



Indian Institute of  
Technology Guwahati



KRITI '24

# Green Route

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Future plans and strategies

# SURVEYS

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1.

## Consumer Survey

We asked a few questions to understand their problems regarding deliveries and bags

2.

## Retailer Survey

We researched and gathered their thoughts regarding the carbon footprint of product packaging and delivery processes.

3.

## Professor Survey

We reviewed our start-up idea and collected suggestions and feedback.

# SURVEY QUESTIONS

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## Retailer Questions

- Q1: Would you be interested in using convertible delivery bags?
- Q2: Does your business think about being eco-friendly in deliveries?
- Q3: Would AI-based optimised delivery routes encourage you to choose a specific delivery service?
- Q4: Is your business actively working to reduce its carbon emissions in the delivery process?
- Q5: Have you considered or implemented sustainable packaging options to minimise environmental impact?

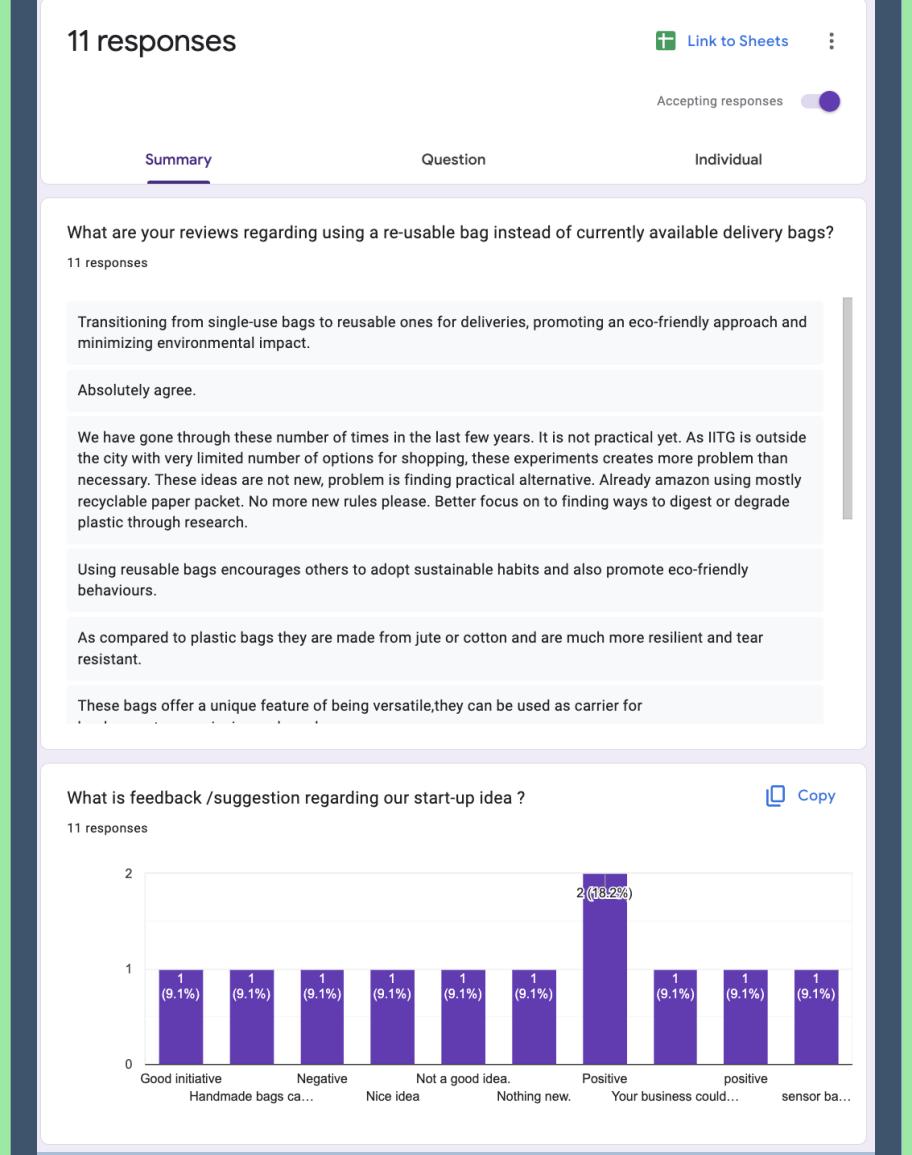
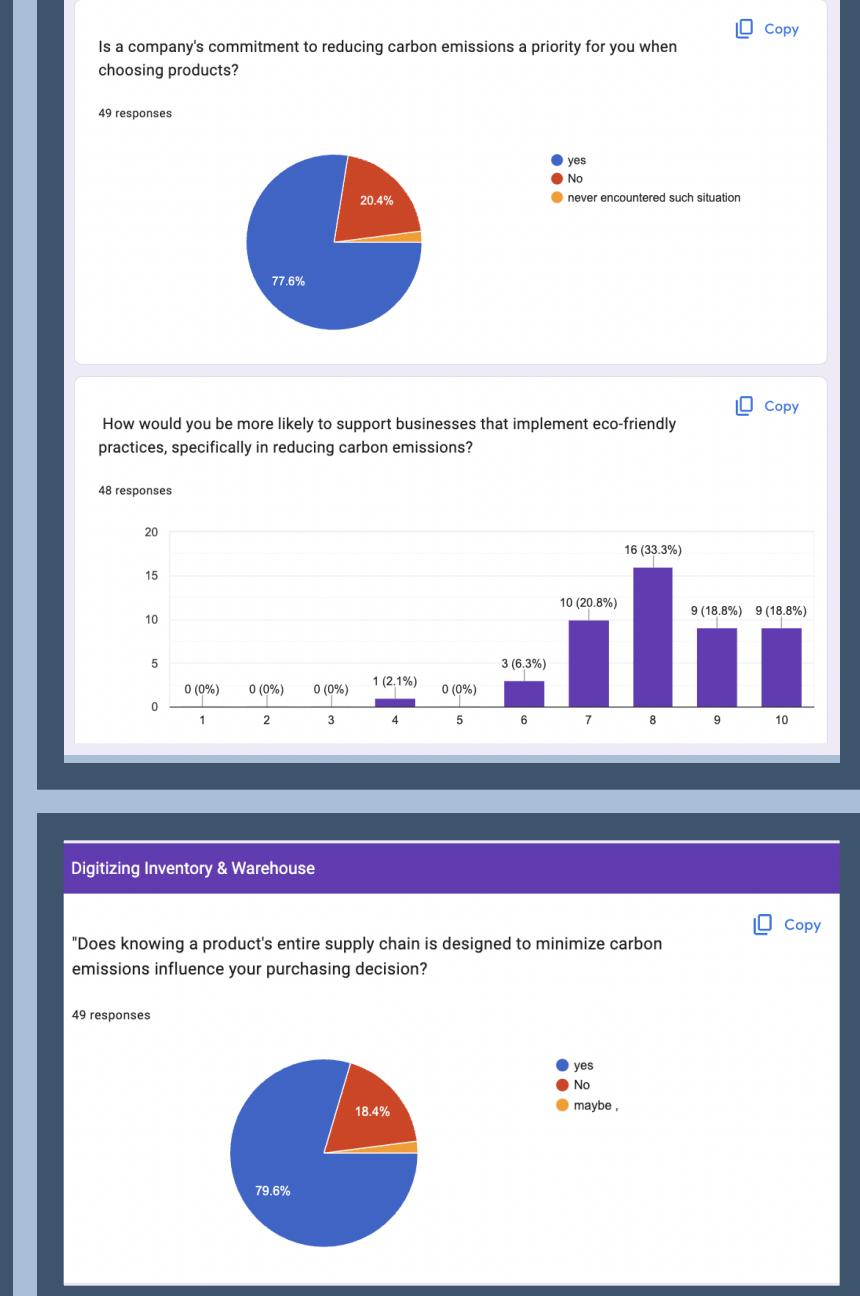
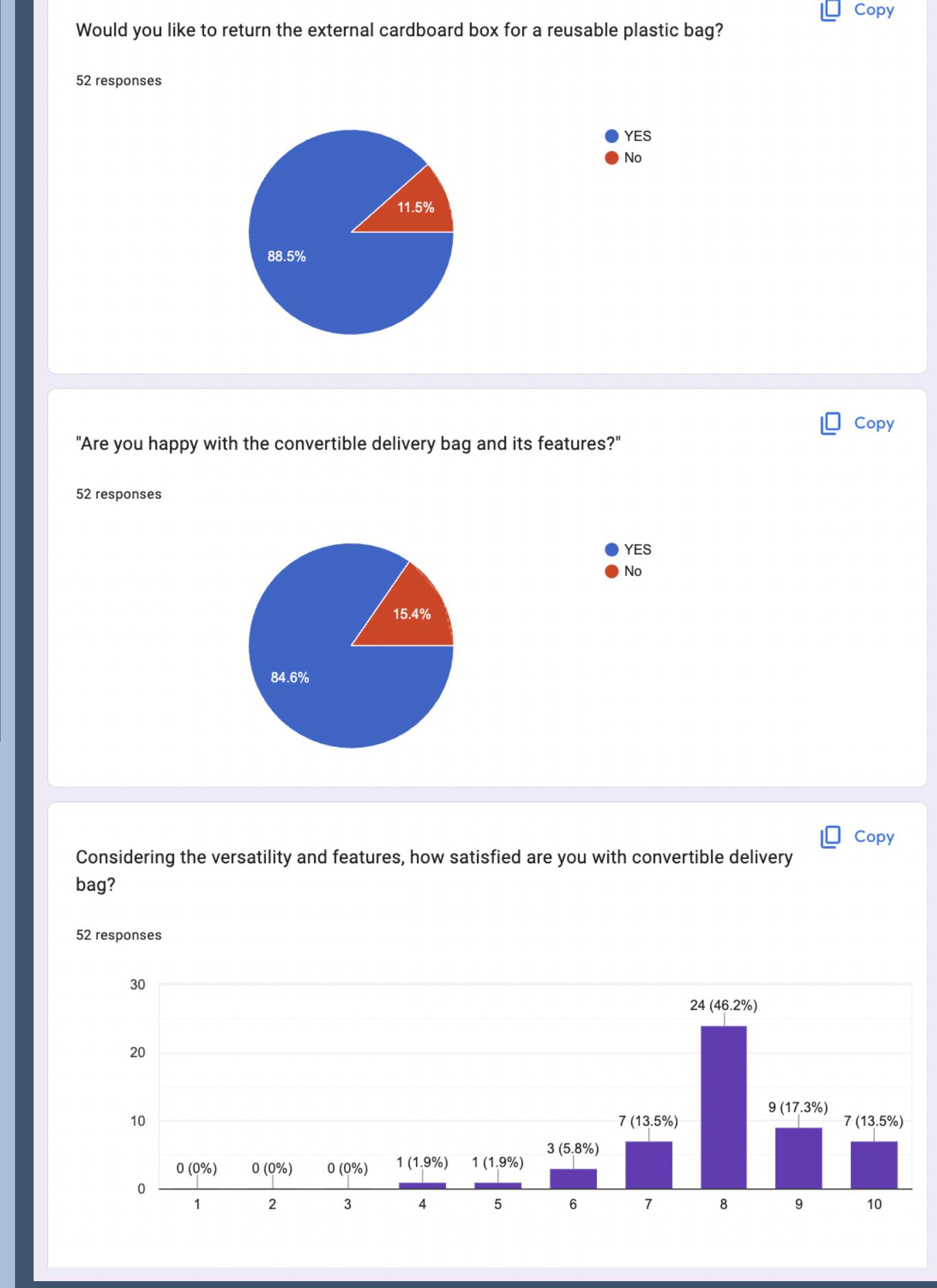
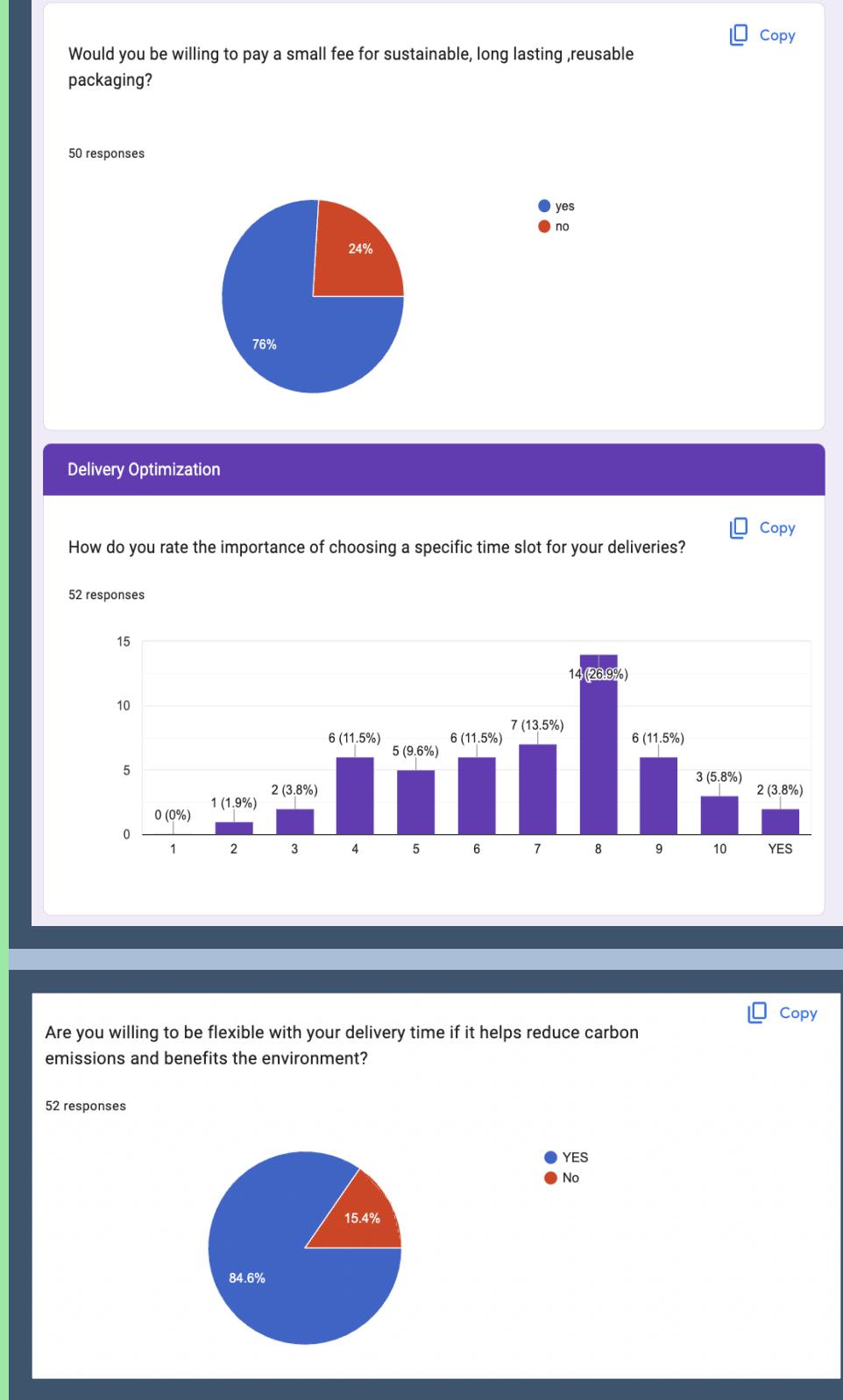
## Consumer Questions

