

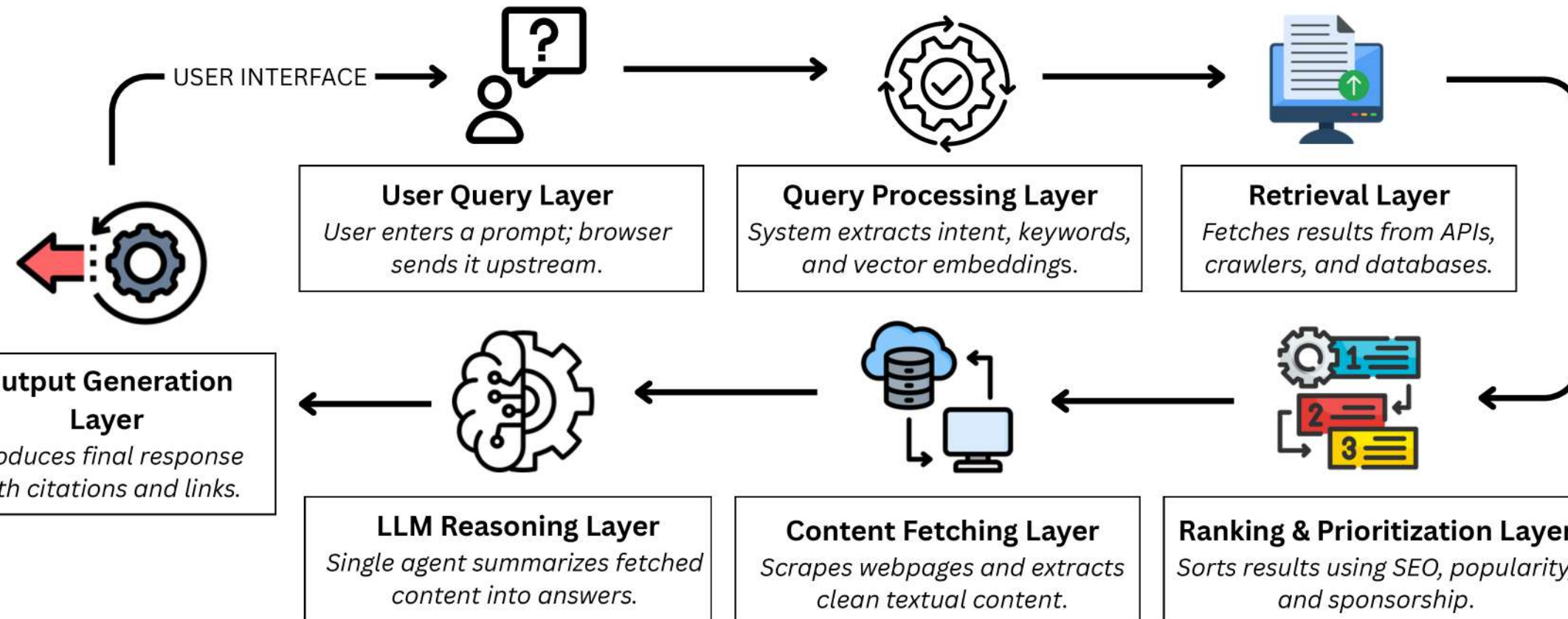
NEXUS

Multi-Agent Browser

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TODAY'S AI BROWSING PIPELINE



FLAWS IN CURRENT FLOW

Browsers Not Intelligent — (Step 1–2)

- Browsers don't understand what the user is actually trying to accomplish — no grasp of **goals, depth, or relevance**.
- They simply take the query and display webpages, leaving all **planning and reasoning** entirely **on the user**.

Search Prioritizes Money, Not Relevance — (Step 4)

- Ranking is heavily influenced by **ads, SEO strength, and domain authority** rather than true quality or rigor.
- As a **result**, **sponsored articles** and optimized content outrank deeper, more relevant insights.

AI Assistants Are Limited — (Step 6)

- LLMs work in a **single threaded**, one-shot manner with no multi-agent collaboration or **long-term context**.
- They cannot break **complex research** into steps or remember previous work, **limiting their usefulness** for real workflows.

No Unified Research & Workflow Automation (System-Wide)

- Today's research spans isolated apps with no shared state, **unified memory**, or **orchestration layer**, forcing every component of the workflow to run independently.
- browser lacks persistent **task-state retention**, and **workflow scheduling**, users must manually reconstruct their research state.

