Capstone Case Study

DEI Goal Calculator

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Executive Summary

Purpose

The **DEI Goal Calculator** is an innovative tool developed by the DataDream team to assist DEI professionals in setting and achieving their diversity, equity, and inclusion goals. Recognizing the complex challenges DEI initiatives face, this project aims to streamline, facilitate, and enable quick goal-setting and evaluation processes through advanced data analytics and user-friendly design.

Objectives

- **Simplify Goal Setting:** Develop a tool that allows DEI professionals to set realistic and attainable goals using data-driven insights.
- **Enhance Data Analysis:** Provide specialized analytical tools to overcome the lack of technical resources and expertise often found in DEI departments.
- **Facilitate Strategic Planning:** Enable strategic scenario planning and trend analysis to support long-term DEI initiatives.
- **Improve Leadership Engagement:** Address the gap in leadership buy-in by providing clear, actionable data and projections.
- **Ensure Data Privacy:** Guarantee data anonymity and security to foster trust and compliance.
- **User-Centric Design:** Create an intuitive, user-friendly interface requiring minimal user input while offering flexible customization options.

Impact & Results

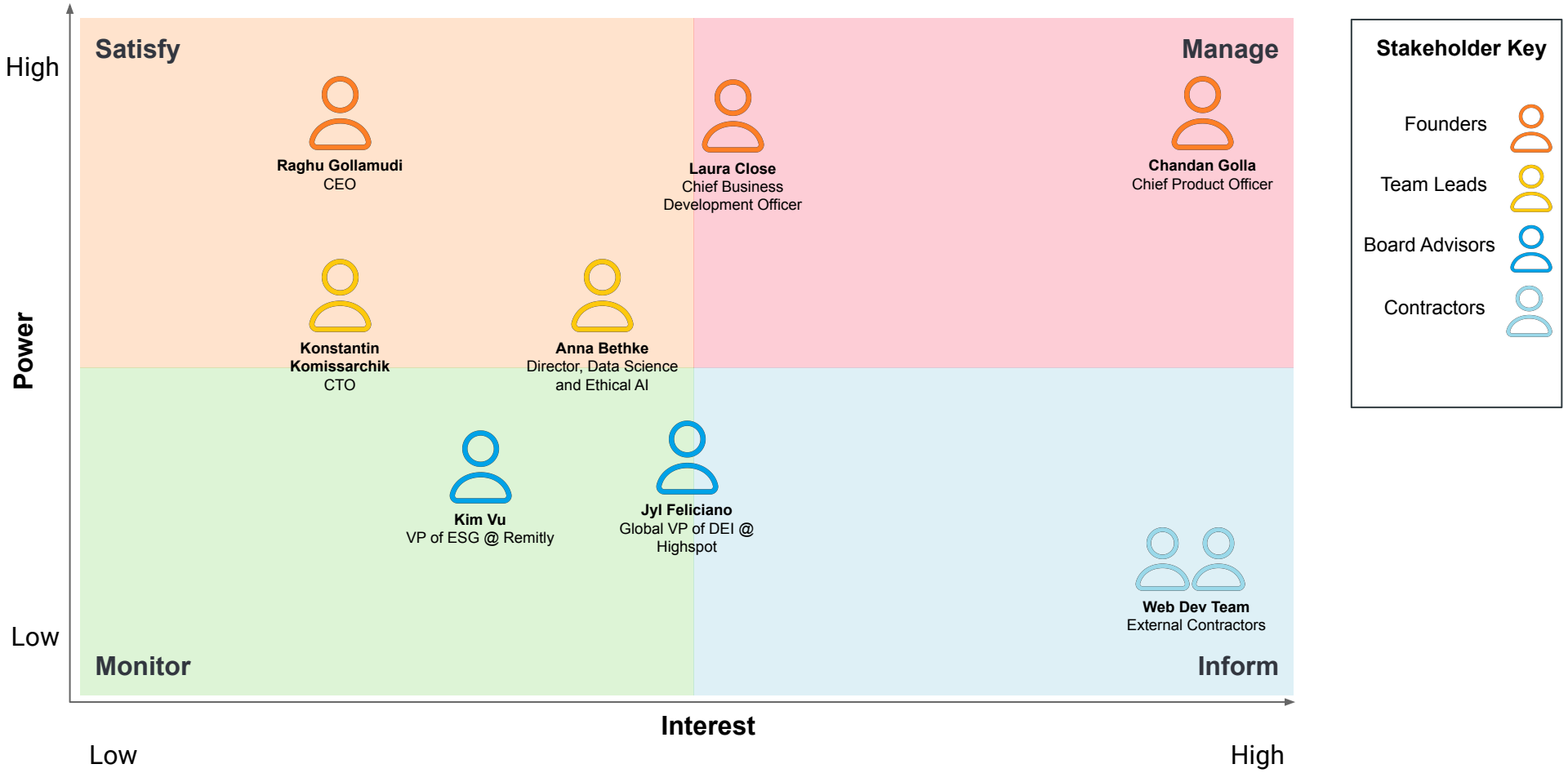
1. **Empowered DEI Teams:** First-of-its-kind application reducing technical barrier for DEI teams. With only high-level metrics as data requirements, DEI professionals may focus on strategic initiatives via an intuitive UI/UX rather than manual data consolidation and analysis.
2. **Enhanced Narrative Support:** Integration of dynamic visual generation, editable output tables, and personalized LLM-generated content provide tailored data descriptions & advice specific to individual use cases
3. **Increased Leadership Engagement:** Clear & actionable insights in addition to on-the-fly scenario adjustments fosters greater buy-in from leadership, enhancing the overall impact and sustainability of DEI initiatives.

