TEAM GOPALBHANR

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IDEA EVALUATOR

WITH

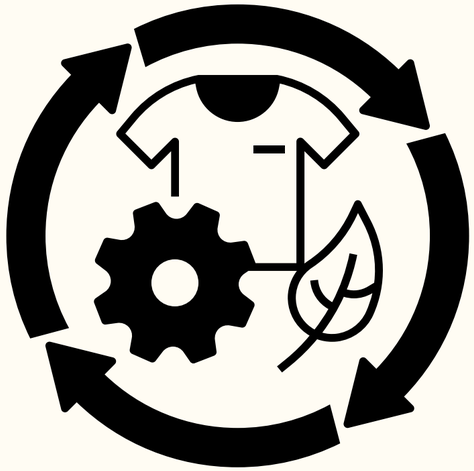
GenerativeAI

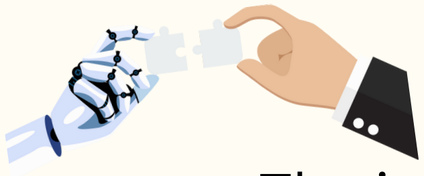
AGENDA

INTRODUCTION

In a world facing urgent climate change challenges, promoting sustainable practices is crucial. The Circular Economy emerges as a guiding principle, highlighting the importance of resource reuse and waste reduction.

This project delves into the synergy of artificial intelligence and environmental innovation to address this complexity. The goal is to introduce a revolutionary **AI-powered decision-support tool**, streamlining the assessment of circular economy solutions for improved accuracy and efficiency. By harnessing AI's analytical capabilities, the aim is to guide evaluators toward impactful innovations, ultimately contributing to the fight against climate change.





OUR SOLUTION

- The initial {problem, solution} is broken down into the problem and user solution(actual input solution).
- 5 different LLM agents are used to generate 5 distinct and independent baseline solutions to the problem.
- An evaluator model is used to generate 21 dimensional vectors for each of these 6 (5 generated and 1 actual) proposals, based on predefined evaluation criteria
- The vector of the user are weighted with each of the generated solution vectors.
- The 5 generated student vectors are averaged and summed according to predefined weights to obtain the final score
- The evaluation cycle is performed 10 times and the final score is obtained
- A Moonshot score is calculated using the uniqueness or “moonshotness” of the salient points of the user idea

