



How to learn

# DATA ANALYTICS

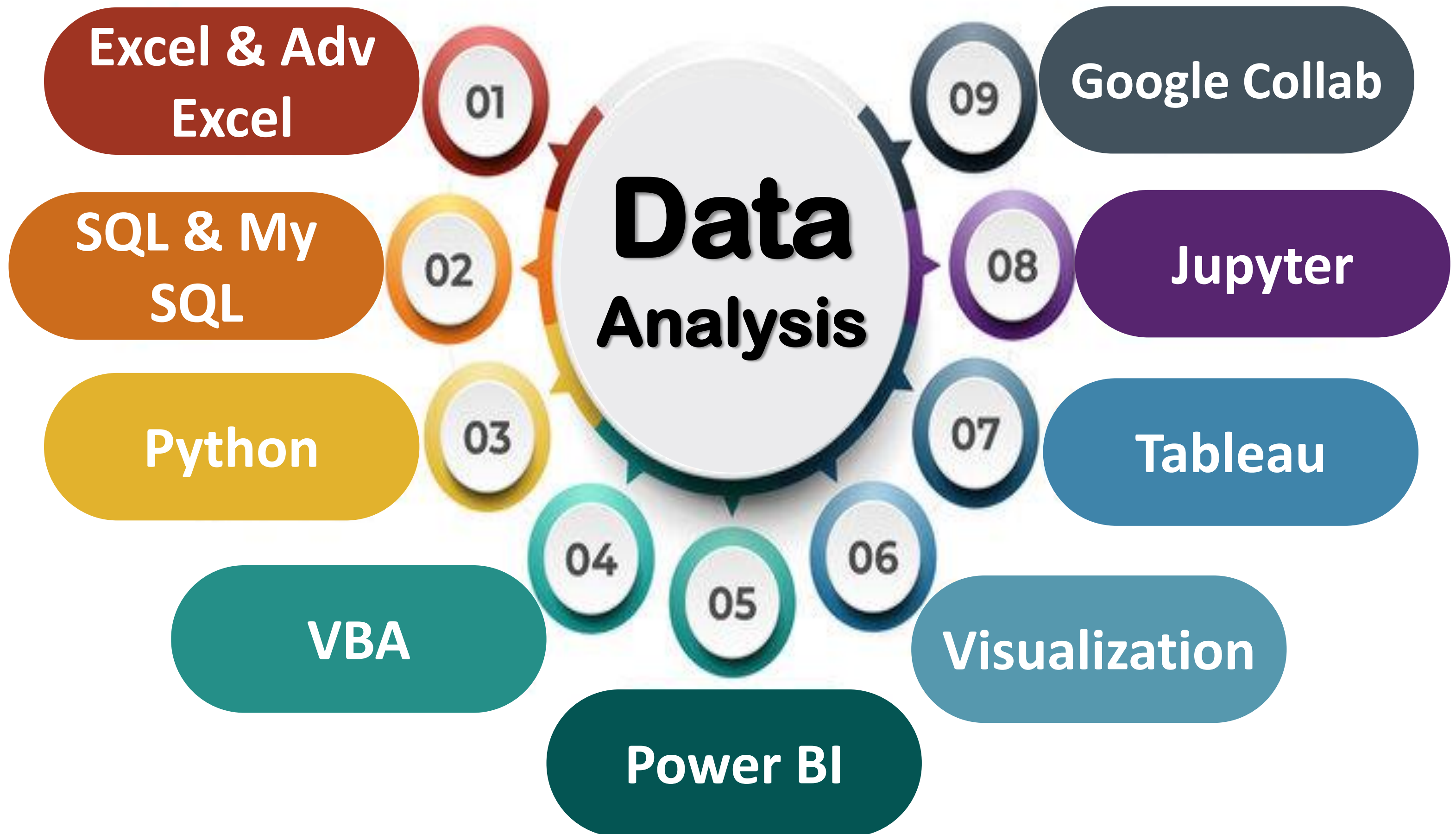


# INTRODUCTION

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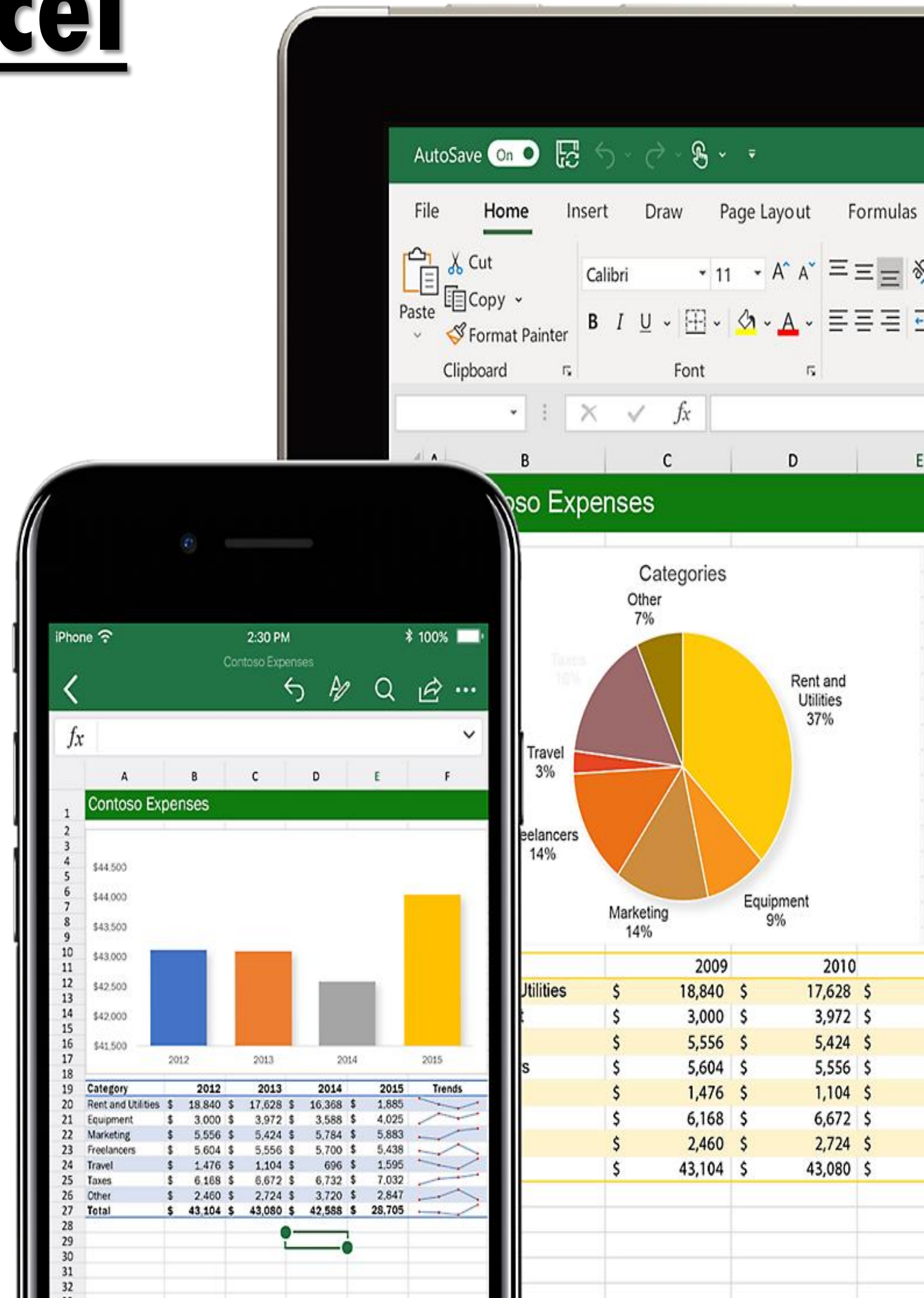
Data analytics is the process of analyzing raw data to uncover meaningful insights and patterns that can inform decision-making. By leveraging techniques such as statistical analysis, machine learning, and data visualization, organizations can extract valuable information from large datasets to drive strategic initiatives, optimize operations, and gain a competitive edge in today's data-driven world.

# Course Outline



# Excel & Advance Excel

- **Basic Functions**
- **Data Organization**
- **Formatting**
- **Charts and Graphs**
- **PivotTables**
- **Advanced Functions**
- **Data Analysis Tools**
- **Macros and Automation**
- **Data Visualization**
- **Power Query and Power Pivot**



# VBA

- **Integration with Office Suite**
- **Object-Oriented Language**
- **Event-Driven Programming**
- **Macro Recorder**
- **IDE (Integrated Development Environment)**
- **Access to Object Model**
- **Language Constructs**
- **Extensibility & Security**
- **Community and Resources**



# SQL & MYSQL

- **Standardized Language**
- **Data Definition Language (DDL)**
- **Data Manipulation Language (DML)**
- **Data Control Language (DCL)**
- **Data Query Language (DQL)**
- **Data Types**
- **Constraints & Transactions**
- **Open Source RDBMS**
- **Compatibility**
