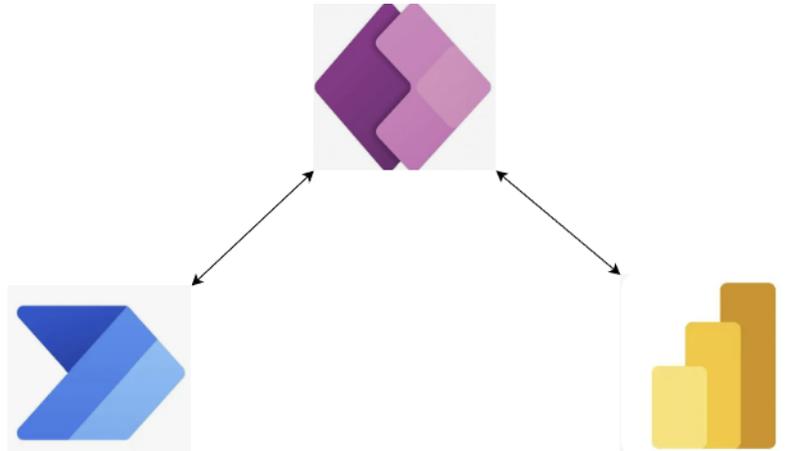Detailed course plan structured around the **"Expense Report Management Portal"** case study.

This project is designed to link each tool into a coherent ecosystem: **Capture** (Power Apps), **Processing** (Power Automate), **Analysis** (Power BI)

Session 1 — Introduction to Power Apps: The Capture Interface

Objective: Design a functional mobile application allowing employees to submit their expenses and capture receipts in real-time.

1. Contextual Overview
- What is the Power Platform and its role in digital transformation.
- Where Power Apps fits: transforming paper or manual Excel processes into mobile applications.
- Data strategy: SharePoint vs. Dataverse vs. EXCEL.

2. Exploring Power Apps
- Discovery of the interface (Studio) and app types (Canvas vs. Model-driven).
- Key concepts: Screens, controls (buttons, text inputs), and data sources.
- Introduction to Power Fx formulas (Excel-style logic).

3. Demonstration: Building the Expense App from scratch
- Connecting to the data source (Expense list).
- Creating a submission form (Title, Amount, Category).
- Adding a "Gallery" to view and search previous submissions.
- Integrating the camera control to attach receipt photos.

4. Business Scenarios
- Capturing expenses while traveling or in the field.
- Real-time data validation before submission (mandatory fields).

5. Guided Workshop
- UI Customization: adding conditional formatting (e.g., the amount turns red if it exceeds a certain threshold).
- Q&A Session.

Session 2 — Introduction to Power Automate: Flow Intelligence

Objective: Orchestrate the validation circuit and automate status updates without manual intervention.

1. Contextual Overview
- The role of Power Automate as the "nervous system" of the company.
- Types of automation: Cloud flows (automatic triggers) and Desktop flows (RPA).

2. Exploring Power Automate
- Interface, connectors (Outlook, Teams, SharePoint), and the template library.
- Core concepts: Triggers and Actions.
- Modern approvals within the M365 ecosystem.

3. Demonstration: Automating the Expense Process
- Creating the flow: "When a new expense is submitted via the App."
- Configuring the "Approval" action: sending an interactive notification to the manager.
- Branching logic: If approved, send a confirmation email; if rejected, notify the user for corrections.

4. Concrete Scenarios
- Intelligent routing: if the expense is > $500, the flow alerts the Finance Department in addition to the manager.
- Automatic database updates: changing the request status from "Pending" to "Approved."

5. Guided Workshop
- Each participant builds a simple Teams notification flow triggered by an action in the application created in Session 1.
- Q&A Session.

Session 3 — Introduction to Power BI: Decision-Making Insight

Objective: Transform raw expense data into an analytical dashboard for management and oversight.

1. Power BI's role in the Power Platform
- Moving from operational data to strategic knowledge.
- Difference between Power BI Desktop (creation) and the Service (sharing).

2. Exploring Power BI Desktop
- Interface: Report, Data, and Model views.
- Importing data from the Expense App source (SharePoint/Dataverse).
- Introduction to Power Query for data cleaning (date formats, currencies).

3. Demonstration: Building the Expense Report
- Creating visuals: Donut chart by category (Meals, Travel, Hotel).
- Histogram of monthly spending trends.
- Using Slicers to filter data by employee, department, or date.
- Publishing to the company's web portal.

4. Concrete Scenarios
- Real-time tracking of the remaining annual budget.
- Identifying the most expensive types of costs for the organization.

5. Guided Workshop
- Participants modify the report to add a KPI card showing the average monthly reimbursement amount.
- Q&A Session.

Session 4 — Microsoft 365 Copilot: AI Productivity

Objective: Master generative AI within Office tools to accelerate policy writing and document analysis related to the project.

1. Contextual Overview
- What is Microsoft 365 Copilot and how it interacts with your data (Microsoft Graph).
- The art of "Prompt Engineering": Context, Objective, Source, and Format.

2. Exploring Copilot in Word, Excel, and PowerPoint
- Interface and Copilot buttons in each application.
- Difference between general chat and contextual in-document assistance.

3. Demonstration: AI for the Manager
- **Word:** Instantly drafting a "Travel Expense Reimbursement Policy" based on a few rough notes.
- **Excel:** Analyzing a complex expense export, identifying spending anomalies, and generating budget forecasts through simple questions.
- **PowerPoint:** Creating a 5-slide executive presentation from the previously written Word policy document.

4. Business Scenarios
- Summarizing long Outlook threads regarding expense disputes.
- Preparing for budget review meetings with AI-identified key talking points.

5. Guided Workshop

- Practical Exercise: Use Copilot to transform an Excel expense list into a narrative summary ready to be sent via email.
- Final Training Synthesis and Q&A.