

Improvements Workshop 1

Business Model Canvas

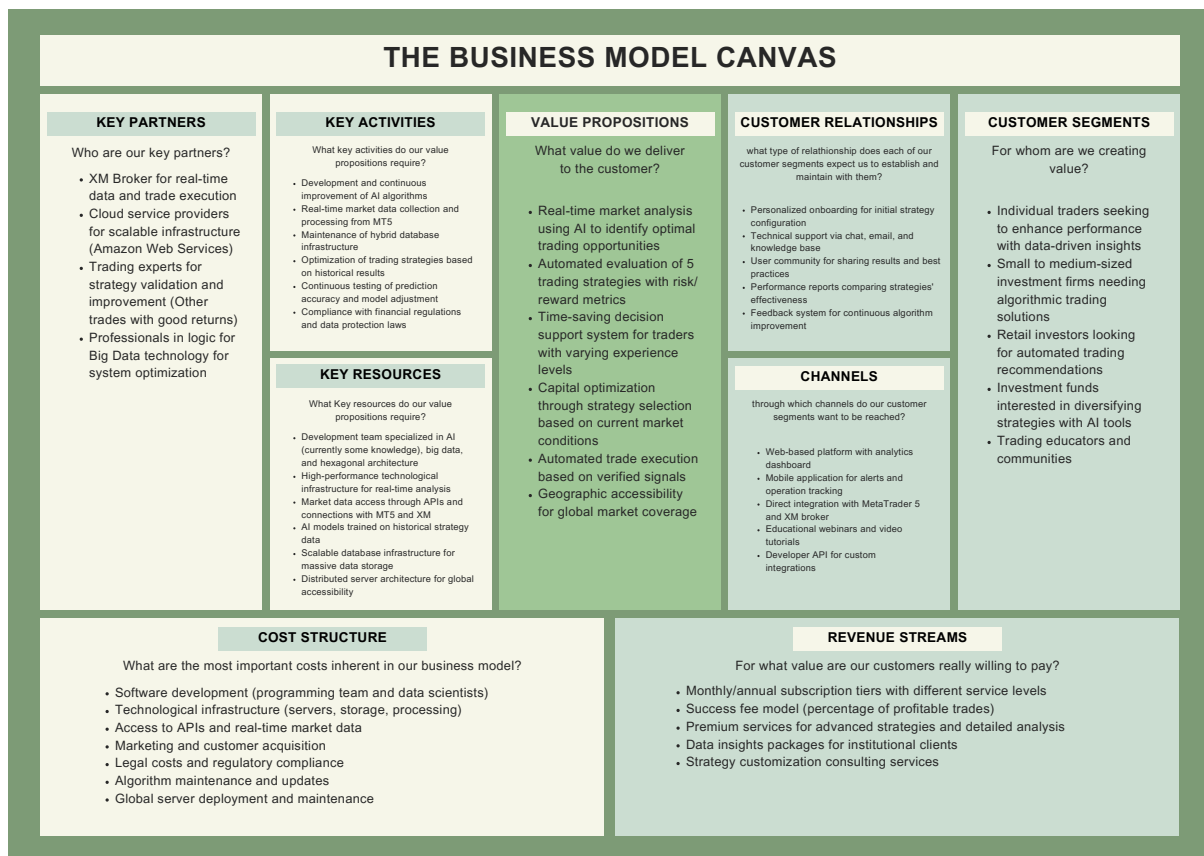


Figure 1: Business Model

User Stories

The original set of user stories was reviewed and refined to focus on the most relevant functionalities and roles. We restructured the content by selecting only three core user roles—Individual Trader, Portfolio Manager, and Advanced Trader—each with specific user stories aligned to their goals and needs. This approach helped clarify the system's key features and improve alignment between development priorities and user expectations

Use Stories – Individual Trader

Title: Real-Time Trading Alerts	Priority: High	Estimate: –
User Story: As an individual trader, I want to receive real-time alerts about buying/selling opportunities based on the analysis of the 5 strategies so that I can act quickly on market movements.		
Acceptance Criteria: Given the strategy is enabled When the system detects a market signal Then an alert is instantly delivered to the user		

Title: Mobile Platform Access	Priority: High	Estimate: –
User Story: As an individual trader, I want to access the trading platform from my mobile device so that I can stay updated and execute trades on the go.		
Acceptance Criteria: Given I have internet access When I log in from mobile Then I can use all trading features		

