Lack of Transparency and Public Engagement in Everyday Waste Management

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The Problem:

Limited awareness of waste processing and its environmental impact leads to poor recycling habits and low sustainability participation

WASTE MANAGEMENT ECOSYSTEM



Low awareness of waste lifecycle post-disposal



Disconnection from environmental impact



Limited access to convenient solutions

The Opportunity

Enhance recycling rates and promote responsible waste disposal behaviors through increased awareness and simple management tools

Methodology

- 50 interviews conducted with students and corporate employees (ages 18-35)
- Questions focused on awareness, daily practices, and challenges
- Outreach via Zoom, emails, and in-person invites

32% aware of basic

aware of basic recycling practices

43%

participate in recycling (segregation)

20%

pounds/day per household waste generation 25%

contamination rate in recyclables

The Solution: Waste Management App

An app based solution that encourages and educates the user towards daily waste management

Local alerts and announcements



Waste sorting education

Incentive-based rewards and recognition





Tools for community engagement and shared initiatives



WHAT SETS US APART?

Personalized Engagement

Mobile app with real-time feedback and tracking

Incentive-Driven
Approach

Preferred by 80% of interviewees

Community Focus

68% interviewees
support programs
like composting and
shared sustainability
efforts



Primary Customer Persona: B2C



B2C: Environmentally-conscious consumers

Other Potential Segments

- B2B: Local governments, municipalities, and corporations
- Nonprofits/NGOs focused on waste management and sustainability

PRIMARY USE CASE

ECO-CONSCIOUS URBAN PROFESSIONAL

Name: Sarah, 28

Occupation: Corporate Employee

Location: Urban area

CHARACTERISTICS

- Busy lifestyle, seeks convenience
- Environmentally aware but struggles with consistent practices
- Tech-savvy, prefers mobile solutions
- Values community involvement and social impact

PAIN POINTS

- Unclear sorting systems
- Lack of motivation due to unclear impact
- Limited time for extensive research on proper disposal methods
- Check local recycling schedules and announcements
- Learn proper sorting techniques for different materials
- Track her recycling efforts and earn rewards
- Participate in community clean-up events

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Revenue Model

- Freemium Model for Consumers: Basic features free, premium features for a subscription
- Data Analytics (B2B): Offer aggregated data on waste patterns to municipalities and corporations
- In-App Advertising: Eco-friendly brands and recycling companies

Scalability Plan

Phase 1	Launch in pilot cities	 Partner with local governments and waste management companies Establish user base and refine app features
Phase 2	Regional Expansion	 Leverage data and success stories from pilot cities Adapt to regional waste management regulations and practices
Phase 3	National Rollout	 Standardize core features while allowing for local customization Develop B2B offerings based on accumulated data and insights
Phase 4	International Expansion	 Partner with global environmental organizations Adapt to diverse cultural and regulatory environments

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Go-to-Market Strategy

Partnerships

Incentives

Go-toMarket
C
Education Strategy
Er

Community Engagement

Data-Driven
Approach

Domain-Specific Challenges

- Highly regulated industry
- Varying recycling rates across states
- 25% contamination rate in recyclables

Potential Risks and Mitigation Plans

Low Adoption

Intensive marketing, influencer partnerships

Regional Inconsistencies

Modular design, local partnerships

Data Privacy

Robust protection, transparent policies

Impact Measurement

Clear KPIs, advanced analytics

Regulatory Issues

Legal partnerships, proactive engagement

Competition

Focus on unique value, seek partnerships

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Fixed & Variable Costs

Cost	Strategy
Software Development	 Opt for cross-platform frameworks to build a single codebase that works on multiple platforms Utilize open-source libraries, frameworks, and pre-made templates to reduce coding time and licensing fees
Customer Acquisition	 Prioritize low-cost, high-impact marketing strategies. Leverage content marketing, social media, and SEO to reach your target audience without significant advertising spend
Data Storage Infrastructure	 Adopting cloud-based software instead of purchasing expensive hardware and investing in automation tools

Partnerships

Waste Management Companies

Benefits: Expertise in waste handling and disposal regulations

Incentives: Enhanced customer service through real-time tracking and reporting

Local Government Authorities

Benefits: Access to public waste collection points and facilities **Incentives**: Enhanced citizen satisfaction through efficient waste services

Environmental Non- Profits

Benefits: Expertise in best practices & sustainability metrics
Incentives: Platform for promoting environmental awareness and best
practices

Thank You