Financial Reporting with Power BI

Harness the potential of Power BI to solve data challenges in the finance function

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ICAEW®

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MY STORY

- Work for Avanade – Joint Venture between Accenture and Microsoft
- Qualified Accountant (ICAEW) but now firmly rooted in the Microsoft Data Analytics space
- Background in Big 4 + Financial Services in London
- Run technical communities as Microsoft MVP – Power Platform Finance (PPF) is a community for Finance professionals around Power BI

Financial Reporting with Power BI – E-learning/cohort based course: www.powerplatformfinance.com

POWER PLATFORM FINANCE

LEARNDATA INSIGHTS

Agenda

1. The value of Power BI for the Finance function

~10-15 minutes

2. Finance Data Transformation use cases

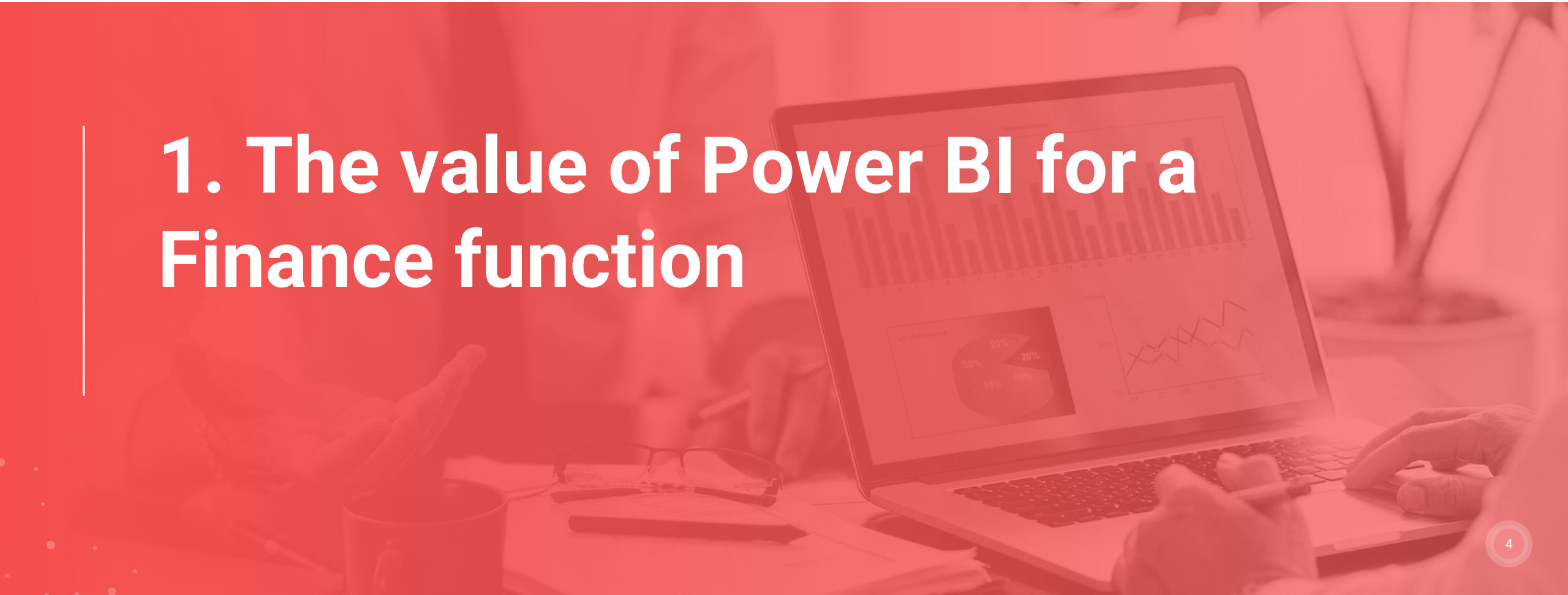
~15-20 minutes

3. Power BI Demo and Q&A

~15-20 minutes

LEARNDATA INSIGHTS

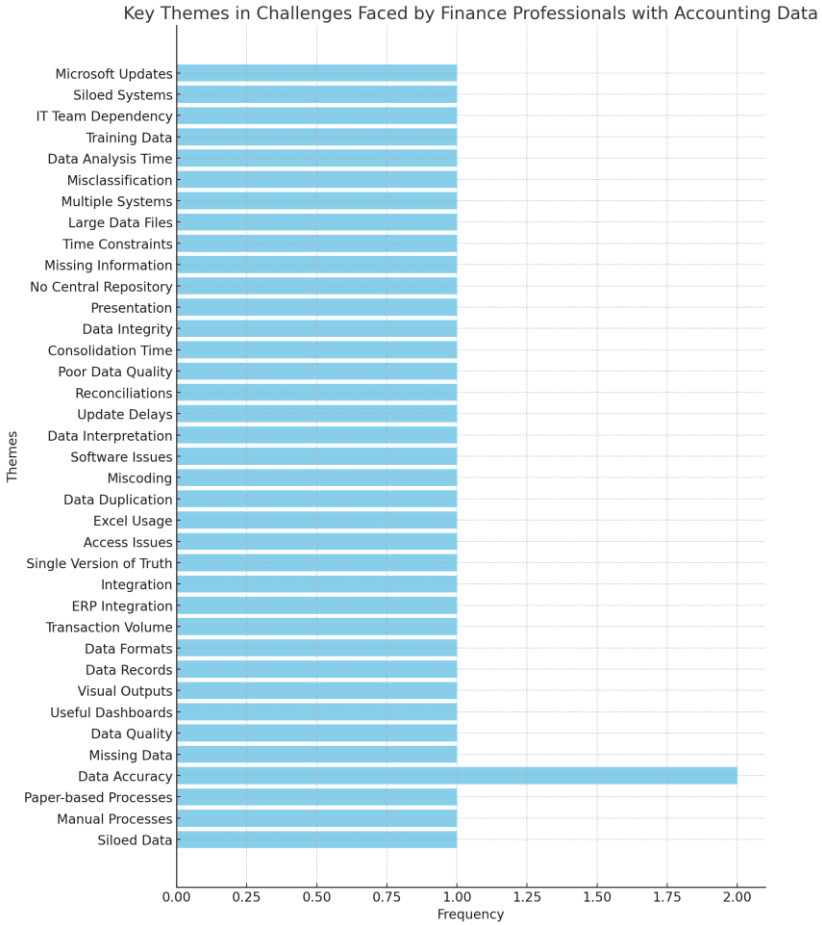
1. The value of Power BI for a Finance function



Poll: What is the biggest pain point when working with financial data?