- Q1: Would you like to return the external cardboard box for a reusable plastic bag?
- Q2: Are you happy with the convertible delivery bag and its features?
- Q3: Considering the versatility & features, how satisfied are you with convertible delivery bag?
- Q4: Would you be willing to pay a small fee for sustainable, long-lasting, reusable packaging?
- Q5: How do you rate the importance of choosing a specific timeslot for your deliveries?
- Q6: Are you willing to be flexible with your delivery time if it helps reduce carbon emissions and benefits the environment?
- Q7: Does knowing a product's entire supply chain is designed to minimise carbon emissions influence your purchasing decision?
- Q8: Is a company's commitment to reducing carbon emissions a priority for you when choosing products?
- Q9: How would you be more likely to support businesses that implement eco-friendly practices, specifically in reducing carbon emissions?

## Professor Questions

- Q1: What are your reviews regarding using a re-usable bag instead of currently available delivery bags?
- Q2: What is feedback/suggestion regarding our start-up idea?

# SURVEY RESPONSES

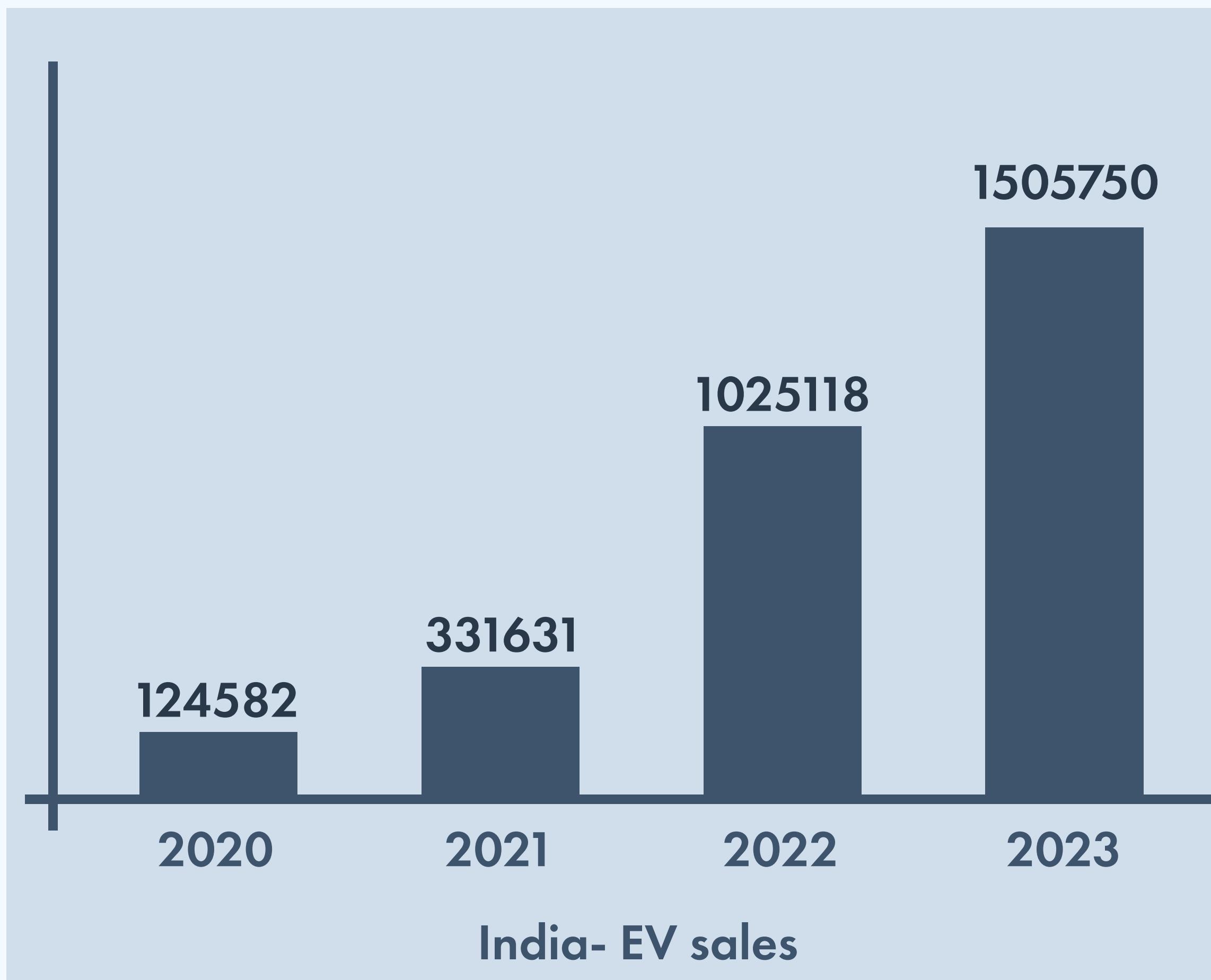


**Retailer  
Responses**

**Customer  
Responses**

**Professor  
Responses**

# GROWING SECTOR OF EVs



## Growth Factors of EVs in India

### Tax & Financial Benefits

Govt offers several policies & initiatives to encourage the use of such vehicles. Eg: Registration fees and Road tax on purchasing EVs are lesser than ICE ones.

### Convenience of Charging at Home

No need to find nearest petrol station to fill fuel, Charge your EV at home and get moving.

### Low Maintenance Cost

Petrol/Diesel vehicles require regular maintenance due to having multiple moving parts, however EVs have less moving parts and thus have a lower maintenance cost.

### Lower Running Cost

Since you're not paying for petrol or diesel to keep your EV running, you save a lot of money on fuel. The cost to charge EV compared to petrol or diesel is substantially low.

### No Fuel No Emissions

One of the most significant advantages of EVs is their impact on our environment. Pure EVs have zero tailpipe emissions, which reduces air pollution.