PROBLEMS EXISTING TODAY

SEVERE PRODUCTIVITY WASTE

- Knowledge workers lose **2.5 hours** daily to unproductive digital tasks
- **600+** hours annually per worker wasted on information retrieval
- **\$54,000+** lost productivity per worker per year (at \$90/hour)

Global Scale:

- **\$1.8–1.9** trillion in annual global productivity loss
- **350M** knowledge workers affected worldwide

Sources: McKinsey Global Institute 2023, IDC Future of Work 2024, Forrester Research

BROKEN INFORMATION ECOSYSTEM

- **60%+** of top results are ads or sponsored content (not merit-based)
- **SEO gaming** pushes authoritative sources below optimized blogs
- AI search **amplifies bias** by surfacing "accessible but low-rigor content"

The Authority Problem:

- Paywalled academic sources get **preferential AI** training data access
- **Corporate-sponsored** research outranks independent analysis

Nature 2023, Pew Research Center, Stanford Internet Observatory

CONTEXT & WORKFLOW CHAOS

- Average professional has **14-36** tabs open simultaneously
- **45 context** switches per hour between apps and tabs
- **23 minutes** required to regain deep focus after each interruption

Repetitive Work Epidemic:

- **64%** of workers repeat the same research tasks monthly.
- Zero memory between sessions—every search starts from scratch
- **5.3 hours** weekly **lost** to manual work

RescueTime 2024, Atlassian State of Teams, Microsoft Work Trend Index, Forrester

ASSUMPTIONS

1. Market Assumptions

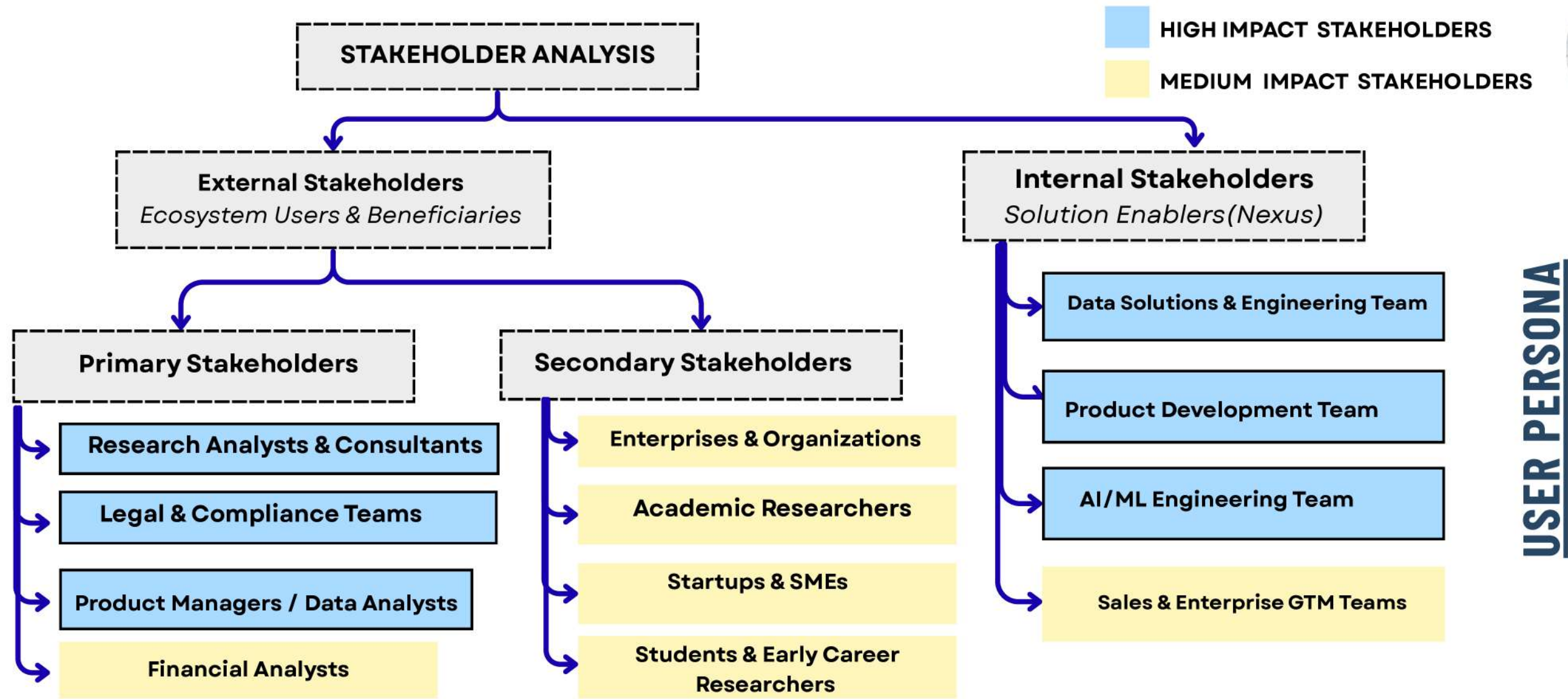
Enterprises pay \$30–\$200/user/month for productivity gains

2. Technical Assumptions

Multi-agent outperforms single-agent systems on complex tasks
Workers accept 30–90 secs latency in exchange for hours saved

3. Behavioral Assumptions

Users trust automation when sources are transparent
Persistent research memory creates strong switching costs



NAME: Aarav Khanna,AGE: 27
ROLE: Senior Research Analyst, Consulting Firm
LOCATION: Bangalore, India
WORK CONTEXT: High-intensity research cycles, tight deadlines, client-facing deliverables

- Goals**
- Produce faster, deeper insights for partners
 - Reduce manual work (data gathering, summarizing, valid)
 - Deliver high-quality slides backed by accurate data
 - Build a repeatable research system for recurring industries

