

PROJECT DESIGN PHASE

Problem - Solution Fit

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| Date | 18 February 2026 |
| Team ID | LTVIP2026TMIDS47401 |
| Project Name | ShopSmart: Your Digital Grocery Store Experience |

Proposed Solution

| S.No. | Parameter | Description |
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| 1 | Problem Statement (Problem to be solved) | Working professionals and urban residents often face challenges in purchasing essential groceries during late hours due to the closure of local stores, lack of reliable delivery services, and unresponsive or buggy apps. This results in inconvenience, delays, and customer dissatisfaction. |
| 2 | Idea / Solution Description | ShopSmart is a full-stack grocery shopping web application built using the MERN stack (MongoDB, Express.js, Angular, Node.js). It enables users to browse and order groceries online at any time with next-morning delivery support. It includes features like categorized product browsing, real-time cart updates, role-based dashboards, flexible payments, and delivery tracking—all accessible via a responsive and user-friendly interface. |
| 3 | Novelty / Uniqueness | Unlike traditional grocery apps, ShopSmart focuses on late-night accessibility, real-time delivery updates, admin/seller dashboards, and seamless category-based navigation. The inclusion of role-based access control and smart filtering ensures a personalized and secure experience for different user types (customers, sellers, admins). |
| 4 | Social Impact / Customer Satisfaction | ShopSmart promotes convenience, reduces the stress of last-minute shopping, and supports small sellers through digital empowerment. By delivering essentials promptly and accurately, it improves the quality of life for time-constrained professionals. Its easy-to-use design encourages digital adoption across all age groups. |
| 5 | Business Model (Revenue Model) | ShopSmart can adopt a multi-channel revenue model, including commission on sales, subscription plans for sellers, premium listing of products, delivery charges, and future integration of secure online payments (e.g., Razorpay/Stripe) for transaction-based revenue. |

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| 6 | Scalability of the Solution | The modular architecture and cloud-ready backend allow ShopSmart to scale easily to new regions, product categories, and mobile apps. The solution can be expanded to support multilingual interfaces, AI-powered recommendations, and integration with supply chain logistics for hyper-local delivery partnerships. |
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Proposed Solution Overview:

To address the problem faced by time-constrained customers like working professionals, our team has developed **ShopSmart**, a digital grocery shopping platform tailored for convenience, efficiency, and accessibility. The proposed solution combines modern technology with real-life use cases to bridge the gap between customer needs and service availability. The table below outlines the key aspects of the proposed solution, highlighting its purpose, implementation strategy, uniqueness, social impact, and business potential.