Cyber Risk Scoring & Dashboard

Final project presentation on assessing and visualizing cyber risks for small businesses.

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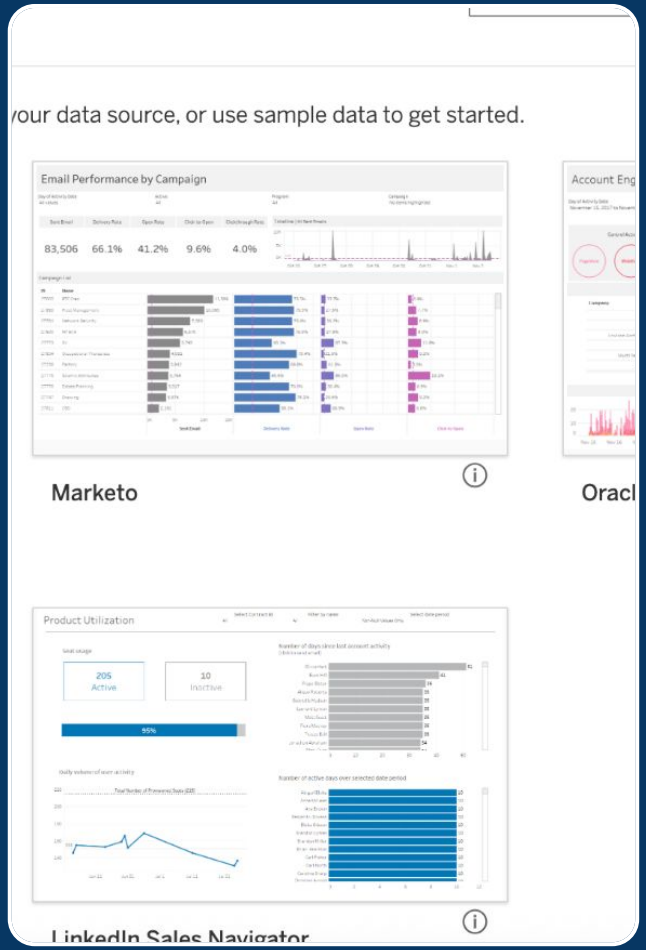
Introduction

Presented by Ilan Sarbac, combining data analysis passion with insurance expertise.

Project aims to assess and visualize cyber risks affecting small businesses.

Project Overview

- Create a complete data solution from raw data cleaning to machine learning scoring model.
- Dataset simulates cyber vulnerability data for SMBs including employee and incident data.
- Objectives: calculate cyber risk score, analyze trends, build interactive dashboard.



Solution and Benefits

- Risk scoring model in Python based on vulnerability metrics.
- Cost simulator estimating insurance cost by risk level.
- Tableau dashboard for fast and intuitive insights.

Potential Users

- SME owners to self-assess vulnerability.
- Insurance analysts to pre-score clients.
- Risk consultants for onboarding or audits.

Demonstration

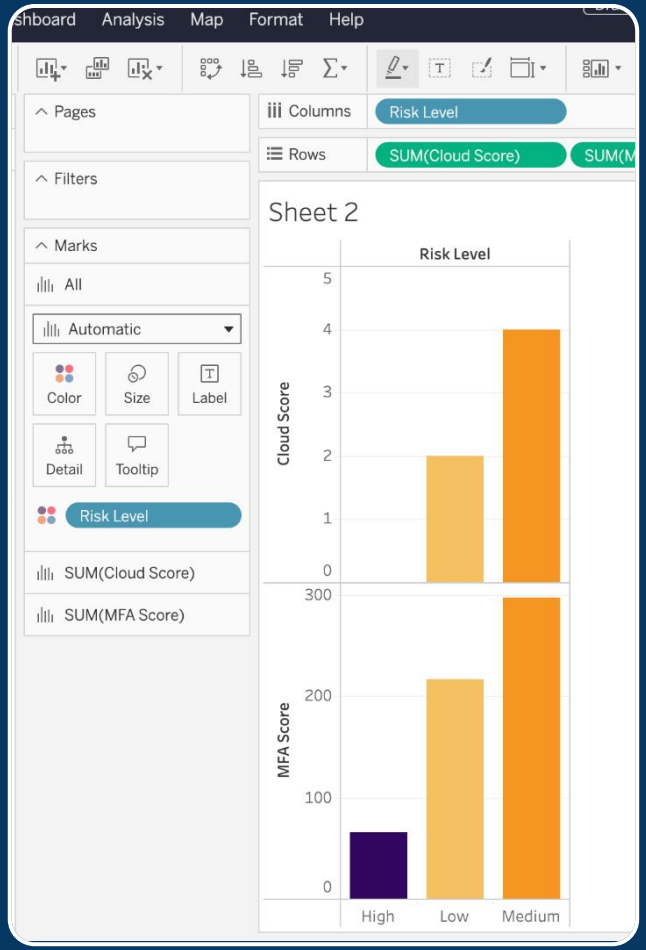
Full Python pipeline on Google Colab for data cleaning, risk scoring, and simulation.

Tableau dashboard with 5 dynamic charts covering incidents, training, risk levels, and cost.

Dataset ready for integration with BI tools like Power BI and Tableau.

Challenges Faced

- Transforming raw inconsistent data into usable business indicators.
- Simplifying scoring logic and matching technical features with financial impact.
- Creating a user-friendly dashboard within Tableau’s constraints.

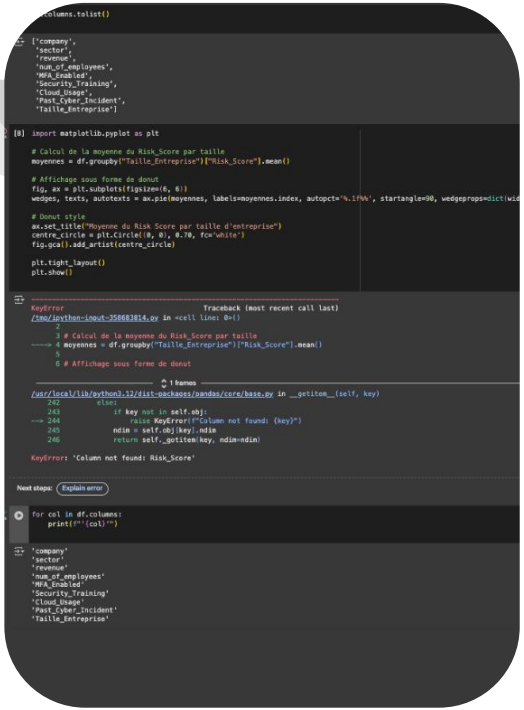


Solutions to Challenges

- Iterative data cleaning and normalization using Pandas.
- Logical scoring assignment in Python.
- Intuitive chart design in Tableau for easy comparisons.

Future Steps

- Add time-series risk evolution.
- Automate the scoring pipeline.
- Extend with real-world insurance data.



Conclusion

Project sharpened data cleaning and visualization skills.

Applied to a real-world use case: cybersecurity in insurance.

Thank you for your attention and open for questions.

Thank you for your time and attention