

M C P   S E R V E R

N O   C O D E

C L O U D   H O S T E D

# Customer Acquisition Cost Engine MCP

Get precise marketing efficiency metrics through your AI client.

Customer Acquisition Cost Engine provides the math your AI needs to evaluate marketing spend. It calculates blended CAC, breaks down costs by specific channels, determines how fast you recover your investment, and compares the efficiency of paid versus organic traffic. You can stop guessing about your unit economics and start using your agent to run deep financial audits on your acquisition strategy.

cac

marketing-roi

customer-acquisition

finance-tools

attribution



# The connectivity layer between AI and the world's software.

---

Vinkius sits between AI and every application. All communication passes through Vinkius Cloud via the Model Context Protocol (MCP) — with governance, observability, and security at every layer.

# Your AI Connections Run Through Vinkius Cloud

The world's largest  
managed MCP catalog

Vinkius is the connectivity layer where AI connects to the software your business already runs. We handle the hosting, the security, the credentials, the uptime — you get agents that actually do things.

We operate the world's largest managed MCP catalog. Major SaaS platforms, CRMs, databases, and cloud providers — running, monitored, production-ready. This MCP server is hosted and maintained by the Vinkius Cloud for AI Agents.

*The agent doesn't manage credentials, doesn't manage uptime, doesn't manage security. Vinkius does.*

— Architecture principle

---

## Four Pillars of the Vinkius Runtime

### 01 — Security by design

Credentials stay encrypted at rest via AES-256. The AI agent never touches raw keys — they're injected into a sandboxed V8 isolate at runtime. Actions are logged, and connections have an emergency kill switch.

### 03 — Deterministic observability

Eight immutable metrics per endpoint: request volume, p95 latency, error rate, active connections, cost attribution. A live payload feed logs every tool call with mutation detection.

### 02 — Built on MCP Fusion

This MCP server was built with **MCP Fusion**, the open-source framework (Apache 2.0) that powers the entire Vinkius catalog. Schema-as-firewall strips undeclared fields, compiled PII redaction runs at zero overhead, and cryptographic lockfiles produce git-diffable audit trails.

### 04 — Autonomous operations

Servers are deployed, monitored, and patched autonomously. New capabilities and security patches ship weekly. Zero-downtime deployments ensure continuous availability across all managed MCP servers.

**AES-256**

Encryption at rest

**Ed25519**

PKI vault signatures

**24h TTL**

Ephemeral session keys

**V8 Isolate**

Sandboxed execution

---

## One Token. Instant Access.

Every MCP server on Vinkius is accessed through a **Connection Token**. Tokens are generated in the cloud dashboard and produce a unique MCP endpoint URL. Paste this URL into any MCP-compatible client — no SDK required.

A single token can serve **multiple AI clients simultaneously**, or you can issue separate tokens per client for granular access control. Each token tracks its own request count, last activity timestamp, and can be individually enabled or revoked.

**MCP ENDPOINT**`https://edge.vinkius.com/{token}/mcp`

Claude



Cursor



VS Code



Windsurf



Grok



Gemini

---

## Security Is the Architecture

Security in Vinkius is not a feature — it's the foundation of the runtime. The gateway enforces multiple independent protection layers between AI agents and third-party APIs.

**01 — Ed25519 PKI Vault**

Every workspace has an Ed25519 Master Key. Session keys are generated ephemerally (24h TTL) and signed by the Master Key. Credentials never leave the vault boundary.

**02 — V8 Isolate Sandboxing**

Tool code runs inside isolated-vm V8 isolates with 64 MB memory caps and per-request timeouts. No filesystem access, no network access except through the SSRF-guarded fetch bridge.

### 03 — SSRF Guard

All outbound HTTP requests are DNS-resolved and validated before execution. Private IP ranges (10.x, 172.16-31.x, 192.168.x, AWS metadata 169.254.x) are blocked at the network layer.

### 05 — Cryptographic Audit Trail

Every request is signed into a SHA-256 hash chain with Ed25519 signatures. Events form a tamper-proof, SIEM-exportable forensic record.

### 04 — DLP & PII Redaction

A ResponseGuard pipeline intercepts every tool response. Configurable redaction patterns strip sensitive fields (emails, SSNs, card numbers) before data reaches the AI agent.

### 06 — Honeypot Trap System

Phantom credentials are injected into isolated environments. If a honeypot is used outside Vinkius infrastructure, the server is quarantined instantly.

## Emergency Kill Switch

EU AI Act Art. 14(1)  
Compliant

The kill switch is an **emergency halt** mechanism — not a simple toggle. When triggered, it executes three actions atomically:

#### 01 — Server deactivated

The MCP server is immediately taken offline across the entire cluster.