PPF @ Accountex Conference 2024: Survey Results

Date lake are Siloed	Access
Scattered Data spreadsheet Manual	Getting Excel Insights
People who still like paper	Excel
Validating accuracy of data	Duplication
Missing Data	miscoding
Missing Data	Getting out of Software
inconsistent	interpreting data
Quality of data	Updating small change takes too long
turning information into a useful dashboard	Reconcilations
creating visual outputs quickly and reliably	Poor data quality
Data Records	Short time to consolidate
Data formats from accounting systems (print reports)	Excel Files => data integrity and consistency with multiple users
Excess of Transaction in SAP	Presentation
Connecting ERP (Netsuite) to PBI	No Central data repository/knowledge
Integration	Missing Information
No one version of truth	Time
Large Data files	Time Analysing
Multiple Systems that don't speak the each other	training data to prompts questions/actions
misclassification	Accuracy
reliance on the IT Team to develop the interface	Siloed systems
Keeping up with Microsoft updates	

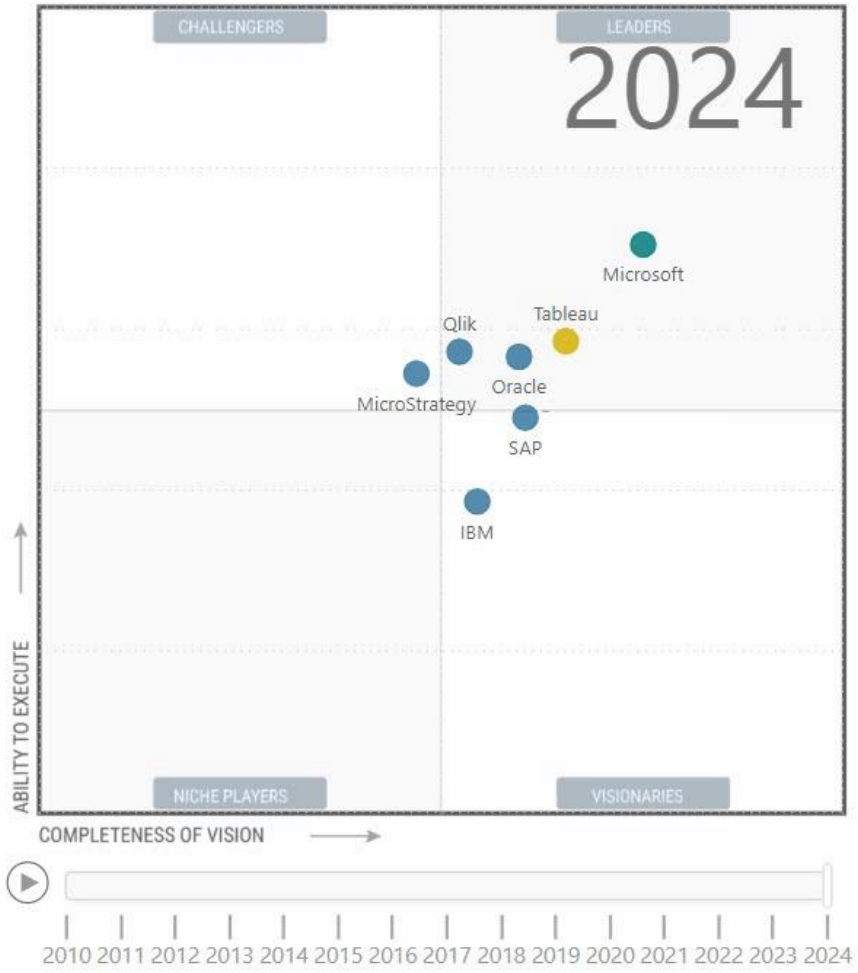


Financial Reporting with Power BI – E-learning/cohort based course: www.powerplatformfinance.com

History of Power BI

- **Centralised vs Self-Serve BI**
  - BI has moved much more towards end users (rather than IT departments) building reports and performing analysis – emergence of tools such as Qlikview/Tableau
  - Microsoft launched Power BI Add-ins into Excel (Power Query/Power Pivot/Power View) with strong functionality but inconveniently pooled in Excel
- **Development of Power BI**
  - Microsoft re-packaged functionality of Add-ins as separate desktop application and portal (GA Summer 2015)
  - Rapid development of both through weekly/monthly updates, including integration with open-source technology and expansion into a self-service data platform with Microsoft Fabric
- **Current Status**
  - Microsoft clear visionary leader in self-serve BI space (Gartner Report, Feb 2024)
  - Competitive pricing: Free Desktop, $10/user/month for Pro features; PBI Premium/Microsoft Fabric for scalability

Figure 1: Magic Quadrant for Analytics and Business Intelligence Platforms



Source: Gartner Magic Quadrant for Business Intelligence - 2024 Update - Excelerator BI

What can you do in Power BI?

