

# Data adoption roadmap.

Turns your data into wisdom at the right pace

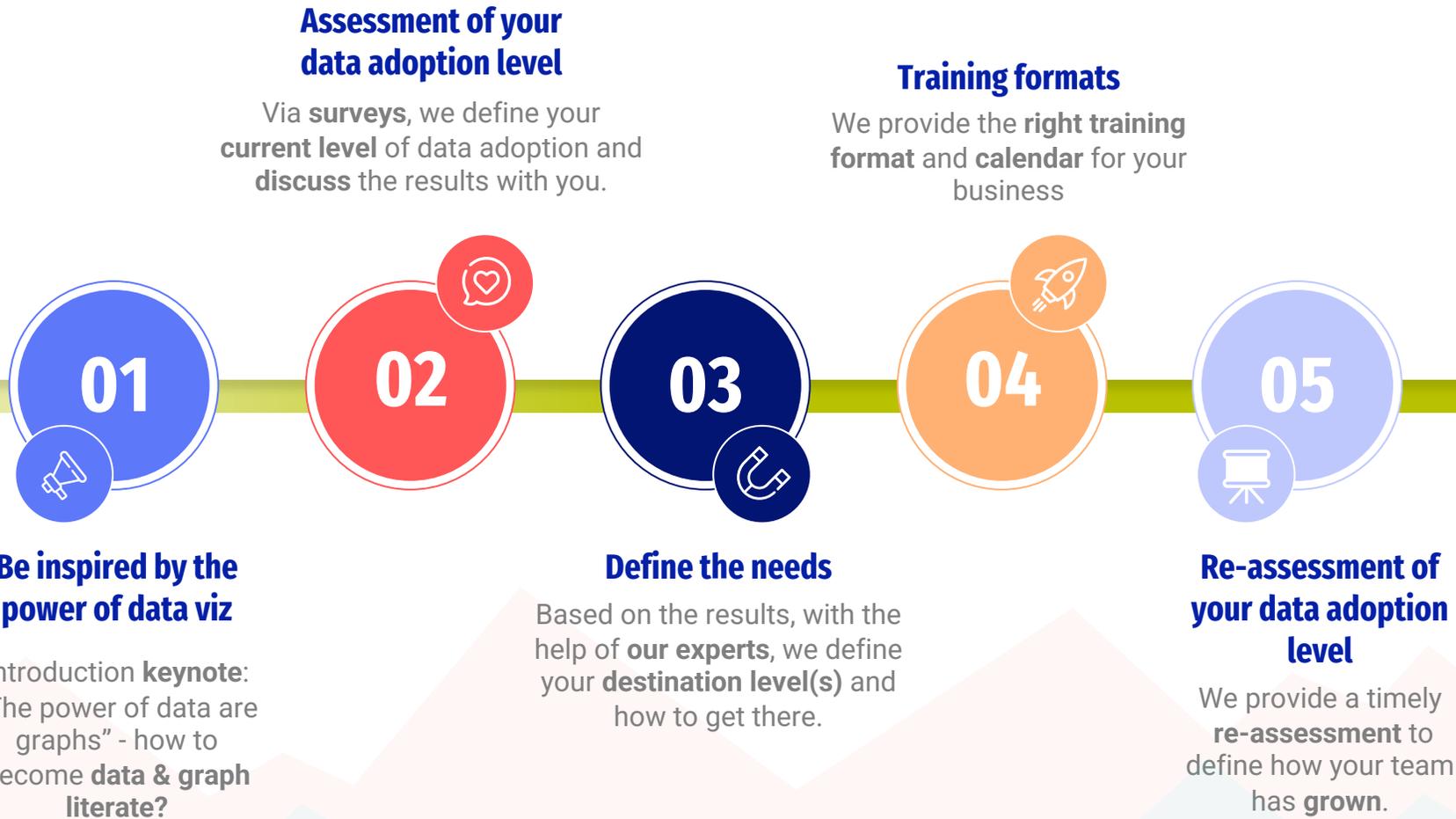


EpicData.

