

# Building AI Agents with AutoGen

Technical Analyst and Tools

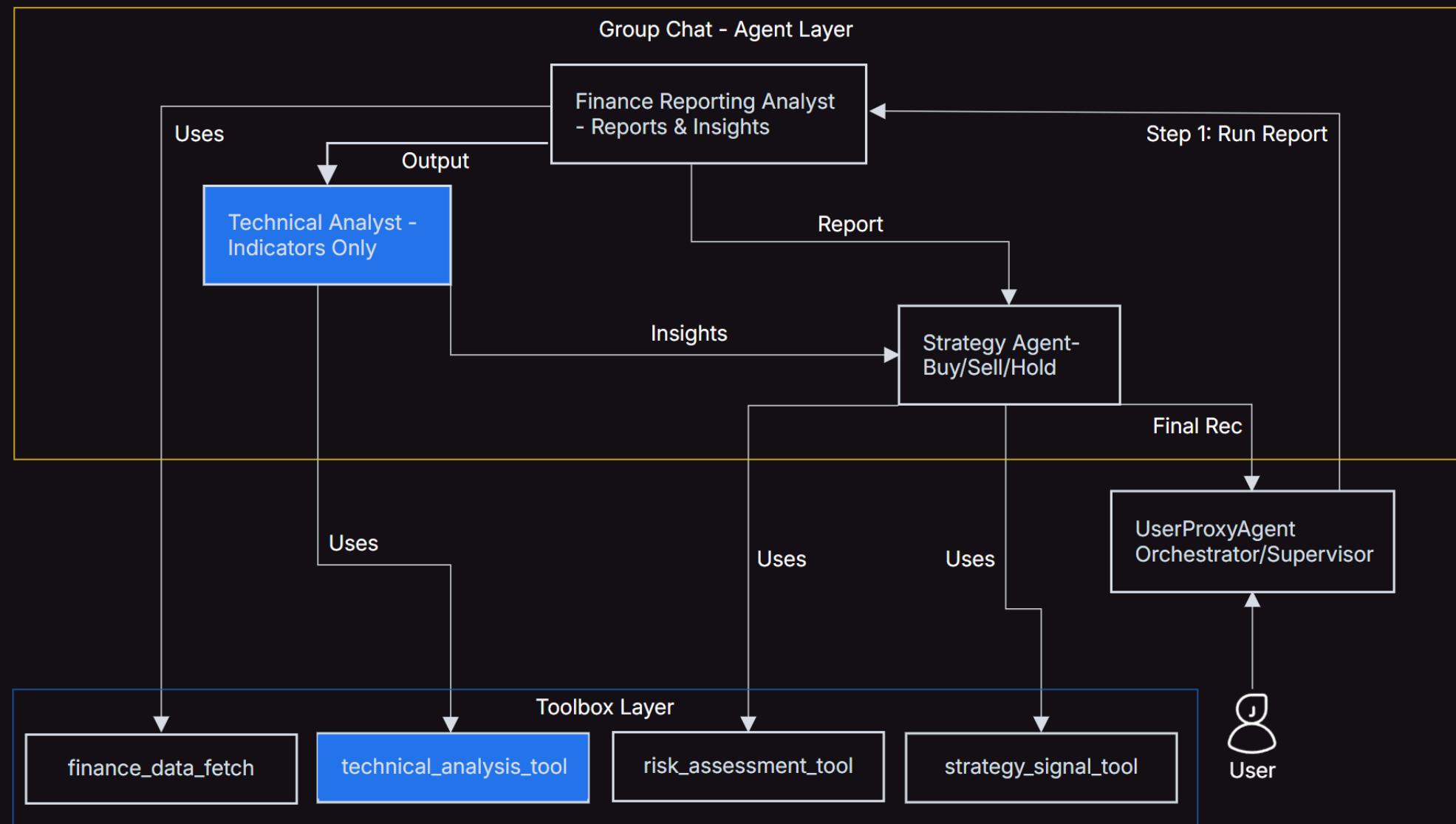
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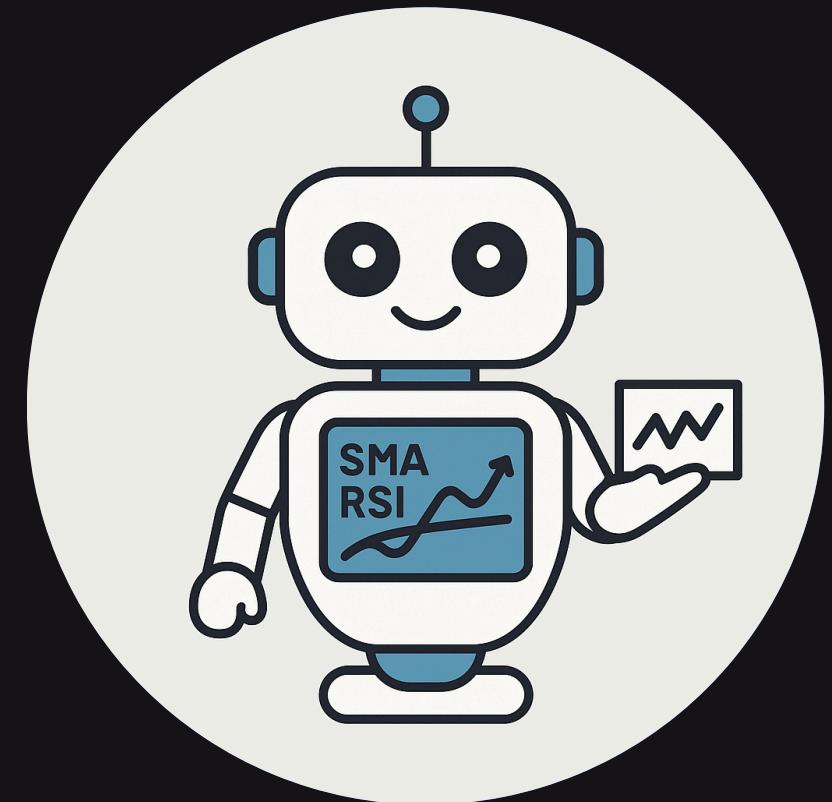


# Agents and Tools for Financial Analysis



# Agent 2 – Technical Analyst

- **Role**
  - Perform technical analysis using predefined indicators
- **Responsibilities**
  - Analyze SMA, EMA, RSI, Last Close Price
  - Identify trends, patterns, and trading signals
- **Constraints**
  - No summaries or financial reports
  - Does not handle performance overview
  - No direct human input handling
- **Tool Used**
  - `technical_analysis_tool`



# Tool 2: technical\_analysis\_tool

- **Purpose:** Perform basic technical indicator calculations
- **Metrics Extracted:**
  - SMA (Simple Moving Avg) – 20-day
  - EMA (Exponential Moving Avg) – 20-day
  - RSI (Relative Strength Index) – 14-day
  - Last close price
- **Used by:** technical\_analyst to detect trends and momentum
- **Error Handling:** Graceful fallback with error message in JSON

```
{  
  "name": "technical_analysis_tool",  
  "data": {  
    "SMA_20": 188.45,  
    "EMA_20": 190.21,  
    "RSI": 62.8,  
    "Last_Close": 192.32  
  }  
}
```

# Hands-On