Connect & Transform

Model & Calculate

Visualise & Analyse

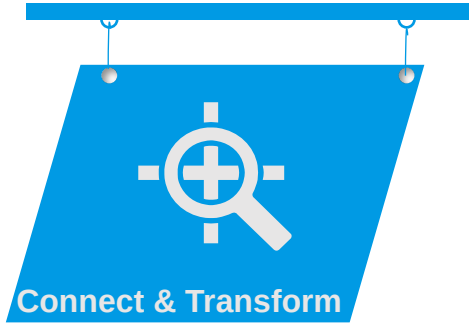
Share & Secure

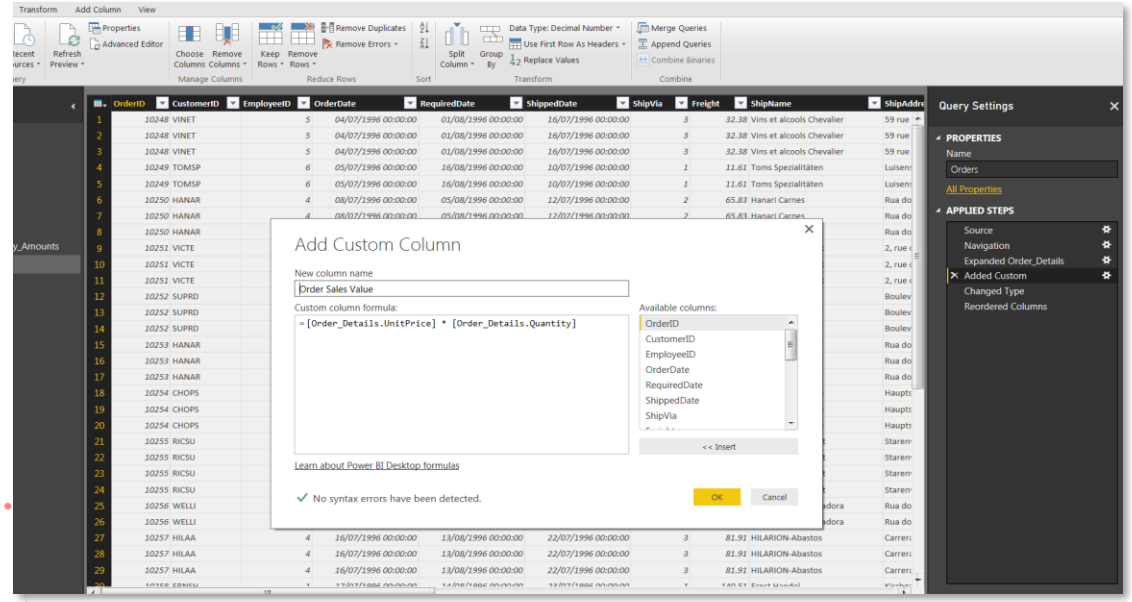
Q&A

Query & Explain

Govern & Scale

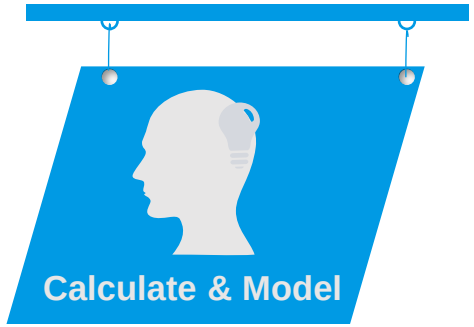
1. Connect & Transform

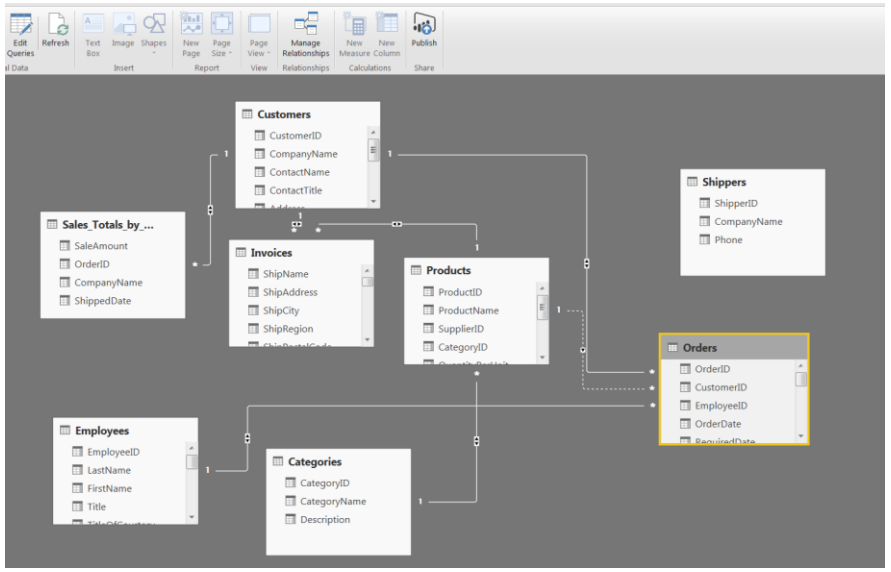




- Self-service **data shaping/transformation** tool in easy, repeatable steps (Like a macro but much more transparent/easy to build!)
- Connect to a wide **range of 200+ data sources** (Desktop/Server/Cloud) – including of course Excel files!
- Hundreds of transformations available **through the UI** – e.g. adding Calculated Fields, Finding/Replacing Values, Unpivoting data
- **Combine data from multiple sources** and shape to be in a consistent structure for analysis