Title: Trade History Review	Priority: Medium	Estimate: –
User Story: As an individual trader, I want to review my past trades and strategy performance so that I can improve my future decisions.		
Acceptance Criteria: Given I'm logged in When I navigate to my trade history Then I can filter and view past operations		

Use Stories – Portfolio Manager

Title: Daily Strategy Performance Reports	Priority: High	Estimate: –
User Story: As a portfolio manager, I want to receive daily reports on each strategy's performance under various market conditions so that I can optimize capital distribution.		
Acceptance Criteria: Given I'm subscribed to reports When the day ends Then I receive a detailed summary of strategy results		

Title: Capital Allocation Simulation	Priority: High	Estimate: –
User Story: As a portfolio manager, I want to simulate how allocating capital across different strategies would have performed in the past so that I can make data-driven decisions.		
Acceptance Criteria: Given I input allocation percentages When I run the simulation Then the system displays historical performance results		

Title: Risk/Reward Monitoring	Priority: Medium-High	Estimate: –
User Story: As a portfolio manager, I want to monitor the risk/reward ratio of my strategy mix in real time so that I can proactively rebalance the portfolio.		
Acceptance Criteria: Given my portfolio is active When market data changes Then the system recalculates and alerts on deviations		

Use Stories – Advanced Trader

Title: AI Model Configuration	Priority: High	Estimate: –
User Story: As an advanced trader, I want to fine-tune AI model parameters so that I can adapt strategy behavior to my trading approach.		
Acceptance Criteria: Given I access the configuration panel When I change a model parameter Then recommendations are adjusted accordingly		

Title: Strategy Backtesting	Priority: High	Estimate: –
User Story: As an advanced trader, I want to run backtests with custom parameters so that I can validate my theories before trading live.		
Acceptance Criteria: Given I select a strategy and timeframe When I run a backtest Then the system shows detailed historical performance		

Entity-Relationship Model

The initial entity-relationship model was enhanced to improve data organization and system coherence. We clarified connection types and explicitly defined primary and foreign keys. These refinements ensure better data integrity, enable more efficient queries, and provide a clearer structure for system development.

Define Relationship

	User	Subscription	Strategy	StrategyConfig	FinancialInstrument	MarketData	TechnicalIndicator	Trade	TradeExecution	Alert	Portfolio	PortfolioAllocation	PortfolioPerformance
User		X	X	X				X		X	X		
Subscription	X												
Strategy	X			X				X		X		X	
StrategyConfig	X		X					X				X	
FinancialInstrument						X		X		X			
MarketData					X		X	X		X			
TechnicalIndicator						X							
Trade	X		X	X	X	X			X				
TradeExecution								X					
Alert	X		X		X	X							
Portfolio	X											X	X
PortfolioAllocation			X	X							X		
PortfolioPerformance											X		
StrategyPerformance			X	X	X	X							
BacktestResult			X	X									

Figure 2: Relaciones Modelo ER

Entity-Relationship Diagram

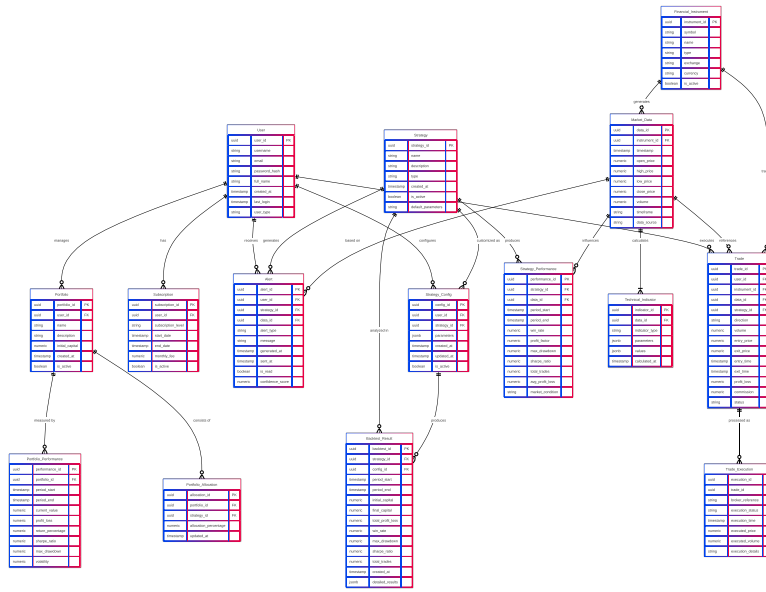


Figure 3: Model ER

Link al repositorio: <https://github.com/felimarod/project-databases-ii>