Project Development Phases

Phase 1: Discovery & Planning (Weeks 1-4)

Problem Validation & Market Research

- Conduct surveys with 100+ rural artisans to identify challenges like limited digital literacy and transaction management difficulties
- Interview buyers about preferences for product authenticity, secure payments, and ease of navigation
- Perform competitive analysis of platforms like Etsy, Amazon Handmade, iTokri, and Typof
- Define project charter outlining goals, deliverables, stakeholders, and resource allocation

Requirements Gathering

- Develop user personas for artisans and buyers
- Create gain/pain maps for each user action to identify value-addition opportunities
- Identify key features: Al recommendations, storytelling content, live shopping, direct-to-consumer storefronts, social media tools

Phase 2: Design & Architecture (Weeks 5-8)

Platform Design & Technology Stack

- Implement modern UI/UX principles with minimalism and intuitive navigation
- Select scalable backend frameworks like Node.js and MongoDB for secure data handling
- Design mobile-optimized interface catering to users with limited digital literacy
- Create wireframes and interactive prototypes using tools like Figma

System Architecture

- Plan integration with social media platforms (Instagram Stories, Reels, Shops)
- Design AI recommendation engine for personalized product suggestions
- Architect secure payment systems and transaction management
- Plan real-time product visualization and co-creation features

Phase 3: Development & Integration (Weeks 9-16)

Core Feature Development

- Build Al-powered recommendation system using machine learning algorithms
- Develop storytelling content management system for product origins and crafting processes
- Implement live video shopping and influencer collaboration features
- Create customizable online storefronts for direct-to-consumer sales
- Integrate social media tools with hashtag and campaign management

Al Implementation

- Follow 6-stage AI implementation: Ideate, Experiment, Build, Test, Deploy, Optimize
- Develop proof of concept for AI features like personalized recommendations
- Implement machine learning models for inventory optimization and demand forecasting
- Create automated marketing and customer service features

Phase 4: Testing & Validation (Weeks 17-20)

Quality Assurance

- Conduct thorough unit testing and integration testing
- Perform usability testing with beta users to validate user experience
- Test Al algorithms for accuracy and performance optimization
- Validate security measures and payment processing systems

Pilot Launch

- Deploy MVP to select group of artisans and buyers
- Gather feedback through surveys, interviews, and analytics
- Monitor user interactions and engagement metrics
- Iterate based on user feedback and performance data

Phase 5: Launch & Optimization (Weeks 21-24)

Platform Launch

- Deploy fully functional platform with all core features
- Implement marketing strategies including partnerships, content marketing, and social media campaigns
- Onboard initial group of artisans with incentives and support
- Launch customer acquisition campaigns targeting craft enthusiasts

Post-Launch Support

- Provide hypercare support during initial weeks
- Monitor performance metrics and user satisfaction
- Collect continuous feedback for improvement
- Plan future feature additions and platform scaling

Critical Success Factors

Technical Infrastructure

- Robust backend capable of handling AI processing and high traffic volumes
- Secure payment systems with multiple integration options
- Mobile-first design approach for accessibility across devices
- Scalable architecture supporting future feature additions

Market Adoption

- Strong artisan onboarding strategy with training and support
- Compelling value proposition for both sellers and buyers
- Effective marketing campaigns highlighting platform uniqueness
- Community building features encouraging engagement and retention

The project follows a systematic 24-week timeline combining MVP development principles with comprehensive AI implementation, ensuring the platform delivers meaningful value while maintaining technical excellence and user satisfaction.