

# Aksara IS

## No-Code Platform for Indonesian Businesses

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### **Planning & Feasibility Analysis**

*Phase 1 Priority Project - Ak'sara Initiative*

# Executive Summary

**Vision:** Empower Indonesian businesses to create custom applications without coding expertise

**Current Status:** Advanced SvelteKit-based platform with drag-and-drop form builder

**Market Position:** First Indonesian-focused no-code platform with local language support

# Current Technical Foundation

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## Existing Architecture

- **SvelteKit with Runes** on Bun runtime
- **Sophisticated designer system** with modular architecture
- **Multi-layered loading strategy:** Core → Defaults → Generated → Runtime
- **YAML-to-JSON compilation** for performance optimization

## Advanced Features Already Implemented

- **Drag-and-drop form builder** with real-time preview
- **Component registry system** with extensible architecture
- **Data source integration** (REST API, Database, File Storage)
- **Module and menu management** system
- **Admin vs End-user layout** separation

# Market Analysis

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## Global No-Code Market

- **Market Size:** \$13.2B (2023) → \$65B (2030)
- **Growth Rate:** 25.2% CAGR
- **Key Players:** Bubble, Webflow, Airtable, OutSystems, Mendix

## Indonesian Business Software Market

- **Total SMEs:** 64.2M businesses (2023)
- **Digital adoption:** <15% use custom business software
- **Pain Points:** Expensive international solutions, language barriers
- **Opportunity:** 54M+ businesses with manual/spreadsheet-based processes

## Competitive Landscape Analysis

# Unique Value Proposition

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## Indonesian-First Approach

- **Native Bahasa Indonesia** interface and documentation
- **Indonesian business templates** (invoice, inventory, HR)
- **Local compliance** (tax forms, government reports)
- **Cultural context** in workflows and processes

## Technical Advantages

- **Modern architecture** (SvelteKit + Bun = faster than competitors)
- **Offline-capable** applications
- **Lightweight deployment** (no vendor lock-in)
- **Open architecture** (export to standard formats)

# Technical Roadmap

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## Phase 1: Core Platform Completion (Months 1-6)

**Current Status:** 70% complete

### Remaining Work:

- **Unified page creator** (integrate module + form designer)
- **Core library consolidation** (file operations, schema management)
- **Database integration** completion
- **User authentication** and workspace management

### Key Features to Complete:

- One-click "Create CRUD Page" workflow
- **Advanced component library**

## Phase 3: Enterprise Features (Months 13-18)

**Objective:** Enterprise-grade platform with advanced capabilities

### Enterprise Features:

- **Advanced security** (SSO, LDAP, audit logs)
- **Custom branding** and white-labeling
- **API management** and webhooks
- **Performance monitoring** and scaling

### Platform Features:

- **Mobile app builder** (Progressive Web Apps)
- **Advanced integrations** (ERP systems, external APIs)
- **Custom component** development framework
- **Multi-tenant** architecture for SaaS deployment

# Technical Architecture Deep-Dive

## Current Architecture Strengths

flowchart TD

A[User Interface] --> B[Designer System]

B --> C[YAML Configuration]

C --> D[JSON Compilation]

D --> E[Runtime System]

E --> F[Generated Applications]

G[Data Sources] --> H[Schema Management]

H --> I[Form Generation]

I --> J[CRUD Operations]

## Performance Optimizations

- **YAML → JSON compilation** for fast runtime loading
- **Component lazy loading** for large applications



# Business Model

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## Revenue Streams

### 1. SaaS Subscriptions (Primary - 70% revenue)

- **Starter:** Free (1 app, 2 users, basic features)
- **Professional:** \$29/month (5 apps, 10 users, advanced features)
- **Business:** \$99/month (20 apps, 50 users, integrations)
- **Enterprise:** \$299/month (unlimited, custom features)

### 2. Professional Services (25% revenue)

- **Custom template development:** \$2K-10K per template
- **System integration:** \$5K-25K per project
- **Training and consulting:** \$150-300/hour

**Migration services:** \$2K-15K per organization

# Market Entry Strategy

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## Phase 1: Developer & Early Adopter Community (Months 1-6)

**Target:** Indonesian developers, small agencies, tech-savvy SME owners

### Approach:

- **Open beta** with developer community
- **Tech conference** demonstrations
- **GitHub** and developer forum engagement
- **Influencer partnerships** with Indonesian tech leaders