# Data adoption roadmap in 5 bullets.

- Scalable training programme
- Lift the data adoption level in your whole organisation
- Suitable for both business & IT
- Continuously measure your success & data adoption grade
- Easy & transparent pricing to lower the entry treshold





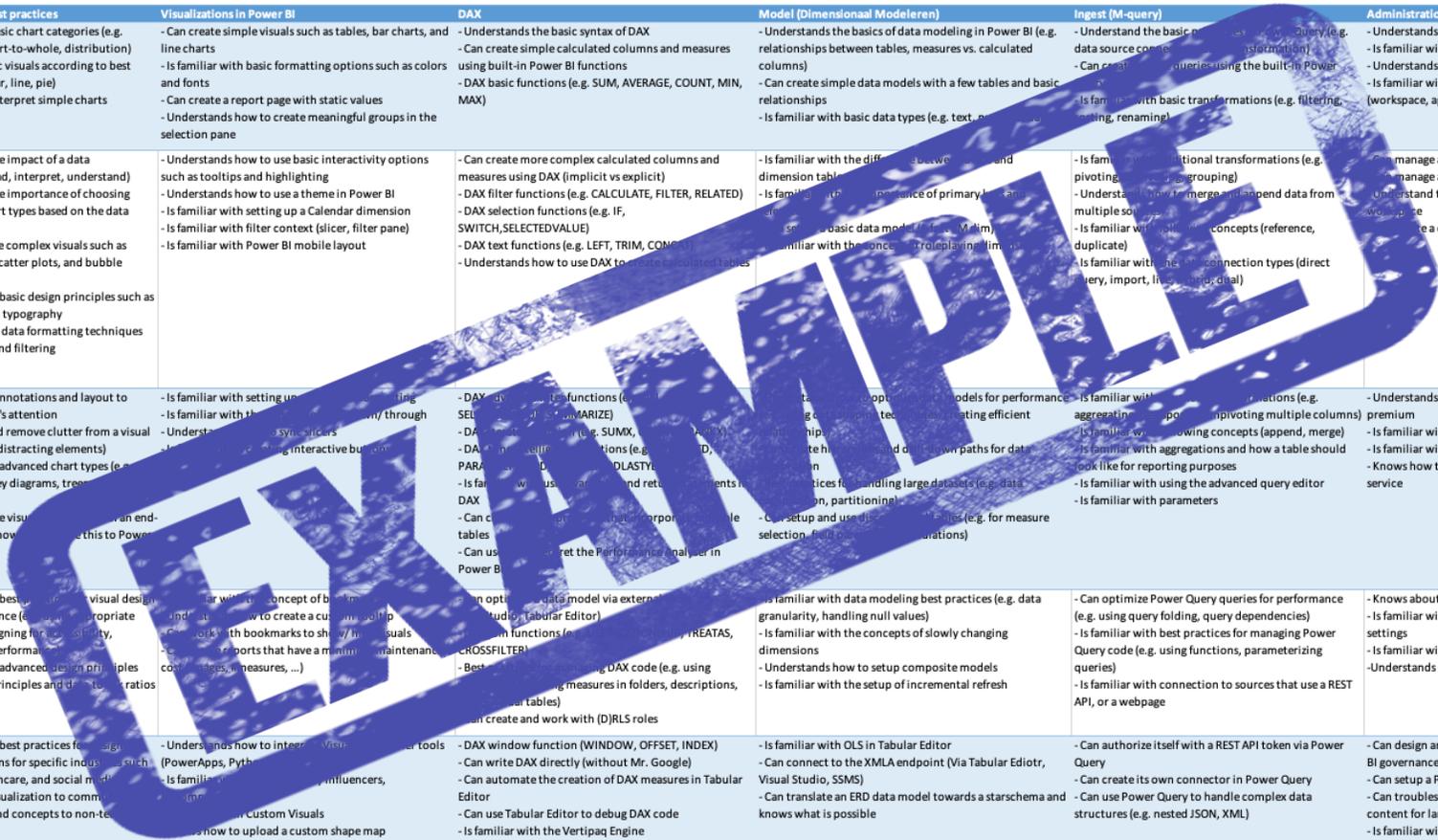
**Let's build a Data Community**

We make sure everyone can learn in a **continuous** way

# Define the needs – skillmatrix level example.



Naam	Visualization best practices	Visualizations in Power BI	DAX	Model (Dimensionaal Modeleren)	Ingest (M-query)	Administration (PowerBI Service)
Level 1 - Beginner	<ul style="list-style-type: none"> <li>- Understands basic chart categories (e.g. composition, part-to-whole, distribution)</li> <li>- Can create basic visuals according to best practices (e.g. bar, line, pie)</li> <li>- Can read and interpret simple charts</li> </ul>	<ul style="list-style-type: none"> <li>- Can create simple visuals such as tables, bar charts, and line charts</li> <li>- Is familiar with basic formatting options such as colors and fonts</li> <li>- Can create a report page with static values</li> <li>- Understands how to create meaningful groups in the selection pane</li> </ul>	<ul style="list-style-type: none"> <li>- Understands the basic syntax of DAX</li> <li>- Can create simple calculated columns and measures using built-in Power BI functions</li> <li>- DAX basic functions (e.g. SUM, AVERAGE, COUNT, MIN, MAX)</li> </ul>	<ul style="list-style-type: none"> <li>- Understands the basics of data modeling in Power BI (e.g. relationships between tables, measures vs. calculated columns)</li> <li>- Can create simple data models with a few tables and basic relationships</li> <li>- Is familiar with basic data types (e.g. text, number, date)</li> </ul>	<ul style="list-style-type: none"> <li>- Understand the basic principles of Power Query (e.g. data source connections, transformations)</li> <li>- Can create simple queries using the built-in Power Query Editor</li> <li>- Is familiar with basic transformations (e.g. filtering, sorting, renaming)</li> </ul>	<ul style="list-style-type: none"> <li>- Understands how to publish a report</li> <li>- Is familiar with navigation in Power BI</li> <li>- Understands how to subscribe users to reports</li> <li>- Is familiar with the several components in Power BI (workspace, app, report, dashboard)</li> </ul>
Level 2 - Novice	<ul style="list-style-type: none"> <li>- Understands the impact of a data visualization (read, interpret, understand)</li> <li>- Understands the importance of choosing appropriate chart types based on the data being visualized</li> <li>- Can create more complex visuals such as stacked charts, scatter plots, and bubble charts</li> <li>- Is familiar with basic design principles such as color theory and typography</li> <li>- Can apply basic data formatting techniques such as sorting and filtering</li> </ul>	<ul style="list-style-type: none"> <li>- Understands how to use basic interactivity options such as tooltips and highlighting</li> <li>- Understands how to use a theme in Power BI</li> <li>- Is familiar with setting up a Calendar dimension</li> <li>- Is familiar with filter context ( slicer, filter pane)</li> <li>- Is familiar with Power BI mobile layout</li> </ul>	<ul style="list-style-type: none"> <li>- Can create more complex calculated columns and measures using DAX (implicit vs explicit)</li> <li>- DAX filter functions (e.g. CALCULATE, FILTER, RELATED)</li> <li>- DAX selection functions (e.g. IF, SWITCH, SELECTEDVALUE)</li> <li>- DAX text functions (e.g. LEFT, TRIM, CONCATENATE)</li> <li>- Understands