- **Client/Server Architecture**
- **Scalability**
- **Performance**
- **Community and Support**
- **Storage Engines & Administration Tools**



# PYTHON

- **General-Purpose Programming Language**
- **Readability and Simplicity**
- **Interpreted Language**
- **Dynamic Typing**
- **Object-Oriented**
- **Extensive Standard Library**
- **Large Ecosystem**
- **Platform Independence**
- **Community and Support**
- **Open Source**



# POWER BI

- **Data Visualization**
- **Data Connectivity**
- **Data Modelling**
- **Data Analysis**
- **Data Visualization Customization**
- **Interactive Dashboards**
- **Sharing and Collaboration**
- **Security and Governance**
- **Mobile Apps**
- **Integration with Other Microsoft Products**





# VISUALIZATION

- **Communication**
- **Understanding Patterns and Trends**
- **Exploration and Discovery**
- **Decision Making**
- **Storytelling**
- **Visualization Types**
- **Design Principles**
- **Tools and Technologies**
- **Interactivity**
- **Ethical Considerations**





# JUPYTER

- **Largest Planet**
- **Composition**
- **Great Red Spot**
- **Magnetic Field**
- **Moons**
- **Ring System**
- **Gravity Assist**
- **Scientific Missions**
- **Role in Solar System Dynamics**
- **Formation**



# GOOGLE COLAB

- **Jupyter Notebooks**
- **Free Cloud Computing**
- **Integration with Google Drive**
- **Support for Libraries**
- **Collaborative Editing**
- **Code Snippets and Examples**
- **Markdown Support**
- **Export Options**