- Pain Points**
- Loses hours daily in tab overload and context switching
 - Struggles to keep track of sources, citations, evidence
 - AI tools provide answers but don't execute multi-step workflows
 - Stuck validating which pages are sponsored vs. truly relevant

- What Aarav Needs from NEXUS ?**
- A multi-agent system that performs parallel research
 - Automated synthesis of market, competitor, and funding data
 - Auto-verification across multiple independent sources
 - A browser that remembers past research and reuses workflows
 - Non-sponsored, relevance-first ranking

USER PERSONA

NEXUS INTERNAL TEAM

- PAIN POINTS**
- Must orchestrate multi-agent workflows reliably across diverse, unstructured web data.
 - Need to manage accuracy, bias detection, and verification at scale while keeping latency low.
- USER NEEDS**
- A scalable agent orchestration framework with persistent memory and task-state management.
 - Robust monitoring tools for agent performance, workflow failures, and system health.
- GOALS**
- Deliver a stable, accurate browser with 10× user productivity.

RESEARCH ANALYSTS & CONSULTANTS

- PAIN POINTS**
- Spend 60–70% of time gathering and validating information instead of analyzing
 - Constant tab overload across tools (Google,Insights, email)
 - Repetitive research cycles with no automation or memory
- USER NEEDS**
- A multi-agent system to run research tasks in parallel
 - A browser that remembers context, prior searches, sources project threads
 - Automated synthesis, cross-verification,insight extraction
- GOALS**
- Reduce research time from 6 hours → 20–30 minutes
 - Deliver data-backed insights to senior consultants faster

COMPLIANCE RESEARCH ANALYSTS

- PAIN POINTS**
- Must track regulatory updates manually across portals
 - Risk of errors due to manual verification .
 - Relevant legal content is buried under SEO-heavy sites.
- USER NEEDS**
- Automated cross-verification and monitoring of official regulatory sources.
 - A secure browser that prioritizes official documents and maintains audit trails.
 - Tools for quick comparison, clause extraction, and change detection.
- GOALS**
- Achieve zero compliance breaches with accurate, verifiable updates.



