LoanLens: Performance & Risk Dashboard

Objective:

Analyze borrower loan data to uncover risk levels, payment behavior, and key performance trends by grade, term, state, and purpose.

Data Source:

- Source: Kaggle
- Fields: Loan ID, State, Term, Loan Amount, Interest Rate, Grade, Purpose, Total Payment, Annual Income, DTI, Loan Status.

Data Cleaning Steps:

- Format Date and other columns
- Standardized columns
- Changed the State Abbreviation to State Name (VLOOKUP)
- Changed the Emp type column values like <1 year to Below 1 (VLOOKUP)
- Changed the Grade column values (VLOOKUP)Converted data types

Tools Used:

- **Excel:** ETL preprocessing (VLOOKUPs, formatting)
- Power BI: Dashboard creation, DAX measures, visuals

Key Metrics:

- Total Products: 1351
- Average Rating: 4.0
- Total Reviews: 5841
- Average Discount %: 48%

***** Key Insights:

- Top States: Texas, Virginia, and Washington have the highest loan amounts
- Top Loan Purpose: Debt Consolidation leads with ₹232M disbursed
- Strong Repayment: 80.6% loans fully paid, only 4.3% charged off
- Interest Rates: Lower grades (E–G) pay 20%+ interest; A–B pay 6–10%
- **DTI Insight:** Higher DTI means higher risk and interest rates
- Loan Terms: 36-month loans perform better than 60-month loans
- Seasonal Trends: Q1 & Q2 show more loan activity
- Default Risk: Most defaults are in Grades E, F, and G

Data-Driven Loan Optimization Plan:

Focus on Low-Risk Loans

Lend more to low and moderate risk borrowers—they offer steady returns with fewer defaults.

Control High-Risk Lending

Loans with high interest rates often default. Use stricter checks and better terms for risky borrowers.

• Diversify Loan Purposes

Most funds go to debt consolidation. Encourage small business and home improvement loans for balanced growth.

• Watch State-wise Exposure

Texas, Virginia, and Washington have large loan volumes. Limit risk by monitoring and capping loans by state.

Promote Short-Term Loans

Offer benefits for 36-month loans—they pay back quicker and reduce long-term risk.

Use DTI & Income to Flag Risk

Track borrowers with high Debt-to-Income (DTI) or low income for extra review before approving loans.