NovaOS Agent Roster & LLM Strategy Explained

This document explains the NovaOS agent architecture and the choice of AI language models (LLMs) we will use for each role. It is written for non-technical stakeholders to understand how these automated agents work together to build, launch, and manage digital products.

1. Core Automated Agents

NovaOS uses specialized AI "agents"—independent components that perform specific tasks automatically. Each agent runs in a container (like a mini work unit) and communicates via a central message queue. Here are the main agents: • TrendFetcher: Gathers the latest market trends and popular topics from Google and Reddit every hour. • Research Analyst: Looks up detailed market data and competitor information to ensure our ideas are grounded in real-world demand. • Prompt Engineer: Takes rough task descriptions and rewrites them into clear, precise instructions for other agents. • TrendAnalyzer: Transforms raw trends into actionable business ideas, outlining product concepts, target customers, and revenue models. • Icon Generator: Creates high-quality icons and visual assets for our product listings. • Copywriting Agent: Writes persuasive product descriptions, marketing copy, and email content. • Automation Architect: Builds and manages workflow pipelines, ensuring data flows automatically between agents. • DockerDeployer: Publishes finalized products to Shopify or Lemon Squeezy storefronts without manual setup. • PublerScheduler: Posts pre-written social media updates to multiple platforms on a schedule. • AdSpend Agent: Monitors advertising performance and adjusts budgets automatically to maximize return. • ProfitReinvest Agent: Takes a portion of profits and redistributes them into the best-performing marketing channels. • Creative Refresh Agent: Generates new creative variations regularly to prevent audience fatigue. • Cloud Manager: Scales server resources up or down based on system demand to control costs. • Reporting Agent: Compiles daily performance reports, summarizing sales, traffic, and profits for review.

2. Why We Use Multiple Language Models

Different AI language models have unique strengths. To get the best results, we assign each agent the model that excels at its task: • GPT-4o (OpenAI): High creativity. Ideal for brainstorming, idea generation, and writing engaging copy. • ChatGPT: Versatile and easy to access. Used as a reliable fallback for general conversations and simple prompt testing. • Perplexity: Known for accurate, citation-backed answers and up-to-date factual information. Perfect for research, fact-checking, and data-driven tasks. • Claude: Excellent at summarization and following complex instructions. Used for condensing long reports and ensuring clarity in messaging. By routing tasks to the optimal model, we ensure each step—whether creative or technical—is handled by the AI best suited for the job.

3. Mapping Agents to Models

Below is how we assign language models to each agent’s role: TrendFetcher & Research Analyst → Perplexity Prompt Engineer → Claude TrendAnalyzer → GPT-4o (or Perplexity as fallback) Icon Generator & Creative Refresh → GPT-4o (for creative prompts) Copywriting Agent → GPT-4o with ChatGPT fallback Automation Architect & DockerDeployer → ChatGPT (for code snippets and automation scripts) PublerScheduler & AdSpend Agent → ChatGPT (for scheduling logic) ProfitReinvest & Cloud Manager → ChatGPT (for simple arithmetic and control logic) Reporting Agent → Claude (for report summarization) ChatPanel (User Interaction) → ChatGPT or Claude depending on request complexity

4. How It All Works Together

When you launch a new product stream: 1. TrendFetcher gathers topics → sends to Redis queue. 2. Prompt Engineer cleans topics → forwards to TrendAnalyzer. 3. TrendAnalyzer (GPT-4o) creates business ideas →

Research Analyst verifies facts via Perplexity. 4. Icon Generator and Copywriting Agent create assets (GPT-4o). 5. Automation Architect wires up workflows → DockerDeployer publishes listings. 6. PublerScheduler and AdSpend Agent drive traffic and ad spend. 7. ProfitReinvest Agent reallocates profit → boosts top performers. 8. Creative Refresh Agent generates new creatives every 48 hours. 9. Cloud Manager scales infrastructure. 10. Reporting Agent compiles and delivers insights via ChatPanel. At every step, the system chooses the best AI model for the task, delivering efficient, reliable automation.

5. Next Steps

1. Integrate Perplexity API into research and TrendAnalyzer agents. 2. Configure Claude for the Prompt Engineer and Reporting agents. 3. Update the dashboard to show which model handled each task. 4. Train agents with a small batch of initial product streams to fine-tune prompts. 5. Begin the 3-week profit sprint to validate our automation and achieve \$25K profit. This framework gives non-technical stakeholders a clear view of how NovaOS leverages multiple AI models to build, deploy, and scale digital products with minimal human intervention.