

## **Team details**

## **Code-for-Conservation:**



## Somesh Ghosh (Team Leader)

College: National Institute of Technology (NIT) Jamshedpur

**Stream: Electronics and Communication Engineering** 

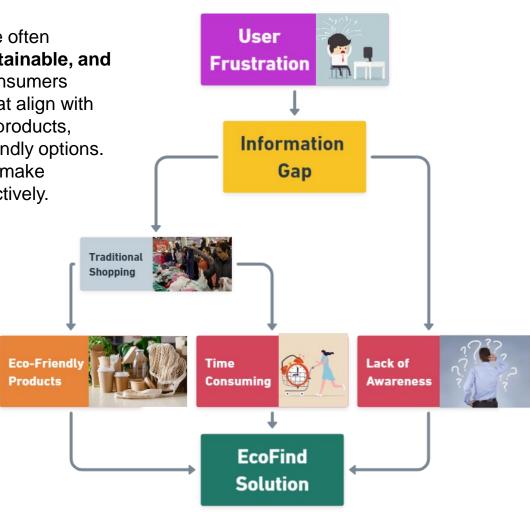
**Year of Graduation: 2026** 

## Describe the problem statement (200 words)

In today's consumer-driven world, environmentally conscious individuals are often overwhelmed by the **lack of easily accessible information on green, sustainable, and eco-friendly products**. As the demand for eco-conscious choices rises, consumers struggle to find trustworthy sources that curate and recommend products that align with their values. Traditional e-commerce platforms are flooded with an array of products, making it time-consuming and challenging for consumers to identify eco-friendly options. This information gap poses a significant obstacle to individuals who wish to make environmentally responsible purchases but lack the resources to do so effectively.

Moreover, the lack of awareness about eco-friendly alternatives and their benefits hinders the broader adoption of sustainable living practices. Bridging this knowledge gap and simplifying the process of identifying eco-friendly products is essential to encourage more people to embrace sustainable consumerism.

**User frustration** is caused by an **information gap**, which, in turn, occurs due to **traditional shopping** and **lack of awareness**. Traditional shops do include **eco-friendly products**, but they **are time-consuming** to find, **unreliable**, and provide **no information** to consumers regarding the green product leading to lack of awareness among the consumers.



## Proposed solution / your big Idea (200 words)

Our solution, EcoFind is the ultimate destination for environmentally conscious consumers seeking to make sustainable choices effortlessly. Our innovative platform combines cutting-edge technology with a commitment to education and community engagement.

At the heart of EcoFind is our product recommendation feature powered by machine learning algorithms. Users can input their desired product, and our platform curates a daily list of top eco-friendly options. Each recommendation comes with detailed product descriptions, direct purchase links, and regular updates to ensure users have access to the latest sustainable products.

But EcoFind is more than just a recommendation engine. We empower users with knowledge through our blog section, which offers informative articles, sustainable living tips, and insights into eco-conscious trends. Our user community forums foster connections among like-minded individuals, encouraging the exchange of ideas and support for sustainable living.

In addition to these core features, EcoFind offers tools like sustainable ratings and reviews, product comparisons, a carbon footprint calculator, and a green events calendar. We promote local and ethical sourcing, showcase eco-friendly brands, and even provide personalized sustainability reports.

With EcoFind, we're not just simplifying eco-friendly shopping; we're building a community and a movement. We envision a world where conscious consumerism is the norm, and EcoFind plays a pivotal role in making this vision a reality. Join us on this journey towards a greener, more sustainable future.

