

Automatically Generated Insights in Power BI

Power BI Desktop & Power BI Service

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The Insights Features

Finds insights

- Without asking a question (like with Q&A)

- Which are statistically significant

- Statistically significant <> practically significant

- Cause vs. effect

- Domain knowledge and common sense necessary

Dependent on (meta-)data available from the model

Available in Power BI Desktop and Power BI Service

- Slightly different implementation

- No Pro-/Premium license necessary

Agenda

Insights in Power BI Desktop

- Explain the Increase

- Explain the Decrease

- Find Different Distributions

- Types of Insights

Insights In Power BI Service

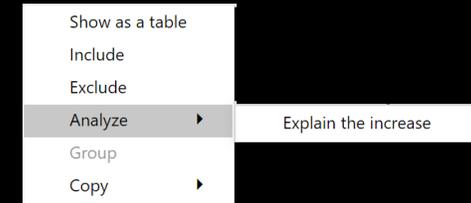
- Quick Insights Feature

- Types of Quick Insights

Key Takeaways

Explain the Increase (Power BI Desktop)

Right click – Analyze – Explain the increase
Builds a machine learning model on the fly
Shows statistically significant information



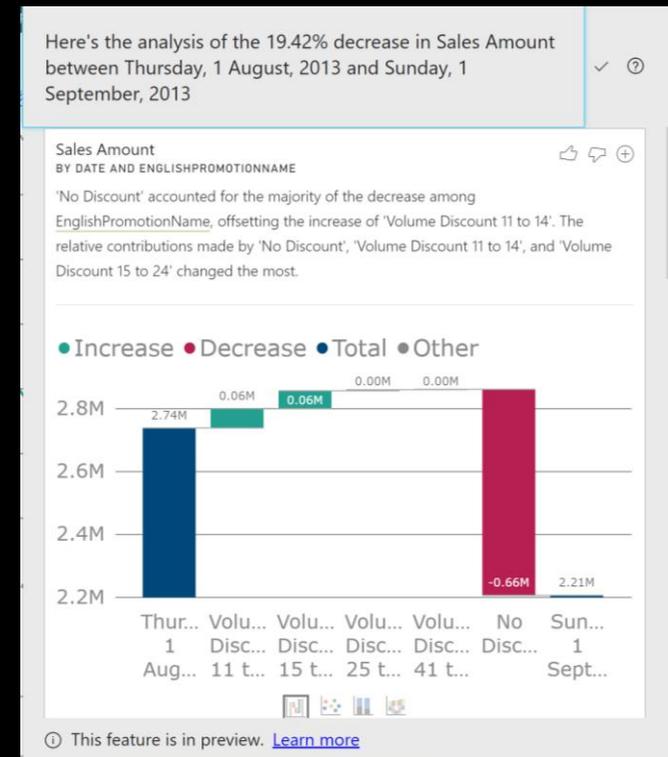
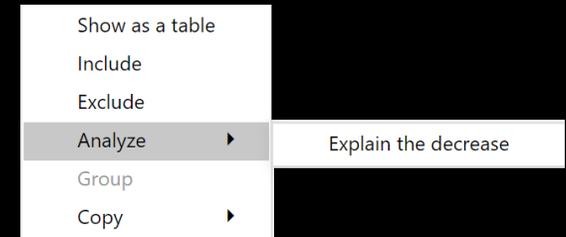
Demo

Explain the Decrease (Power BI Desktop)

Right click – Analyze – Explain the decrease

Builds a machine learning model on the fly

Shows statistically significant information



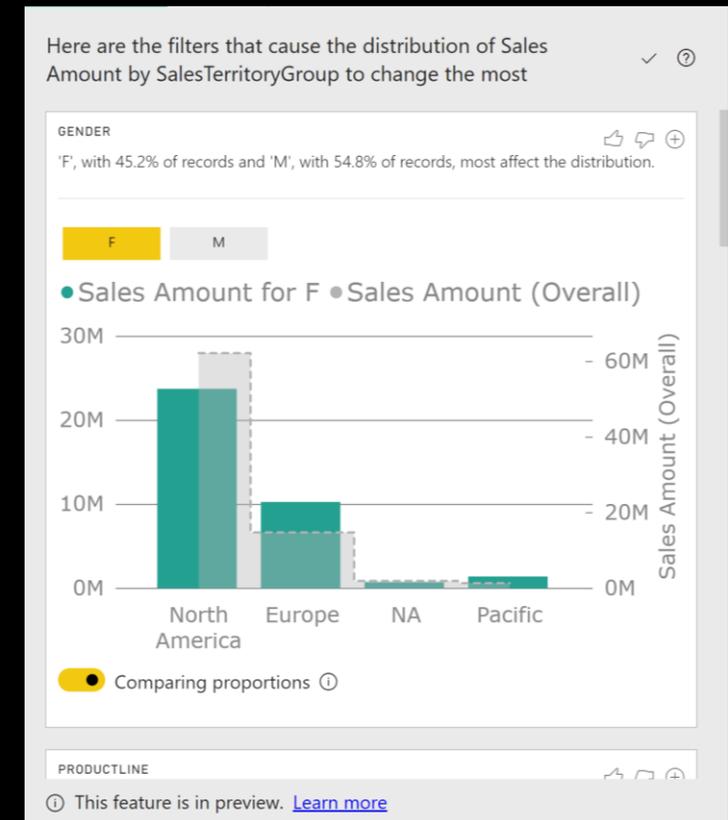
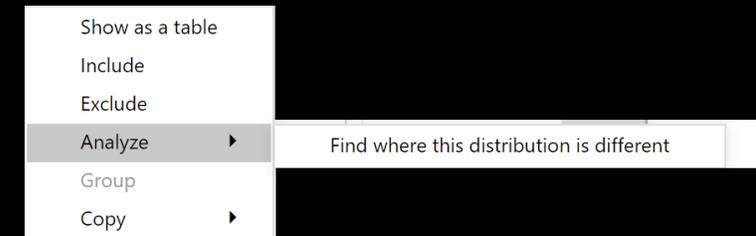
Demo