PROBLEM → SOLUTION Mapping



SEO Bias & Superficial Rankings

Relevance Integrity & Source Trust Layer

Inability to Handle Multi-Step Reasoning

Parallel Multi-Agent Orchestration Engine

Zero Persistent Memory Across Sessions

Context Graph Memory System

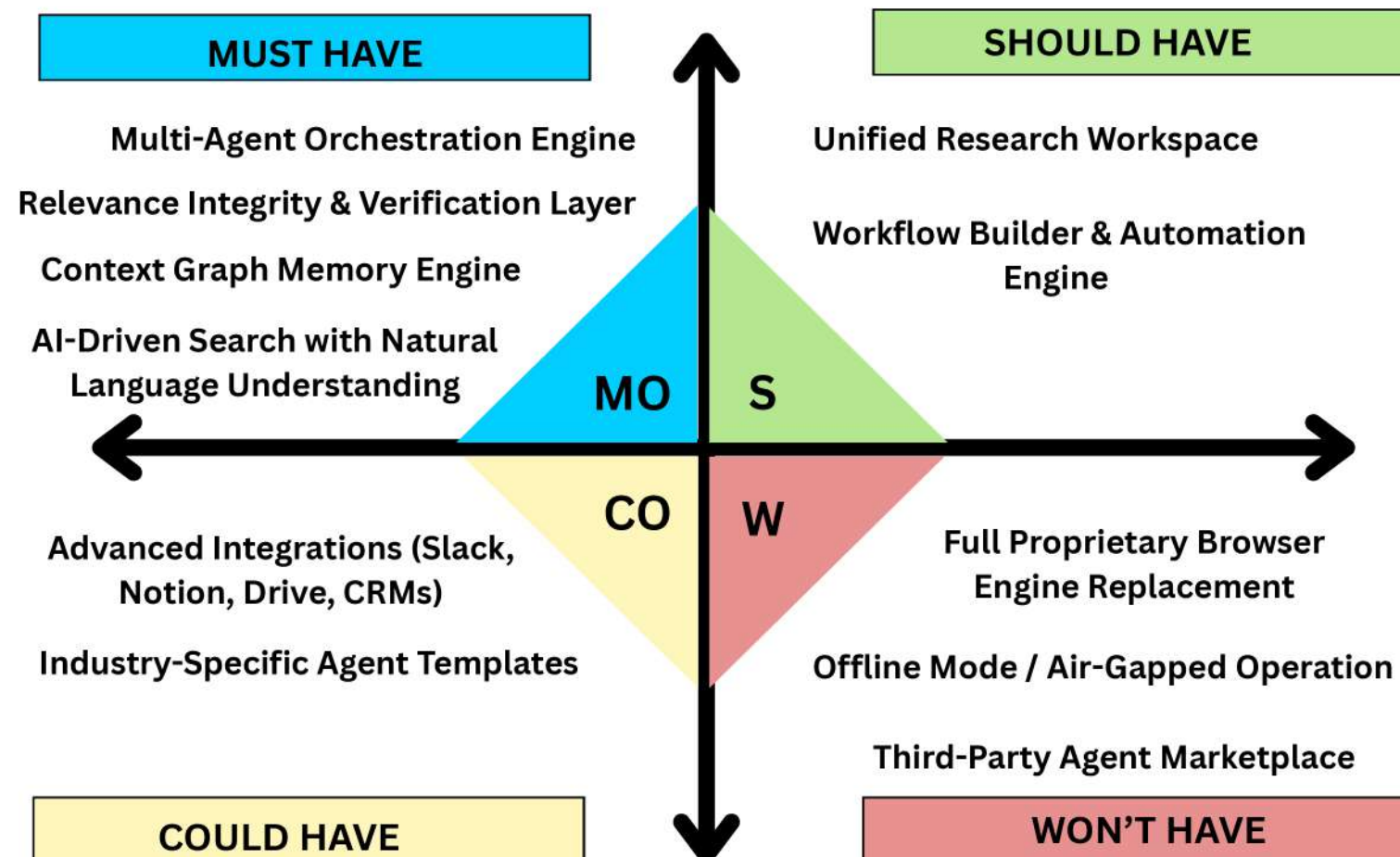
Research Scattered Across Tabs & Tools

Unified Research Workspace

No Automation for Recurring Workflows

Intelligent Workflow Automation Engine

NEXUS MVP – Feature Prioritization



SOLUTION ARCHITECTURE (NEXUS 4-Layer Architecture)

LAYER 1 : AGENT INTELLIGENCE LAYER



User submits a query or workflow trigger fires.



Task Graph Orchestrator breaks it into micro-tasks.



Specialized agents (Discovery, Extraction, Verification, Synthesis) spin up in parallel.



coherent, validated intermediate result.

What NEXUS does differently?

- Runs **5–8 agents** in parallel rather than **one LLM**
 - Decomposes work into **microtasks**, not monolithic ans
- Result: Hrs of research become mins, with higher accuracy.

What NEXUS does differently?

- Prioritizes **official sources**, primary research data
 - Runs a **source integrity score** (SIS) to filter out biased pages
- Result: NEXUS delivers truth-first research, not SEO-first data

LAYER 2 – RETRIEVAL & VERIFICATION LAYER



Retrieval engine queries web sources, APIs, databases simultaneously.



Relevance Integrity Model ranks results by authority, trust, and freshness (not SEO)



Source Integrity Score filters sponsored or biased content.



Verification agent cross-checks claims across multiple independent sources.

What NEXUS does differently?

- Maintains **persistent, session-independent** memory
 - Resurfaces **past insights** using a semantic knowledge graph.
- Result: Analysts don't start from zero every time

LAYER 3 – MEMORY & RESEARCH GRAPH LAYER



All extracted entities, sources, relationships update the semantic knowledge graph



New findings connect to historical research through embeddings and graph links.



The graph identifies recurring entities and resurfaces past insights automatically.



Long-term memory stores citations, tasks, reasoning trails.

What NEXUS does differently?

- Creates a single workspace for all research tasks
 - Agents are set to monitor, alert, and update automatically
- Result: No repeated work, no manual tracking.

LAYER 4 – WORKFLOW & WORKSPACE LAYER



Final multi-agent output displayed in a unified workspace



Users convert the multi-agent process into automated workflows.



Workflow Engine runs scheduled research in the background.



Updates pushed to dashboards, Slack, internal tools.



"NEXUS is not positioned as a browser, it is a operating system built for high-stakes knowledge work."

Stage 1 – Vertical Beachhead (Analysts, Consultants, Finance)



NEXUS enters through the users who feel the highest research pain and experience the clearest time-to-value.

Why this works ?

- These users spend **60–70% of time** synthesizing information
- Strong **peer networks** → (+ve within group effect)
- Extremely high willingness to adopt productivity tools

Stage 2 – Team & Department Expansion (Horizontal Spread)



Once a few individuals adopt NEXUS, team expansion becomes natural due to Coordination Lift.

Why this works ?

- Shared workflows → reusable processes
- Shared memory graphs → shared context
- Shared entities → team-level knowledge alignment

Stage 3 – Enterprise Rollout (Scale Across Org)



As organizations accumulate workflows, insights, and memory graph intelligence, switching away becomes extremely costly.

Why this works ?

- More research → richer memory → smarter agent recommendations → more reliance.
- This creates structural, compounding switching costs.



HOW NEXUS WINS EARLY?

- Industry-specific agent templates (“Funding Deep Dive”, “Market Landscape Scan”)
- Fast onboarding (first insight < 5 minutes)
- Case-study driven GTM (before/after comparisons)
- Outcome: Rapid traction, clear PMF signals, organic analyst-to-analyst adoption.

WHAT MAKES ADOPTION INEVITABLE?