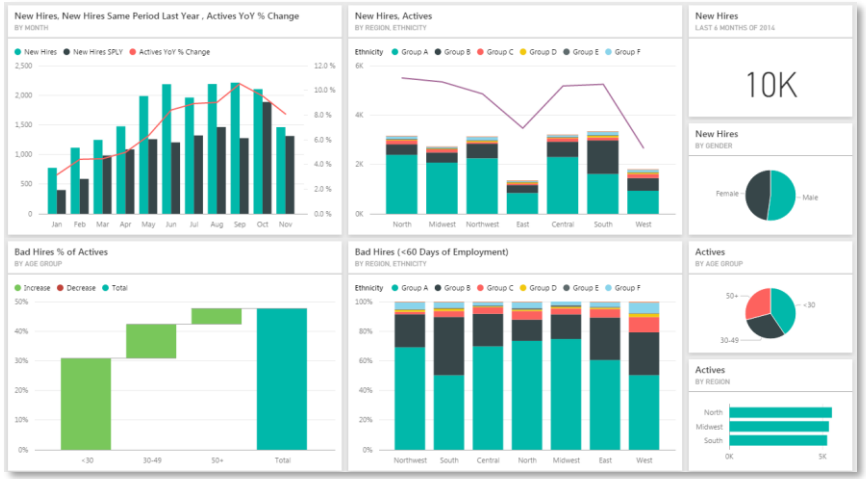
2. Model & Calculate





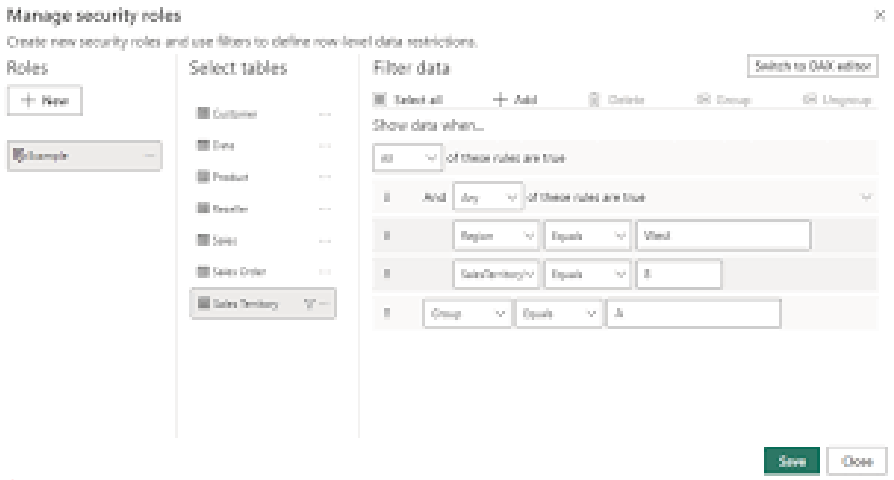
- Create **relationship between datasets**, eliminating the need for lookups between tables.
- Create performant, flexible **"Pivot style" calculations** that can be dynamically calculated at different levels/for different data cuts.
- Familiar language **using DAX** (similar syntax to Excel) to create metrics or even entire tables

3. Visualise & Analyse



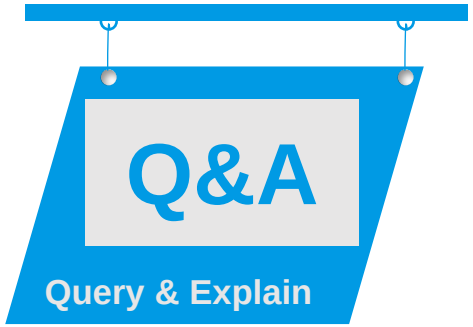
- **Drag and drop visuals** onto a canvas to create interactive reports/dashboards that highlight trends/patterns and allow you to **"slice and dice"** by selecting data points on graphs or slicers
- Huge variety of **customisable visuals** including Waterfall and Scatter plots
- Ability to build **interactive "app-like" functionality** including report tooltips, drill-through, bookmarks and dynamic selections with field parameters.

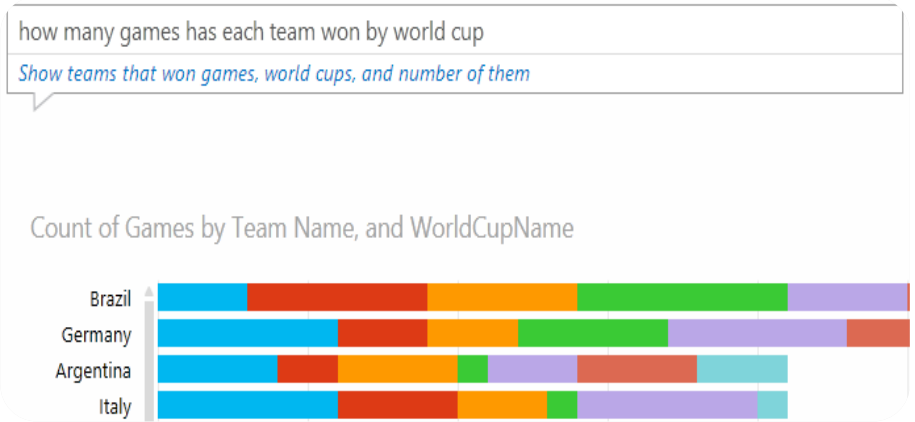
4. Share & Secure



- **Cloud-centric solution** that is based on Entra (Active Directory) and data sensitivity labels that apply across all MS applications including Office/Azure.
- Easy **collaboration to share reports or underlying data** with others
- **Row Level Security (and Object level security)** to limit access to different sets of data without having to create different reports/data models.
- Live (Real time) or **scheduled refresh** options
- **Accessible through Power BI mobile application** with ability for users to set up data-driven notifications

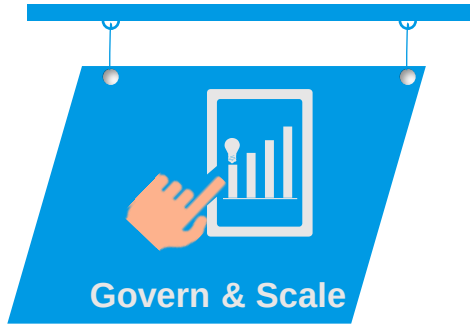
5. Query & Explain

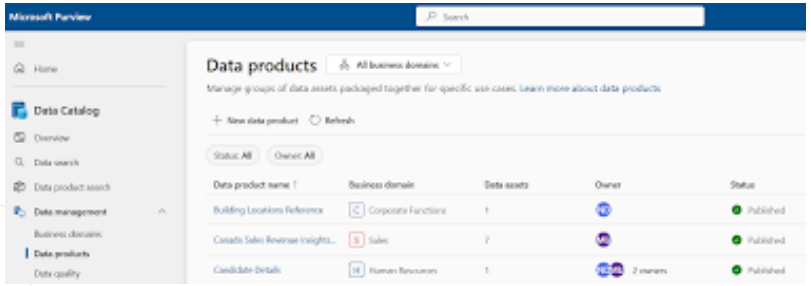




- **Natural language Q&A** has been available in Power BI since 2018!) and Is now part of the Copilot experience too!
- Quickly obtain an executive summary/a **summary of key insights** from visualisations and the data model, powered by Copilot
- **AI-powered insight generation** through visualisations such as Key Influencers/Decomposition Tree and Quick Insights – running automatic correlation/patterns analysis on your dataset

6. Govern & Scale



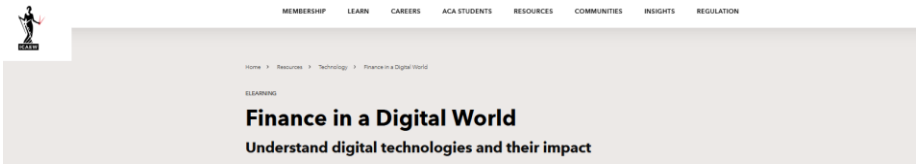


- Create centralized data assets (e.g. dataflows/shared datasets) or use Power BI as part of **Microsoft Fabric** to bring data into a standardized, **self-service driven data layer (lakehouse)** which is automatically available as a source for Power BI as well as other Fabric experiences (e.g. Notebooks, Data Warehouse, Data Activator)
- Define reports and datasets as part of **data products in Microsoft Purview** and align to a corresponding organizational operating model (e.g. Data Mesh)
- Set up **technical controls and processes** inside Power BI/Microsoft Fabric including tenant settings, Deployment pipelines and Source control/Git integration.

