

# SkillProbe.AI

Customized Interviews, Unmatched Insights.

“Revolutionize your hiring process with AI-powered interviews, delivering personalized insights and precision talent matching.”

## PROBLEM DEFINITION

### Objectives

**Pain points:**

Traditional hiring processes have the following pain-points:

1. Very Time-consuming. (Average hiring process takes 24-42 days to fill a position)
2. Very subjective, i.e. Difficult to customize interviews to candidates' strengths.
3. Inconsistent Interviewer quality.
4. Inadaptability to Remote Hiring.
5. Not scalable. Companies must rely on specific keywords to filter out many potential good hires.

### Target users/Segmentation

**Staffing Agencies:** These agencies operate across various industries, serving clients with diverse needs. They require a flexible, sophisticated tool that can customize interviews based on specific job requirements, provide comprehensive candidate reports, and enhance their service offering through advanced AI-driven insights.

Competitive Advantages: Speed, Efficiency, Adaptability, Scalability, Industry-level requirements data

**HR Departments of Large corporations:** This segment includes large organizations with complex, ongoing hiring with distinct job & value requirements across multiple departments. They require a scalable, integrable solution that can automate and refine the recruitment process, providing deep insights into candidates' skills and potential fit.

Competitive Advantages: Speed, Perfect-fit hires, HR system Integration capabilities, D&EI/Data compliance

**Career Aspirants, Educational Institutions and Career Services:** This segment is unique in its focus on preparing candidates for the job market rather than hiring. They need a tool that can simulate real interview scenarios, provide feedback and areas for improvement, and help students and job seekers align their skills with market needs.

Competitive Advantages: Real-time Interview simulation, Practice Personalization, Industry trends information.

# Context, Problems, Opportunities

## Context and Problem Hypothesis:

The recruitment landscape is increasingly competitive and dynamic, necessitating tools that streamline the hiring process, enhance candidate assessment, and ensure cultural and skill fit. SkillProbe.AI emerges in this context, aiming to revolutionize how organizations approach talent acquisition and candidate evaluation through AI-driven insights.

## Problems:

***Inefficiency in the Hiring Process:*** Many organizations experience a lengthy, resource-intensive hiring process that often results in suboptimal candidate selection. The absence of a streamlined, efficient method for evaluating candidates' skills and potential fit leads to increased costs and time-to-hire.

***Subjectivity in Candidate Evaluation:*** Traditional interview processes are prone to bias and subjectivity, which can overshadow candidates' true abilities and potential for the role, impacting diversity and inclusion efforts.

***Adapting to Remote Hiring Needs:*** The shift towards remote work necessitates a flexible, effective solution for assessing candidates across geographical boundaries, which current systems are not fully equipped to handle.

## Opportunities:

***AI-Powered Customization and Efficiency:*** By leveraging AI to customize interviews according to specific job requirements and analyze candidate responses, SkillProbe.AI offers a unique opportunity to enhance the efficiency and effectiveness of the hiring process.

***Objective and Comprehensive Candidate Evaluation:*** SkillProbe.AI provides an opportunity to minimize subjectivity in interviews, offering a more objective assessment of skills and fit through data-driven insights.

***Scalability and Global Reach:*** The platform's adaptability to various industries and job roles, combined with its capability to conduct remote interviews, positions it as a scalable solution for global talent acquisition efforts.

## **Total Addressable Market (TAM) / Serviceable Available Market (SAM) / Serviceable Obtainable Market (SOM) Calculations:**

### 1. **TAM:**

Consider just the San Francisco Bay Area for our initial market.

Assuming the Bay Area tech ecosystem's vibrant nature and the high priority on innovative hiring solutions, let's hypothetically consider there are 20,000 relevant businesses in the broader tech ecosystem. If the average annual spend on recruitment technologies per business is estimated at \$10,000, the TAM would be 20,000 businesses \* \$10,000 = \$200 million.

### 2. **SAM:**

Focusing on a more realistic subset of these businesses that SkillProbe.AI can serve directly with its current capabilities and in the context of its initial launch phase. If we consider 10,000 of these businesses as directly serviceable within the Bay Area tech and related sectors, with the same average spend, the SAM would be 10,000 businesses \* \$10,000 = \$100 million.

### 3. **SOM:**

Estimating our ability to capture a portion of this market, given the competitive landscape and the startup's go-to-market strategy. If SkillProbe.AI aims to capture 10% of the SAM in the first few years of operation, the SOM would be 10% of \$100 million = \$10 million.

