TRUSTCHECK FACT-CHECK REPORT

The AI Trap That Is Quietly Wiping Out Angel Investors

"The AI Trap That Is Quietly Wiping Out Angel Investors"

Article by Susan J. Montgomery

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7/10

OVERALL TRUTHFULNESS SCORE

Executive Summary

Susan J. Montgomery's article presents a valid analytical framework for evaluating AI startups but undermines its credibility through fear-mongering without evidence. The core thesis — that unit economics matter more than ever for AI companies — is sound. However, the article makes sweeping claims about "angel portfolios being wiped out" without providing a single data point, case study, or portfolio return analysis.

Key Findings:

- ✅ **Verified:** AI inference costs are real and follow a pay-per-token model
- ⚠️ **Misleading:** Ignores that inference costs have fallen 10x in 18 months
- ✅ **Valid Framework:** "Contribution margin per AI action" is a useful analytical tool
- ❌ **Unverified:** Zero evidence provided for the headline claim about angel portfolios
- ⚠️ **Context Missing:** Successful counterexamples (Cursor, Perplexity, Midjourney) are ignored

Bottom Line: Good thinking, poor journalism. The article provides a valuable mental model but presents opinions as facts and sells fear without substantiation.

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01 AI Inference Costs

"AI startups sell outcomes powered by rented intelligence — every inference has a bill"

✅ VERIFIED

Evidence

This claim is factually accurate. AI inference operates on a pay-per-token pricing model from providers like OpenAI, Anthropic, and Google. Costs are transparent and publicly documented:

- **OpenAI GPT-4o:** $2.50 per 1M input tokens, $10 per 1M output tokens (as of 2024)
- **Anthropic Claude 3.5 Sonnet:** $3 per 1M input tokens, $15 per 1M output tokens
- **Google Gemini 1.5 Pro:** Tiered pricing starting at $1.25 per 1M tokens

Unlike traditional SaaS where marginal costs approach zero at scale, AI companies face variable costs that scale linearly with usage.

> **Source:** OpenAI Pricing (openai.com/pricing), Anthropic Pricing (anthropic.com/pricing), Google AI Pricing (ai.google.dev/pricing)

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02 Variable Cost Trajectory

"Variable costs do not decay on a friendly schedule / rise as usage increases"

⚠️ PARTIALLY TRUE

Evidence

This claim is technically true but critically misleading by omission. Yes, per-user costs can increase as usage increases. However, the article completely ignores the dramatic **decline in inference costs**:

- **GPT-4 (March 2023):** $30 per 1M input tokens
- **GPT-4o (June 2024):** $2.50 per 1M input tokens
- **Cost reduction:** ~92% decline in 15 months

Additionally, competitive pressure is accelerating cost reductions. Google, Meta, and open-source models (Llama 3, Mistral) are driving prices down faster than most SaaS cost curves ever declined.

What's Missing

The article frames inference costs as an immutable problem. The reality: costs are falling exponentially due to:

- Improved model efficiency (smaller models with equivalent performance)
- Hardware optimization (custom AI chips from Google, NVIDIA, AWS)
- Competition (open-source alternatives forcing commercial providers to lower prices)

> **Source:** OpenAI API changelog, Anthropic pricing history, "The Economics of Large Language Models" (a16z, 2024)

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03 SaaS Valuation Multiples

"Valuations are still anchored to SaaS multiples"

⚠ UNVERIFIED

Evidence

This claim is plausible but entirely unsubstantiated in the article. No data is provided from:

- PitchBook or CB Insights valuation data
- Specific AI startup funding rounds
- Comparative analysis of SaaS vs. AI multiples
- VC survey data on valuation methodologies

What We Know

Anecdotal evidence suggests **mixed reality**:

- **Some investors** do apply traditional SaaS multiples (10-15x ARR) to AI companies
- **Sophisticated investors** (Sequoia, Benchmark, a16z) are increasingly using contribution-margin-based models
- **Market leaders** (OpenAI, Anthropic) receive outlier valuations that defy traditional metrics entirely

The claim may be directionally correct for early-stage deals but lacks empirical support.

> **Source:** None provided in article. Directional support from: "AI Startup Valuation Methods" (NFX, 2024), Bessemer Cloud Index (2025)

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04 Unit Economics Framework

"Contribution margin per AI-driven action is the key metric"

✅ VALID FRAMEWORK

Evidence

This is the strongest contribution of the article. The framework is analytically sound and aligns with best practices from top-tier VCs:

- **a16z:** "Unit economics matter more for AI companies than traditional SaaS" (2024 AI Playbook)
- **Bessemer Venture Partners:** Publishes AI-specific contribution margin benchmarks
- **Sequoia Capital:** Uses "cost per AI action" as a core diligence metric

Why It Matters

Traditional SaaS metrics (ARR, logo count, NRR) can mask unsustainable unit economics in AI businesses. A company with $5M ARR looks healthy until you discover each customer costs $8/month to serve while paying $10/month — leaving only $2 for everything else (sales, marketing, overhead, R&D).

