**Project Design Phase**

**Problem – Solution Fit**

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| Date | 28 June 2025 |
| Team ID | LTVIP2025TMID36031 |
| Project Name | **Revolutionizing Liver Care : Predicting Liver Cirrhosis using Advanced Machine Learning Techniques** |
| Maximum Marks | 2 Marks |

**Problem – Solution Fit :**

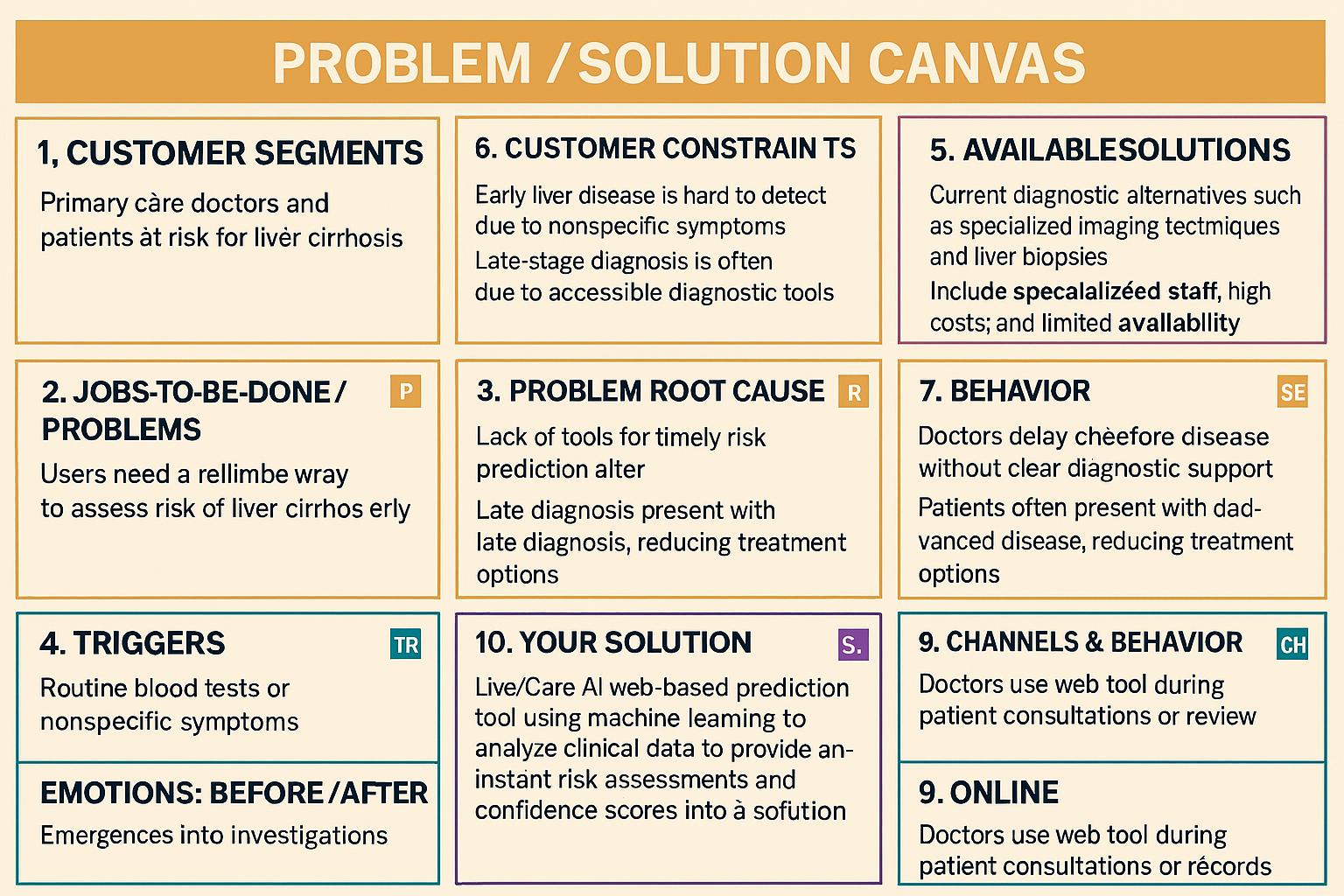
**🔍 Problem**

Liver cirrhosis is a progressive and life-threatening disease that is often diagnosed at a late stage due to vague symptoms and lack of timely clinical interpretation. Patients and primary care doctors lack fast, reliable, and accessible tools for early risk assessment, especially in under-resourced settings. This delay can lead to severe complications or even death, despite liver disease being manageable when detected early.

**💡 Solution**

**LiverCare AI** addresses this gap by providing a web-based, machine learning–powered prediction tool that analyzes clinical data such as bilirubin, albumin, INR, and creatinine to accurately assess a patient’s risk of liver cirrhosis. The tool delivers instant, user-friendly risk scores with confidence levels and clear visual feedback. It empowers doctors with decision support, assists patients in early detection, and enhances diagnostic efficiency—especially in areas lacking liver specialists.

**Example:**

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