POWER PLATFORM FINANCE

LEARNDATA INSIGHTS

What does this enable?



What are the opportunities for Finance in a Digital World?

Duration: 3 minutes

Select 5 things you believe are the greatest opportunities for Finance in a Digital World. When you click "Save my choice", you will see a wordcloud that is based on the total number of votes from all users that have completed the exercise. The more times a word has been voted for, the larger it will appear in the wordcloud. Your votes will also be highlighted.

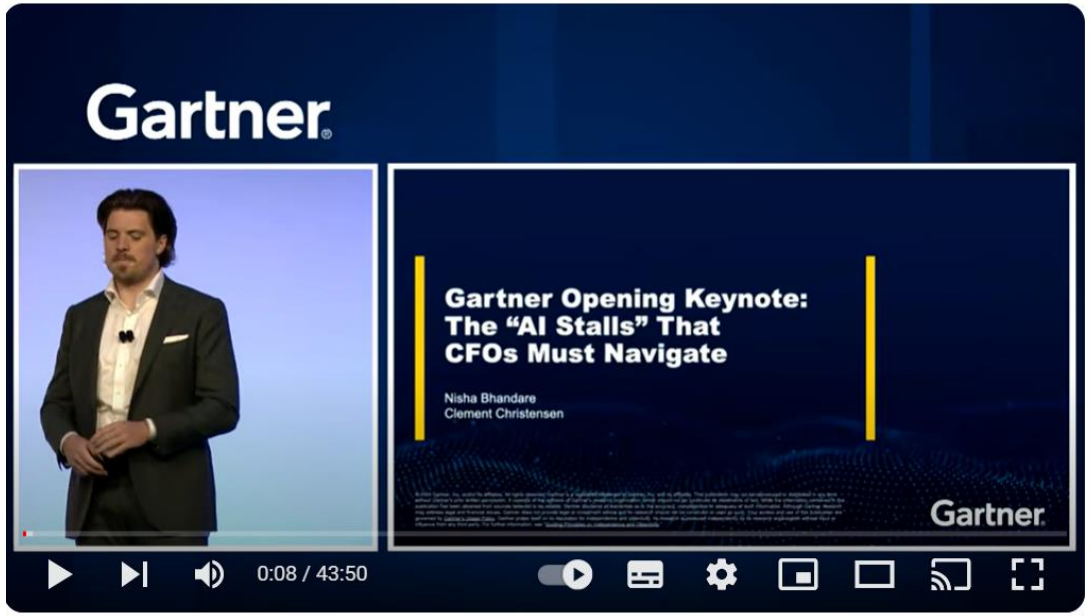
- [x] Benefits from automation
- [ ] Increase speed to act and react
- [ ] Provide more value to the business
- [ ] Reduce risks
- [x] Enable self-service
- [ ] Shape our culture
- [ ] Foster a customer centric approach
- [x] Realise efficiency gains
- [ ] Deliver better commercial insight
- [x] Drive the analytics agenda
- [ ] Improve cost effectiveness
- [ ] Boost job satisfaction
- [ ] Allow people to do more
- [ ] Establish new business models
- [ ] Work in a more intelligent way
- [ ] Increase quality & control
- [ ] Increase agility in how we work
- [ ] Discover new career paths
- [x] Develop new skills & capabilities

Your role will no longer be of one producing management reports and information. Automation will enable you to increase the time spent with the business to understand the drivers of performance and their impact on the financial outcomes. This will enable you to work with the business to provide timely performance interventions.

For example, using Natural Language Generation to automatically create a first pass of commentary for a monthly performance report, and then add richness to the insight through conversations with the business.

You will refocus effort from running core planning and reporting processes to delivering true business insights and analytics, enabling drilldown to the root cause of performance issues. This will be at a more granular level, linking in external, operational and non-financial information alongside core financial information.

The future of Finance is AI!



AI Success Depends on the CFO, Not IT | Gartner Finance Keynote

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79%

of finance leaders believe that to meet future needs, it is a big priority for them to play a significant role in owning business model innovation and empowering transformation across the organization.

