

POSTUP

1. Vytvoření tabulky dat (Date Table)

Pro potřeby časových analýz jsem vytvořil tabulku dat:

```
Date Table = CALENDAR(MIN(bank_loan_data[issue_date]); MAX(bank_loan_data[issue_date]))
```

2. Přidání sloupců do tabulky dat

Do tabulky dat jsem přidal sloupec Month pro lepší analýzu:

```
Month = FORMAT('Date Table'[Date]; "mmm")
```

2. Vytvoření vztahu mezi tabulkami

Propojil jsem tabulku dat s hlavní tabulkou půjček pomocí sloupce `issue_d`:

```
Date Table[Date] → bank_loan_data[issue_d]
```

4. Výpočty (Measures)

Pro analýzu jsem vytvořil následující výpočty:

- **Total Loan Applications**

```
Total Loan Applications = COUNT(bank_loan_data[id])
```

```
MTD Loan Applications = CALCULATE(TOTALMTD([Total Loan Applications]; 'Date Table'[Date]))
```

```
MoM Loan Application = ([MTD Loan Applications]-[PMTD Loan Applications])/[PMTD Loan Applications]
```

- **Total Funded Amount:**

```
Total Funded Amount = SUM(bank_loan_data[loan_amount])
```

```
MTD Funded Amount = CALCULATE(TOTALMTD([Total Funded Amount]; 'Date Table'[Date]))
```

```
MoM Total Funded Amount = ([MTD Funded Amount]-[PMTD Total Funded Amount])/[PMTD Total Funded Amount]
```

- **Total Amount Received:**

```
Total Amount Received = SUM(bank_loan_data[total_payment])
```

```
MTD Total Amount Received = CALCULATE(TOTALMTD([Total Amount Received]; 'Date Table'[Date]))
```

```
MoM Total Amount Received = ([MTD Total Amount Received]-[PMTD Total Received Amount])/[PMTD Total Received Amount]
```

- **Average Interest Rate:**

Avg Interest Rate = `AVERAGE(bank_loan_data[int_rate])`
 MTD Avg Int Rate = `CALCULATE(TOTALMTD([Avg Interest Rate]; 'Date Table'[Date]))`
 MoM Avg Int Rate = `([MTD Avg Int Rate]-[PMTD Avg Int Rate])/[PMTD Avg Int Rate]`

- **Average Debt-to-Income (DTI)**

Avg DTI = `AVERAGE(bank_loan_data[dti])`
 MTD Avg DTI = `CALCULATE(TOTALMTD([Avg DTI]; 'Date Table'[Date]))`
 MoM Avg DTI = `([MTD Avg DTI]-[PMTD Avg DTI])/[PMTD Avg DTI]`

- **Vytvoření GROUP – Good v Bad Loan**

Good Loan % = `(CALCULATE([Total Loan Applications]; bank_loan_data[Good V Bad Loan]= "Good Loan"))/[Total Loan Applications]`
 Good Loan Applications = `CALCULATE([Total Loan Applications]; bank_loan_data[Good V Bad Loan]="Good Loan")`
 Good Loan Funded Amount = `CALCULATE([Total Funded Amount]; bank_loan_data[Good V Bad Loan]="Good Loan")`
 Good Loan Received Amount = `CALCULATE([Total Amount Received]; bank_loan_data[Good V Bad Loan]="Good Loan")`

Bad Loan % = `(CALCULATE([Total Loan Applications]; bank_loan_data[Good V Bad Loan]= "Bad Loan"))/[Total Loan Applications]`
 Bad Loan Applications = `CALCULATE([Total Loan Applications]; bank_loan_data[Good V Bad Loan]="Bad Loan")`
 Bad Loan Funded Amount = `CALCULATE([Total Funded Amount]; bank_loan_data[Good V Bad Loan]="Bad Loan")`
 Bad Loan Received Amount = `CALCULATE([Total Amount Received]; bank_loan_data[Good V Bad Loan]="Bad Loan")`

- **Vytvoření tabulky LOAN STATUS se sloupci:**

Total Loan Applications, Total Funded Amount, Total Amount Received, MTD Funded Amount, MTD Received Amount, Average Interest Rate, Average DTI.

- **Vytvoření parametru Select Measure pro:**

Total Loan Applications, Total Funded Amount, Total Amount Received

- **Vytvoření filtrů typu SLICER – State, Grade, Purpose, Select Measure, Good v Bad Loan**

5. Vizualizace a analýza

- Zobrazení jednotlivých výpočtů pomocí **Card**
- Good a Bad Loan, Total Funded Amount podle délky půjčky - **Koláčový graf**
- Zobrazení trendu celkové částky půjček podle měsíce. – **Spojnicový graf**
- Porovnání celkové částky půjček mezi různými regiony a účely půjček - **Sloupcový graf**
- Analýza vlastnictví nemovitosti – **Stromový graf**