how to use DAX to create calculated tables</li> </ul>	<ul style="list-style-type: none"> <li>- Is familiar with the difference between star and dimension tables</li> <li>- Is familiar with the importance of primary/foreign keys</li> <li>- Is familiar with basic data model types (e.g. MDM, Data Lake)</li> <li>- Is familiar with the concept of roleplaying dimensions</li> </ul>	<ul style="list-style-type: none"> <li>- Is familiar with conditional transformations (e.g. pivoting, unpivoting, grouping)</li> <li>- Understands how to merge and append data from multiple sources</li> <li>- Is familiar with table relationships (reference, duplicate)</li> <li>- Is familiar with the different connection types (direct query, import, live, refresh, dual)</li> </ul>	<ul style="list-style-type: none"> <li>- Can manage a dataset</li> <li>- Can manage an app</li> <li>- Understand the differences in roles of the workspace</li> <li>- Can create a dashboard</li> </ul>
Level 3 - Intermediate	<ul style="list-style-type: none"> <li>- Can use visual annotations and layout to guide the viewer's attention</li> <li>- Can identify and remove clutter from a visual (unnecessary or distracting elements)</li> <li>- Is familiar with advanced chart types (e.g. heat maps, sankey diagrams, treemap, marimekko)</li> <li>- Understands the visual language of an end-user and knows how to apply this to Power BI</li> </ul>	<ul style="list-style-type: none"> <li>- Is familiar with setting up a dashboard</li> <li>- Is familiar with the concept of roleplaying dimensions</li> <li>- Understands how to use bookmarks to show/hide visuals</li> <li>- Can create reports that have a minimum maintenance cost (links, measures, ...)</li> </ul>	<ul style="list-style-type: none"> <li>- DAX advanced functions (e.g. EARLIER, EARLIEST, SELECTEDVALUE, MERGE, MARIZE)</li> <li>- DAX aggregation functions (e.g. SUMX, AVERAGEX, MAXX)</li> <li>- DAX intelligence functions (e.g. IFERROR, IF, PARALLELARRAY, LASTYEAR)</li> <li>- Is familiar with using advanced refresh options in DAX</li> <li>- Can create a report that incorporates multiple tables</li> <li>- Can use the Performance Analyzer in Power BI</li> </ul>	<ul style="list-style-type: none"> <li>- Is familiar with the different options for data models for performance</li> <li>- Understands the importance of creating efficient relationships</li> <li>- Can create histograms and data flow paths for data analysis</li> <li>- Is familiar with advanced techniques for handling large datasets (e.g. data partitioning, incremental refresh)</li> <li>- Can setup and use DAX roles (e.g. for measure selection, filter context)</li> </ul>	<ul style="list-style-type: none"> <li>- Is familiar with advanced aggregations (e.g. aggregating, pivoting, unpivoting multiple columns)</li> <li>- Is familiar with table relationships (append, merge)</li> <li>- Is familiar with aggregations and how a table should look like for reporting purposes</li> <li>- Is familiar with using the advanced query editor</li> <li>- Is familiar with parameters</li> </ul>	<ul style="list-style-type: none"> <li>- Understands the difference between pro and premium</li> <li>- Is familiar with report usage metrics</li> <li>- Is familiar with deployment pipelines</li> <li>- Knows how to create a paginated report in the service</li> </ul>