### Better Performance

EVs are lighter in weight and their acceleration is impeccable compared to fuel-powered vehicles.

### Zero Tailpipe Emissions

EVs emit zero tailpipe emissions, helping reduce carbon footprint. You can further reduce carbon footprint by utilising renewable energy to charge your EV.

# ADVANTAGES FOR EVs FLEET IN LOGISTICS

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## Limited Range & Battery Life

EVs have a finite range per charge, and their battery longevity is influenced by factors like driving conditions and terrain. Optimizing routes ensures efficient use of battery power, preventing the vehicle from running out of charge.

## Charging Infrastructure:

Considering the evolving nature of charging stations, route optimization assists drivers in planning stops at strategic charging points, minimizing downtime during the journey. This is crucial to alleviate range anxiety associated with the still-developing charging infrastructure for EVs.

## Reducing Environmental Impact:

Optimal routing contributes to lowering greenhouse gas emissions associated with electricity production, aligning with the goal of reducing the environmental impact of transportation.

## Energy Efficiency:

EVs exhibit optimal energy efficiency under specific conditions. Route optimization factors in variables such as traffic, road gradients, and driving patterns to identify the most energy-efficient route, maximizing overall efficiency.

# ADVANTAGES FOR EVs FLEET IN LOGISTICS

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## Enhancing Battery Life:

Considering factors like temperature and their impact on battery health, route optimization suggests routes that are gentler on the battery, promoting longevity and reducing the need for frequent replacements.

## Dynamic Adjustments:

Real-time route optimization allows for adaptive changes based on dynamic conditions, such as traffic congestion or unexpected road closures. This adaptability is crucial for EVs to navigate the ever-changing road network efficiently.

## User Experience and Convenience:

Route optimization enhances the overall driving experience for EV users by planning not only energy-efficient routes but also convenient ones that consider amenities, rest areas, and other services along the way.

