

## Project Design Phase Problem – Solution Fit

<b>Date</b>	19 February 2026
<b>Team ID</b>	LTVIP2026TMIDS45121
<b>Project Name</b>	shopsmart: your digital grocery store experience
<b>Maximum Marks</b>	2 Marks

### Problem – Solution Fit Template:

ShopSmart is designed to simplify grocery shopping for busy individuals by providing a seamless digital experience. It addresses the inefficiencies of traditional grocery shopping and fragmented online platforms by offering real-time product availability, secure payments, and centralized management for both users and admins.

### Purpose:

- To design and develop a responsive and intuitive grocery web application using React.js.
- To implement secure user authentication and role-based access control using JWT.
- To create RESTful APIs using Node.js and Express.js for handling business logic.
- To design and manage MongoDB database schemas using Mongoose.
- To implement complete product management, cart management, and order processing features.

### Table:

Problem-Solution fit canvas 2.0					
Make grocery shopping easy & quick for busy individuals					
Define CS & J&P into CC	<b>1. CUSTOMER SEGMENT(S)</b> <span>CS</span> <ul style="list-style-type: none"> <li>• Busy professionals, working parents,</li> <li>• Tech-savvy individuals</li> </ul>	<b>6. CUSTOMER CONSTRAINTS</b> <span>CC</span> <ul style="list-style-type: none"> <li>• Product freshness concerns, delivery fees</li> <li>• Find desired products easily</li> <li>• Manage grocery budget effectively</li> </ul>	<b>5. AVAILABLE SOLUTIONS</b> <span>AS</span> <ul style="list-style-type: none"> <li>• Traditional in-store shopping</li> <li>• Using multiple grocery delivery apps</li> <li>• Local delivery services</li> </ul>	Explore AS, differentiate	
	<b>2. JOBS-TO-BE-DONE / PROBLEMS</b> <span>J&amp;P</span> <ul style="list-style-type: none"> <li>• Save time shopping for groceries</li> <li>• Avoid crowded stores</li> <li>• Find desired products easily</li> <li>• Manage grocery budget effectively</li> </ul>	<b>9. PROBLEM ROOT CAUSE</b> <span>RC</span> <ul style="list-style-type: none"> <li>• Lack of time due to busy lifestyle</li> <li>• Inconvenience &amp; unreliability of traditional grocery shopping</li> <li>• Fragmented and unreliable online grocery options</li> </ul>	<b>7. BEHAVIOUR</b> <span>BE</span> <ul style="list-style-type: none"> <li>• Check multiple grocery apps for prices &amp; availability</li> <li>• Order when free delivery is offered or when convenient</li> <li>• Make last-minute store trips for missing items</li> </ul>		
Identify strong TR & RE	<b>3. TRIGGERS</b> <span>TR</span> <ul style="list-style-type: none"> <li>• Running out of groceries</li> <li>• Seeing online grocery ads 📱</li> <li>• Finding discounts on grocery apps</li> <li>• Desire for convenience or savings</li> </ul>	<b>10. YOUR SOLUTION</b> <span>SL</span> <ul style="list-style-type: none"> <li>• ShopSmart provides a seamless digital platform for browsing, ordering, and receiving groceries online.</li> <li>• It offers real-time stock levels, secure payments</li> <li>• Centralized management for both users &amp; admins</li> </ul>	<b>7. YOUR SOLUTION</b> <ul style="list-style-type: none"> <li>• ShopSmart provides a seamless digital platform for browsing, ordering, and receiving groceries online. It offers real-time stock levels, secure payments &amp; multiple payment &amp; personalized suggestions based on shopping history</li> </ul>	Embed online & offline CH	
	<b>3. TRIGGERS</b> <span>TR</span> <ul style="list-style-type: none"> <li>• Running out of groceries</li> <li>• Seeing online grocery ads</li> <li>• Finding discounts on grocery apps</li> </ul>	<b>10. YOUR SOLUTION</b> <span>SL</span> <ul style="list-style-type: none"> <li>• ShopSmart provides a seamless digital platform for browsing, ordering, and receiving groceries.</li> <li>• It offers real-time stock levels, secure payments &amp; multiple payment options, personalized management (for both users &amp; admins).</li> </ul>	<b>8.1. CHANNELS of BEHAVIOUR</b> <p><b>8.1 ONLINE</b></p> <ul style="list-style-type: none"> <li>• Google search (a, Facebook, Instagram)</li> <li>• Grocery delivery aggregator apps</li> </ul> <p><b>8.2. OFFLINE</b></p> <ul style="list-style-type: none"> <li>• Recommendation of friends or family</li> <li>• Local grocery flyers</li> <li>• Discussions at work, admins</li> </ul>		
	<b>4. EMOTIONS: BEFORE / AFTER</b> <span>EM</span> <ul style="list-style-type: none"> <li>• Stressed, exhausted</li> <li>• Relieved, in control, satisfied</li> </ul>				