### 1. Difference between Power BI Desktop and Power BI Online Service

- **Power BI Desktop** (free, Windows app):
  - Used for data modeling, transformations (Power Query), DAX, building reports.
  - Everything happens locally.
- **Power BI Service (Online)** (cloud platform):
  - Used for sharing, collaboration, scheduled refresh, dashboards, apps, and governance.
  - No complex modeling, but consumption, security, and distribution of reports.
- $\leftarrow$  Think: Build in Desktop  $\rightarrow$  Publish to Service  $\rightarrow$  Share with others.

### 2. Publishing a report from Desktop to Online

- In **Power BI Desktop**  $\rightarrow$  click **Publish** (on Home ribbon).
- Sign into Power BI account.
- Select a workspace (not "My Workspace" if enterprise).
- Report + semantic model (dataset) are uploaded to the Service.

# 3. What is a Workspace? Types of Workspaces

- Workspace = a container in Power BI Service that holds reports, datasets, dashboards, and dataflows.
- Types:
  - My Workspace private, only visible to you.
  - Workspaces (collaborative) shared with team members; supports roles (Admin, Member, Contributor, Viewer).

# 4. Difference between a Workspace and an App

• Workspace: Development and collaboration space for a team. Editable.

• **App**: Packaged, read-only version of workspace content. Published from a workspace → shared with wider audience.

## 5. Power BI License Types

- **Free** build reports in Desktop; can publish to *My Workspace* only; limited sharing.
- **Pro (\$10/user/month)** required for sharing, collaboration, publishing apps.
- **Premium Per User (PPU \$20/user/month)** includes Pro features + advanced (paginated reports, larger dataset sizes, AI).
- **Premium Capacity (enterprise)** organization buys dedicated capacity; users with free licenses can view shared reports.

## 6. Sharing a report with someone without a Pro license

- Option 1: Organization must have **Premium Capacity** → free users can consume shared content.
- Option 2: Recipient must upgrade to **Pro/PPU** (no way around without Premium).

## 7. Semantic Model (Dataset)

- **Dataset** = collection of data, model, relationships, measures.
- Stored in the **Power BI Service** under the workspace where you published it.
- Multiple reports can connect to the same dataset.

#### 8. Scheduled Refresh

- In Power BI Service → configure refresh schedule for datasets connected to cloud/on-prem sources.
- Uses On-Premises Data Gateway for local databases.
- Pro/PPU: up to 8 refreshes/day; Premium: up to 48/day.

#### 9. Dataset vs. Dataflow

- **Dataset** = semantic model used for reporting (tables, relationships, DAX).
- **Dataflow** = ETL layer built in the cloud (Power Query Online); reusable across multiple datasets.
- **b** Dataset = final model, Dataflow = data preparation pipeline.

#### 10. When to use a Dataflow

- When you need data prep once, reused across multiple reports/datasets.
- Example: Same "Customer Dimension" used in Sales, Finance, and Marketing reports.
- Reduces duplication and ensures consistency.

#### 11. Dashboards in Power BI Online

- **Dashboard** = **single-page canvas** (**tiles**) built in Service.
- Different from Reports:
  - o **Reports** = multi-page, interactive visuals built in Desktop.
  - **Dashboards** = mashup from multiple reports, pinned visuals, KPIs.

#### 12. Pin a Visual to a Dashboard

• Open a report in Service → hover over a visual → click **Pin** → choose a dashboard.

#### 13. Mobile View

- Layout mode in Service/Desktop to arrange visuals for phone screens.
- Useful for executives/managers who consume reports on mobile apps.

### 14. Paginated Report

• Pixel-perfect, paged reports (like SSRS).

- Used for invoices, statements, regulatory reporting.
- Only available with **Premium or PPU**.

### 15. Export to PDF or PowerPoint

- In Service: open a report  $\rightarrow$  File  $\rightarrow$  Export  $\rightarrow$  choose PDF or PowerPoint.
- Static export (not interactive).

#### 16. Live Connection

- A connection where dataset remains in source (SSAS, Power BI Dataset, Azure Analysis Services).
- No data stored in report; queries go to source in real time.

### 17. Row-Level Security (RLS)

- Restricts data at row level based on user role.
- Defined in Desktop  $\rightarrow$  published to Service.
- Applied when user opens report in Service or App.

## 18. Testing RLS in Service

• Go to dataset → Security → select role → "Test as role" or "Test as user."

# 19. Apps in Power BI

- Packaged collection of dashboards/reports.
- Published from a workspace → shared with users/groups.
- Consumers can't edit, only view.

# 20. Key Benefits of Power BI Service (Enterprise)

- Centralized sharing and collaboration.
- Scheduled refresh & data gateway for automation.
- Security (RLS, sensitivity labels).

- Scalability with Premium capacity.
- Apps for distribution to large audiences.
- Integration with Teams, Excel, SharePoint.