

This is the critical transition from **Hobbyist** to **Vendor**. You cannot sell a "Theory"; you can only sell a "Result."

**Paper Trading** is the process of generating that Result without risking capital. It creates the **Proof of Concept (PoC)** required to value your algorithm.

Here is the execution plan to turn your code into a sellable asset.

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## PHASE 1: THE PAPER TRADING SCRIPT (The Evidence Generator)

We need to modify your script. Instead of just *finding* a Buy Signal, it must now simulate the **Exit**.

### The Logic:

1. **Entry:** When Score == 4 (Buy).
2. **Simulation:** Look forward in time (using historical data) or track live.
3. **Exit Rules:**
  - **Take Profit:** Sell if price rises **3%**.
  - **Stop Loss:** Sell if price drops **1.5%**.
4. **Result:** Did this signal make money?

### The Script Update:

This script runs a "Backtest" on the signals found to prove if they would have made money.

Python

```
import yfinance as yf
import pandas as pd

def proof_of_concept_runner(ticker_list):
    print("--- GENERATING PROOF OF CONCEPT (BACKTEST) ---")

    ledger = []

    for symbol in ticker_list:
        try:
            # Get data
            df = yf.download(symbol, period="6mo", interval="1d", progress=False)
```

```

if df.empty: continue

# Calculate Indicators (Simplified for brevity)
df['SMA_20'] = df['Close'].rolling(window=20).mean()
df['Lower_Band'] = df['SMA_20'] - (df['Close'].rolling(window=20).std() * 2)

# SIMULATION LOOP (Iterate through past days)
# We skip the first 30 days to let indicators settle
for i in range(30, len(df)-5):
    row = df.iloc[i]

    # THE BUY LOGIC (Simplified Triple Threat)
    # Price below band AND Volume spike
    if row['Close'] < row['Lower_Band'] and row['Volume'] > df['Volume'].iloc[i-1]:

        entry_price = row['Close']
        entry_date = df.index[i]

        # THE EXIT LOGIC (Look ahead 5 days)
        outcome = "HOLD"
        pnl = 0

        for j in range(1, 6): # Check next 5 days
            future_price = df['Close'].iloc[i+j]
            pct_change = (future_price - entry_price) / entry_price

            if pct_change >= 0.03: # +3% Gain
                outcome = "WIN"
                pnl = 3.0
                break
            elif pct_change <= -0.015: # -1.5% Loss
                outcome = "LOSS"
                pnl = -1.5
                break

        if outcome != "HOLD":
            ledger.append({
                "Ticker": symbol,
                "Date": entry_date,
                "Entry": round(entry_price, 2),
                "Result": outcome,
                "PnL_%": pnl
            })

```

```

except: continue

# CALCULATE VALUE
if ledger:
    results = pd.DataFrame(ledger)
    total_trades = len(results)
    wins = len(results[results['Result'] == 'WIN'])
    win_rate = (wins / total_trades) * 100

    print(f"\n--- ALGORITHM VALUATION METRICS ---")
    print(f"TOTAL TRADES SIMULATED: {total_trades}")
    print(f"WIN RATE: {round(win_rate, 2)}%")
    print(f"NET THEORETICAL GAIN: {results['PnL_%'].sum()}%")

    if win_rate > 60:
        print(">>> STATUS: MARKETABLE ASSET (High Value)")
    else:
        print(">>> STATUS: NEEDS REFINEMENT (Low Value)")

else:
    print("No trades triggered in backtest.")

# EXECUTE
stock_list = ['TSLA', 'NVDA', 'AMD', 'COIN', 'MARA']
proof_of_concept_runner(stock_list)

```

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## PHASE 2: DEFINING THE VALUE OF THE ALGORITHM

When you sell an algorithm, you are selling **Certainty** and **Time**. The price is determined by these metrics:

Metric	Definition	Value Impact
Win Rate	Percentage of trades that are profitable.	> 60% = High Value. > 75% = Institutional Value.

<b>Profit Factor</b>	(Gross Profit) / (Gross Loss).	If you make \$2 for every \$1 lost, your factor is 2.0.
<b>Drawdown</b>	The maximum drop in account value.	Low Drawdown (<10%) increases value significantly.
<b>The "Black Box" Factor</b>	Is the logic unique?	Your "Triple Threat + VIX" logic is understandable but effective.

The Valuation Formula:

If your PoC model shows a monthly return of 10% on a \$10,000 account:

- **Monthly Value:** \$1,000.
- **Sale Price (Multiple):** Typically 12x to 24x monthly value.
- **Estimated Asset Price:** \$12,000 - \$24,000.

### PHASE 3: BEST OPTIONS TO SELL THE ALGORITHM

You have four distinct paths to monetize this code.

#### 1. The "Pickaxe" Model (SaaS/Subscription)

- **Concept:** You don't sell the code; you sell the **Signals**.
- **Method:** Set up a Telegram channel or Email list (using the script I gave you).
- **Price:** \$29 - \$49 / month per user.
- **Pros:** Recurring revenue. You keep the IP.
- **Cons:** Requires marketing.

#### 2. The Marketplace Model (MQL5 / TradingView)

- **Concept:** Convert your logic into a plugin for popular trading platforms.

- **Method:** Translate your Python logic into **PineScript** (for TradingView) or **MQL** (for MetaTrader).
- **Price:** One-time fee of \$50 - \$200 per download.
- **Pros:** Access to millions of existing traders.
- **Cons:** High competition. Lower price point.

### 3. The Prop Firm Challenge (High Leverage)

- **Concept:** You don't sell the algorithm to others; you "sell" it to a Prop Firm (like FTMO or Apex).
- **Method:** You pay a fee to take a trading challenge. You use your Bot to pass the challenge. They give you a funded account (e.g., \$100,000). You keep 80% of the profit.
- **Value:** If your bot makes 5% a month on \$100k, you earn **\*\*\$4,000/month\*\***.
- **Pros:** Highest potential payout. No customers to manage.
- **Cons:** Strict rules (drawdown limits).

### 4. The White Label Sale (B2B)

- **Concept:** Sell the Python code directly to a small hedge fund or a "Guru" who wants to offer a bot to their community.
- **Method:** Networking on LinkedIn or specialized Discords.
- **Price:** \$5,000 - \$15,000 + Royalties.
- **Pros:** Large lump sum.
- **Cons:** You lose the rights to the code (usually).

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## COMPARISON TABLE

Model	Difficulty to Start	Potential Revenue	Scalability
SaaS (Signals)	Medium	Medium (Recurring)	High
Marketplace	Low	Low (Volume based)	Very High

<b>Prop Firm</b>	High (Strict Rules)	<b>Very High</b>	Low (Personal limit)
<b>White Label</b>	High (Sales skills)	High (Lump Sum)	Low

## NEXT STEP

To proceed with the **Proof of Concept**, do you want to:

1. **Refine the Backtest:** Adjust the script to output a visual chart of the "Account Balance" over time (The Equity Curve)?
2. **Explore Prop Firms:** Get a list of firms that allow Python bots so you can attempt to win a funded account?