# ADVANCEMENT OF WEBSITE

## Green Route

Cart 

LOHIT

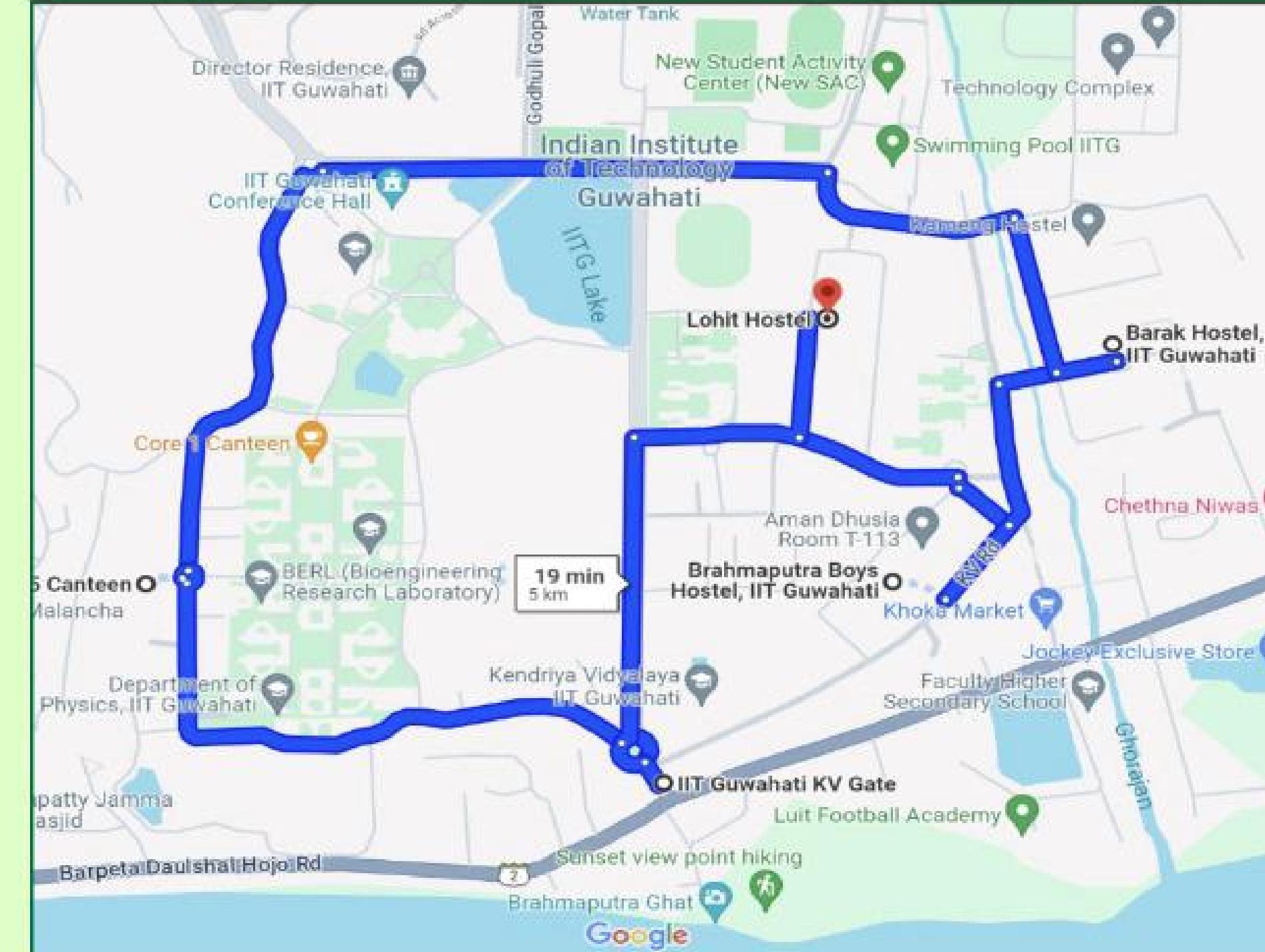
KV GATE

ACADEMIC COMPLEX

BRAHMAPUTRA

BARAK

Submit



# IMPLEMENTING TIME SLOTS

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**Enhancing Convenience:** Offering consumers the flexibility to select a preferred time slot for delivery ensures convenience when they are unavailable to receive their orders.