- Workflow Network Effects
- Compounding Context Graph Memory
- Daily Automation Hooks
- Daily Automation Hooks
- High Perceived Value vs. Low Switching Cost at Entry

GROWTH TECHNIQUES (AARRR FRAMEWORK)

Acquisition

- Browser extension + one-click onboarding
- LinkedIn content targeting analysts & PMs
- Organic demos from shared PDFs

Activation

- First insight under 2 minutes onboarding
- Prebuilt agent templates
- Auto-suggested workflows

Retention

- Daily automated monitoring workflows
- Long-term memory graph
- Team collaboration features

Referral

- Created with NEXUS in exported reports
- Internal workflow sharing

Revenue

- Analyst community templates

METRICS

- Visit → Install Con. Rate (15–25%)
- Install → Sign-Up Rate (35–50%)
- % Organic Referral Traffic (20–30%)

- Activation Rate (Sign-Up → First Insight: 40–55%)
- Agent Template Usage in First Session (≥ 1)

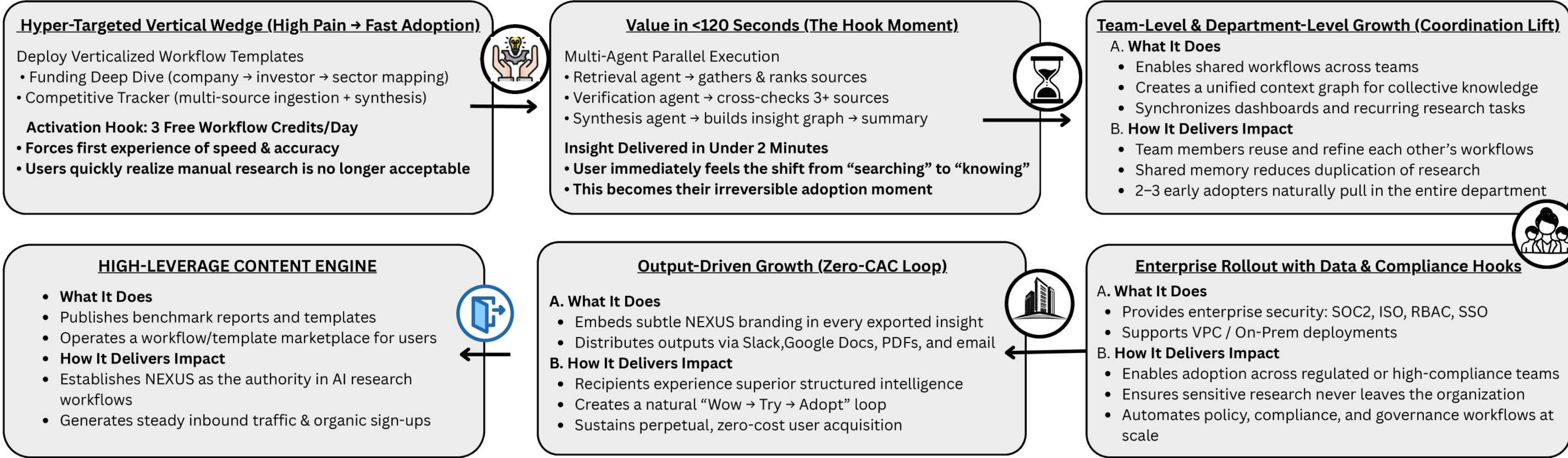
- Day-7 Retention (35–45%)
- Day-30 Retention (20–30%)
- Weekly Automated Workflow Runs/User (5–12)

- Free → Pro Conversion (5–12%)
- Team Seat Expansion Rate (25–35%)
- Enterprise Seat Multiplier (2.5×)

- Internal Workflow Sharing (30–50% of teams)
- Workflow Marketplace Downloads/User (1–3 per week)



GO-TO-MARKET STRATEGY



| CORE SUBSCRIPTION REVENUE | PLATFORM REVENUE STREAMS | ENTERPRISE & UPSELL REVENUE | |
|---|--|---|--|
| PRO Plan — \$49/month or \$470/year | Workflow Marketplace (15% revenue share) | White-Label Licensing (\$150K–\$1M/yr) | |
| Unlimited agent tasks; Advanced context graph; Custom workflows; Priority execution | Vertical workflow packs; Community workflows; Marketplace flywheel | Private deployments; Internal workflow libraries; Secure environments | |
| Enterprise Plan — \$39–\$89/user/month | Intelligence & Data Products (anonymized trend insights) | Automation Packs (competitor monitors, regulatory alerts, exec briefings) | |
| SSO, RBAC, audit trails, admin console | Sector heatmaps; Research dashboards; Premium briefings | Enterprise dataset indexing; Org-wide federated search | |
| VPC/On-Prem deployment; SLA support | API & Developer Platform (orchestration & workflow APIs) | Deep enterprise penetration & high switching cost | |



