

Executive Briefing: The AI Volatility Tax

Independent Economic Risk Assessment for SaaS Leadership

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The Thesis: R&D is No Longer a Fixed Cost

The Shift

For the last decade, SaaS R&D was a fixed cost function. You hired engineers, you shipped code, you paid salaries. Margins were predictable. **Generative AI has broken this physics.**

The traditional model of software economics—where infrastructure scaled predictably with revenue—has been fundamentally disrupted. What was once linear is now exponential.

The Risk

AI models introduce **variable inference costs** that behave like unpriced financial derivatives. Every feature you ship now carries an ongoing "tax" on Gross Margin.

- **The Danger:** Engineering velocity often scales costs 3x faster than revenue
- **The Result:** Silent EBITDA compression and valuation drag

Understanding the Volatility Tax

The AI Volatility Tax manifests as unpredictable, usage-dependent costs that erode gross margins without corresponding revenue growth. Unlike traditional software infrastructure, AI inference costs scale with customer behavior, not just customer count.

Variable Cost Structure

Token-based pricing creates exponential cost exposure as users engage more deeply with AI features

Margin Compression

Gross margins deteriorate silently as AI usage patterns exceed financial modeling assumptions

Valuation Impact

Public markets discount unpredictable unit economics, creating immediate enterprise value destruction

Is Your Organization Exposed?

If you answer "No" to any of these questions, you are carrying unpriced risk that threatens both near-term performance and long-term valuation.

Margin Visibility

Can you isolate the exact gross margin impact of your AI features separate from general cloud spend? Most finance teams cannot disaggregate AI costs from traditional infrastructure.

Kill Criteria

Do you have a board-approved protocol for depreciating AI features that fail unit economic yield tests? The absence of sunset criteria creates permanent drag.

Volatility Modeling

Does your roadmap account for "usage spikes" that could break P&L covenants? Unexpected adoption can trigger covenant violations.

Fiduciary Link

Can the CPO explain how the current AI roadmap compounds Enterprise Value, not just technical capability? Product decisions must defend shareholder value creation.

Restoring Economic Leverage

A systematic framework for converting AI from a margin liability into a defensible competitive advantage through economic discipline.



Audit

The AI Margin Autopsy

A forensic teardown of unit economics. We identify exactly where "smart" features are destroying value through rigorous attribution modeling and cost allocation.



Govern

Q-PEP Protocols

Shift from "Agile" to "Economic" governance. Roadmaps must compete for capital based on Yield, not Velocity. Every initiative faces economic hurdle rates.



Subtract

Governance of Subtraction

The highest-ROI decision is often deleting code. We institutionalize the depreciation of low-yield assets through systematic portfolio pruning.

The Strategic Imperative

The companies that will dominate the next decade are not those that ship the most AI features. They are the ones that **systematically optimize for economic yield per innovation dollar**.

This requires a fundamental shift in governance: from velocity-oriented product management to capital-efficient innovation. The Board's fiduciary responsibility now extends directly into the product roadmap.

Organizations that fail to adopt economic governance will face three compounding penalties: margin compression, valuation discount, and strategic inflexibility when capital markets tighten.



3x

Cost Growth vs Revenue

Typical multiple by which AI feature costs outpace revenue growth without economic discipline

15%

Margin Compression

Average gross margin deterioration in SaaS companies with unmanaged AI portfolios

30%

Valuation Discount

Multiple compression applied by public markets to companies with unpredictable unit economics

Richard Ewing, Principal Product Economist

Independent advisory for Boards, CEOs, and Investors. Specializing in AI economic risk and capital-efficient product strategy.

Richard brings a unique synthesis of product leadership, financial modeling, and governance expertise to help executive teams navigate the economic complexities of generative AI. His work focuses on restoring predictable unit economics in an era of variable computational costs.

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