Final Evaluation Plan

Evaluation Plan of Ventureseed—An Al-powered scenario-based entrepreneurship practice platform

GOAL

The evaluation aims to assess the effectiveness of the Al-powered scenario-based entrepreneurship platform in:

- Improving learners' entrepreneurial knowledge and decision-making skills.
- Enhancing learners' ability to perform market analysis, business modeling, risk evaluation, and negotiation tasks.
- Providing personalized, authentic, and engaging learning experiences using Al simulations.

METHODS

- Behavioral data tracking (e.g., completion rates, time-on-task)
- Pre and post-assessments
- Self-reflection questionnaires
- User interviews & feedback forms
- Embedded module performance scoring

PARTICIPANTS

We'll invite 3 NYU students interested in building their entrepreneurial skills to test whether it can meet our expectations to improve their entrepreneurial skills with scenario-based and personalized learning materials and scaffolding.

KEY INDICATORS

Part 1: Market Demand Analysis & Business Model Design

Indicator	Description	Data Source
Market analysis completeness	Coverage of key dimensions (e.g., target user, pain point, competitors)	Auto-evaluated via field completion
Business model logic consistency	Degree of logical alignment between value prop, cost, revenue, etc.	NLP + semantic logic check

Al support usage frequency	How often Al hints, generators, or QA are used	System usage log
Task completion time	Time to complete a business model canvas	Timestamp comparison

Part 2: KPI Setting Simulator & Risk Management

Indicator	Description	Data Source
SMART KPI score	Whether KPIs meet SMART criteria	Template check + NLP tagging
Risk identification coverage	Types and range of risks identified	Risk category match rate
Risk prioritization accuracy	Match between the user's risk ranking and the system benchmark	Ranking deviation analysis
Al advice adoption rate	% of Al-generated risk suggestions adopted	Click-through & response logs
Simulation success/failure rate	Did the user succeed in the business simulation round?	Outcome tracker from the simulation engine

Part 3: Negotiation Simulator

Indicator	Description	Data Source
Response time	Time taken to reply to simulated negotiation prompts	Chat logs

Dialogue turns	Number of back-and-forths during negotiation	Chat session data
Negotiation strategies used	Detected use of concession, anchoring, etc.	Al-based intent analysis
Emotional tone consistency	Stability of emotional language used	Sentiment analysis
Al-based performance rating	Al's holistic evaluation of the learner's negotiation	LLM-based rubric scoring

4. Tools & Data Collection

- Al backend: to collect and analyze interaction data
- Front-end analytics (e.g., Google Analytics, Mixpanel): to track user flow and engagement
- Pre/post surveys via Typeform or Qualtrics
- Embedded dashboards for learning analytics
- LLM-powered scoring systems for open-ended responses
- Reflection prompts are integrated into each module's end screen

Survey Questions

Pre-Post Assessment Survey Design (1-5 Likert Scale)

Overall Goal

To measure growth in users' knowledge, skills, and confidence using self-assessment, and validate it with backend usage metrics.

Part 1: Idea Analysis

Survey Questions:

- 1. I can clearly describe a business idea with market potential.
- 2. I understand the key elements of a business plan (e.g., target users, pain points, value proposition).
- 3. I feel confident creating a basic business model.
- 4. I can organize my thoughts logically when analyzing a business idea.

Trackable Metrics:

- Completion of analysis tasks
- Frequency of Al assistant use
- Time spent per section

	Sur		
Participant 1			
Participant 2			
Participant 3			

Part 2: KPI & Risk Simulator

Survey Questions:

- 1. I understand what makes a KPI effective.
- 2. I know how to set realistic and measurable startup goals.
- 3. I can identify key risks in a startup scenario.
- 4. I can apply reasonable strategies to manage potential risks.