| PITFALLS | DESCRIPTION | MITIGATION STRATEGY |
|---|--|--|
| 1. Multi-Agent Reasoning Drift ● High-Severity | Model degradation reduces synthesis accuracy and produces inconsistent insights. | Continuous fine-tuning; RLHF; Confidence scoring fallback LoE: ● Low |
| 2. SEO/Ad-Biased Source Pollution ● High-Severity | Sponsored/SEO pages outrank authoritative sources causing polluted retrieval. | Relevance Integrity Layer; Multi-source validation; Domain trust scoring ,LoE: ● Medium |
| 3. Context Graph Noise ● Medium-Severity | Graph accumulates outdated/irrelevant nodes reducing resurfacing precision. | Graph pruning; Embedding recalibration; User tagging LoE: ● Low |
| 4. Workflow Automation Breakage ● High-Severity | External site/API changes break triggers causing workflow failures. | Redundant triggers; Auto-retry + anomaly detection; Health monitoring , LoE: ● Medium |
| 5. Cross-Agent Output Inconsistency ● Medium-Severity | Parallel agents produce conflicting results leading to synthesis errors. | Contradiction scoring; Majority voting; Rule-based synthesis agent LoE: ● Low |
| 6. Data Privacy Risks ● Medium -Severity | Sensitive enterprise research risks compliance exposure. | SOC2 encryption; Zero-retention mode; VPC/on-prem deployment LoE: ● Medium |

FUTURE ENHANCEMENTS

Adaptive Agent Ensembles (Dynamic Orchestration Layer)

- Multi-agent teams automatically reorganize based on task complexity, domain, and prior performance.
- → Increases insight accuracy by 20–30% and reduces reasoning drift.

Domain-Specific Intelligence Packs

- Pretrained domain packs for Finance, Technology with specialized retrieval, terminology understanding, and workflow templates.
- → Reduces onboarding time and improves relevance for vertical users.

SUCCESS METRICS

1. North Star Metric – Verified Multi-Agent Insight Accuracy

$$InsightAccuracy = \frac{InsightsValidatedBy \geq 3Sources}{TotalInsightsGenerated} \times 100$$

- **Purpose:** Measures the reliability of synthesized insights.
- **Goal:** ≥ 92% Verified Insight Accuracy
- Tracks correctness, cross-source triangulation, and bias reduction.

2. Growth Metric – Active Workflows Per Org

$$OrgWorkflowGrowth = \frac{(ActiveWorkflows + NewTeamsActivated - ChurnedTeams)}{TotalTeams} \times 100$$

- **Purpose:** Measures adoption + productivity impact.
- **Goal:** +60% quarterly team activation
- Indicates team-level network effects and PLG expansion.

3. Source Integrity Index

$$SourceIntegrity = \frac{(VerifiedSources - SEO/SponsoredSources)}{TotalSourcesUsed} \times 100$$

- **Purpose:** Tracks how well NEXUS filters out SEO bias, sponsored content, misinfo.
- **Goal:** ≥ 90% authoritative sources
- Ensures clean retrieval pipelines.

4. Retention Efficiency (AARRR)

$$RetentionEfficiency = \frac{DAU + WeeklyWorkflowRuns}{MAU} \times 100$$

- **Purpose:** Measures habit formation and automated workflow stickiness.
- **Goal:** 40–55% DAU/MAU ratio
- Matches top-tier PLG benchmarks.



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NEXUS

MULTI-AGENT BROWSER

TRANSFORMING KNOWLEDGE WORK THROUGH ORCHESTRATED INTELLIGENCE

MAIN DASHBOARD

NEXUS

Multi-Agent Research OS

Home

Agents

Workflows

Memory Graph

Alerts

Projects

Settings

System Status

Active

Welcome back

Your intelligent research workspace is ready

Ask NEXUS to research anything...

Try: "Compare 3 fintech competitors" or "Deep dive on Series B funding"

Quick Actions



Competitive Landscape

Analyze market competitors and positioning



Funding Deep Dive

Research funding rounds and investors



Market Scan

Monitor industry trends and signals



Regulatory Tracker

Track compliance and policy changes

Active Agents

Processing research workflow



Retrieval Agent

active

Fetching source #12...
Evaluating credibility...
Processing data stream...



Verification Agent

active

Cross-validating claims...
Checking source reliability...
Analyzing patterns...



Synthesis Agent

idle

Waiting for data...
Ready to synthesize...
Standing by...



Memory Agent

complete

Graph updated
Entities mapped
Task complete

Recent Projects

Fintech Market Analysis



Complete • 2 hours ago

Series B Investor Mapping



In Progress • 1 day ago

AI Regulatory Landscape



Complete • 3 days ago

Universal Command Bar

Natural-language interface to trigger any research workflow instantly ("Compare top fintech competitors...").

Quick Action Templates

Pre-built workflows for high-frequency tasks like Competitive Analysis, Funding Deep Dive, Market Scans, or Regulatory Tracking.

Active Agents Panel

Real-time view of the multi-agent engine – retrieval, verification, synthesis, ranking, and memory agents all working in parallel.

SEARCH RESULTS PAGE WITH AI-POWERED FEATURES.

NEXUS

Multi-Agent Research OS

Home

Agents

Workflows

Memory Graph

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Projects

Settings

System Status

Active

Analysis Setup

Configure your multi-agent research workflow

Research Query

Compare top 5 fintech competitors by funding and market positioning

Region

Global

Time Window

Last 12 Months

Industry

Fintech

Example Queries

Compare top 5 fintech competitors by funding and market positioning

Generate investor mapping and funding analysis for Series B fintech startups

Create market map for SaaS security startups with growth trends

Analyze regulatory compliance requirements across EU and US markets

Cancel

Run Multi-Agent Analysis

Research Query Input

Accepts natural-language queries which NEXUS decomposes into multi-step tasks.