IDEA EVALUATION PIPELINE

Our pipeline for evaluating comprises of the following four broad steps -

Solution generation

Generate baseline solutions from LLM

Solution Evaluation

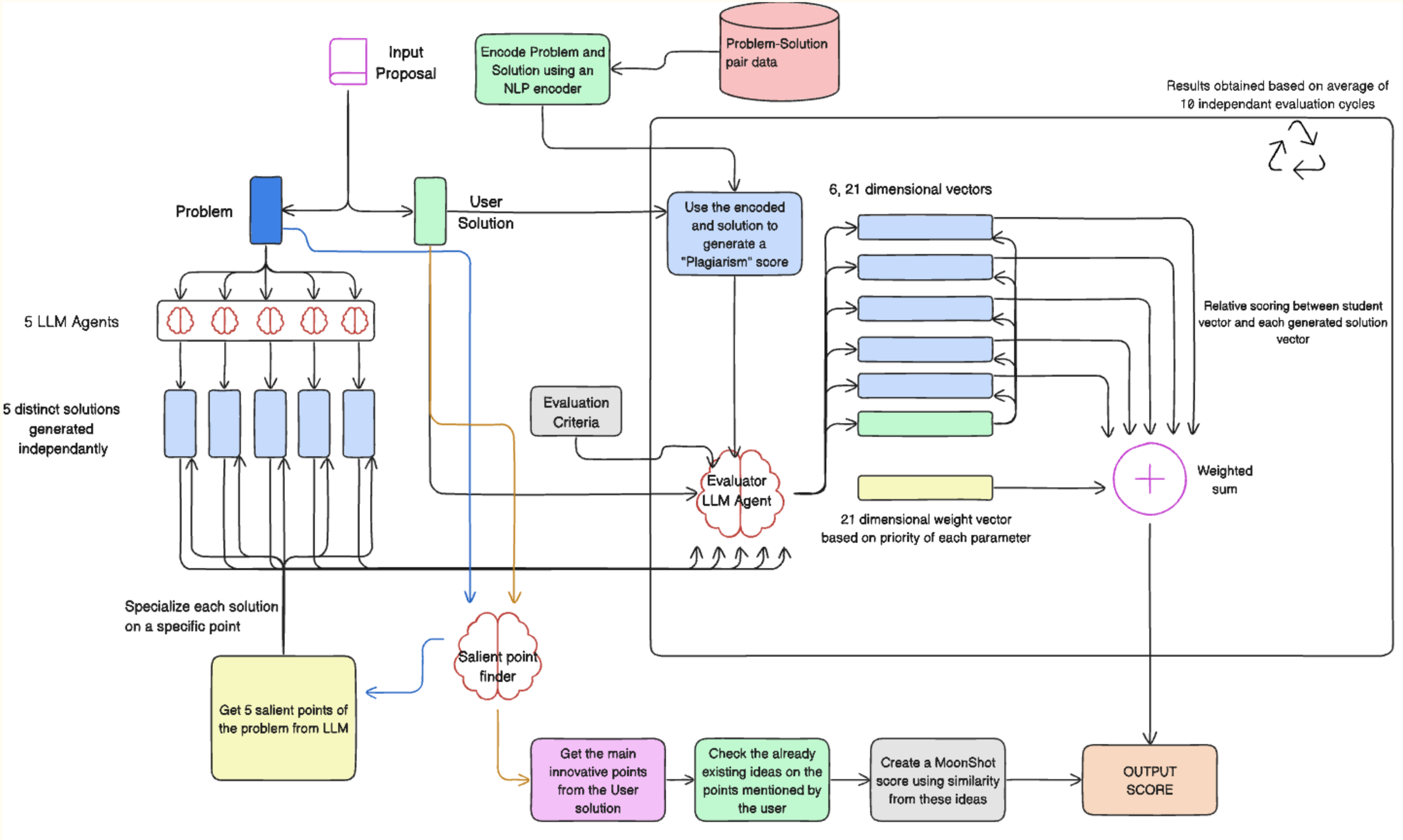
Feed given solution and calculate scoring based on generated solution

Filter Moonshot Idea

Similarity matching with existing 1300 solutions and LLM generated solutions

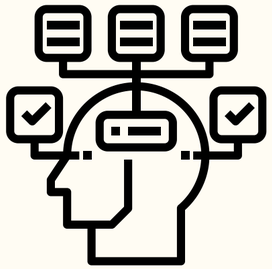
Final Scoring

Aggregate scoring of all features to give solution insights



High level design of our solution

KEY FEATURES



Sustainable Resource Management

AVAILABILITY [2]
WASTE PRODUCT RATIO [2]
RENEWABILITY [2]
BIODEGRADABILITY [1]

Scaling and Expansion

DIGITAL FEASIBILITY [1]
NECESSITY OF INNOVATION HUBS [-1]
SCALABILITY [3]
RESEARCH NEEDED [-1]

EACH CIRCLE REPRESENTS A DIFFERENT SUBCATEGORY OF CONSIDERATIONS.
CRITERIA PROVIDED ALONG WITH SCORE IN BRACKETS

Design for Circularity

% OF RECYCLABLE PRODUCT [2]
QUALITY OF WASTE [3]
LONGEVITY [2]
RECYCLABILITY [3]
COST OF REPAIR [-1]

Others

ENVIRONMENTAL IMPACT [2]
OUTLANDISH IDEA SCORE [1]
NUMBER OF CYCLES [2]
RETURN/CYCLE [1]