Find Different Distributions (Power BI Desktop)

*Right click – Analyze –
Find where the distribution is different*

Builds a machine learning model on the fly

Shows statistically significant information



Demo

Availability of Insights (Power BI Desktop)

Explain the increase/decrease

Line chart, area chart, stacked area chart

Only for continuous categories (e. g. date/time) on axis

Find where the distribution is different

Stacked bar chart, stacked column chart, clustered bar chart, clustered column chart

Continuous categories in a bar/column chart offer both

But best practice is to show continuous values on a line chart

Excuse: Continuous vs. Categorical Data

Continuous

e. g. date, time, percentage, quantity, amount, ...

Endless amount of data points between any two data points

Categorical

e. g. product category, sales territory, rank, ...

No value between any two values

Quick Insights Feature (Power BI Service)

Available at no cost

No Pro/Premium license necessary

You need a work/school account to sign-up
outlook.com, hotmail.com, ... will not work

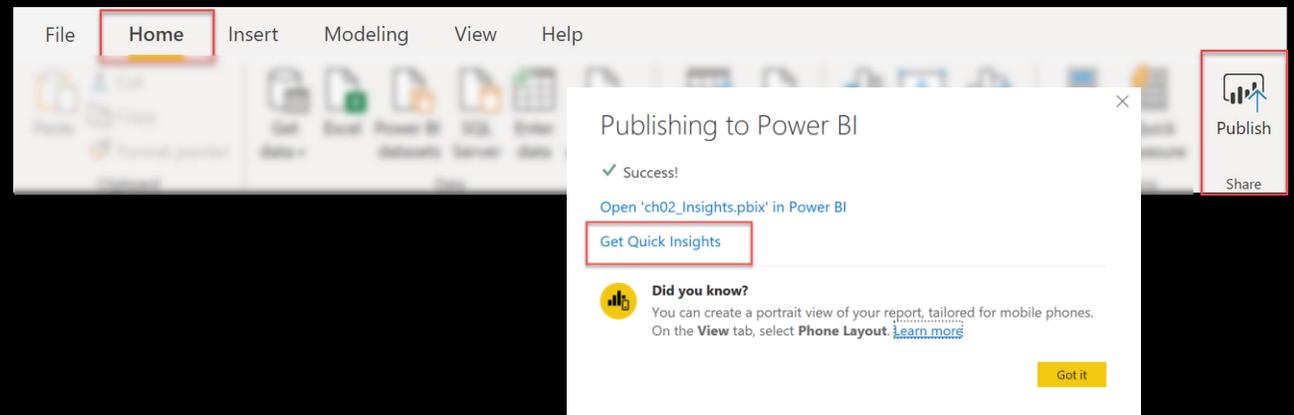
The admin of the domain must enable Power BI Service

<https://docs.microsoft.com/en-us/power-bi/fundamentals/service-self-service-signup-for-power-bi>

You need to publish a report

Home – Publish

Click *Get Quick Insights*



Demo

Types of Quick Insights (Power BI Service)

Majority

Outliers

Steady share

Low Variance

Trends, seasonality, trend outliers, and change points over time

Correlation

Key Takeaways

Increase/decrease can be automatically explained for continuous values in Power BI Desktop

Bar and column chart allow to find where distribution is different in Power BI Desktop

Add an insight to your report in Power BI Desktop

Power BI Service finds more complex insights

Add an insight to a dashboard in Power BI Service

Call to Action

Find explanations for increase/decrease and where distribution is different in your existing reports

Upload your reports to Power BI Service to get more insights

Use your domain knowledge and common sense to evaluate the found insight

Add insights, which make sense, to reports and dashboards and share them with your colleagues

Questions?

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SQL Server 2005 – 2019

BI Developer
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Database Admin

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Solutions Expert

Business Intelligence

Data Platform

Microsoft
CERTIFIED
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