Data models in Power BI – Lesson overview

Data models form the foundation of meaningful insights and interactive reports in Power BI. Much like SQL (Structured Query Language) serves as the foundation for database management, Power BI relies on **data models to seamlessly connect**, **organise**, **and transform data into actionable insights**. In Power BI we have a **structured representation of our data**, **with tables**, **relationships**, **and calculations**.

In this lesson, we take a look at **viewing**, **creating**, and **managing data models in Power BI**, and explore how our **data model and data granularity impact our reports**. By the end of this lesson, you will be able to create and manage data models in Power BI, know how to resolve model errors and understand how data models impact our reports and dashboards.
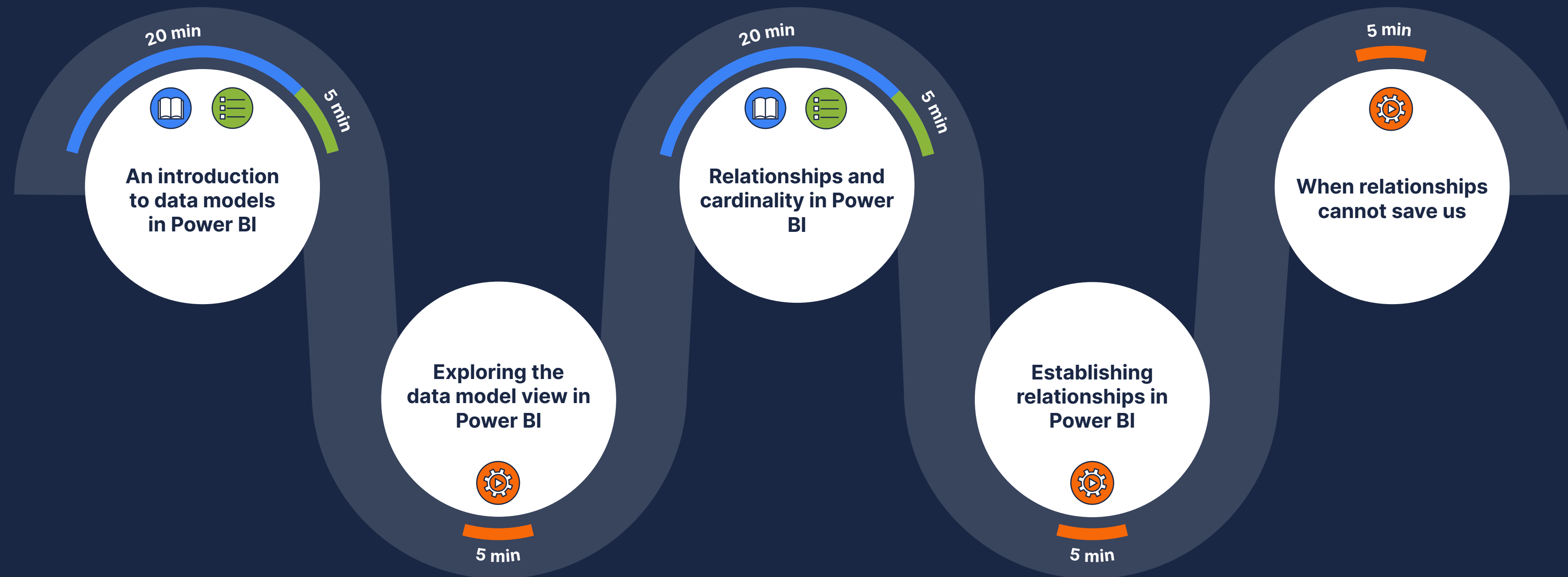
Slide deck

Knowledge questions

Walk-through

20 min

5 min

An introduction to data models in Power BI

5 min

Exploring the data model view in Power BI

20 min

5 min

Relationships and cardinality in Power BI

5 min

Establishing relationships in Power BI

5 min

When relationships cannot save us

Learning objectives

- Understand the significance of data models in enabling comprehensive data analysis and visualisation within Power BI.

- Know how to establish relationships between tables to enable seamless cross-table analysis and insights.

- Use the data model view in Power BI to visualise and validate relationships, hierarchies, and cardinalities.

- Apply best practices for organising tables, fields, and relationships to create a logical and user-friendly data model.

- Understand circular dependencies and how to avoid them.