**Efficient Resource Utilization:** By empowering consumers to choose optimal time slots, not only do we prioritize their needs, but we also enhance the efficiency of delivery operations. This, in turn, aids delivery personnel in saving time and fuel.

**Environmental Impact:** Firstly, the evolving dynamics of supply chains, adapting for efficiency and customer satisfaction, inadvertently escalate the carbon footprint, urging a swift transition to sustainable models.

# EXPANDING HORIZONS WORLDWIDE

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## Understand Global Sustainability Standards

Familiarize yourself with international sustainability frameworks and standards such as the Global Reporting Initiative (GRI), the United Nations Sustainable Development Goals (SDGs), and the ISO 14000 family on environmental management. Ensure your business practices align with these standards to appeal to a global audience.

## Market Research and Localization

Conduct thorough market research to identify potential markets with a high demand for sustainable products and supply chain services. Understand local regulations, sustainability practices, consumer preferences, and cultural nuances. Tailor your offerings to meet these local demands.

## Build Strategic Global Partnerships

Forge partnerships with local and international businesses that share your sustainability ethos. This can include suppliers, distributors, and logistics providers.

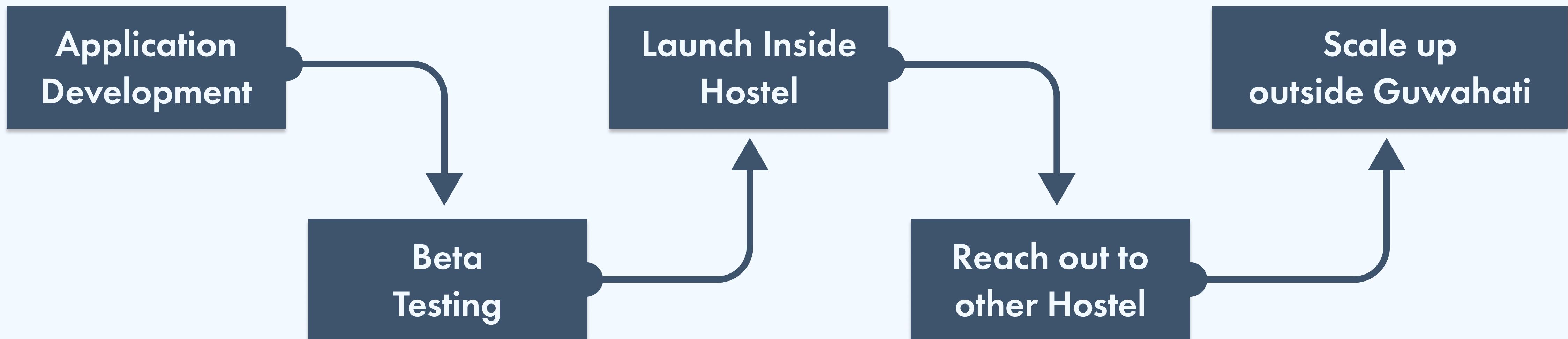
Collaborate with international sustainability organizations and networks to enhance credibility and learn from global best practices.

## Continuous Improvement and Innovation

Foster a culture of continuous improvement and innovation, focusing on sustainable practices that can adapt to changing global trends. Engage in research and development to innovate in products, services, and processes that meet the evolving needs of the global market.

# TIMELINE

Gantt Chart	FEB				MAR				APR		
	W 2	W 3	W 4	W 1	W 2	W 3	W 4	W 1	W 2	W 3	
TASK											
Application Development											
Beta Testing											
Launch Inside Hostel											
Reach out to Other Hostels											
Scale up to other Institutes in Guwahati											





**THANK  
YOU**