

X1 Blockchain Analytics Platform

Building 'Birdeye for X1'

Development Roadmap
January 2026

Executive Summary

This document outlines the development roadmap for building a comprehensive analytics platform for the X1 blockchain ecosystem, similar to Birdeye on Solana. The platform will provide real-time trading data, charts, analytics, and token discovery tools specifically for XDEX and the X1 blockchain.

Target Platform Features

Feature Category	Description
Real-Time Trading	Live price feeds, candlestick charts, volume tracking
Token Discovery	Trending tokens, new launches, gem finder
Analytics	Whale tracking, trader profiles, leaderboards
Security	Rug pull detection, liquidity analysis, safety scores
Portfolio Tracking	Multi-wallet support, P&L calculations
Alerts	Price alerts, whale movements, Telegram integration

Development Roadmap

Phase 1: MVP - Core Trading View (Weeks 1-4)

Build the foundational infrastructure and basic trading interface.

- Set up X1 blockchain RPC connection and test environment
- Build indexer service to monitor XDEX swap transactions
- Design and implement database schema (PostgreSQL/TimescaleDB)
- Aggregate swap data into OHLCV candles (1m, 5m, 15m, 1h, 4h, 1d)
- Create REST API endpoints for chart data
- Develop frontend with React/Next.js
- Integrate TradingView Lightweight Charts library
- Display basic token information (price, volume, TVL)
- Implement live trade feed with WebSocket
- Add simple token search functionality

Deliverable	Status
Working indexer monitoring XDEX	Target
Database with historical price data	Target
API serving chart data	Target
Basic web interface with charts	Target
Real-time trade updates	Target

Phase 2: Analytics & Insights (Weeks 5-8)

Add deeper analytical capabilities and market intelligence features.

- Implement trending tokens algorithm (24h gainers/losers)
- Build liquidity pool breakdown and analysis
- Add holder distribution analysis
- Create whale tracking system (large transaction monitoring)
- Develop top traders leaderboard based on P&L;
- Add technical indicators (RSI, MACD, moving averages)
- Implement volume analysis tools
- Create market depth visualization
- Add 24h/7d/30d performance metrics
- Build token comparison tools

Phase 3: Discovery & Safety Features (Weeks 9-12)

Help users discover new opportunities and assess token safety.

- Build new token launch detection system
- Implement token safety scoring algorithm
- Create liquidity lock verification checker
- Add rug pull risk indicators and warnings
- Build 'Find Gems' feature with advanced filters
- Implement smart contract verification integration
- Add holder concentration risk assessment
- Create launch explorer for new pairs
- Build token metadata aggregation
- Add social media integration (Twitter/Telegram links)

Phase 4: Personalization & Alerts (Weeks 13-16)

Enable user-specific features and notification systems.

- Implement wallet connection (Solana wallet adapter for X1)
- Build portfolio tracker with multi-wallet support
- Create P&L; calculations and performance analytics
- Develop custom watchlist functionality
- Implement price alert system
- Build whale movement alerts
- Create new token listing notifications
- Develop Telegram bot for alerts
- Add email notification system
- Implement user preferences and saved views

Technical Architecture

System Components

- X1 Blockchain Layer: RPC endpoints, XDEX program interaction
- Indexer Service: Transaction monitoring, data parsing, event processing
- Database Layer: PostgreSQL with TimescaleDB for time-series data
- API Server: REST endpoints and WebSocket for real-time updates
- Frontend Application: React/Next.js with TradingView charts
- Alert System: Background jobs for monitoring and notifications
- Cache Layer: Redis for high-frequency data caching

Recommended Technology Stack

Component	Technology	Rationale
Blockchain Connection	Solana Web3.js	SVM-compatible, mature library
Indexer	Node.js / Rust	Performance and X1 compatibility
Database	PostgreSQL + TimescaleDB	Efficient time-series storage
API Backend	Express.js / FastAPI	Fast development, good ecosystem
Frontend	Next.js + TypeScript	SSR, optimal performance
Charts	TradingView Lightweight	Industry standard, performant
Real-time	WebSocket / Socket.io	Low-latency updates
Deployment	Docker + Kubernetes	Scalable infrastructure

X1-Specific Competitive Advantages

First-Mover Advantage

Be the first comprehensive analytics platform on X1, establishing brand recognition and user trust early.

Complete Indexing

With X1's lower transaction volume compared to Solana, you can index 100% of activity without infrastructure scaling challenges.

Sub-Second Updates

Leverage X1's 1-second block times for truly real-time analytics that outperform multi-chain platforms.

X1-Native Features

Integrate unique X1 features like XEN token burning tracking, validator staking analytics, and XNT gas token metrics.

XDEX Integration

Deep integration with XDEX features: farm APR calculations, LP position tracking, impermanent loss calculators.

Lower Operating Costs

Run your own X1 validator for ~\$5/day, providing infrastructure independence and data reliability.

Community-First Approach

Build with the X1 community from day one, incorporating feedback and establishing yourself as essential infrastructure.

Success Metrics & KPIs

Phase 1 Metrics (Weeks 1-4)

- Index 100% of XDEX transactions with <1 second latency
- Display charts for all active trading pairs
- Achieve 99.9% uptime for data indexing
- Support at least 10 simultaneous chart viewers

Phase 2-4 Metrics (Weeks 5-16)

- Achieve 1,000+ daily active users by end of Phase 4
- Track 95%+ of all tokens launched on X1
- Provide safety scores for 100% of tracked tokens
- Deliver 500+ active alert subscriptions
- Maintain API response times under 200ms (p95)

Timeline Overview

Phase	Duration	Key Milestone
Phase 1: MVP	Weeks 1-4	Working charts & live data
Phase 2: Analytics	Weeks 5-8	Advanced analytics & insights
Phase 3: Discovery	Weeks 9-12	Safety features & token discovery
Phase 4: Personalization	Weeks 13-16	Alerts & user features
Total Project	16 weeks	Full-featured platform

Immediate Next Steps

Set Up Development Environment

Install Solana CLI configured for X1, get testnet tokens, set up local development environment.

Study XDEX Architecture

Review XDEX smart contract code, understand swap mechanics, identify event structures for indexing.

Build Proof of Concept

Create minimal indexer that can parse one XDEX swap and display it. Validates technical approach.

Design Database Schema

Plan data models for tokens, swaps, candles, pools, and wallets. Optimize for query performance.

Prototype Chart Interface

Build simple React app with TradingView charts connecting to sample data.

Identify X1 Infrastructure

Find reliable X1 RPC endpoints, consider running your own validator node.

Community Engagement

Join X1 Discord/Telegram, announce project intentions, gather early feedback.

Conclusion

Building a comprehensive analytics platform for X1 blockchain represents a significant opportunity to establish essential infrastructure in an emerging ecosystem. By following this phased approach, you can deliver value to users quickly with the MVP while systematically building toward a full-featured platform that rivals established solutions like Birdeye.

The key to success will be maintaining focus on user needs, delivering reliable data with low latency, and building strong relationships within the X1 community. Start with Phase 1, validate your technical approach, gather user feedback, and iterate rapidly.