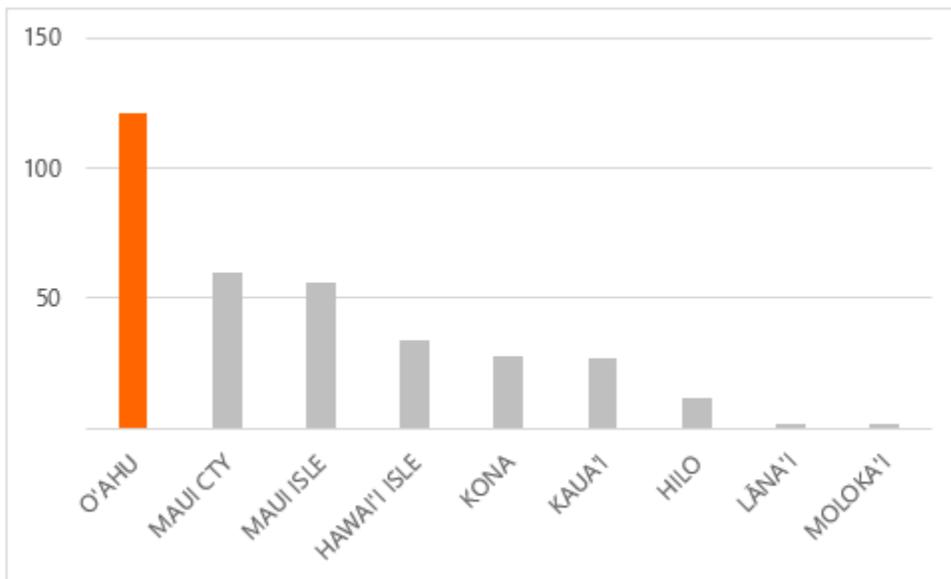
Quality Charts

Overall the quality of charts returned by Insights is quite high, as you can see from the chart below:

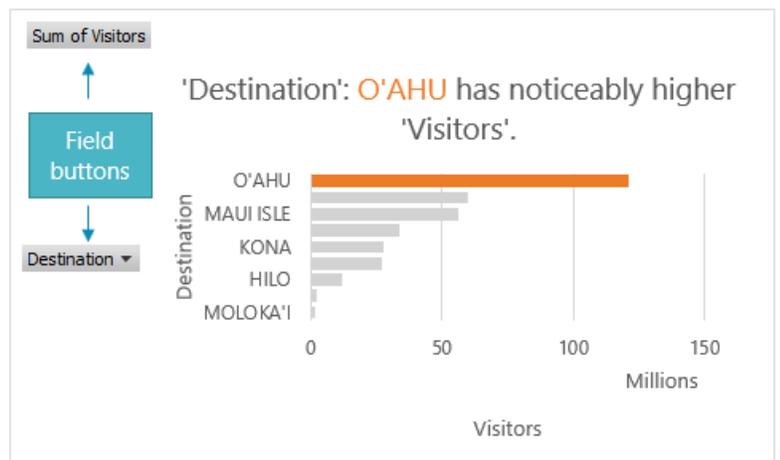


Which adopts the following data visualisation best practices:

- The bars are sorted in descending order with the largest bar highlighted in orange, drawing your attention to the key point.
- The chart title is descriptive and the use of orange for 'O'AHU creates a relationship between the bar and title, making it quick for the reader to interpret.
- The values are displayed in millions rather than displaying insignificant digits.
- The axis labels are in a grey colour, so they don't dominate the visual.
- The bar chart is ideal when working with long category labels, as we have for the island names, because they don't get rotated like they would with a column chart, as you can see below:



- Even though this is a Pivot Chart, the field buttons are hidden, which is the first thing I turn off on a PivotChart. Better to use [Slicers](#) for filtering than space sapping field buttons:



Insights Limitations

- Insights doesn't currently support analysing datasets over 16MB, which is approximately 250k cells. Not all is lost. Try using filters to reduce the amount of data. Copy and paste it to a new sheet and try Insights on the smaller dataset.
- [Proper date serial numbers](#) are required for Insights to identify dates. Dates entered as text will be analysed as if they are text strings.
- Insights only works with .xlsx, .xlsm or .xlsb file types. If your file is .xls use 'Save As' to save it as one of the compatible file types.
- Unique column headers are required. Also avoid headers with merged cells and header rows spread over two or more rows.
- Currently dates returned by Insights in the chart titles are formatted mm/dd/yyyy irrespective of your regional settings. I've raised this with Microsoft and hopefully they'll improve that in future updates. It's easy enough to fix once you add the chart or PivotChart to your workbook. Just edit the chart title by left-clicking it once and then type in your preferred date format.

Additional information available at: <https://www.myonlinetraininghub.com/excel-insights>