



# MerdekaOS

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## Arch-based Linux Distribution for Indonesian Users

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### Project Proposal & Strategic Analysis

*Ak'sara Initiative - Phase 3 Project*



# Executive Summary

**MerdekaOS** adalah distribusi Linux berbasis Arch yang dirancang khusus untuk user Indonesia, dengan fokus pada kemudahan penggunaan, performa optimal, dan dukungan hardware lokal yang excellent.

**Vision:** Menciptakan alternatif OS yang powerful, ringan, dan mudah digunakan untuk mengurangi ketergantungan Indonesia pada sistem operasi proprietary.

**12-18**

Bulan Pengembangan

**\$200K**

Estimasi Budget

**1M+**

Target Users





- **Dependency Reduction**: Mengurangi ketergantungan pada Windows dan macOS
- **Local Hardware Support**: Optimasi untuk laptop dan PC yang dijual di Indonesia
- **Government Adoption**: Alternatif untuk institusi pemerintah
- **Educational Impact**: Platform pembelajaran untuk computer science

## Market Opportunity

- **Indonesia PC Market**: 15M+ units sold annually
- **Linux Adoption**: <2% market share, huge growth potential
- **Price Sensitivity**: Indonesian users need cost-effective solutions
- **Technical Skills**: Growing developer community needs good tools

## Ak'sara Ecosystem Integration



- **Performance**: Optimized untuk resource efficiency
- **Customizable**: Flexible configuration options

### Desktop Environment: Custom GNOME

- **Modern interface**: Clean, intuitive user experience
- **Indonesian localization**: Complete Bahasa Indonesia support
- **Performance tuned**: Optimized animations dan resource usage
- **Extensible**: Support untuk custom extensions

### Hardware Optimization

#### Indonesian Laptop Brands Focus:

- **Advan**: Driver optimization dan power management
- **Axioo**: Hardware compatibility testing





- **Indonesian theme:** Batik-inspired visual design
- **Local applications:** Banking, e-commerce, government apps
- **Font optimization:** Beautiful Indonesian text rendering
- **Input methods:** Support untuk various Indonesian input

## Pre-installed Software Suite

### Productivity Applications:

- **LibreOffice:** Fully localized dengan Indonesian templates
- **Aksara Writer:** Markdown converter untuk business documents
- **Web browsers:** Firefox dengan Indonesian bookmarks dan settings
- **Media tools:** VLC, GIMP untuk multimedia needs

### Development Tools:



## Target User Segments

### Primary Users:

- **Office workers:** Government employees, SME staff
- **Students:** University students learning computer science
- **Developers:** Indonesian software developers
- **Small businesses:** Shop owners, freelancers

### Secondary Users:

- **Educational institutions:** Schools dan universities
- **Government agencies:** Cost-conscious departments
- **Internet cafes:** Gaming centers, co-working spaces





## Market Analysis

### Competitive Landscape

DISTRIBUTION	MARKET POSITION	STRENGTHS	WEAKNESSES
Windows	Dominant (85%)	Familiar, compatible	Expensive, bloated
Ubuntu	Linux leader (40% Linux)	User-friendly	Generic, not localized
Elementary	Design-focused	Beautiful interface	Limited software
MerdekaOS	Indonesian focus	Local optimization	New entrant



## Phase 1: Core System (Months 1-6)

**Focus:** Stable base system dengan Indonesian optimizations

**Deliverables:**

- Arch-based foundation dengan custom repositories
- Indonesian-themed desktop environment
- Hardware compatibility untuk major brands
- Basic installation system
- Alpha release untuk testing

**Team Requirements:**

- 2 system engineers
- 1 UI/UX designer





## Phase 2: Application Integration (Months 7-12)

**Focus:** Pre-installed applications dan user experience

### **Deliverables:**

- Complete software suite integration
- Aksara IS dan Aksara Writer pre-installation
- Indonesian language packs dan input methods
- Driver packages untuk common hardware
- Beta release dengan community testing

### **Team Requirements:**

- 1 additional application developer
- 1 localization specialist



## Phase 3: Distribution & Support (Months 13-18)

**Focus:** Public release dan ecosystem building

**Deliverables:**

- Stable 1.0 release
- OEM partnerships dengan laptop manufacturers
- Community support infrastructure
- Documentation dan training materials
- Update dan maintenance systems

**Team Requirements:**

- 1 community manager
- 1 business development





- **Marketing Cooperation:** Joint promotional campaigns

### Direct Distribution:

- **Free download:** Community edition dengan basic features
- **Premium edition:** \$25 dengan additional software dan support
- **Enterprise edition:** \$100 dengan management tools dan SLA
- **USB/DVD sales:** Physical media untuk areas dengan limited internet