Technology Used: Machine Learning, Web Development Technologies

## Proposed solution / your big Idea (200 words)

### **EcoFind Features**

#### Product Recommendation:

- Machine Learning Algorithms
- User Input
- Curated Eco-Friendly Product List
- Direct Purchase Links
- Detailed Product Descriptions
- Updated Recommendations

#### **Carbon Footprint Calculator:**

- Calculate Carbon Footprint of Purchases
- Provide Eco-Friendly Alternatives
- Environmental Impact Tracking

#### **Blog Section:**

- Informative Articles
- Sustainable Living Tips
- Eco-Conscious Trends
- User Engagement

#### **Sustainable Ratings and** Reviews:

- User-Generated Ratings
- Environmental Impact Ratings
- User Reviews
- Product Insights

#### **Product Comparisons:**

- Side-by-Side Product Comparison
- Price Comparison
- Environmental Impact Comparison
- Feature Comparison

#### **Local and Ethical Sourcing:**

- Highlight Local and Ethically Sourced **Products**
- Fair Trade and Local Community Support

#### **User Forums and Community:**

- Discussion Forums
- Sustainable Living Tips Exchange
- Like-Minded Community

#### **Green Deals and Discounts:**

- Exclusive Eco-Friendly Product Deals
- Discounts on Sustainable Choices
- Promote Affordable Eco-Friendly Shopping

#### **Interactive Sustainability Challenges:**

- Monthly/Quarterly Challenges
- Encourage Sustainable Actions
- Rewards and Recognition

### **Eco-Friendly Brands Directory:**

- Curated List of Eco-Conscious Brands
- Brand Values and Certifications Support Ethical Businesses

#### **Product Certification** Information:

- Detailed Information on Eco-Certifications
- Educate Users on Product Standards

#### **Green Events Calendar:**

- Upcoming Environmental Events
- Workshops and Sustainability Activities
- Stay Informed and Engaged

#### **Personalized Sustainability** Reports:

- User-Specific Reports
- Tracking Sustainable Shopping Habits
- Suggest Areas for Improvement

#### Mobile App:

- On-the-Go Access
- Product Scanning for Eco-Friendliness
- Eco-Tips and Shopping Assistance

# How does your innovation accelerate change with the power of Technology? (200 words)

EcoFind harnesses the power of cutting-edge technology, specifically machine learning algorithms, to accelerate positive change in the way people shop and consume products. Our innovative platform employs data-driven insights and automation to provide users with a curated selection of green, sustainable, and eco-friendly products. This streamlines the decision-making process for eco-conscious consumers, making it easier than ever to choose sustainable alternatives.



Through advanced data analysis, EcoFind continuously scours the vast landscape of e-commerce websites, considering product attributes, certifications, and user reviews to identify environmentally responsible products. This technology-driven approach not only saves users time but also ensures that the products featured meet stringent eco-friendly criteria. Moreover, our platform's educational content leverages technology to raise awareness about sustainable living, fostering a community of informed and responsible consumers.

By making eco-friendly products more accessible, EcoFind empowers individuals to make eco-conscious choices effortlessly. This technological innovation is a catalyst for change, encouraging a shift towards sustainable consumerism, reduced carbon footprints, and a healthier planet.



# How is your solution different/unique from other solutions in market (150 words)

EcoFind stands out in the market due to its unique combination of curated product recommendations and educational content. While there are existing eco-friendly product directories and sustainability-focused websites, EcoFind goes a step further by not only offering a handpicked selection of eco-friendly products but also educating users on why these choices matter.

Most similar platforms primarily provide product listings without comprehensive information or context, leaving users to navigate on their own. In contrast, EcoFind provides detailed product descriptions, direct links to purchase, and captivating images, enhancing the user experience.

Furthermore, EcoFind's machine learning algorithms continuously update product recommendations based on evolving eco-friendly criteria and user feedback, ensuring that users have access to the latest and most relevant sustainable products.

Our dedication to user education through a blog section sets us apart, empowering consumers with knowledge about eco-friendly living practices, certifications, and industry trends. EcoFind's holistic approach makes it a unique and invaluable resource for ecoconscious consumers seeking both products and knowledge to drive positive environmental change.

