



ECO SNAP PHOTOBOX :

Smart Photobox Innovation Based on Gamification Recycle Reward System to Reduce Plastic Waste

Description

Eco Snap Photobox is a sustainability-based technology startup that presents an interactive recycling photobox machine. This machine invites the public to exchange 5 used plastic bottles for a direct prize in the form of an instant photo in the photobox. Every bottle collected through EcoSnap Photobox not only reduces plastic waste in the environment, but will also be recycled into environmentally friendly manufacturing materials that are reused in sustainable development projects. EcoSnap Photobox makes throwing away trash a fun and rewarding experience that has a real impact on a greener future.

Problem Identification

Main Activities

- Literature review of plastic waste & recycling incentives

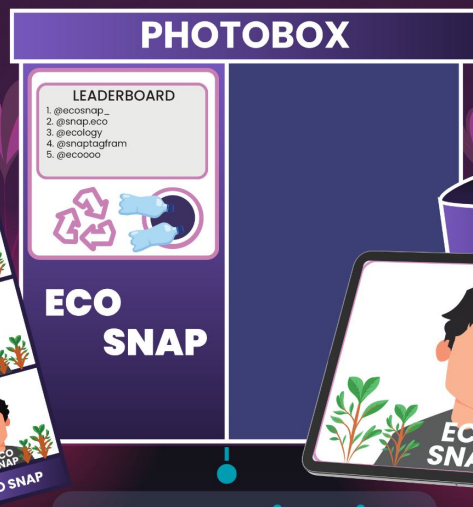
- Gap analysis of existing facilities

Methods & Tools

- Literature review (UNEP, plastic journal)

- Initial interviews with environmental & city stakeholders

Methodology Stages



Unique Value Proposition:

- The first photobox based on gamification and reward system for plastic recycling.
- Provide photobox access with 5 plastic bottles as payment media.
- Recycling plastic bottle waste into manufacturing materials.

Evaluation

Main Activities

- Measure outcomes: number of bottles, change in recycling intention, user satisfaction
- Analysis of social norms factors

Methods & Tools

- Pre-post statistical analysis (TPB survey)

Define Objectives

Main Activities

- Formulate objectives: increase the volume of bottles transported & community intentions
- Determine success indicators

Methods & Tools

- Design thinking workshop
- TPB-based questionnaire (Ajzen, 1991) to explore attitudes & norms

Communication

Main Activities

- Report to CSR partners & government
- Publication of study results & policy recommendations

Methods & Tools

- Digital monitoring dashboard
- Whitepapers and presentations at environmental conferences

Customer Segments

- The younger generation (Gen Z & Millennials) who are active on social media and like to travel.
- Environmentally conscious community.

Design & Development

Main Activities

- Designing a photobox & water dispenser prototype
- Creating a UI/UX interface for reward options

Methods & Tools

- Rapid prototyping (CAD / SketchUp)
- Iteration using early user feedback

Demonstration

Main Activities

- Pilot deployment in 3 selected locations (campus, mall, event)
- Socialization through signage & accompanying staff

Methods & Tools

- Direct observation
- Daily bottle count recording
- Post-use user interviews

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Eco Snap Photobox is an innovative solution that combines sustainable photography, providing an enjoyable experience while reducing plastic waste and raising public awareness about disposing of plastic waste.