Level 4 - Advanced	<ul style="list-style-type: none"> <li>- Is familiar with best practices for visual design and user experience (e.g. choosing appropriate chart types, designing for consistency, optimizing for performance)</li> <li>- Is familiar with advanced design principles such as gestalt principles and design ratios</li> </ul>	<ul style="list-style-type: none"> <li>- Is familiar with the concept of bookmarking</li> <li>- Understands how to create a custom self-help guide</li> <li>- Can create reports that have a minimum maintenance cost (links, measures, ...)</li> </ul>	<ul style="list-style-type: none"> <li>- Can optimize a data model via external tools (e.g. Tabular Editor)</li> <li>- Can write DAX directly (without Mr. Google)</li> <li>- Can use advanced DAX functions (e.g. EARLIER, EARLIEST, CROSSFILTER)</li> <li>- Best practices for writing DAX code (e.g. using variables, avoiding measures in folders, descriptions, using calculated tables)</li> <li>- Can create and work with (D)RLS roles</li> </ul>	<ul style="list-style-type: none"> <li>- Is familiar with data modeling best practices (e.g. data granularity, handling null values)</li> <li>- Is familiar with the concepts of slowly changing dimensions</li> <li>- Understands how to setup composite models</li> <li>- Is familiar with the setup of incremental refresh</li> </ul>	<ul style="list-style-type: none"> <li>- Can optimize Power Query queries for performance (e.g. using query folding, query dependencies)</li> <li>- Is familiar with best practices for managing Power Query code (e.g. using functions, parameterizing queries)</li> <li>- Is familiar with connection to sources that use a REST API, or a webpage</li> </ul>	<ul style="list-style-type: none"> <li>- Knows about the Premium Capacity management (e.g. using the admin portal with its tenant settings)</li> <li>- Is familiar with auditing and monitoring logs</li> <li>- Understands how to set up a (personal) data gateway</li> </ul>
Level 5 - Expert	<ul style="list-style-type: none"> <li>- Is familiar with best practices for designing data visualizations for specific industries such as finance, healthcare, and social media</li> <li>- Can use data visualization to communicate complex ideas and concepts to non-technical audiences</li> <li>- Is an ambassador in the organization with regards to communicating data effectively</li> </ul>	<ul style="list-style-type: none"> <li>- Understands how to integrate Power BI with other tools (PowerApps, Python, etc.)</li> <li>- Is familiar with the concept of influencers, and how to use them</li> <li>- Can create Custom Visuals</li> <li>- Understands how to upload a custom shape map</li> <li>- Understands how to setup a Power BI Theme in JSON</li> </ul>	<ul style="list-style-type: none"> <li>- DAX window function (WINDOW, OFFSET, INDEX)</li> <li>- Can write DAX directly (without Mr. Google)</li> <li>- Can automate the creation of DAX measures in Tabular Editor</li> <li>- Can use Tabular Editor to debug DAX code</li> <li>- Is familiar with the Vertipaq Engine</li> </ul>	<ul style="list-style-type: none"> <li>- Is familiar with OLS in Tabular Editor</li> <li>- Can connect to the XMLA endpoint (Via Tabular Editor, Visual Studio, SSMS)</li> <li>- Can translate an ERD data model towards a starschema and knows what is possible</li> </ul>	<ul style="list-style-type: none"> <li>- Can authorize itself with a REST API token via Power Query</li> <li>- Can create its own connector in Power Query</li> <li>- Can use Power Query to handle complex data structures (e.g. nested JSON, XML)</li> </ul>	<ul style="list-style-type: none"> <li>- Can design and implement a comprehensive Power BI governance framework</li> <li>- Can setup a Power BI tenant</li> <li>- Can troubleshoot performance issues and optimize content for large-scale deployments</li> <li>- Is familiar with industry-specific regulations such as GDPR</li> </ul>

