

Exploring the Desirability, Feasibility, and Viability of an Integrity-Scoring Web Application for Elected Officials

Abstract:

This capstone work aimed to conduct an extensive discovery study on the conceptualization and validation of a web application for the Human-Centered Design (HCD) phase. The primary purpose of this application is to centralize and streamline information about elected officials, offer easily comparable profiles, and integrate an integrity scoring mechanism for each official. I used a methodology that involved three distinct studies:

- **Desirability:** I conducted 1-hour discovery interviews with 8 voters and 3 investigators and performed a thorough competitor analysis.
- **Feasibility:** I directed my research towards Natural Language Processing (NLP) studies on Hugging Face and identified specific models and classification tasks. I also studied the hardware prerequisites, cloud hosting costs, and sourced relevant data. I also discovered the GDELT Project which has significant overlap with my project in regards to NLP and data acquisition, while also providing lengthy documentation regarding how they do it. Finally, I formulated initial metrics to measure integrity.
- **Viability:** I reviewed business structures, focusing on revenue models such as data monetization, subscription, freemium, crowdfunding/donations, and advertisements. I also conducted in-depth market research to support this phase.

I initiated this project due to the scattered data about elected officials, particularly at the local level. My primary goal is to consolidate this fragmented information into a single platform, enabling the public to make more informed decisions when selecting trustworthy leaders.

My initial findings indicate a strong desire for such a platform among all users I interviewed, especially voters who favor comparative profiles and ratings. Journalists also have a strong desire for a comprehensive database that details the actions, quotes, and affiliations of elected officials, aligning well with the data needed to assess integrity. I have validated the feasibility in terms of the required software tools and prior examples, but I have yet to execute a proof of concept. In terms of viability, the market potential is clear, but I still need to explore revenue model determinants further.

These discovery studies set the foundation for a proof of concept and prototyping, which once conducted, will further inform my decision to launch a startup focused on developing this application. My research not only addresses a significant informational gap but also aims to enhance democratic processes by equipping citizens with more powerful data tools.