### Goals:

- 1,000 beta users
- 100 published applications

# Competitive Advantages

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## Technology Advantages

1. **Modern architecture** (SvelteKit + Bun) = superior performance
2. **Sophisticated designer** with advanced component system
3. **YAML-based configuration** = human-readable and version-controllable
4. **Offline capability** = works without constant internet connection

## Market Advantages

1. **Indonesian language first** - complete localization
2. **Local business context** - templates and workflows
3. **Affordable pricing** - 80% cheaper than international alternatives
4. **Community-driven** - Indonesian developer ecosystem

# Risk Analysis

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## Technical Risks ●

**Risk:** Complexity of visual designer for non-technical users

**Mitigation:** Extensive UX testing, tutorial system, template-first approach

**Risk:** Performance issues with complex applications

**Mitigation:** Performance monitoring, optimization guidelines, architecture reviews

## Market Risks ●

**Risk:** Competition from established international players

**Mitigation:** Indonesian-specific features, local partnerships, pricing advantage

**Risk:** Slow adoption by traditional Indonesian businesses

**Mitigation:** Change management support, extensive training, success showcases

# Success Metrics & KPIs

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## Technical KPIs

- **Platform uptime:** >99.9%
- **Application generation time:** <30 seconds
- **Designer responsiveness:** <2 seconds for most operations
- **Export compatibility:** 100% with standard formats

## User Adoption KPIs

- **Monthly active users:** 1K (Month 6) → 10K (Month 12) → 50K (Month 18)
- **Application creation rate:** 100/month → 1,000/month → 5,000/month
- **User retention:** >70% monthly, >40% annual
- **Template usage:** >80% of users start with templates

# Resource Requirements

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## Development Team (5 people)

- **Technical Lead** - \$85K/year (architecture, core development)
- **Frontend Developer** - \$70K/year (SvelteKit, designer UI)
- **Backend Developer** - \$70K/year (APIs, data layer)
- **UX/UI Designer** - \$60K/year (user experience, templates)
- **QA Engineer** - \$50K/year (testing, quality assurance)

## Business Team (3 people)

- **Product Manager** - \$80K/year (roadmap, user research)
- **Marketing Manager** - \$60K/year (growth, content)
- **Customer Success** - \$45K/year (support, onboarding)

# Financial Projections

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## 5-Year Revenue Model

### Year 1: \$100K

- 1,000 users, 10% conversion rate
- Average \$100/user annual revenue

### Year 2: \$1M

- 10,000 users, 15% conversion rate
- Average \$120/user annual revenue

### Year 3: \$5M

- 50,000 users, 20% conversion rate



# Strategic Partnerships

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## Technology Partners

1. **Cloud providers** (AWS, Google Cloud) - credits and support
2. **Payment gateways** (Midtrans, Xendit) - integration partnerships
3. **Indonesian APIs** (e-faktur, government services) - official partnerships

## Business Partners

1. **Business consultants** - template development and user acquisition
2. **System integrators** - enterprise sales and implementation
3. **Educational institutions** - training programs and certification

## Distribution Partners

1. **Indonesian ISVs** - white-label partnerships



# Implementation Timeline

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## Development Phases

### Q1 2024: Foundation

- Complete core platform features
- Launch beta testing program
- Build initial template library
- Establish development processes

### Q2 2024: Market Entry

- Public launch with freemium model
- Indonesian business template release
- Marketing campaign initiation

Community building programs

# Conclusion

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## Strategic Advantages Summary

- **Strong technical foundation** with 70% complete advanced platform
- **Clear market opportunity** in underserved Indonesian SME segment
- **Differentiated value proposition** through localization and pricing
- **Scalable business model** with multiple revenue streams

## Success Factors

- **Rapid completion** of remaining technical development
- **Effective market entry** with Indonesian-specific features
- **Strong partnerships** for distribution and growth
- **Quality execution** of user experience and support

# Next Steps

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## Immediate Priorities (30 days)

1. **Complete unified page creator** integration
2. **Finalize core team** recruitment
3. **Launch beta testing** with 100 selected users
4. **Establish key partnerships** discussions

## Short-term Goals (90 days)

1. **Public beta launch** with marketing campaign
2. **Template marketplace** MVP release
3. **Strategic partnerships** establishment
4. **Seed funding** completion

## Contact Information:

- **Product Lead:** [To be assigned]
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