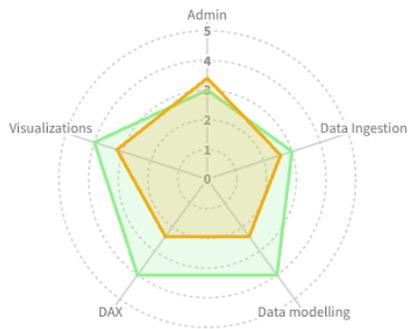


# Define the needs – skillmatrix department report example.

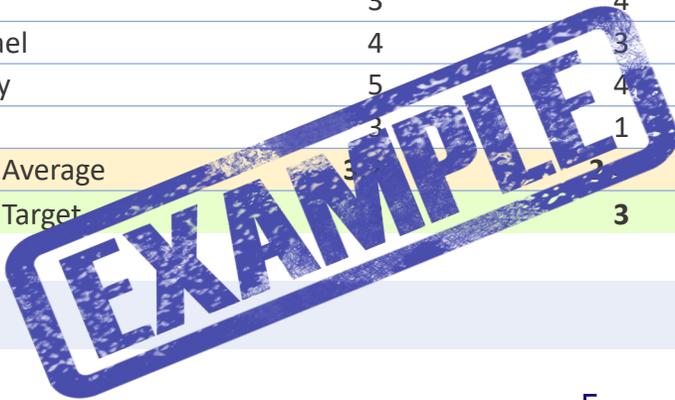


## Data adoption report. Coverage: 78%

### Team details



Name	Admin	Data Ingestion	Data modelling	DAX	Visualizations
Anita	1	0	2	2	4
Luc	3	4	2	3	3
Michael	4	3	4	4	5
Jeffrey	5	4	2	3	4
Lisa	3	1	2	1	1
Team Average	3	2	2,4	2,6	3,4
Team Target		3	4	4	4



### Action planning

Based on your overall coverage:

Focus area: Data Ingestion & Data modelling

Your organisation is relatively mature but can improve primarily on data ingestion and data modelling skills. Data ingestion is a necessary skill for your organisation, as the setup of Power BI is based on various Excel files that need to be ingested and transformed, respectively. Some employees do have the necessary skills to perform advanced actions, however from discussions with the manager, the full team needs to be able to do these kind of tasks. Next to the ingestion of the data, the team also needs to focus on data modelling techniques, which are necessary to create sustainable Power BI reports. Based on the current situation, we suggest to assign Michael as a 'data steward' within this department.

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## DATA COMMUNITY

Ongoing support for continuous learning.

That's what a **data community** is all about.

### WHAT WE BRING

- Workshops to help your organization with your data journey
- Technical guidance for your organization's users to keep them up-to-date
- Make sure your organization can work with data with minimal intervention of a third party

### GOALS AND ACTIONS

- Identify stakeholders and ambassadors
- Prepare the workshop days according to the agreed dates
- Setup the right communication channels to facilitate collaboration and communication within the data organisation