Business Model

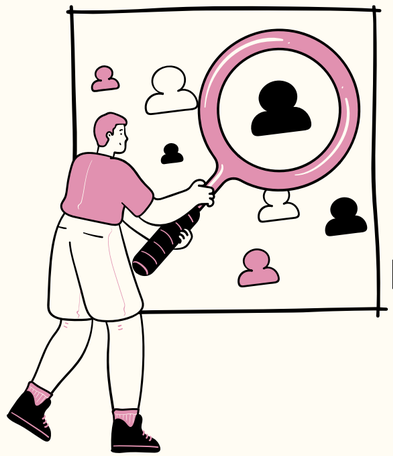
PAAS [1]
EPR [1]
INFRASTRUCTURE SCALE [-1]
MANPOWER [-1]

MOONSHOT IDEAS!

01 The salient points of the user solution are extracted using an LLM.

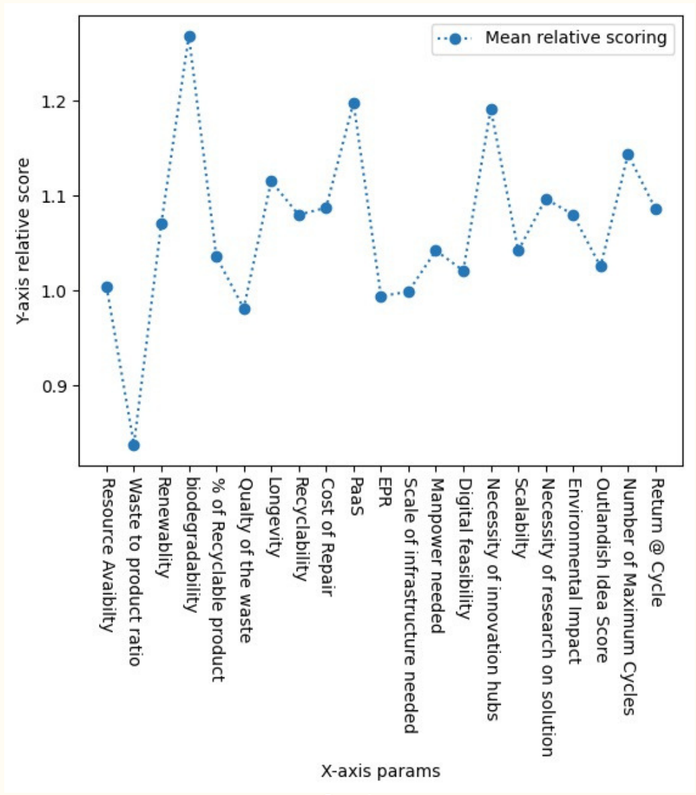
02 Existing solutions for each salient points are generated using an LLM and the similarity of each wrt the user solution are calculated

