**BankSight Analytics**

**1. Problem Statement**

Financial institutions generate massive volumes of customer-related data, yet lack effective mechanisms to interpret this data for strategic decision-making. Without structured analysis and visual dashboards, it becomes difficult to identify patterns in loans, deposits, income segments, and customer behavior.

This project aims to build a complete end-to-end banking dashboard solution, leveraging Python for Exploratory Data Analysis (EDA) and Power BI for interactive visual reporting, to support data-driven business insights.

**2. Project Objectives**

* To perform EDA using Python to uncover hidden trends and clean the dataset.
* To visualize banking metrics such as total loans, deposits, credit balances, account types, and estimated income.
* To segment data by nationality, gender, occupation, income band, and banking relationships.
* To design a summary dashboard for easy executive reporting.

**3. Dataset Overview**

Key fields analyzed and visualized:

* **Demographic Data**: Client ID, Name, Age, GenderId, Nationality, Occupation
* **Financial Data**: Fee Structure, Estimated Income, Superannuation Savings, Credit Card Balance, Bank Loans, Bank Deposits, Checking Accounts, Saving Accounts, Foreign Currency Account, Business Lending
* **Classification & Metadata**: Loyalty Classification, Risk Weighting, BRId, IAId

**4. Tools & Technologies Used**

* **Python (Pandas, Matplotlib, Seaborn)**: For data preprocessing and exploratory data analysis (EDA)
* **Power BI**: For data modeling and visualization
* **Excel/CSV**: As the original data source for transformation and loading