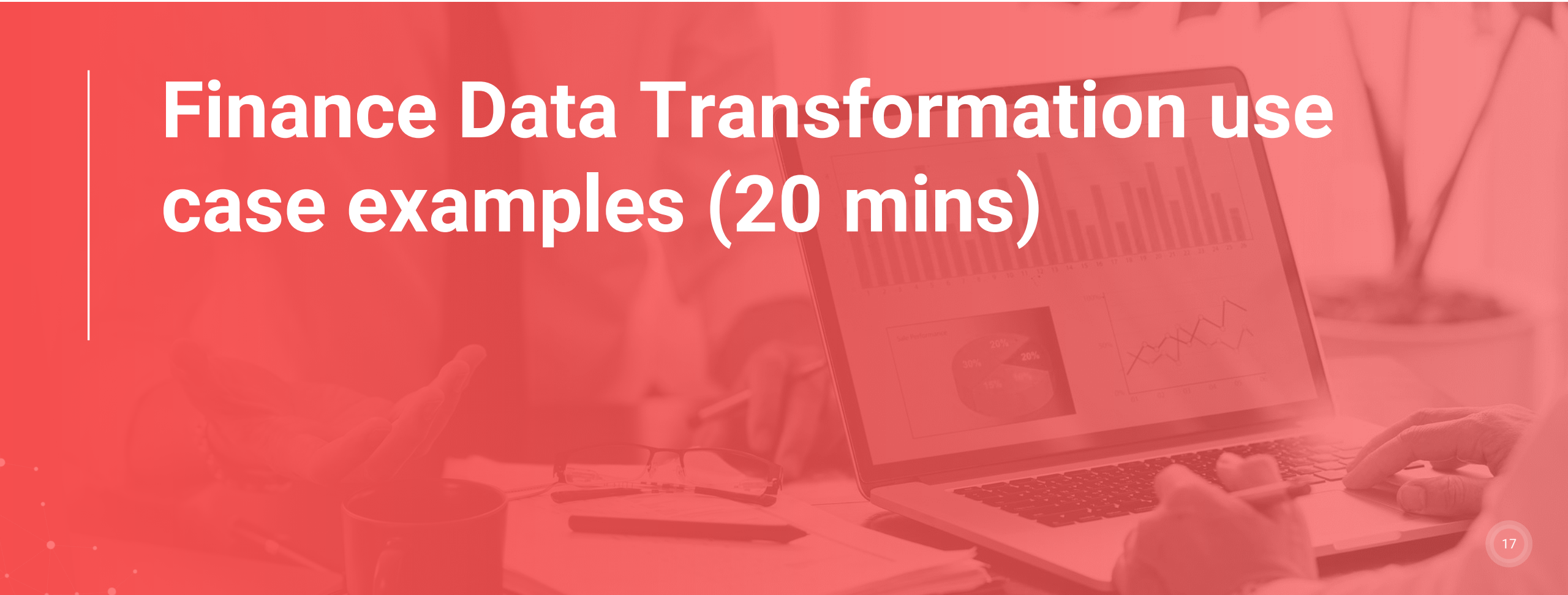
88%

of finance leaders currently feel the challenge of not having the automation tools they need to automate repetitive tasks (e.g., digital invoicing software, online payroll) and free up their time for more innovative work, the growing appetite for finance-first innovation is an unmistakable sign of the need for a culture shift.

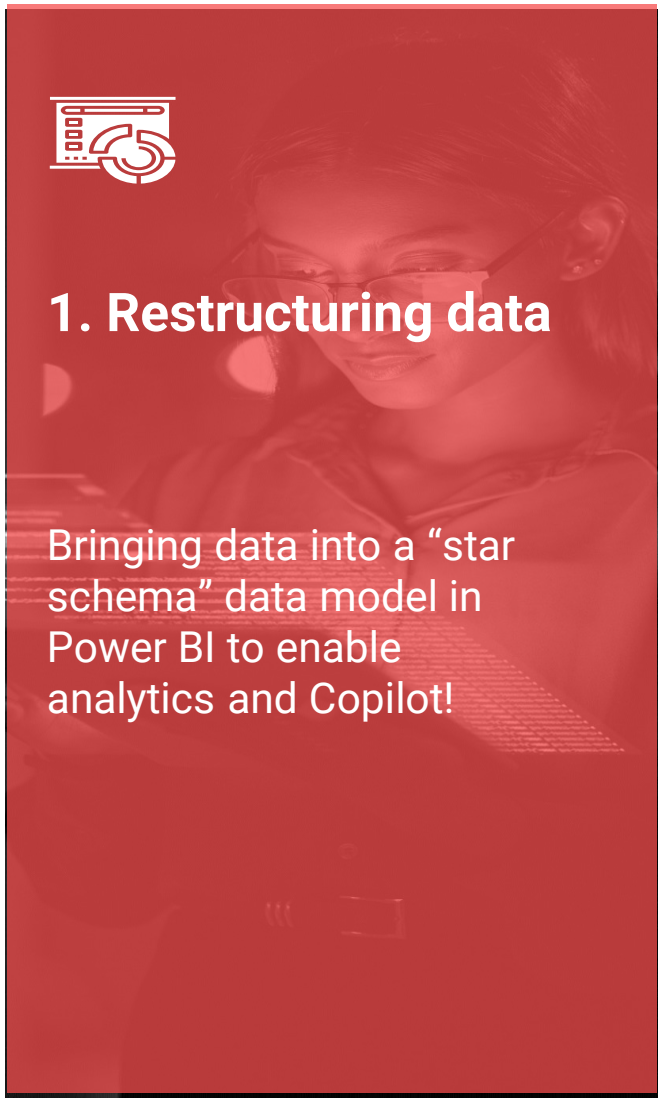
[Source: Future of Finance Trends | Microsoft Dynamics 365]

LEARNDATA INSIGHTS

Finance Data Transformation use case examples (20 mins)



Finance Data Transformation Use cases



1. Restructuring data

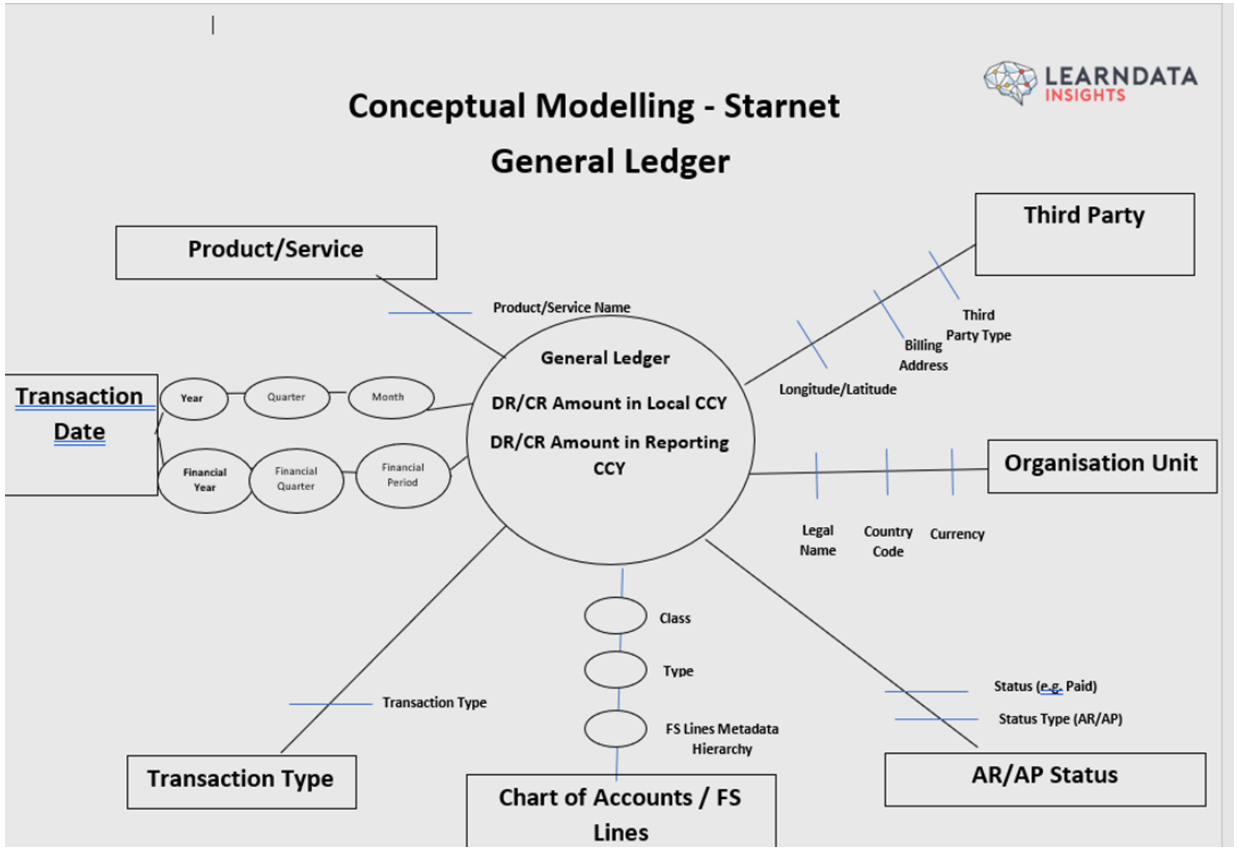
Bringing data into a “star schema” data model in Power BI to enable analytics and Copilot!