03 Finally, the similarity scores are merged and used for MoonShot analysis

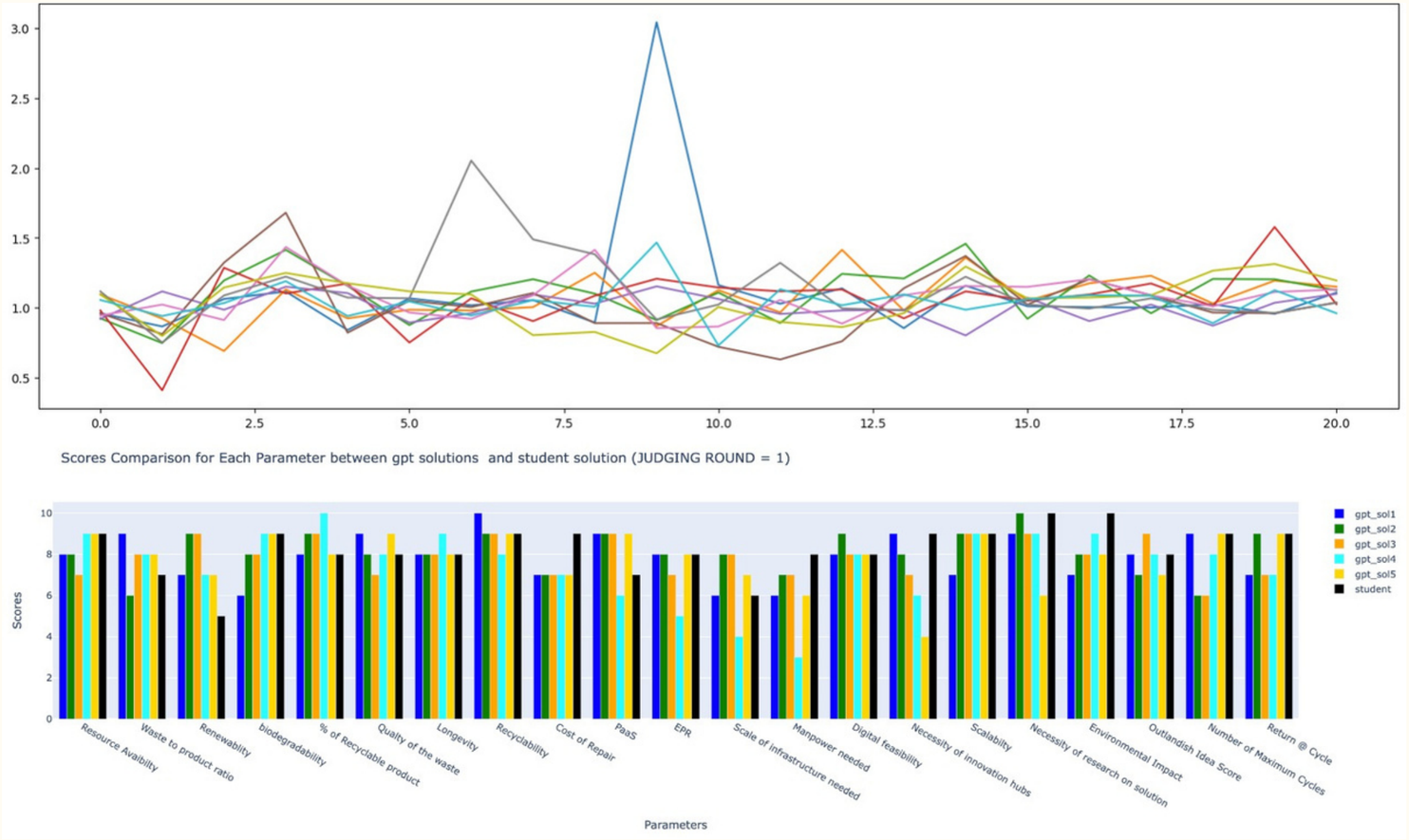


IDEA ANALYSIS

The following graphs display the mean score for each feature, the relative score between user and generated solutions, and the score of each feature across solutions.



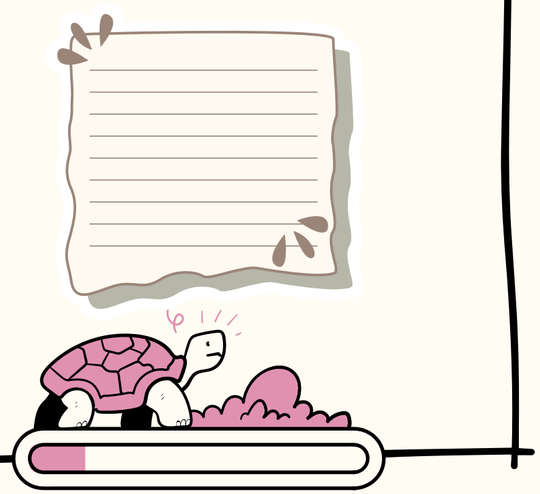
Graph



IDEA FILTER

The output scores generated by our pipeline are used to determine the ranking. The top solutions are considered as good ideas and rest are filtered out as bad ideas. Ideas that are moonshot are also considered to determine the ranking via the outlandish_score

