

**Project Design Phase**  
**Proposed Solution Template**

Date	28 June 2025
Team ID	LTVIP2025TMID41766
Project Name	Smart sorting : Transfer Learning for identifying rotten fruits and vegetables
Maximum Marks	2 Marks

**Proposed Solution Template:**

Project team shall fill the following information in the proposed solution template.

S.No.		Description
1.	Problem solving	Clearly identifying and classifying [e.g., rotten fruits and vegetables / abnormal blood cells] is challenging using manual inspection, which is often slow, inaccurate, and resource-intensive.
2.	Idea / Solution description	Utilize transfer learning models integrated with smart image processing techniques to automatically identify and classify [e.g., rotten produce / abnormal cells], enabling faster and more reliable detection.
3.	Novelty / Uniqueness	Combines deep learning with transfer learning to reduce training time while maintaining high accuracy, customized for low-resource or real-time environments. Can be adapted across different domains with minimal re-training.
4.	Social Impact / Customer Satisfaction	Enhances food quality/safety or health diagnostics, reduces wastage or misdiagnosis, and ensures faster service. Empowers consumers and professionals with reliable AI support.
5.	Business Model (Revenue Model)	Revenue can be generated through <i>subscription-based software, B2B sales to industries</i> , integration with existing systems, or <i>hardware kits</i> bundled with the software.
6.	Scalability of the Solution	Highly scalable—can be deployed across <i>agriculture/food supply chains</i> or <i>medical labs/hospitals</i> globally. Supports integration with IoT or cloud platforms for real-time monitoring and analytics.