Meme Coin Trader V2 - Improvements Roadmap

Status Key

- ✅ Complete
- 🔄 In Progress
- 📋 Planned
- ❓ Needs Investigation

Phase 1: Discovery Pipeline (CURRENT PRIORITY)

1.1 Pre-Filter Rejection Rate 🔄

Problem: 97% of candidate wallets rejected at pre-filter (91 no_sells, 46 no_buys)

Root Cause Analysis:

- Token-centric extraction only sees trades FOR that specific token
- Wallet might buy $MEME and sell $PEPE - from $MEME perspective, "no sells"
- Limited to 100-150 recent transactions per token

Solutions:

- [ ] Run diagnose_prefilter.py to confirm hypothesis
- [ ] Implement wallet-centric verification before profiling
- [ ] OR: Aggregate wallet activity across ALL scanned tokens before pre-filter

Files: `hybrid_discovery.py`, `diagnose_prefilter.py`

1.2 Profiler Swap Detection ✅

Problem: Profiler used `len(tokens) == 1` (too strict) **Solution:** Changed to `len(tokens) >= 1` to handle multi-hop swaps **Files:** `profiler.py`

1.3 Webhook Auto-Add ✅

Problem: run_discovery.py didn't pass multi_webhook_manager to Historian **Solution:** Added webhook manager initialization to run_discovery.py **Files:** `run_discovery.py`

Phase 2: Strategy & Learning ✅

2.1 Learning Loop ✅

Added:

- Trade outcome analyzer - identifies WHY trades fail
- Parameter optimizer - adjusts stop/TP based on results
- Automatic strategy promotion - challenger beats champion = promotion
- Runs every 6 hours automatically

Files: `strategist_v2.py`, `master_v2.py`

2.2 Adaptive Parameters ✅

Added:

- Stop loss optimization based on early stop-out rate
- Take profit optimization based on peak analysis
- Conviction threshold tuning based on win rates
- Cluster weight adaptation (already existed, enhanced)

Phase 3: Execution Verification 📋

3.1 Paper Trading Flow

Need to verify:

- [ ] Are paper trades actually opening when webhooks arrive?
- [ ] Query database for trade history and P&L
- [ ] Confirm position tracking and exit detection working

Command to check:

```
bash

sqlite3 swing_traders.db "SELECT COUNT(*), SUM(profit_sol) FROM tracked_positions WHERE source='pap
```

3.2 Exit Detection

- [ ] Verify trailing stops triggering correctly
- [ ] Verify time-based exits working
- [ ] Check if exit signals from tracked wallets being processed

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Phase 4: Risk Management 📋

4.1 Portfolio-Level Limits

Not yet implemented:

- [ ] Max exposure per token (avoid 5 wallets all buying same token)
- [ ] Max concurrent positions (hard cap)
- [ ] Correlation check (avoid similar meme tokens)
- [ ] Daily loss limit (stop trading if down X%)

4.2 Position Sizing

Current: Fixed formula based on conviction and regime **Needed:**

- [ ] Account for current exposure
- [ ] Scale down as more positions open
- [ ] Respect max portfolio percentage per trade

Phase 5: Monitoring & Dashboard 📋

5.1 Performance Dashboard

Needed:

- [ ] P&L curve over time
- [ ] Open positions with live prices
- [ ] Win rate trend
- [ ] Recent trades table
- [ ] Wallet performance breakdown

Options:

- Simple HTML page served by Flask
- React artifact
- Grafana + SQLite export

5.2 Better Alerts

Current: Basic Telegram notifications **Needed:**

- [ ] Daily summary report
- [ ] Weekly performance email
- [ ] Alert on unusual activity (many stops hit, etc.)

Phase 6: Production Readiness 📋

6.1 Graceful Recovery

Not yet implemented:

- [ ] State persistence on crash
- [ ] Webhook backlog handling
- [ ] ngrok reconnection handling
- [ ] Database backup strategy

6.2 Error Handling

- [ ] Better API error recovery
- [ ] Circuit breakers for external services
- [ ] Alerting on repeated errors

Quick Reference: Files Modified Today

File	Change
`profiler.py`	Fixed swap detection (>= 1 instead of == 1)
`run_discovery.py`	Added webhook manager for auto-add
`strategist_v2.py`	Added full learning loop
`master_v2.py`	Added learning endpoints and background task
`diagnose_prefilter.py`	NEW - diagnostic tool for pre-filter issues

Next Steps

1. **Run diagnose_prefilter.py** to understand the pre-filter rejection issue
2. **Implement fix** based on findings (likely wallet-centric check)
3. **Verify paper trading** is working correctly
4. **Add portfolio risk limits** before going live
5. **Build simple dashboard** for monitoring