## **Mindwell Technologies**

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## **Project Report**

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### 1. Ethical Business Plan

### 1.A. Company Name

**Mindwell Technologies** 

### 1.B. Long-Term Vision Statement

#### **1.B.1 Goals:**

Mindwell Technologies aims to revolutionize workplace mental health support by leveraging AI-driven conversational agents to provide scalable, confidential, and accessible mental health assistance. The goal is to reduce workplace stress, improve employee well-being, and create a supportive corporate culture where mental health is prioritized. Over the next five years, Mindwell seeks to expand its AI capabilities, build a diverse network of licensed mental health professionals, and integrate advanced privacy measures to enhance user trust and compliance with mental health regulations.

#### 1.B.2 Idea Origination:

The concept for Mindwell emerged from a gap identified in corporate mental health support during an AI ethics seminar in a computer science class. The increasing workplace stress and mental health crises highlighted the need for a scalable, AI-driven mental health solution that bridges the gap between self-help tools and traditional therapy. Inspired by both technological advancements and a growing corporate demand for mental health solutions, the founders saw an opportunity to integrate ethical AI practices with mental health support.

#### 1.B.3 Purpose/Values/Mission:

Mindwell Technologies is dedicated to ethical AI implementation in mental health care, ensuring accessibility, privacy, and accuracy. The mission is to provide an AI-powered mental health support system that complements traditional therapy while maintaining the highest standards of data security and ethical AI use. Core values include:

- **Empathy & Inclusivity:** Ensuring AI-driven support is accessible to diverse user groups.
- Privacy & Security: Maintaining the highest standard of data protection and ethical AI practices.
- **Collaboration:** Working with licensed professionals to ensure AI interventions align with clinical best practices.
- **Continuous Improvement:** Using feedback loops to refine AI accuracy and user experience.

#### 1.B.4 Key Questions:

1. How can Mindwell ensure that AI-driven mental health support remains ethical and unbiased across diverse populations?

- 2. What strategies will maintain high accuracy in AI-generated mental health recommendations while safeguarding user privacy?
- 3. How can Mindwell create sustainable partnerships with corporate clients while prioritizing user well-being over profit?

### 1.C. Strategy with Ethical Impacts AND Ethical Safeguards

#### **OKR 1: Improving Chatbot Screening Accuracy for Mental Health Needs**

**Objective:** Develop a clinically sound and structured screening process in collaboration with mental health professionals to enhance the chatbot's ability to accurately assess user mental health concerns and recommend appropriate providers.

#### **Key Result:**

- Achieve an **85% provider matching accuracy** within the first six months.
- Maintain at least **90% provider matching accuracy** after one year with continuous feedback integration.

#### **Experiment:**

- Conduct controlled **user simulations** with 50-100 participants simulating various mental health concerns.
- Compare chatbot-generated problem summaries with licensed mental health professional evaluations.
- Implement a **feedback loop** where providers rate the chatbot's accuracy in summarizing patient concerns.

#### **Ethical Impacts:**

- **Risk of misdiagnosis or misinterpretation:** If the chatbot incorrectly assesses a mental health concern, it may delay proper care.
- **Potential AI bias:** Lack of diversity in training data could lead to inequitable provider recommendations.
- **User frustration and trust issues:** Incorrect or unclear recommendations could lead to employee dissatisfaction.

#### **Ethical Safeguards:**

- **Diverse training datasets** incorporating multiple demographics and mental health conditions
- Clinical expert review of chatbot outputs before live deployment.
- Regular audits to assess bias in provider recommendations.

#### OKR 2: Enhancing Data Privacy & Security in AI Mental Health Support

**Objective:** Ensure user privacy by implementing advanced security measures, including **differential privacy** and **zero-retention data storage policies**.

#### **Key Result:**

• Implement **end-to-end encryption** for all chatbot-user interactions.