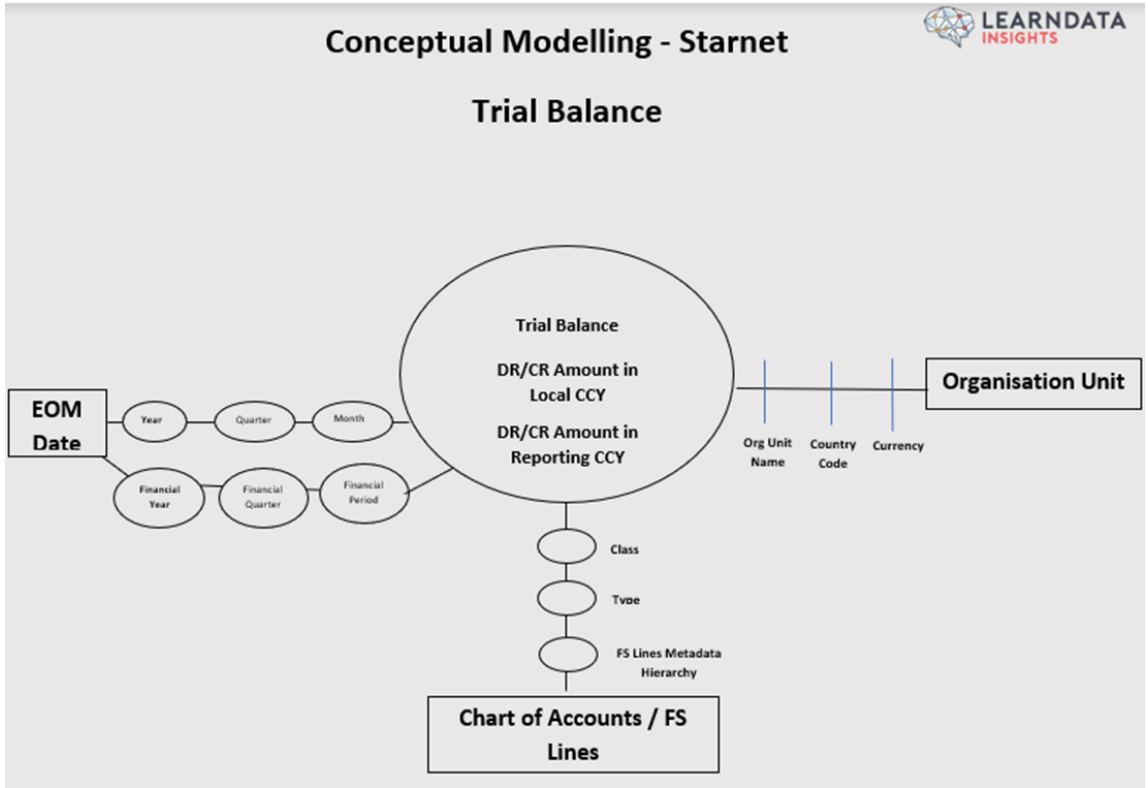
2. Combining multiple files

Automatically dealing with a set of Excel/CSV files (e.g. system extracts)

