

Project Design Phase

Problem - Solution Fit Template

Date	15 February 2025
Team ID	LTVIP2025TMID42449
Project Name	Butterfly Species Classification System
Maximum Marks	2 Marks

1 Problem - Solution Fit Template

1.1 Purpose

The Problem-Solution Fit ensures the identified customer problem is addressed by an effective solution, leveraging behavioral patterns and existing channels to enhance adoption and trust.

1.2 Problem - Solution Fit Canvas

Customer Segment	Researchers, ecologists, citizen scientists, students.
Problem	Manual identification of 75 butterfly species is time-consuming and error-prone, limiting biodiversity monitoring and research.
Customer Behaviors	Collect images, use field guides, search online for species data, struggle with accurate identification.
Existing Solutions	Field guides, basic apps, and manual classification tools, lacking automation and real-time capabilities.
Proposed Solution	A Streamlit app using MobileNetV2 for real-time classification of 75 butterfly species, with educational facts for users.
Value Proposition	Automates species identification, supports biodiversity monitoring, provides educational content, and offers an accessible interface for diverse users.

1.3 References

- <https://www.ideahackers.network/problem-solution-fit-canvas/>
- <https://medium.com/@epicantus/problem-solution-fit-canvas-aa3dd59cb4fe>