## Revenue Streams

### 1. OEM Licensing (60% revenue)

- Partnership dengan laptop manufacturers
- Pre-installation revenue sharing
- Support service contracts

### 2. Enterprise Services (30% revenue)



- **Security updates:** Timely patches dan vulnerability fixes

### Development Infrastructure:

- **Build systems:** Automated package building dan testing
- **Quality assurance:** Package validation dan compatibility testing
- **Community contributions:** Package maintainer program
- **Documentation:** Indonesian package development guides

### System Architecture

MerdekaOS Components:

- └─ Base System (Arch Linux)
- └─ Custom Desktop (GNOME + Indonesian theme)





## Phase 1: Developer Community (Months 1-6)

**Target:** Indonesian Linux enthusiasts dan developers

### Approach:

- Open source development di GitHub
- Tech conference presentations
- Developer community engagement
- Technical blogs dan tutorials

### Goals:

- 1,000 alpha testers
- 100 community contributors
- Technical validation



## Phase 2: Educational Adoption (Months 7-12)

**Target:** Universities dan technical schools

**Approach:**

- Educational partnerships
- Student developer programs
- Campus deployment pilots
- Computer science curriculum integration

**Goals:**

- 10 university partnerships
- 5,000 student users
- Educational use cases validation





## Phase 3: Commercial Launch (Months 13-18)

**Target:** OEM partnerships dan general users

### **Approach:**

- Manufacturer negotiations
- Retail channel development
- Marketing campaigns
- Government procurement participation

### **Goals:**

- 2 OEM partnerships
- 50,000 users
- Government pilot programs



**Risk:** Software ecosystem limitations dibanding Windows

**Mitigation:** Focus pada web applications, essential software porting

**Risk:** Update system complexity untuk non-technical users

**Mitigation:** Automated updates, simple UI, rollback capabilities

## Market Risks 🟡

**Risk:** User resistance untuk change dari Windows

**Mitigation:** Easy migration tools, dual-boot support, training programs

**Risk:** OEM reluctance untuk alternative OS

**Mitigation:** Compelling business case, technical support, marketing cooperation

**Risk:** Competition dari international Linux distributions

**Mitigation:** Indonesian-specific features, local partnerships, community building





- **Boot time:** <20 seconds pada typical hardware
- **RAM usage:** <1GB idle consumption
- **Hardware compatibility:** >95% Indonesian laptop models
- **Package availability:** >80% essential applications

## Adoption KPIs

- **User base:** 10K (Month 6) → 50K (Month 12) → 250K (Month 18)
- **OEM partnerships:** 2 major manufacturers by Month 18
- **Educational adoption:** 25 institutions by Month 18
- **Community:** 500 active contributors, 50 package maintainers

## Business KPIs



- **Desktop Developer:** GNOME customization (\$70K/year)
- **Package Maintainer:** Repository management (\$60K/year)
- **QA Engineer:** Testing + hardware validation (\$55K/year)
- **UI/UX Designer:** Indonesian interface design (\$65K/year)

## Infrastructure Costs

- **Build servers:** \$20K/year
- **Package mirrors:** \$30K/year (multiple Indonesian locations)
- **Testing hardware:** \$15K one-time (various laptop models)
- **Development tools:** \$10K/year

## Business Operations





- **Digital sovereignty**: Reduced dependency pada foreign OS
- **Local innovation**: Platform untuk Indonesian software development
- **Educational advancement**: Modern tools untuk computer science education
- **Economic impact**: Support untuk local hardware manufacturers

## Ak'sara Ecosystem Benefits

- **Platform synergy**: Optimized environment untuk Aksara IS dan Writer
- **Developer adoption**: Attracts developers ke Ak'sara tools
- **Government relations**: Demonstrates commitment ke national tech independence
- **Brand recognition**: Establishes Ak'sara sebagai serious tech initiative

## Long-term Vision



- 2 OEM pilots × \$12.5K

### Year 2: \$500K

- 10,000 premium users × \$25
- 5 OEM partnerships × \$50K
- Enterprise services: \$100K

### Year 3: \$2M

- 50,000 premium users × \$25
- 10 OEM partnerships × \$125K
- Enterprise services: \$500K

## Investment Requirements





- **Technical excellence:** Reliable, performant system untuk Indonesian hardware
- **Strategic partnerships:** OEM cooperation untuk distribution
- **Community building:** Active developer dan user communities
- **Government support:** Alignment dengan national digitalization goals

## Phased Approach Benefits

- **Lower risk:** Gradual development dengan validation di each phase
- **Community-driven:** Open source development model
- **Market validation:** Testing dengan real users before commercial launch
- **Sustainable growth:** Revenue streams develop organically

## Next Steps

- **Core team recruitment:** System architect dan desktop developer
- **Infrastructure setup:** Build systems dan testing environment



### Contact Information:

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