3. Reshaping and Grouping

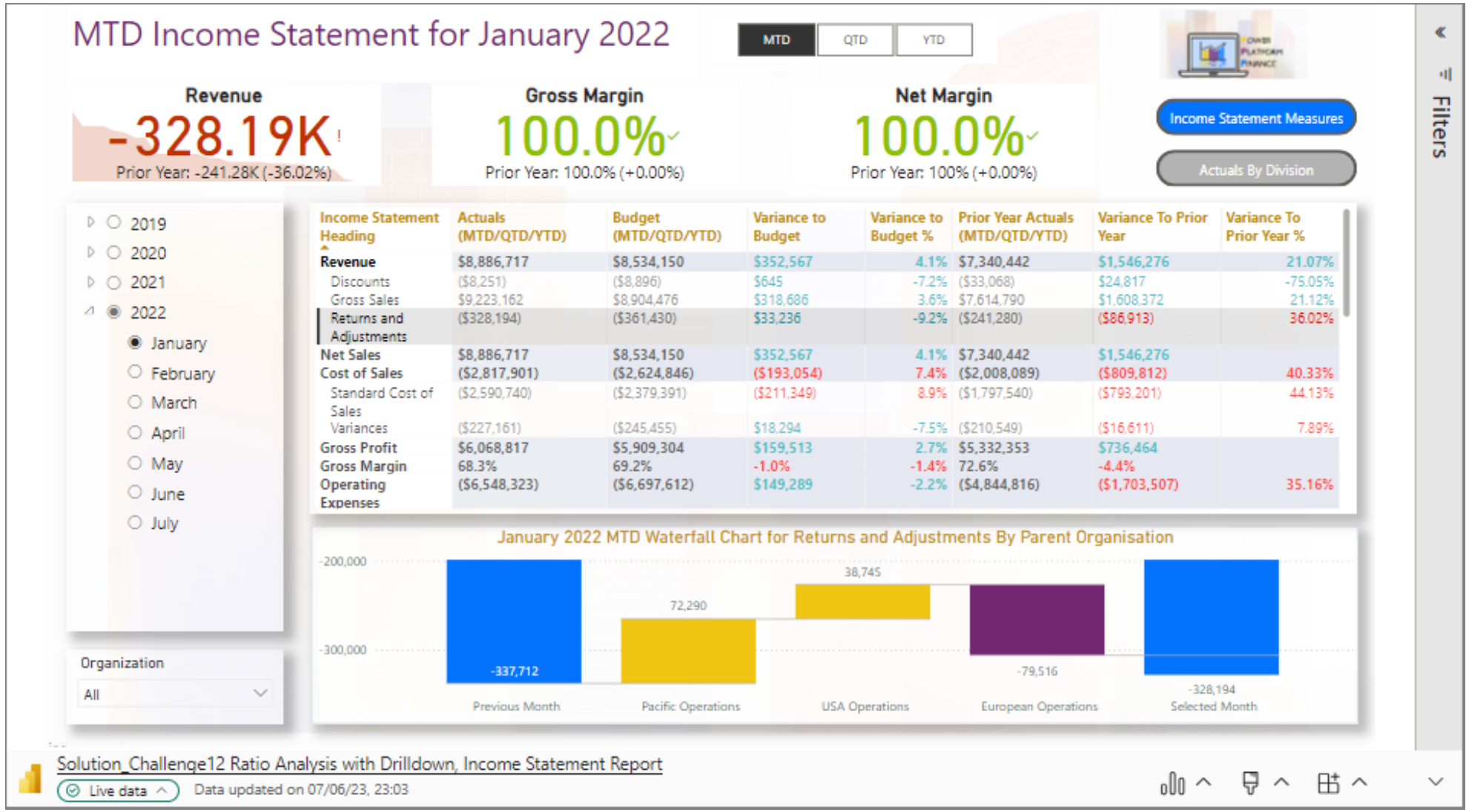
Working with data structured in different formats to derive calculations


LEARNDATA INSIGHTS
Conceptual Modelling - Starnet
General Ledger
Product/Service
Third Party
Product/Service Name
General Ledger
DR/CR Amount in Local CCY
DR/CR Amount in Reporting CCY
Billing Address
Third Party Type
Longitude/Latitude
Transaction Date
Year
Quarter
Month
Financial Year
Financial Quarter
Financial Period
Organisation Unit
Legal Name
Country Code
Currency
Class
Type
FS Lines Metadata Hierarchy
Transaction Type
Transaction Type
Status (e.g. Paid)
Status Type (AR/AP)
AR/AP Status
Chart of Accounts / FS Lines


LEARNDATA INSIGHTS
Conceptual Modelling - Starnet
Trial Balance
Trial Balance
DR/CR Amount in Local CCY
DR/CR Amount in Reporting CCY
EOM Date
Year
Quarter
Month
Financial Year
Financial Quarter
Financial Period
Organisation Unit
Org Unit Name
Country Code
Currency
Class
Type
FS Lines Metadata Hierarchy
Chart of Accounts / FS Lines

LEARNDATA INSIGHTS

Solution Demo


MTD Income Statement for January 2022
MTD
QTD
YTD
Revenue
-328.19K
Prior Year: -241.28K (-36.02%)
Gross Margin
100.0%
Prior Year: 100.0% (+0.00%)
Net Margin
100.0%
Prior Year: 100% (+0.00%)
Income Statement Measures
Actuals By Division
Filters
2019
2020
2021
2022
January
February
March
April
May
June
July
Organization
All
Income Statement Heading | Actuals (MTD/QTD/YTD) | Budget (MTD/QTD/YTD) | Variance to Budget | Variance to Budget % | Prior Year Actuals (MTD/QTD/YTD) | Variance To Prior Year | Variance To Prior Year %
Revenue | $8,886,717 | $8,534,150 | $352,567 | 4.1% | $7,340,442 | $1,546,276 | 21.07%
Discounts | ($8,251) | ($8,896) | $645 | -7.2% | ($33,068) | $24,817 | -75.05%
Gross Sales | $9,223,162 | $8,904,476 | $318,686 | 3.6% | $7,614,790 | $1,608,372 | 21.12%
Returns and Adjustments | ($328,194) | ($361,430) | $33,236 | -9.2% | ($241,280) | ($86,913) | 36.02%
Net Sales | $8,886,717 | $8,534,150 | $352,567 | 4.1% | $7,340,442 | $1,546,276 |
Cost of Sales | ($2,817,901) | ($2,624,846) | ($193,054) | 7.4% | ($2,008,089) | ($809,812) | 40.33%
Standard Cost of Sales | ($2,590,740) | ($2,379,391) | ($211,349) | 8.9% | ($1,797,540) | ($793,201) | 44.13%
Variances | ($227,161) | ($245,455) | $18,294 | -7.5% | ($210,549) | ($16,611) | 7.89%
Gross Profit | $6,068,817 | $5,909,304 | $159,513 | 2.7% | $5,332,353 | $736,464 |
Gross Margin | 68.3% | 69.2% | -1.0% | -1.4% | 72.6% | -4.4% |
Operating Expenses | ($6,548,323) | ($6,697,612) | $149,289 | -2.2% | ($4,844,816) | ($1,703,507) | 35.16%
January 2022 MTD Waterfall Chart for Returns and Adjustments By Parent Organisation
200,000
300,000
-337,712
72,290
38,745
-79,516
-328,194
Previous Month
Pacific Operations
USA Operations
European Operations
Selected Month
Solution_Challenge12 Ratio Analysis with Drilldown, Income Statement Report
Live data
Data updated on 07/06/23, 23:03

Recap: What can Power BI help with?

Connecting directly to accounting systems/ERPs

E.g. SAP/Oracle/Xero

Shaping data into a workable (tabular) format

Telling a story around financial performance and drivers

Joining data tables manually

E.g. for Mappings between different COA/Org structures)

Creating different cuts of data/reports for different audiences

Dealing with unclean data

E.g. missing/duplicate values

Calculating logic

E.g. financial ratios) across different levels

Combining data from different sources

E.g. financial/non-financial

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Q&A