#### 02 — All tokens revoked

Every connection token is invalidated. Total lockout — reconnection blocked until new tokens are issued.

#### 03 — WebSocket connections killed

Active connections terminated via Redis pubsub broadcast. Propagates to every runtime node in the cluster.

## Full Visibility. Zero Guesswork.

The Vinkius cloud dashboard includes a full MCP Governance suite — real-time analytics and security controls for production AI operations.

**Control Plane**

KPI dashboard with request volume, latency, success rate, token consumption, and AI-generated operational briefings.

**FinOps**

Cost tracking per tool, payload compression savings, budget optimization signals, and consumption trends.

**Firewall & DLP**

PII redaction activity, sensitive data protection counters, and security event timeline.

**Agent Activity**

Which AI clients are connecting, how often, and what they're doing — real-time session tracking.

**Tool Health**

Slowest and most error-prone tools, with actionable root-cause insights and performance baselines.

**Incident Log**

Error trends, failure rates, status-code breakdowns, and forensic audit trail access.

Get started at [cloud.vinkius.com](https://cloud.vinkius.com) — connect your AI agent in under 60 seconds.

# Customer Acquisition Cost Engine MCP

4 tools available

Cloud-hosted on Vinkius

You can stop manually building spreadsheets just to figure out if your marketing is actually working. This MCP gives your AI client the specific tools it needs to run complex customer acquisition math. Instead of you doing the arithmetic, your agent can aggregate marketing, sales, and tool overhead to find your blended CAC in seconds.

You can dig into the details by asking your agent to isolate costs for specific paths or to see how quickly a new customer pays back their acquisition cost. It's built to bridge the gap between raw spend data and actionable unit economics. Whether you need to see if your organic growth is outperforming paid ads or if you need to know the exact payback period for a specific channel, this MCP handles the heavy lifting. You just provide the numbers, and your agent provides the analysis.

---

## Core Capabilities

### 01 — Blended CAC Calculation

Your agent uses this to find the single average cost per customer across all your marketing and sales spend.

### 02 — Channel Cost Isolation

Your agent uses this to break down spend into specific acquisition paths.

### 03 — Payback Period Analysis

Your agent uses this to calculate how quickly you recover your acquisition investment.

### 04 — Organic vs Paid Comparison

Your agent uses this to evaluate the performance gap between different acquisition strategies.

# One Click on Vinkius — From Prompt to Execution

Available at [vinkius.com/en/ai-agent-connect/customer-acquisition-cost-engine](https://vinkius.com/en/ai-agent-connect/customer-acquisition-cost-engine) — connect your AI agent in three steps.

- 01 Connect the MCP to your client like Claude or Cursor via Vinkius.
- 02 Provide your spend and customer acquisition data to your agent.
- 03 Ask your agent to run specific calculations like blended CAC or payback periods.
- 04 Receive instant, accurate financial analysis directly in your chat interface.

Connect the MCP to your AI client and start asking for financial metrics.

## Built For

Marketing and finance professionals who need to run rapid unit economic audits without manual spreadsheet work.

### Growth Marketers

They hand off spend and customer data to the agent to check channel efficiency.

### Finance Analysts

They use the agent to calculate payback periods and blended CAC for reporting.

### Marketing Operations

They use the agent to compare the cost effectiveness of paid versus organic channels.

## What Changes When You Connect

- 01 Eliminates manual math by letting your agent handle CAC calculations.
- 02 Identifies inefficient spending by isolating costs per channel.

- 
- 03** Speeds up financial decision making with instant payback period data.
- 
- 04** Provides a clear view of organic versus paid performance gaps.
- 

---

## Real-World Applications

### Monthly Marketing Audits

Your agent calculates the blended CAC by combining marketing, sales, and tool costs.

### Organic Growth Evaluation

Your agent compares paid and organic efficiency to see if your SEO efforts are paying off.

### Channel Scaling Decisions

You use the agent to see which channels have the fastest payback periods before increasing budget.

### Budget Allocation

You use channel-specific CAC to decide where to move your next dollar of investment.

---

# 4 Tools Available

| #  | TOOL                               | DESCRIPTION                                                                                                                                                  |
|----|------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 01 | calculate_blended_cac              | This tool finds your total average cost per customer across every channel. It aggregates all marketing, sales, and tool overhead into one number.            |
| 02 | calculate_channel_cac              | This tool isolates acquisition costs for individual channels. Use it to see which specific paths are driving efficient growth and which are too expensive.   |
| 03 | calculate_channel_payback          | This tool measures how fast you recover the cost of acquiring a customer. It uses customer value to determine the financial recovery speed for each channel. |
| 04 | compare_paid_vs_organic_efficiency | This tool compares the performance of your paid strategies against your organic growth. It highlights the efficiency gap between the two approaches.         |

---

## See It in Action

Real prompts you can use once this MCP is connected to your AI agent through Vinkius Cloud.