Context Controls

• Region: Global, APAC, US, EU

• Time Window: Last 1–12 months

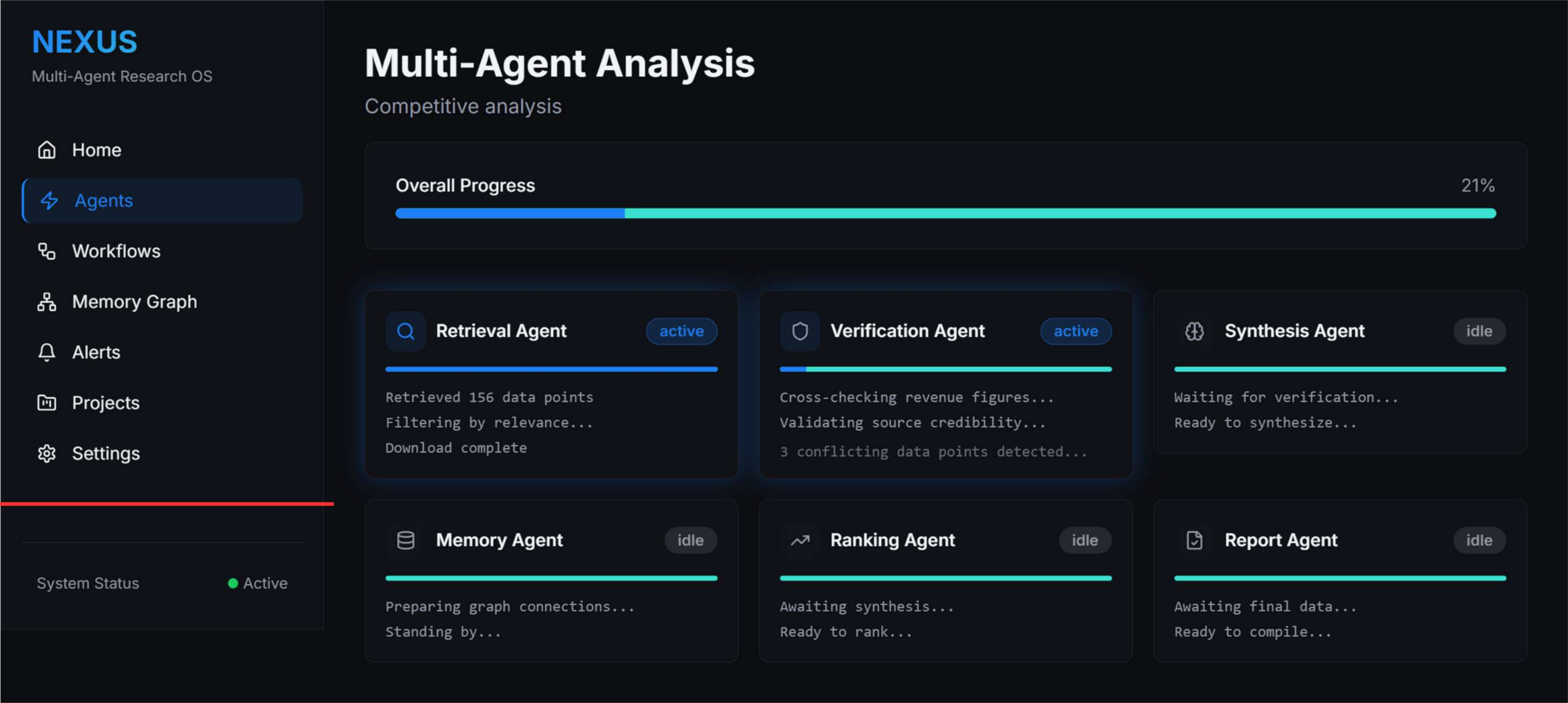
• Industry: Fintech, SaaS, Healthcare, etc.

• Enables hyper-targeted research.

Run Multi-Agent Analysis

Launches Retrieval, Verification, Memory, Synthesis, and Ranking agents in parallel.