## ***References:***

1. <https://www.sf.gov/data/san-francisco-employment-industry>
2. [https://labormarketinfo.edd.ca.gov/LMID/Size\\_of\\_Business\\_Data.html](https://labormarketinfo.edd.ca.gov/LMID/Size_of_Business_Data.html)
3. <https://www.cbre.com/press-releases/san-francisco-bay-area-holds-steadfast-at-1-in-cbre-s-annual-scoring-tech-talent-report>

## Product Goals and Non-Goals

### Goals:

1. **Enhance Hiring Efficiency:** Significantly reduce the time-to-hire for companies by streamlining the interview process with AI-driven automation.
2. **Improve Candidate Fit:** Use AI to analyze and match candidates' skills and experiences with job requirements, ensuring high-quality hires.
3. **Minimize Bias:** Provide an objective assessment framework to minimize unconscious bias in the hiring process, promoting diversity and inclusion.
4. **Scalability:** Offer a solution that easily scales with the client's growing hiring needs without compromising on performance or user experience.
5. **Global Accessibility:** Enable remote interviews and assessments, making it easier for companies to access and evaluate global talent.
6. **Actionable Insights:** Deliver comprehensive reports and analytics to inform hiring decisions and strategies.

### Non-Goals:

1. **Replacing Human HR Functions:** Not intended to replace human judgment or the need for personal interactions in the HR process but to augment and support these functions. A human will be responsible to decide the final metrics and values the candidate should be judged on.
2. **General Business Management:** SkillProbe.AI focuses on the hiring process, not on broader HR management tasks like payroll, benefits administration, or employee performance management.
3. **Industry-Specific Training:** The platform is designed for evaluating candidate fit and skills, not for providing industry-specific training or certifications.
4. **Non-Recruitment Communication:** The tool is specialized for recruitment and interview processes, not intended for general business communications or meetings.

# TECHNICAL CONSIDERATIONS

## Data Requirements

### 1. **User Data:**

*User profiles:* Information about HR users and candidates, including their demographics, preferences, and usage patterns.

*Activity logs:* Records of user interactions with the platform, such as logins, profile creations, job postings, interviews conducted, and candidate engagements.

### 2. **Job Data:**

*Job postings:* Details of job positions posted on the platform, including job titles, descriptions, requirements, and hiring statuses.

*Interview data:* Information about interviews conducted through the platform, including interview questions, responses, completion status, and feedback.

### 3. **Engagement Data:**

*Engagement metrics:* Metrics related to user engagement with the platform, such as session duration, frequency of logins, feature usage, and interaction patterns.

*Candidate activity:* Data on candidate interactions with the platform, such as profile updates, interview participation, and progress tracking.

### 4. **Feedback Data:**

*User feedback:* Feedback collected from HR users and candidates through surveys, ratings, reviews, and direct communication channels.

*Satisfaction scores:* Scores indicating user satisfaction with the platform, derived from feedback and other sources.

### 5. **Outcome Data:**

*Outcome metrics:* Metrics reflecting the outcomes achieved through the platform, such as successful candidate placements, hiring rates, and performance metrics of placed candidates.

## Algorithm selection

### Natural Language Processing (NLP):

SkillProbe.AI leverages NLP algorithms to analyze unstructured data such as candidate resumes and interview transcripts.

Advanced NLP models such as transformers (e.g., BERT, GPT) are employed for tasks like resume parsing, keyword extraction, and sentiment analysis.

### Machine Learning (ML):

Supervised learning algorithms are utilized for tasks like candidate matching and performance prediction.

Logistic regression, decision trees, and random forests are applied to structured data (ex: user profiles, job descriptions) to predict candidate-job fit and interview success probabilities.

Ensemble methods like gradient boosting machines (GBM) or XGBoost may be employed to improve prediction accuracy and handle imbalanced datasets.

## Model performance requirements

The performance of our application will depend upon these Performance metrics as it is very AI-driven:

### 1. Accuracy:

***Accuracy = Number of correctly matched candidates / Total number of candidates***

Context: Accuracy measures the proportion of correctly matched candidates out of all candidates assessed by the matching algorithm. SkillProbe.AI aims for high accuracy to ensure that candidates are effectively matched with job positions.

