San Francisco Business Lifespan Insights: SF District 3

Project Presented by,

- Abirami Rajamanickam

Executive Summary

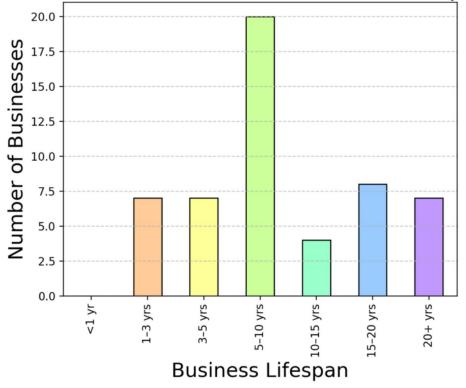
• This project is designed for Daisy, an aspiring entrepreneur exploring opportunities to establish a business in San Francisco's District 3. Her goal is to better understand local business trends, specifically how long businesses tend to survive and how neighborhood dynamics influence success.

 By conducting a survival analysis of business licenses in District 3, the project uncovers critical insights into business longevity, density, and patterns of growth or closure. These data-driven findings offer a clearer picture of the area's economic landscape, helping future business owners make more informed decisions about where, when, and how to launch.

As a product designer, this project goes beyond analytics—it integrates strategic UI/UX solutions that make complex data
accessible and actionable. The goal is to create an intuitive digital experience that not only presents insights but also empowers
users to explore scenarios, assess risk, and build resilient business plans. Ultimately, this work bridges data science with
human-centered design to support smarter, community-focused entrepreneurship in San Francisco.

■ Business Lifespan Distribution: Restaurant - Under 1,000 Sqft in Chinatown

Lifespan Distribution: Restaurant - Under 1,000 Sqft in Chinatown



Insights:

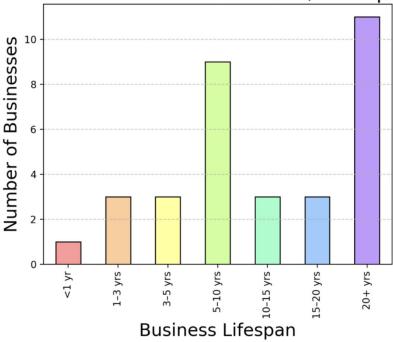
- Most common lifespan: 5-10 yrs
- Sample size: 53 businesses

Technical Stack

- Python with **Streamlit** for the interactive web app
- Pandas for data processing
- Matplotlib for visualizations
- Survival analysis using the lifelines library

Business Lifespan Distribution: Restaurant - Under 1,000 Sqft in North Beach

Lifespan Distribution: Restaurant - Under 1,000 Sqft in North Beach

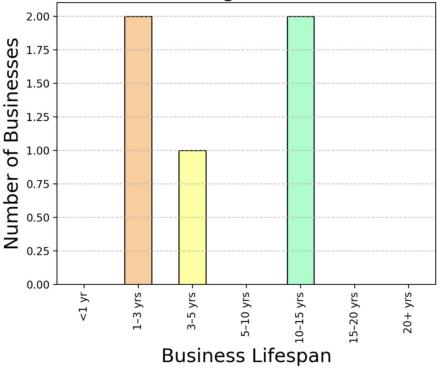


Insights:

- Most common lifespan: 20+ yrs
- Sample size: 33 businesses

■ Business Lifespan Distribution: Massage Establishment in North Beach

Lifespan Distribution: Massage Establishment in North Beach



Insights:

- Most common lifespan: 1-3 yrs
- Sample size: 5 businesses

Future Recommendations

- **Enhanced Data Visualization:** Design intuitive, interactive visualizations to display complex datasets like demographics and foot traffic.
- Scalable UI System: Build a modular design framework to support expansion to other neighborhoods and cities.
- User Personalization: Enable filters, comparisons, and custom insights based on business type or location preferences.
- **Guided Onboarding:** Introduce walkthroughs and tooltips to help users navigate and apply survival insights effectively.
- Collaboration Features: Allow users to save, share, and discuss findings for team-based planning.

These improvements will elevate usability, support decision-making, and create a more engaging, scalable product experience.

Thank you!