

Echo-Plant

Project Charter

By: [team vega]

To: Mr. Yohan Pandigama

PROJECT CHARTER APPROVALS

Role	Name	Signature	Date
Project Manager			
Project Sponsor			
Executive Sponsor			

Revision History

Date	Name	Comments	Version

Content

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1. PROJECT OVERVIEW

Executive summary

A waste management system is the strategy an organization uses to dispose, reduce, reuse, and prevent waste. Possible waste disposal methods are recycling, composting, incineration, landfills, bioremediation, waste to energy, and waste minimization.

Here we focused on the design of a web application for industrial waste management in Sri Lanka. Develop a software service for transporting, storing, and recycling the industrial waste in collaboration with other services and provide a platform to purchase raw materials obtained from the recycling process.

Echo Plant is an online marketplace where recyclable products may be bought and sold. We intend to broaden our concept to include the world of the future in the hopes that it would benefit society. There are several marketplace platforms and apps available worldwide. However, there is no good platform for selling stuff that people discard. So, our suggestion will be a great solution.

2. PROJECT OBJECTIVES AND EXPECTED BENEFITS

Objectives

- I. opportunities are provided to the unemployed to start small businesses. for example, an unemployed person has the ability to create rugs by purchasing small scraps of cloth discarded from a garment factory through the web platform.
- II. Through our web platform, can sell and buy reusable waste! as a result, many things are used to make a new product rather than being added to the environment. it reduces what needs to be destroyed and adds less to the environment
- III. With this system, most companies will practice segregation of waste. Then they can be sold through the platform

Measurable Benefits

Metric	Expected Improvement
Revenue	20%
Cost reduction	10%
Improve efficiency	15%
Improve customer experience	20%
Increase market share	5%

3. Project Detail

Problem Description

100000 MT of industrial waste is generated in Sri Lanka per year. Managing it can be challenging for existing industries and new industries. It is useful to consider the background of Sri Lanka's waste management in considering the decision to dispose of collected waste into the environment.

Each person generates an average of 1-0.4kg of waste per day. Lack of public awareness about waste management, and a lack of comprehensive understanding process about the benefits of waste even though there are public or private waste disposal measures. Therefore, air pollution and environmental pollution can still be seen today. This situation can lead to waste management that is harmful to the environment.

Identified Root Causes

The main reason for this problem is the lack of knowledge about waste management and the lack of understanding among the citizens. An organized system of existing waste management has not been considered. Garbage is material that can be disposed of under different categories.

Proposed Solution

To solve the issues and complexity of the waste management process, team Vega propose to develop a software service for transporting, storing, and recycling the industrial waste in collaboration with other services (third party partners and companies). In addition, to promote recycling, it is proposed to provide a platform to purchase raw materials obtained from the recycling process through the solution, as well as residual materials.

Scope Details

In Scope	Out of Scope
Accept recyclable waste only.	will not handle landfill waste for now
Recyclable waste category list (TBD)	

Project Milestones

Name	Target Date	Comments
Select correct technologies	2022/10/20	
Develop the correct architecture	2022/10/25	
Develop database	2022/11/8	
Develop server application	2022/12/6	
Develop web UI	2022/12/27	

Team

Project team

Name	Project Role
A.G.Hansika Udayangani	Co-Project manager, developer
Ramesh Shyaman	Project manager , developer
B.H.I.S.Pieris	UX designer ,developer
Maneesha Rathnayake	Technical lead, developer

4. PROJECT COST AND RESOURCE ESTIMATION

Project cost

Project Expense	Cost Center	Comments	Est. Amount
Web domain	Customers	Web domain and sever	7000
Communication	Customers	Zoom and internet	2000
hosting		AWS/TBD	11000/MO (estimate)

Resource estimation

Role or Name	Est. Hours	Rate (USD)	Est. Total
software architect	20	60	1,200
UX designer	50	48	2,400
Application developer	50	47	2,350
Database developer	45	47	2,115
QA	20	36	720

5. RISKS AND COMMUNICATION PLAN

Risk Mitigation Plan

Identified Risk	Severity	Probability	Mitigation
In the beginning we had to face several issues as we were not experienced in project management.	High	Low	The challenges & technical issues were solved with the help of an Advisor.
Faced problems in working together with all the group members.	Medium	Medium	We use various types of communication software such as Zoom and WhatsApp etc.
New Technologies	High	Medium	We learned new things through YouTube & educational websites.

Communication Plan

Topic	Audience	Frequency/Date	Owner
Project Meeting	Group members	Once	Advisor
Kickoff Meeting	Group members	Once	Group leader (Project Manager)
Project Status Meeting	Group members	Weekly	Group leader (Project Manager)
Task Progress Updates	Group members	Frequently	Group leader (Project Manager)
Project Review	Group members	At milestone	Group leader (Project Manager)
Technical Design Meeting	Group members	As needed	Advisor

6. ADDITIONAL PROJECT DETAILS

Assumptions

- I. All developers and project team will have specialized skills and knowledge about technologies required by the project.**
- II. In Sri Lanka there are service to transport waste and facilities to recycle all the waste categories supported by the project.**
- III. Customers are not handing over mixing waste with other type of waste. For example, plastic waste that mixed with paper waste.**