PATENT FILED: No

Foundation of the solution.	EcoFind Platform:
EcoFind goes beyond simple recommendations.	Comprehensive Product Curation:
Informative articles and sustainable living tips.	User Education:
Fosters an engaged community of users.	Active Community:
Users can provide sustainability-based ratings.	Sustainable Ratings:
Products rated for their environmental impact.	Environmental Impact:
Highlights products with ethical sourcing.	Ethical Sourcing:
Exclusive green deals and discounts.	Green Deals:
Users receive customized sustainability reports.	Personalized Reports:

Do you have a working model/prototype: Yes (With ML recommendation feature and blog section. Other features are in development)

## Any testimonials received?

In diligent pursuit of market research, I conducted an extensive search across reputable sources to ascertain the viability, economic feasibility, and cultural acceptability of my eco-conscious idea. Gratefully, numerous esteemed think tanks and organizations have undertaken comprehensive analyses that not only validate the commercial potential but also underscore the socio-economic and cultural relevance of my concept. Some noteworthy references include:

- The rise of the eco-friendly consumer (strategy-business.com)
- Climate explained: Are consumers willing to pay more for climate-friendly products? (theconversation.com)
- <u>Frontiers | Culture and Green Advertising Preference: A Comparative and Critical Discursive Analysis</u>
   (frontiersin.org)
- Sustainable consumption (europa.eu)

Additionally, I sought counsel from **Dr. Ram Krishna**, a well-regarded professor within my academic institution. Furthermore, I conducted informal surveys among acquaintances, encompassing neighbors, uncles, and aunts, with the intention of gauging their perspectives. While the responses exhibited variation, a recurring theme emerged: a collective preference for eco-friendly products that closely align with the price and quality standards set by conventional alternatives.

In response to this valuable feedback, I am earnestly refining my model. The objective is to ensure its recommendations encompass environmentally responsible products that present cost and quality parity with traditional offerings. This approach is intrinsically user-centric, serving as a testament to our unwavering commitment to sustainability and inclusivity, resonating with the discerning and conscientious consumer demographic.



Somesh Ghosh <someshghoshjoyguru@gmail.com>

#### Seeking Your Expertise: Feedback on EcoFind Project

2 message

Somesh Ghosh <someshghoshjoyguru@gmail.com>
To: Ram Krishna <krishna.met@nitjsr.ac.in>

10 September 2023 at 15:42

Dear Professor Dr. Ram Krishna.

I hope this email finds you well. I wanted to reach out to you for your valuable insights regarding a project I have been developing, called EcoFind.

EcoFind is an initiative aimed at simplifying sustainable consumerism. It's designed to assist environmentally conscious individuals in discovering eco-friendly products that closely align with the price and quality standards of conventional alternatives. The primary goal is to bridge the gap between eco-consciousness and accessibility, enabling a wider audience to make environmentally responsible choices in their everyday lives.

Given your extensive experience and expertise, I would greatly appreciate your thoughts on the concept of EcoFind and its effectiveness in addressing the sustainability problem. Any guidance or feedback you could provide would be immensely valuable in refining this project.

I understand your time is precious, and I genuinely appreciate your consideration of this request. If you are available for a brief discussion or would prefer to communicate via email, please let me know your preferred mode of communication.

Thank you very much for your time and consideration.

Warm regards.

Somesh Ghosh Electronics and Communication Engineering National Institute of Technology Jamshedpur someshghoshjoyguru@gmail.com

Code-for-Conservation\_Conscious-Consumerism-Solutions\_.pdf

Dr. Ram Krishna <krishna.met@nitjsr.ac.in>
To: Somesh Ghosh <someshghoshjoyguru@gmail.com>

10 September 2023 at 16:12

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I trust this email finds you in good health. I've had the opportunity to review your project, EcoFind, and I must say that it is an excellent and commendable initiative.

The concept of EcoFind, with its focus on facilitating access to eco-friendly products that are competitive in both price and quality with conventional alternatives, is both timely and promising. It addresses a pressing issue in sustainable consumerism, making responsible choices more accessible to a broader demographic.

I wholeheartedly support your endeavor and believe that it has the potential for significant positive impact. To ensure EcoFind's success, I encourage you to continue your efforts in training the recommendation model to closely align with the price and quality standards set by traditional products. This alignment will be crucial in gaining wider acceptance and adoption.

Should you require any further guidance or assistance in the future, please do not hesitate to reach out. I am here to support your endeavors and look forward to witnessing the progress of EcoFind.

Wishing you all the best in your efforts

Warm regards.

Dr. Ram Krishna, FIE, FISME, FSIESRP

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