**U** What is our blended CAC if we spent \$50,000 on marketing, \$30,000 on sales, and \$10,000 on tools, acquiring 1,000 customers?



The blended CAC is \$90.00.

**U** Calculate the payback period for a channel with a CAC of \$50 if the average customer value is \$200.



The payback period is 0.25 months.

**U** Break down the CAC for these channels: [{'channelName': 'Paid Search', 'customerCount': 100}, {'channelName': 'Organic', 'customerCount': 50}] with a total investment of \$15,000.



The CAC for Paid Search is \$100.00 and the CAC for Organic is \$100.00.

---

## Frequently Asked Questions

### 01 What can this MCP calculate?

It calculates blended CAC, individual channel CAC, channel payback periods, and the efficiency gap between paid and organic channels.

### 02 Which AI clients can I use with this MCP?

You can use it with any MCP-compatible client, including Claude, Cursor, Windsurf, and VS Code.

---

**03 Do I need to host this myself?**

No. Vinkius hosts and manages the MCP for you. You just connect your client and it is ready to use.

---

**04 How does it handle sales and tool costs?**

The blended CAC tool specifically aggregates marketing, sales, and tool overhead to give you a true cost per customer.

---

**05 Can I compare my SEO performance to my paid ads?**

Yes. You can use the `compare_paid_vs_organic_efficiency` tool to evaluate the performance gap between those strategies.

---

# Go Live in 60 Seconds

Get your connection token from [cloud.vinkius.com](https://cloud.vinkius.com), then paste the endpoint URL into any MCP-compatible client.

YOUR MCP ENDPOINT

`https://edge.vinkius.com/[TOKEN]/mcp`

| CLIENT                                                                                              | WHERE TO CONFIGURE                                                                                           |
|-----------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|
|  <b>Claude AI</b>  | Profile → Customize → Connectors → "+" → Add custom connector → Paste endpoint                               |
|  <b>Cursor</b>     | Settings → Features → MCP Servers → "+ Add New MCP Server" → Type: SSE → Paste endpoint                      |
|  <b>VS Code</b>  | Ctrl/Cmd+Shift+P → "MCP: Add Server" → add <code>"customer-acquisition-cost-engine": { "url": "..."} </code> |
|  <b>Windsurf</b> | MCP Settings → <code>mcp_settings.json</code> → Add endpoint URL                                             |
|  <b>ChatGPT</b>  | Settings → Tools & plugins → Add MCP server → Paste endpoint                                                 |
|  <b>Gemini</b>   | Extensions → Add MCP Server → Paste endpoint URL                                                             |

ASK AN AI ABOUT THIS

Let your preferred AI explain this MCP server

-  Ask ChatGPT 
-  Ask Claude 
-  Ask Perplexity 
-  Ask Gemini 
-  Ask Grok 

READY TO CONNECT

# Customer Acquisition Cost Engine is live on Vinkius Cloud.

---

Get your connection token, paste it into your AI agent, and  
start building. No SDK. No deployment. Just results.

**Start at [cloud.vinkius.com](https://cloud.vinkius.com) →**

[vinkius.com](https://vinkius.com) · [support@vinkius.com](mailto:support@vinkius.com)

INDEPENDENT PLATFORM DISCLAIMER

Vinkius is an independent platform and is not affiliated with, endorsed by, sponsored by, verified by, or otherwise authorized by Customer Acquisition Cost Engine. All third-party trademarks, logos, and brand names are the property of their respective owners. Their use in this document is strictly for informational purposes to identify service compatibility and interoperability.

DOCUMENT INFORMATION

|            |                                      |
|------------|--------------------------------------|
| Generated  | September 2026                       |
| MCP Server | Customer Acquisition Cost Engine MCP |
| Server ID  | 01a0a268-9264-73b6-a234-9a2b30b5563e |
| Platform   | Vinkius Cloud for AI Agents          |
| Endpoint   | https://edge.vinkius.com/{token}/mcp |

LICENSE & USAGE

This document is generated automatically by the Vinkius PDF Engine. Content reflects the MCP server configuration at the time of generation and may change as updates are deployed. For the most current information, visit [vinkius.com/en/ai-agent-connect/customer-acquisition-cost-engine](https://vinkius.com/en/ai-agent-connect/customer-acquisition-cost-engine).