Small Business Loan Applications

Helping You Find the Ideal Bank for Your Loan Needs

# 1. Introduction

This report details the development of the Loan Selector Dashboard, a project from week 2 of the DSN Datathon bootcamp. The aim is to assist small businesses in finding the right bank for loans based on interest rates, repayment terms, location, business age, and industry.

Full details:

<https://data.world/makeovermonday/2023w6>.

<https://www.youtube.com/watch?v=OTRo2PEpzQg>

# 2. User Story

Small business owners often struggle to find the perfect bank for loans. This project addresses this issue by providing a user-friendly dashboard that empowers them to make informed decisions. Users can filter based on the location of their business, desired repayment terms, interest rates, business age, and industry.

# 3. Dataset

This project utilizes a database from the U.S. SMALL BUSINESS ADMINISTRATION which is attached with this project files.

# 4. Solution Steps

The solution incorporates the following:

* **Data Collection**: Data used is from a reliable source from a reliable source (U.S. Small Business Applications) which includes a wide range of banks and relevant information.
* **Data Cleaning:** Data was validated. Some datatypes were corrected like the geographical fields.
* **Enhanced Filters**: Filters were added based on business age and industry, granting users control in their search.
* **State Map**: Users can now filter banks based on a state map, making the selection process location specific.
* **Bar Charts:** Three bar charts were created. Users can visualize "years to pay off loans," "loans by interest rate," and "median loan amount by bank." These charts help users understand loan dynamics and make informed choices.

# 5. Result

The Loan Selector Dashboard has produced promising results, benefiting small businesses in various ways:

* Small business owners can now easily and confidently find banks that suit their loan requirements, simplifying the application process.
* By considering repayment terms, interest rates, geographic location, business age, and industry, the dashboard presents the corresponding banks to users based on their preferences.

**Note:** It's important to note that our visualizations only include loans that have been paid in full, ensuring a complete and reliable analysis.

The Tableau visualization can be found here: <https://public.tableau.com/views/SmallBusinessApplicationsandLoanAmounts_16973927028610/Dashboard1?:language=en-US&:display_count=n&:origin=viz_share_link>

# 6. Conclusion

In conclusion, the Loan Selector Dashboard is a valuable tool for small businesses seeking loans. It demonstrates the potential of data-driven solutions to address real-world challenges and empowers businesses to make informed financial decisions. We anticipate further refinements and expansions of this project to benefit even more users in the future.

# 7. Feedback

Feedback on this Tableau project is highly encouraged. Please feel free to provide comments, suggestions, or improvements to the project. Your input will be valuable for enhancing the quality of the visualization and making it more informative and user-friendly.