- Maintain 100% compliance with HIPAA and GDPR regulations.
- Achieve 90%+ user satisfaction in privacy and data security.

#### **Experiment:**

- Conduct bi-annual penetration tests to assess system vulnerabilities.
- Implement a user opt-in model for data st

Meeting goal: iterate group entrepreneur project, firm up OKRs, metrics, experiments Meeting day/time: Tues 3/4 8-915am Who Attended: Marianna Belmares, Jason Russell, Luke Hagan, Benjamin Thompson

Meeting summary: Further work on OKRs, business goals and mission statement

Mission statement: Offer a chatbot as a mobile app as an additional support for common mental health challenges for corporate employees. Focused on helping user ages of 25-49, primary use is case is to find a licensed therapist in a directory. Through the interactive use of a LLM chatbot delivered in the app, company can offer employees immediate help. LLM chatbot can run screening dialogue questions to best place user with a licensed practitioner drawn from directory. Through careful safety studies, a safety approval by a clinical group would be sought to support market messaging for corporate clients. One additional language would be developed early starting with Spanish.

• OKRs: -- Chatbots for mental health:

[NO CHANGE] --- Objective: Through engaging with experts, develop a series of scripted dialogues to serve as ongoing test scenarios to assure chatbot is operating within expected norms. --- Key Result: LLM Chatbot operates within norms in scripted scenarios for common conditions. --- Objective: By engaging test users, confirm through user studies that chatbot continues to perform within safety objectives providing advice to users in studies. --- Key Result: Users report an engaging dialogue with the chatbot, and self report satisfaction with the interactions --- Objective: Through engaging clincians in review, confirm through paid clinician review of user studies that the chatbot is operating within norms in user studies. --- Key Result: Study of clinical review of chatbot performance is within norms and satisfactory

[WILL NOT DO] --- Objective: Engage a regulator with supporting user studies that both the user and clinicians can report positive satisfaction through interactions with the chatbot: --- Key Result: Regulator solicits constrictive feedback, enabling to move forward with testing at the regulator:

[NO CHANGE] --- Objective: Get users into marketing studies to construct positive stories of use for a wider marketing campaign. --- Key Result: Marketing based study is satisfactory, giving confidence in positive testimonials to by used in user marketing --- Objective: Open user testing with a broadly appealing ad campaign with supporting studies --- Key Result: open user testing can confirm results found in smaller user studies

[ADDITION] --- Objective: Develop screening dialog with clinical experts to support placement with licensed therapists familiar with the problem and conditions and interested to help --- Key Result: LLM chatbot can be engaged with a variety of problems. A summary is automatically generated for review by clinicians as part of placement with a provider. Provider can review full text of dialogue and offer feedback to LLM chatbot team.

[ADDITION] --- Objective: App supports a provider directory, or a marketplace of providers

available for each corporate client and geography --- Key Result: Starting with two to three enterprises and one geography, get ten to twenty licensed providers signed up with fully created profiles for matchmaking and user booking.

[ADDITION] --- Objective: Sell to corporate enterprises as a subscription benefit for their employees a certain number of hours of licensed provider hours placed through the provider marketplace. --- Key Result: Starting with two to three enterprises, work with one or more HR contacts to make the service available on a trial basis.

#### Agreed

- Jason is taking the Marketing OKRs
- Luke is taking the Safety OKRs
- Marianna to review the business plan, mission statement for another pass. Will follow up.
- Ben is will take whichever OKRs remain.

#### **Next Steps:**

Further develop metrics and experimental designs in one on one follow up meetings.

Revised the mission statement after our meeting. For each OKR, noted whether NOCHANGE, WILL NOT DO or ADDITION.

For each OKR identifying representative metrics, and how we'll measure those and any ethical considerations are the things to think about, and if you can start writing.

If you'd like to revise, simplify or change the mission statement, suggestions welcome!

# 2. Cultural Policy

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# 3. Ethics Policy

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# 4. YouTube Presentation



# 5. References

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