**Project Design Phase**

**Problem – Solution Fit Template**

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| Date | 16 June 2025 |
| Team ID | LTVIP2025TMID41917 |
| Project Name | Smart Sorting: Transfer Learning for Identifying Rotten Fruits and Vegetables |
| Maximum Marks | 2 Marks |

**Problem – Solution Fit Template:**

The Problem-Solution Fit simply means that you have found a problem with your customer and that the solution you have realized for it actually solves the customer’s problem. It helps entrepreneurs, marketers and corporate innovators identify behavioral patterns and recognize what would work and why

**Purpose:**

* **Solve complex problems in a way that fits the state of your customers.**
* Smart Sorting uses AI-driven transfer learning models to detect rotten produce with high accuracy, addressing a critical issue for retailers, suppliers, and consumers dealing with food quality and safety.
* **Succeed faster and increase your solution adoption by tapping into existing mediums and channels of behavior.**
* By integrating with existing conveyor belt systems or sorting lines in warehouses and markets, the solution fits seamlessly into current workflows without major infrastructure changes.
* **Sharpen your communication and marketing strategy with the right triggers and messaging.**
* Focus messaging on waste reduction, freshness assurance, and cost savings to appeal to grocery chains, distributors, and farmers—stakeholders sensitive to perishability and product reputation.
* **Increase touch-points with your company by finding the right problem-behavior fit and building trust by solving frequent annoyances, or urgent or costly problems.**
* Rotten produce leads to financial loss, poor customer experience, and food waste. Smart Sorting addresses these pain points directly, making it easy for businesses to trust and adopt.
* **Understand the existing situation in order to improve it for your target group.**
* By analyzing common supply chain inefficiencies and spoilage trends, the solution is trained to adapt to the real-world scenarios faced by produce handlers, thereby delivering practical, impactful improvements.

**Template:**