Trackable Metrics:

- Completeness of risk identification
- Al suggestion adoption rate
- Simulation outcome score (e.g., budget control, goal achievement)

Part 3: Negotiation Simulator

Survey Questions:

- 1. I can express my position clearly during a negotiation.
- 2. I am aware of different negotiation strategies (e.g., compromise, assertiveness, win-win).
- 3. I can respond quickly and appropriately in negotiation situations.
- 4. I feel more confident negotiating in real-world business contexts.

Trackable Metrics:

- Number of dialogue turns
- Types of negotiation strategies used
- User response time (tracked via timestamps)

Cross-Module (Overall)

Survey Questions:

- 1. The experience helped me better understand the startup process and required skills.
- 2. I feel more confident in taking the first step toward launching a business.
- 3. I would recommend this platform to other aspiring entrepreneurs.

System Metrics:

- Frequency of platform/Al use
- Frequency of editing Al-generated content
- Drop-off and retry rates across modules

Section	Question	Participant 1	Participant 2	Participant 3
ldea Analysis	Describe a business idea	3	4	5
	Understand business plan	3	4	4
	Confidence in business model	2	3	4
	Logical organization	3	4	5

KPI & Risk Simulator	Understand KPI	2	3	4
	Set startup goals	3	3	4
	ldentify risks	2	3	3
	Manage risks	2	3	4
Negotiation Simulator	Express position	2	3	4
	Know negotiation strategies	3	4	5
	Respond quickly	2	3	4
	Confidence in real-world negotiation	2	3	5

Section	Metric 1	Metric 2	Metric 3
ldea Analysis	Completed 3/4 tasks	Used AI 2 times	Average time: 12 mins
KPI & Risk Simulator	Identified 4 risks	Adopted 75% Al suggestions	Simulation score: 85
Negotiation Simulator	8 dialogue turns	Used 3 strategies	Avg response time: 3 sec

INSIGHTS

- Users show varied baseline skills; support should be tailored.
- Al tool use is low but effective where applied.
- Negotiation module has highest engagement.

NEXT STEPS

- Provide beginner-friendly guidance for lower-skill users.
- Add contextual Al prompts at key steps.
- Implement auto-scoring tasks to validate self-assessments.

Template

Evaluation Plan Template

1. Evaluation Objectives

- What do you want to evaluate and why?
- Are you evaluating effectiveness, usability, user satisfaction, learning outcomes, etc.?

Example:

The goal of this evaluation is to assess the effectiveness of the AI-powered language learning tool in improving learners' vocabulary and motivation.

2. Evaluation Questions

- What specific questions will guide your evaluation?
- Did users achieve the intended learning outcomes?
- How do learners perceive the learning experience?
- Did the activities support independent learning?

Example:

- Did learners improve their vocabulary after using the AI tool?
- Do users find the grammar explanations provided by the AI tutor helpful?

3. Indicators

- What evidence will show that the project is successful?
- Quantitative indicators: test scores, completion rate, usage time
- Qualitative indicators: user feedback, observed behavior, interview responses

Example:

- A 20% increase in post-test vocabulary scores
- 80% of users report being "satisfied" or "very satisfied" with the tool

4. Data Collection Methods

- How will you collect data to answer the evaluation questions?
- Surveys, pre/post-tests, interviews, usage analytics, observation

Example:

- Pre- and post-assessment of vocabulary knowledge
- User satisfaction survey
- Semi-structured interviews with 5 selected users

5. Timeline

When will the evaluation activities happen?

Example:

- Week 1: Pre-test
- Week 4: Mid-point survey
- Week 5: Post-test and interviews
- Week 6: Data analysis and report writing

6. Data Analysis Plan

- How will you analyze the data?
- Quantitative: descriptive statistics, t-tests, correlations
- Qualitative: thematic coding, content analysis

Example:

- Paired sample t-test on pre- and post-test results
- Thematic analysis of interview transcripts

7. Use of Results

- How will the findings be used?
- To improve the next version?
- To inform stakeholders?
- For publication or presentations?