### 2. Precision:

***Precision = Number of correctly matched candidates / Number of candidates recommended by the algorithm.***

**Context:** Precision indicates how accurately SkillProbe.AI selects candidates who are suitable for specific job positions.

### 3. Recall:

**Recall = Number of correctly matched candidates / Number of actual relevant candidates**

**Context:** Recall indicates how effectively SkillProbe.AI captures all relevant candidates, ensuring that no qualified candidates are overlooked during the matching process.

## LAUNCH PLAN

### Experiment Plan

**A/B Testing:** We will conduct A/B tests to compare the performance of different versions of SkillProbe.AI. This approach involves dividing users randomly into two or more groups and exposing each group to different versions of the platform. We will analyze user engagement, satisfaction, and key metrics to determine the impact of changes and enhancements.

### Success metrics

#### Metrics:

Metrics	Type	Aligned to
Number of company sign-ups	Input	Acquisition
Number of job positions posted	Input	Activation
Percentage of job positions with customized interview sets	Input	Activation
Daily active HR users/logins	Input	Engagement
Weekly active companies conducting interviews	Input	Retention
Number of interviews completed	Output	Engagement
Candidate feedback score average	Output	Retention
Number of hires made through the platform	Output	Outcome
HR user satisfaction score	Output	Quality

#### North Star Metric

***Number of successful candidate placements made through the platform.***

**Rationale:** The ultimate goal of SkillProbe.AI is to facilitate successful candidate placements, indicating that the platform effectively matches candidates with job positions based on their skills and potential fit. A higher number of successful placements signifies the platform's value in improving the recruitment process for companies and enhancing job opportunities for candidates.

**Proxy metrics:**

1. Job Postings Created
2. Interview completion rate
3. Candidate Engagement
4. Conversion Rate

**Guardrail Metrics:**

1. Interviewee Satisfaction Score
2. Retention Rate
3. Platform Usage Statistics

## Pricing strategy

SkillProbe.AI's pricing strategy will be designed to align with the value proposition offered to its target users while maximizing revenue potential. Here's an overview of the pricing strategy:

1. **The PLG Approach: Freemium Option:** To attract new users and encourage adoption, SkillProbe.AI may offer a freemium option with limited functionality or usage quotas. This allows users to experience the platform's capabilities before upgrading to a paid subscription tier. Freemium users can then be upsold to premium tiers as they recognize the value and need for additional features.
2. **Tiered Pricing:** SkillProbe.AI will offer tiered pricing plans to cater to the diverse needs and budgets of its user segments. Each tier will provide access to different levels of functionality, customization options, and support services. Tiered pricing allows users to select the plan that best fits their requirements and budget constraints.
3. **Subscription Model:** SkillProbe.AI will primarily operate on a subscription-based pricing model, where users pay a recurring fee for access to the platform's features and services. Subscriptions can be billed monthly, annually, or on a customized billing cycle, providing flexibility for users and ensuring a predictable revenue stream for SkillProbe.AI.



# HYPOTHESIS & RISKS

1. **Hypothesis 1 (for Interview Practice users)**: By offering personalized interview simulations tailored to each candidate's skills and experience, SkillProbe.AI will increase interview performance and job placement rates for users.

**Confidence in Hypothesis 1**: High. Research indicates that personalized practice improves skill acquisition and confidence, leading to better performance in real-world scenarios. Increased interview success metrics will validate this hypothesis.

**Risk**: There is a risk that candidates may become overly reliant on the platform for interview preparation, potentially reducing their ability to adapt to unexpected interview questions or scenarios.

**Risk Mitigation**: Continuous monitoring and user feedback will be essential to mitigate this risk and ensure the platform enhances, rather than replaces, traditional interview preparation methods.

2. **Hypothesis 2 (for Companies and Hiring Agencies)**: Implementing SkillProbe.AI's AI-driven recruitment platform will streamline the hiring process for large companies and hiring agencies, leading to a reduction in time-to-hire and improved candidate quality.

**Confidence in Hypothesis 2**: Moderate. While AI-driven recruitment solutions should demonstrate efficiency improvements in various contexts, the complexity of large companies' hiring processes may pose challenges. Successful implementation and positive user feedback will validate this hypothesis.

**Risk**: There is a risk of resistance to change and adoption challenges among employees and stakeholders within large companies, leading to delays in implementation and underutilization of the platform.

**Risk Mitigation**: Effective change management strategies and stakeholder engagement will be crucial to address this risk and ensure successful adoption within large organizations.