



# Roadmap for Data Analysis with Power BI

Embark on a journey of data exploration and business intelligence with this comprehensive roadmap for Power BI. Discover the essential steps to unlock the power of your data and drive impactful decisions.



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# Power Bi



## Getting Started

- 1 Installation**  
Download and install Power BI Desktop, the free analytical tool from Microsoft.
- 2 Overview**  
Familiarize yourself with the Power BI user interface and its core capabilities.
- 3 Data Inputs**  
Connect Power BI to a variety of data sources, like Excel and CSVs Files

# Introduction to Business Intelligence

## Data-Driven Decisions

Leverage Power BI to transform data into actionable insights, empowering data-driven decision making.

## Competitive Advantage

Gain a competitive edge by uncovering hidden trends and patterns in your data.

## Operational Efficiency

Optimize business processes and workflows by identifying areas for improvement.



# Data Preparation

1

## Data Cleaning

Eliminate errors, inconsistencies, and missing values in your data.

2

## Data Transformation

Reshape and format your data to align with your analysis requirements.

3

## Data Modeling

Define relationships between your data sources to enable sophisticated analysis.



# Power Query Basics

## Data Transformations

Leverage Power Query's extensive set of data transformation tools to clean and prepare your data.

# Data Modeling & Schema Types

1

## Flat Data Model

Simplify your data model by flattening hierarchies and relationships, suitable for basic analysis.

2

## Star Schema

Organize your data into a central fact table and surrounding dimension tables for optimal performance.

3

## Snowflake Schema

Extend the star schema by normalizing dimensions, creating a more complex but flexible data model.



# Core Analytics

## Statistics Fundamentals

Understand key statistical concepts, such as measures of central tendency and variability, to interpret your data accurately.

## Introduction to DAX

Dive into the DAX formula language, mastering calculated columns, tables, and time-based intelligence.

## Data Visualization

Create compelling visualizations, from basic charts to advanced KPIs and decomposition trees, to tell a compelling data story.

# Data Visualization

- Creating Charts (Bar, Line, Pie, etc.)
- Advanced Visuals (KPIs, Tree Decomposition, Key Influencers)
- Formatting & Filters
- Bookmarks
- Buttons





# Reporting & Publishing

- Building Reports
- Case Studies & Real-World Applications
- Publishing Dashboards