Organization Overview

Our Sponsor

At the core, **Included.ai** strives to provide technology that integrates diversity, equity, and inclusion metrics into a comprehensive people analytics platform, helping companies build inclusive workplace cultures for better organizational performance.Chandan Golla, Chief Product Officer & Co-founder was the primary stakeholder throughout the project.

We worked closely with Included **founders**, **functional leads**, and **associated advisors** to ensure delivery value and alignment to the overall company vision as a start-up organization in the DEI space. Additionally, we collaborated with Included external contractors to execute website deployment of our solution. Below is a summary of all stakeholders involved in the DEI goal calculator initiative.



Problems & Opportunities

Problems:

From our interviews we identified three primary problems currently faced by DEI professionals. First, DEI professionals struggle to establish realistic and attainable representation goals. This is due to a lack of available analytical tools that prioritize DEI performance metrics. This can lead to goals that are either too ambitious resulting in failed initiatives, or not ambitious enough which renders DEI initiatives ineffective. Without data-driven insights, DEI initiatives can lack direction and focus, reducing their effectiveness and potentially leading to wasted resources and missed opportunities.

Second, we identified a lack of technical resources available to DEI professionals. DEI departments often lack the technical expertise and resources necessary for advanced data analysis. This includes insufficient access to sophisticated analytical tools and platforms. The inability to perform in-depth data analysis limits the department's ability to identify trends, make informed decisions, and demonstrate the impact of initiative implementation.

Third, due to the sensitive and protected nature of DEI related data, privacy and security are a central concern. If data privacy is compromised, it can lead to a loss of trust among stakeholders and potential legal exposures, undermining the over effectiveness of DEI efforts.

Opportunities:

Create a specialized analytics tool that prioritizes DEI performance metrics to assist DEI professionals in establishing realistic and attainable representations goals.

Provide DEI departments with access to sophisticated analytics tools and platforms, without the need of technical expertise for advanced data analysis.

Develop a DEI tool that does not collect or save user data ensuring data privacy and security.

Benefits Delivered

Benefits:

The development of an analytics tool for DEI metrics would provide data-driven insights, helping to set goals that are both ambitious and achievable. This would ensure that DEI initiatives are focused, effective and impactful, reducing the likelihood of failed, or ineffective initiatives.

Enhanced data analysis capabilities would enable DEI professionals to identify trends, make informed decisions, and demonstrate the impact of their initiatives. This would improve the strategic planning and implementation of DEI efforts, leading to more effective outcomes.

Ensuring the anonymity and security of DEI data would foster trust among stakeholders and prevent legal issues. This would strengthen the overall integrity and effectiveness of DEI initiatives, as stakeholders would be more likely to support efforts that prioritize data security.

Impacts:

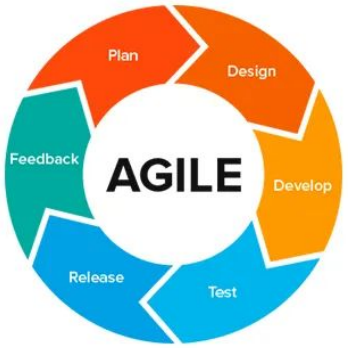
A DEI analytics tool allows DEI professionals the ability to gradually implement changes without the whiplash that can often be associated with new organizational initiatives. Thus, successfully reducing organizational resistance to cultural change.