Example:

The evaluation findings will guide the next iteration of the tool and be shared with the product and instructional design teams.

Evaluation Plan

Evaluation Plan

1. Evaluation Objectives

The evaluation aims to assess the effectiveness of the Al-powered scenario-based entrepreneurship platform in:

- Improving learners' entrepreneurial knowledge and decision-making skills.
- Enhancing learners' ability to perform tasks such as market analysis, business modeling, risk evaluation, and negotiation.
- Providing personalized, authentic, and engaging learning experiences using AI simulations.

2. Evaluation Methods

We will adopt a mixed-methods evaluation approach, including:

- System log data analysis (to track behaviors and learning patterns)
- Pre-/Post-assessment surveys (to measure changes in knowledge, confidence, and skills)
- Embedded performance analytics (to evaluate real-time task performance)
- Self-reflection prompts (to assess perceived learning and areas of improvement)
- User interviews or feedback forms (to collect qualitative insights)

3. Key Evaluation Indicators

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Al-based performance	Al's holistic evaluation of the learner's	LLM-based rubric
rating	negotiation	scoring

4. Tools & Data Collection

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Reflection prompts integrated into each module's end screen

5. Evaluation Timeline

Phase	Activities
Week 1	Baseline survey + onboarding module
Week 2-4	Monitor interaction data and simulation outputs
Week 5	Post-assessment + user interviews
Week 6	Report insights & product refinement suggestions

PRE

Our evaluation has three main objectives:

- To assess the **platform's effectiveness** in improving entrepreneurial knowledge and practical abilities.
- To **measure the usefulness** of Al-generated support in learning.
- To analyze user behavior to optimize the user experience.

We use a mixed-method approach combining:

- Behavioral data tracking,
- Pre- and post-assessments,
- Embedded performance scoring,
- Self-reflection prompts,
- And user interviews or feedback forms.

Each module has tailored evaluation indicators:

For Part 1: Idea Analysis, we evaluate task completeness, logical consistency, Al tool usage frequency, and time spent.

For Part 2: **KPI & Risk Simulation**, we check if KPIs follow the SMART framework, the breadth of risk identification, prioritization accuracy, AI suggestion adoption rate, and startup simulation outcomes.

For Part 3: **Negotiation Simulator**, we assess turn count, use of negotiation tactics, response time, emotional tone stability, and Al-generated performance scores.

We also track **cross-module indicators** such as drop-out rate, repetition rate, learning speed, and how often users revise Al-generated content.

Data will be collected through backend logs, front-end analytics tools, NLP-based scoring engines, and reflective feedback.

The evaluation will run over six weeks, including pre-tests, usage tracking, post-tests, and final analysis to inform future platform development.

In the early stages, our platform will focus on behavior-based metrics such as task completion, time spent, and Al tool usage—easy to track and actionable for iteration. More complex indicators involving content quality or emotional tone will be explored in future versions using NLP and expert labeling.

Recommended Easy-to-Monitor Evaluation Indicators

- ↑ Cross-Module Behavioral Metrics (Platform-Wide, Trackable via Logs)
 - Task Completion Rate (whether users complete each module)
 - Time-on-Task (how long users spend in each module)
 - **Drop-off & Retry Rates** (if users quit midway or reattempt tasks)
 - Al Tool Usage Frequency (how often users click to use Al assistance)
 - Al Content Edits (whether users revise Al-generated content, if editable)
- Module-Specific Indicators (Trackable via Frontend/Backend Triggers)

Module 1: Market Analysis & Business Model

• Completion of business model fields (e.g., filled-out business canvas)

Module 2: KPI & Risk Simulator

- KPI format validation (e.g., includes numeric and time-based components)
- User interaction with risk sorting or tagging (e.g., drag-and-drop or selection)

Module 3: Negotiation Simulator

- Number of dialogue turns with Al
- Strategy type selected (if using pre-set or multiple-choice strategies)