

Literature Review

1. Introduction

This literature review analyzes existing e-commerce solutions, their strengths, and weaknesses. By understanding the best practices and technologies used, we can build a more effective and scalable e-commerce platform.

2. Existing Systems & Competitor Analysis

Competitor 1: Amazon

- **Features:** Advanced search filters, AI-based recommendations, secure payment gateway.
- **Strengths:** High availability, seamless user experience, trusted brand.
- **Weaknesses:** High fees for third-party sellers, complex refund policies.

Competitor 2: Shopify

- **Features:** Easy store setup, multiple payment integrations, customizable themes.
- **Strengths:** User-friendly interface, great for small businesses, scalable.
- **Weaknesses:** Subscription-based pricing, limited free themes.

Competitor 3: WooCommerce

- **Features:** Open-source, customizable, integrates with WordPress.
- **Strengths:** Cost-effective, highly flexible.
- **Weaknesses:** Requires technical knowledge for customization.

3. Best Practices in E-Commerce Development

- **Mobile-First Design:** Over 70% of online shoppers use mobile devices.
- **Personalized Recommendations:** AI-based product suggestions improve sales.
- **Fast & Secure Payments:** Stripe and PayPal provide secure, frictionless transactions.
- **Scalability:** Cloud-based hosting ensures system can handle high traffic.
- **SEO Optimization:** Ensures product listings rank higher in search engines.

4. Relevant Technologies

Technology	Usage
ASP.NET Core	Backend development
React.js / Angular	Frontend UI development
SQL Server / MySQL	Database management
Stripe / PayPal API	Payment processing
Firebase / Twilio	Push notifications & messaging
Elasticsearch	Advanced product search & filtering

5. Suggested Improvements for Our System

- Implement a streamlined checkout process to reduce cart abandonment.
- Enhance UI/UX for better navigation and faster product discovery.
- Enable multi-vendor support for future scalability.
- Use AI-based recommendation engines to improve user engagement.

6. Conclusion

This literature review highlights the strengths and weaknesses of existing solutions, best practices in the industry, and key technologies that can be leveraged for the E-Commerce System. These insights will help refine our approach and deliver a superior product.