

Review Paper

MOBILE-OPTIMIZED IMMERSIVE E-COMMERCE

in

META

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Date of Submission: 2025/02/01

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ABSTRACT

This review paper evaluates the proposed **Mobile-Friendly Immersive E-Commerce Platform** designed for **Meta**, highlighting its strategic alignment with Meta's vision for immersive commerce, technical feasibility, market potential, competitive advantage, financial projections, and scalability. The paper also assesses the project's risk mitigation strategies, revenue model, and global impact, providing comprehensive insights into the viability and future potential of the solution.

INTRODUCTION

The evolution of **immersive commerce** has accelerated with the growth of **AR/VR technologies**, yet accessibility remains a challenge. The proposed **mobile-friendly platform** targets **small and medium-sized enterprises (SMEs)**, empowering them to create **AI-driven AR/VR experiences** integrated with **Meta's ecosystem** (Facebook, Instagram, and WhatsApp). This review examines the project's alignment with Meta's **metaverse strategy**, addressing global market gaps and enabling scalable adoption.

STRATEGIC ALIGNMENT WITH META'S VISION

The proposal supports **Meta's** mission to build **inclusive**, **immersive digital experiences** by:

- Advancing the metaverse through mobile-optimized AR/VR tools.
- Enhancing global user engagement by enabling 400M+ SMEs to offer immersive shopping experiences.
- Utilizing Meta's existing platforms to drive rapid adoption without high-end hardware dependency.

MARKET POTENTIAL AND OPPORTUNITY

- **SME Market Focus:** SMEs represent **90% of global businesses** yet lack access to immersive commerce tools.
- Emerging Markets: Rapid smartphone penetration in Southeast Asia, Latin America, and Africa offers a 17% CAGR opportunity through 2030.
- Consumer Demand: Studies show 78% of shoppers prefer AR-powered
 product visualization, enhancing conversion rates by 40%.

TECHNICAL FEASIBILITY

- Al-Driven 3D Model Generation: Simplifies product visualization without technical expertise.
- Mobile Optimization: Accessible on low-spec smartphones, ensuring global reach.
- Infrastructure Scalability: Leveraging Meta's Spark AR Studio and cloud infrastructure reduces deployment time.

COMPETITIVE ADVANTAGE

The platform positions **Meta** ahead of key competitors:

- Amazon: Focuses on static e-commerce with limited AR integration.
- Google: Offers advanced AR tools but lacks e-commerce integration.
- Snapchat: Excels in AR filters but lacks SME-centric commerce solutions.
- Meta's Edge: Combines Al-powered tools, integrated social commerce, and a unified ecosystem for unparalleled scalability.

FINANCIAL ANALYSIS AND ROI

- Revenue Projections:
 - Transaction Fees (69%): \$14B annually.
 - Subscriptions (30%): \$6B annually.
 - Ads (1%): \$300M annually.
 - o Total Annual Revenue: \$20.3B.
- ROI Timeline:
 - Full ROI expected within Year 1, with \$60B cumulative revenue in 5
 years and \$203B over 10 years.
- Investment Structure:
 - Total Investment: \$55M distributed across R&D, Infrastructure,
 Marketing, Operations, and Contingency funds.

RISK MITIGATION STRATEGIES

- Adoption Risks: Addressed through free trials, educational resources, and
 SME incentives.
- Privacy Concerns: Compliance with GDPR, CCPA, and transparent data policies.
- Technical Challenges: Overcome by leveraging Meta's existing AR/VR tools and allocating a \$7M contingency fund.

SCALABILITY AND LONG-TERM GROWTH

- Global Expansion: Targeting emerging markets with tailored mobile solutions.
- Vertical Applications: Diversification into telemedicine, education, and virtual events.
- Technological Evolution: Future incorporation of generative AI and advanced
 AR personalization.

CONCLUSION

The Mobile-Friendly Immersive E-Commerce Platform offers a transformative opportunity for Meta to lead in immersive social commerce. With robust financial projections, scalable technical infrastructure, and alignment with Meta's metaverse vision, the solution presents a compelling case for immediate adoption.

Comprehensive risk mitigation strategies and long-term scalability plans further enhance its viability, making it a strategic investment for Meta's sustained growth and global impact.

REFERENCES

- Statista: Global AR/VR Market Reports (2024).
- Forrester Research: AR Adoption Trends in E-commerce (2023).
- Meta Reports: Meta's Annual Reports on AR/VR Investments and Reality Labs (2024).
- Deloitte Insights: Consumer Preferences in Digital Commerce (2023).