Additionally, identifying trends within the organization's DEI data would allow organizations to better evaluate the effectiveness of past initiatives. This retrospective analysis would enable DEI professionals to understand what has worked and what hasn't, providing valuable insights for shaping new initiatives. By learning from past efforts, DEI professionals can refine their strategies, making future initiatives more targeted, impactful, and aligned with the organization's overall DEI goals. This continuous improvement cycle ensures that DEI efforts are dynamic, evidence-based, and capable of adapting to evolving organizational needs and societal expectations.

Approach

Methods

For this project, we used agile project management methods to quickly develop and iterate on our major deliverable: a production ready DEI calculator. During our discover phase, we used semi-structured interviews with 5 DEI practitioners to understand the challenges facing practitioners. After completing the discovery process, we prepared a list of features for our calculator with acceptance criteria associated with a minimal viable product (MVP) and an advanced version. After completing discovery and planning, we started development of an MVP. With the completion of our MVP, we sought the feedback of our sponsor to develop future iterations. We developed two successive versions of our product and tested our product to make it production ready.



Reason + benefits of methods

We chose our method in order to create a working prototype and product within the timeframe allowed. By using an agile development methodology, we were able to quickly develop an MVP and incorporate feedback from our sponsor. If we would have employed a waterfall approach, we likely would not have been able to create an MVP and two successive versions.

Shortcomings/issues of methods

Working in the DEI space requires intentionality, sensitivity and understanding. While our team keep these perspectives top of mind, our methodology did not allow us a more time to conduct exhaustive discovery and planning in the space. While we were able to capture several different perspectives and worked to incorporate these into our tool, more perspectives could have been valuable to developing a tool that could be usable and accessible to as many individuals as possible.

Deliverables

Our primary project deliverable was aan easy to use DEI calculator created for our personas, ready for use in production that our sponsor could use on their website. As a part of our project we completed five sprints, which produced deliverables to our sponsor that informed our project both in the initial stages and for future development and iteration. Some of our deliverables might also be used in inform other development projects in the future.

We successfully delivered on our project goals and you can see version two of the calculator deployed here: https://ochristopher380.shinyapps.io/dei-calculator/

5 Interviews

- CDO
- VP of DEI
- Global VP
- Director
- Researcher

3 Personas

- Chief Diversity Officer
- DEI Program Manager
- Academic Personnel

3 Use cases

- Goal & Strategy Setting
- DEI Retrospective
- Research & Analysis / Exploration to Achieve Business Leader Buy-In

4 Initial Features

- Future Projection/Trajectory
- Input Table/Fields
- Output Table/Fields
- Delta to Goal

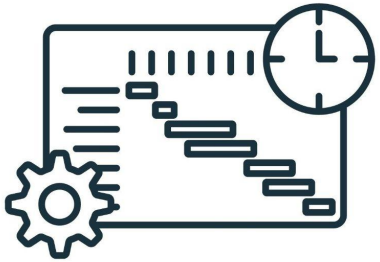
Development + design codeblock

- Production ready code

3 Deployed iterations

- MVP
- Version1
- Version 2

Challenges & Limitations



The short timeline and rapid iteration style we utilized resulted in a multitude of features we had to give up on, due to not wanting to commit too much time to features that might not function properly. We had to prioritize only the achievable and essential features.

With no prior front-end experience, learning to develop and build a website lead to many hours spent on UI configurations that were never used. Additionally, implemented functionality was largely basic, as lacking knowledge meant we could not take advantage of complex CSS features.

Lack of a budget greatly reduced our development options, and locked python shiny in as our only viable code-base due to its free price tag. Development was heavily bottlenecked, as free version of feature APIs were limited to a small amount of API calls per month.

With challenges and limitations in mind, the following considerations will help with future work:

- Research feature feasibility prior to conducting development
- Reach out to individuals with specialized knowledge to act as advisors
- Use dummy outputs when testing to reduce API calls, preventing a bottleneck

Next Steps

Our project output consists of a **neatly packaged private Github Repository** shared with our sponsor and the third-party web development team responsible for hosting our code.

The repository contains:

- Introductory markdown text
- Code for the final calculator
- Requirements file detailing packages used and their versions

For the project, **deployment** was **out-of-scope**. However, we have researched and provided them with the following information to help make implementation easy:

- Hosting options for the code
- Technical requirements necessary to run the code properly

After deployment, we anticipate **minimal action items** relating to our output upkeep:

- Bug fixes
- Implementing BLS and Gemini API Keys with more resources
- Aesthetic changes to fit sponsor preference