BAD IDEAS



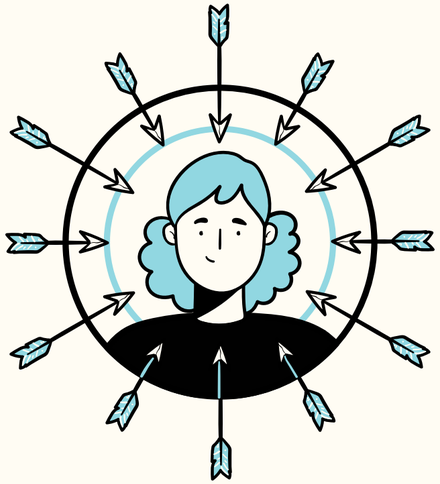
GOOD IDEAS

THE TARGET AUDIENCE

• Prospective clients

This AI-based idea evaluator caters to diverse users seeking to assess the feasibility, impact, and sustainability of initiatives, products, or policies aligned with circular economy principles.

- Entrepreneurs & Innovators
- Investors & Venture Capitalists
- Policy Makers & Government Bodies
- NGOs & Advocacy Groups



• Marketing Strategy

Unique Selling Proposition (USP) Definition

Clearly articulate our circular economy tool's unique features for market differentiation

Tailor Messaging for Our Audience

Customize messaging for businesses, policymakers, or sustainability consultants to address specific needs

Demonstrations and Workshops

Organize workshops and live demonstrations to showcase the tool's functionality and practical applications.

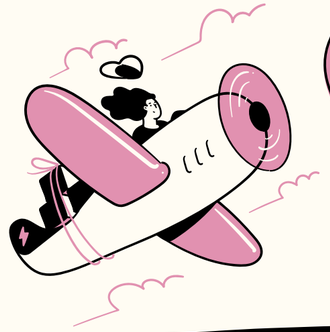
Emphasize Data Privacy and Feedback

Highlight strong data privacy, showcase testimonials, and implement feedback loops for continuous improvement

CONCLUSION AND FUTURE WORK

In conclusion, our proposed method for evaluating circular economy proposals stands as a robust and innovative solution. By incorporating a unique set of features and a user-friendly interface, we've streamlined the evaluation process for businesses, policymakers, and sustainability consultants.

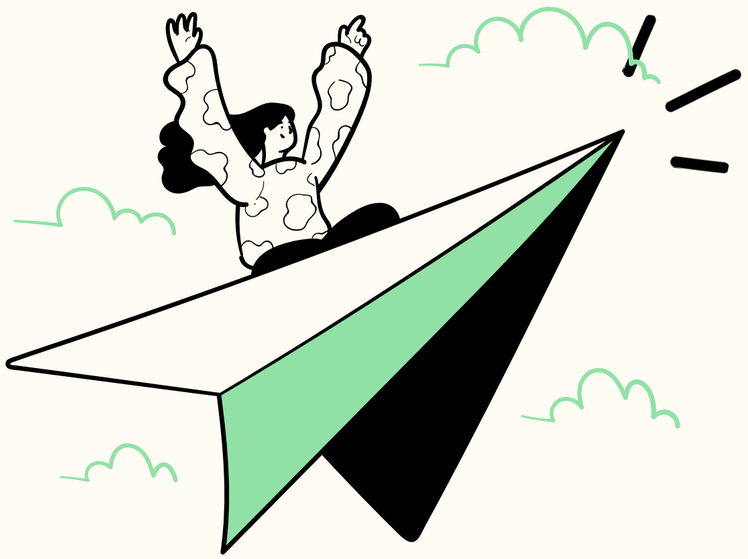
01 Focus on user experience by conducting in-depth user studies to understand how the tool is utilized and perceived.



02 Expand collaborations with key industry players and organizations to scale the impact of our circular economy proposal evaluation method.

03 Investigate the feasibility of integrating real-time data sources to provide up-to-the-minute insights. This enhancement would enable users to adapt strategies promptly

THANK YOU!



Braking

TURNNING

TURNING

Turning

Jerking

Event Data Processing

EGITE

(1)

STARTING

STARTING

100

STOPPING

STARTING

STARTING