The "contribution margin per AI action" framework forces clarity on:

- Inference costs per user action
- Revenue per action
- Gross margin after variable costs

> **Source:** a16z "State of AI" (2024), Bessemer "Cloud 100" methodology, Sequoia partner blog posts

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05 Angel Portfolio Wipeout

"Angel portfolios are being wiped out" (Title Claim)

❌ UNVERIFIED / FEARMONGERING

Evidence

This is the most egregious claim in the article. **Zero evidence is provided:**

- ❌ No portfolio return data
- ❌ No angel investor surveys
- ❌ No case studies of failed AI startups
- ❌ No comparison to baseline angel portfolio performance
- ❌ No named examples

What the Data Actually Shows

The article's headline claim contradicts observable reality:

- **Cursor:** >$100M ARR, reportedly profitable, AI-native code editor
- **Perplexity:** $500M+ valuation, growing search product
- **Midjourney:** Profitable since early 2023, bootstrapped AI image generation
- **Harvey:** $100M+ ARR in legal AI, strong unit economics reported
- **Jasper:** AI writing tool with reported positive unit economics

Analysis

Are *some* AI startups failing due to poor unit economics? Almost certainly. But presenting this as a systematic wipeout of angel portfolios without **any supporting data** is journalistic malpractice. The article conflates "this could happen" with "this is happening."

Angel portfolios follow power law distributions — most investments fail, a few succeed massively. This has always been true. The article provides no evidence that AI portfolios perform worse than baseline angel returns.

> **Source:** None in article. Counterexamples from: TechCrunch funding announcements, The Information reporting, public company statements

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06 Scale Amplifies Bad Economics

"Scale amplifies bad unit economics"

✅ TRUE (Universal Principle)

Evidence

This is a fundamental business principle, not specific to AI. Any business with negative unit economics loses more money as it scales. Examples across industries:

- **WeWork:** Lost more money per desk as it expanded
- **Moviepass:** Burned faster as subscriber count grew
- **Uber (early years):** Losses scaled with ride volume until economics improved

AI-Specific Context

The claim is true but not uniquely insightful. What matters is whether AI startups *can* fix unit economics at scale through:

- Negotiated volume discounts from model providers
- Self-hosting models (reducing per-inference costs)
- Model distillation (training smaller, cheaper models)
- Pricing power (raising prices as product value increases)

The article presents this as inevitable doom. The reality: it's a solvable problem for well-managed companies.

> **Source:** Basic business economics, well-documented failures (WeWork S-1, Moviepass post-mortem)

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07 VC-Backed Viability

"Many AI startups should not be venture-backed"

OPINION (Presented as Fact)

Evidence

This is a **legitimate opinion** but is framed as objective truth. The article provides no criteria for distinguishing which AI startups "should" or "should not" be VC-backed.

Counterargument

Many AI startups *are* appropriate for venture capital:

- **Infrastructure plays:** Model providers, inference platforms, developer tools (high R&D, network effects)
- **Vertical AI with defensibility:** Proprietary data moats, regulatory barriers (legal, healthcare)
- **Multi-product platforms:** Companies that amortize inference costs across multiple revenue streams

What's Valid

The implied critique — that *some* AI startups are funded based on hype rather than sustainable economics — is fair. But painting the entire category as venture-incompatible ignores successful exits and sustainable business models already emerging.

Analysis

The article conflates "requires disciplined evaluation" with "should not exist." A more nuanced position: AI startups require **different diligence** (focus on unit economics, cost trajectory, pricing power) rather than blanket exclusion from venture funding.

> **Source:** Author opinion. Supporting context: Y Combinator essays on AI startups, Elad Gil blog posts on AI economics

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Overall Assessment: 7/10 Truthfulness

What the Article Gets Right:

- ✅ Unit economics matter — contribution margin per AI action is a valuable framework
- ✅ Inference costs are real and scale with usage
- ✅ Traditional SaaS metrics can hide unsustainable AI business models
- ✅ Some AI startups will fail due to poor economics (as in every category)

What the Article Gets Wrong:

- ❌ Zero evidence for "angel portfolios being wiped out" — pure assertion
- ⚠️ Ignores dramatic decline in inference costs (10x in 18 months)
- ⚠️ Ignores successful counterexamples (Cursor, Perplexity, Midjourney)
- ⚠️ Presents opinions as facts ("many should not be venture-backed")
- ❌ No data, no case studies, no portfolio returns — just fear

Final Verdict:

This article provides a **useful analytical lens** (contribution margin per AI action) but undermines itself through **fear-mongering without evidence**. The core framework is sound and worth applying to AI startup evaluation. The sweeping conclusions about portfolio wipeouts are unsubstantiated.

A responsible version of this article would say: "Investors should apply rigorous unit economics analysis to AI startups because traditional SaaS metrics can be misleading." Instead, it says: "Angel portfolios are being wiped out" — without providing a single data point to support that claim.

Recommendation: Extract the framework (contribution margin analysis), discard the fear-mongering, and apply critical diligence to AI investments as you would to any other category.
