# Mini Quant Desk – Growth & Strategy Roadmap

## 1. Capital Growth Roadmap

Phase 0: Build & Prove ($100–$2,000)  
- Reinvest 100%, no withdrawals, no loans.  
- Focus: Execution reliability, risk controls, testing multiple strategies.

Phase 1: Seed Capital ($2,000–$25,000)  
- Still reinvest almost everything. Maybe 5–10% symbolic withdrawals.  
- Withdrawals only if profits exceed capital floor.  
- Goal: Reach $25k to avoid PDT rule.

Phase 2: Desk Growth ($25,000–$100,000)  
- Begin profit-split withdrawals (e.g., 80% reinvest / 20% withdraw quarterly).  
- Loans possible but not usually worth it yet.  
- Focus: Diversify strategies and infrastructure.

Phase 3: Scaling to Professional Desk ($100,000–$1M)  
- Withdrawals: 70/30 or 60/40 reinvest/withdraw.  
- Loans may be viable if returns > loan interest.  
- Focus: Multiple strategy layers, risk diversification.

Phase 4: Institutional Level ($1M+)  
- Withdrawals: Consistent income, fund-style structure possible.  
- Loans worth considering (low rates possible).  
- Focus: Hedge fund-level systems, ML, risk parity.

## 2. Strategy Priority Ladder

Step 1: Low-Capital Equity Strategies ($100+)  
- Breakouts (ABCD), momentum filters, mean reversion.  
- Focus: Build execution engine, backtesting, risk control.

Step 2: Shorting Strategies (>$25k)  
- Mirror long setups, hedging with index shorts, pair trades.  
- Requires margin and PDT freedom.

Step 3: Options Strategies ($50k–$100k)  
- Covered calls, protective puts, spreads, volatility trades.  
- Needs options pricing module and more capital.

Step 4: Advanced Quant Systems (>$100k)  
- Volatility arbitrage, market making, ML models.  
- Desk-level portfolio hedging and risk parity.

## 3. Repo Architecture Notes

Recommended structure:  
- strategies/: individual strategy modules (equity, short, options).  
- engine/execution.py: universal order execution.  
- engine/risk.py: capital floor, position sizing, drawdown guards.  
- engine/reporting.py: PnL, equity curve, high-water mark tracking.  
- Future strategies can be dropped into strategies/ without changing core engine.