MULTI-AGENT ANALYSIS WIREFRAME

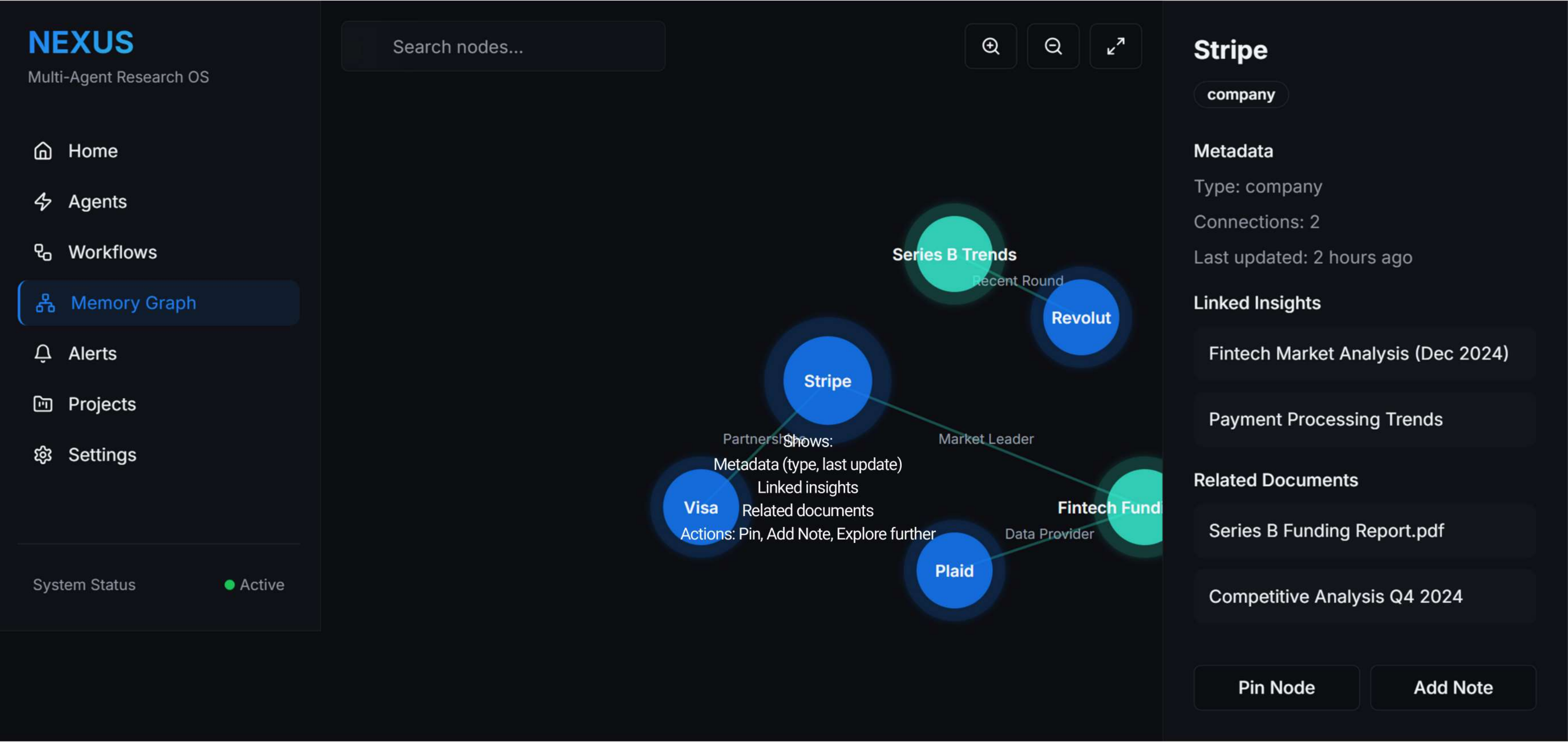


Overall Progress Indicator

Aggregates completion of all agents — retrieval → verification → synthesis → ranking → reporting.

- **Retrieval Agent:** Gathers, filters, and pre-processes data.
- **Verification Agent:** Cross-checks claims, resolves inconsistencies, detects SEO-bias.
- **Synthesis Agent:** Generates structured insights.
- **Memory Agent:** Links new findings to past analyses.
- **Ranking Agent:** Orders insights based on relevance, credibility, and context.
- **Report Agent:** Prepares export-ready structured outputs.

MEMORY GRAPH (CONTEXTUAL INTELLIGENCE LAYER)



KEY FEATURES

Entity Nodes & Relationships

Each node (company, topic, trend) is linked with meaningful relationships:

Dynamic Visualization

Nodes scale and cluster based on relevance, confidence, and recency.

Searchable Knowledge Base

Users can instantly jump to any past insight, entity, or dataset.

Persistent Memory

Insights from every analysis automatically update the graph, creating enterprise-grade domain intelligence over time.

ALERTS & MONITORING WIREFRAMES

NEXUS

Multi-Agent Research OS

Home

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Memory Graph

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Projects

Settings

System Status

Active

Alerts & Monitoring

Automated intelligence tracking for your research workflows

2

Unread Alerts

New

5

Monitoring Workflows

Active

07:00

Next Scan Tomorrow

Scheduled

Stripe raised \$600M Series H

new

△ Funding Event

Confidence: 96%

2 hours ago

Details

Visa announced partnership with PayPal

new

△ Partnership

Confidence: 89%

5 hours ago

Details

EU PSD3 draft regulations released

reviewed

△ Regulatory

Confidence: 94%

1 day ago

Details

Plaid user base grew 34% QoQ

reviewed

△ Growth Metric

Confidence: 82%

2 days ago

Details

Automated Monitoring Workflows:

- NEXUS runs scheduled multi-agent scans (news, filings, regulatory portals, datasets) at predefined intervals.
- Autonomous retrieval + verification ensures only high-confidence updates are surfaced.

Entity-Aware Tracking

- Alerts automatically link to related entities in the Memory Graph.
- Example: “Stripe raised \$600M Series H” → ties to Stripe node + Funding Trends cluster.
- Enables instant contextual expansion from alert → deeper analysis.