



Technology Risk Assessment Scorecard

**A Framework for Evaluating Cloud Infrastructure
in Private Equity Deals**

By Mark Richman

Overview

This scorecard provides a systematic framework for evaluating technology risk in PE deals and translating technical findings into specific EBITDA multiple adjustments. Use the Quick Assessment for pre-LOI screening (5 minutes) and the Comprehensive Assessment for detailed diligence (30-60 minutes).

Quick Assessment (Pre-LOI Screening)

Complete this assessment before signing the LOI to identify deal-killers. Total time: 5 minutes.

Dimension 1: Infrastructure Efficiency

Score 0-1 (Proceed): Cloud spend at or below industry benchmark, basic cost management in place

Score 2-3 (Caution): Cloud spend 20-50% above benchmark, reactive cost management or none

Score 4-5 (Walk Away): Cloud spend 50%+ above benchmark with negative unit economics

Your Score: _____

Dimension 2: Technical Debt

Score 0-1 (Proceed): Modern architecture, minimal debt, remediation <\$500K and <6 months

Score 2-3 (Caution): Moderate debt, remediation \$500K-\$2M and 6-18 months

Score 4-5 (Walk Away): Severe debt exceeding 25% of deal value or >24 months remediation

Your Score: _____

Dimension 3: Security and Compliance

Score 0-1 (Proceed): Required certifications current, no major incidents, good security posture

Score 2-3 (Caution): Some gaps requiring remediation, past incidents disclosed and remediated

Score 4-5 (Walk Away): Active breaches, undisclosed incidents, missing required compliance

Your Score: _____

Quick Assessment Decision Matrix

Total Score	Recommendation
0-3	Proceed to detailed diligence with standard terms
4-6	Proceed with caution; plan for 10-20% valuation adjustment
7-9	Serious walk-away consideration; if proceeding, require 20-30% adjustment
10-15	Walk away—technical issues threaten business viability

Your Total Score: _____

Comprehensive Assessment (Detailed Diligence)

Use this during full technical diligence (post-LOI) to determine precise valuation adjustments. Total time: 30-60 minutes.

Dimension 1: Infrastructure Efficiency and Cost Management

Evaluates how cloud spend compares to industry benchmarks and the maturity of cost management practices.

Score	Description	Multiple Impact
0	At or below benchmark, strong FinOps practices, 70%+ commitment coverage, comprehensive tagging	+0.1x
1	10-20% above benchmark, basic cost management, some visibility	0x
2	20-40% above benchmark, reactive management, limited visibility	-0.1x
3	40-60% above benchmark, no cost management practices	-0.2x
4	60-100% above benchmark, no visibility or accountability	-0.3x
5	>100% above benchmark, negative unit economics	-0.5x

Your Score: _____ | Multiple Impact: _____

Key Evidence:

- Cloud spend as % of revenue: _____
- Industry benchmark: _____
- Commitment coverage: _____
- Tagging coverage: _____

Dimension 2: Technical Debt and Architecture Quality

Assesses the accumulated cost of suboptimal technical decisions.

Score	Description	Multiple Impact
0	Modern, well-architected infrastructure appropriate for scale, minimal debt, 80%+ infrastructure as code	+0.1x
1	Generally sound architecture, minor debt <\$500K and <6 months	0x
2	Moderate debt \$500K-\$1M requiring 6-12 months	-0.1x
3	Significant debt \$1M-\$2M requiring 12-18 months, clear over-engineering	-0.3x
4	Severe debt \$2M-\$5M requiring 18-24 months	-0.5x
5	Technical debt >25% of deal value or >24 months remediation	-0.8x

Your Score: _____ | Multiple Impact: _____

Key Evidence:

- Estimated remediation cost: \$_____
- Estimated timeline: _____ months
- Over-engineering indicators (Kubernetes for <10 services, etc.): _____

Dimension 3: Security and Compliance Posture

Evaluates risk exposure from security gaps and compliance failures.

Score	Description	Multiple Impact
0	Excellent security, all required certifications, proactive program, no incidents 24+ months	+0.1x
1	Good security, minor gaps, properly handled incidents	0x
2	Adequate security, some gaps requiring remediation	-0.1x
3	Significant gaps requiring \$500K-\$1M remediation, past incidents not fully disclosed	-0.3x
4	Major failures, fundamental controls missing, undisclosed breaches	-0.5x
5	Catastrophic: active breaches, regulatory investigations, inherited liability >\$10M	-1.0x

Your Score: _____ | Multiple Impact: _____

Key Evidence:

- Required certifications: _____
- Security incidents (24 months): _____
- Estimated remediation cost: \$_____

Dimension 4: Integration Complexity

Matters most for buy-and-build strategies where the target must integrate with existing portfolio companies.

Score	Description	Multiple Impact
0	Same cloud provider, compatible technology stack, 3-6 month integration	0x
1	Same provider, mostly compatible stack, 6-9 months	0x
2	Same provider, different stack, 9-12 months	-0.1x
3	Different cloud provider, compatible stack, 12-18 months	-0.2x
4	Different provider, incompatible stack, 18-24 months	-0.3x
5	Fundamentally incompatible, integration cost exceeds synergy value	-0.4x

Your Score: _____ | **Multiple Impact:** _____

Key Evidence:

- Target cloud provider: _____
- Portfolio cloud provider(s): _____
- Technology stack compatibility: _____
- Estimated integration timeline: _____ months

Dimension 5: Scalability and Growth Readiness

Assesses whether infrastructure can support the growth assumptions in your investment thesis.

Score	Description	Multiple Impact
0	Excellent scalability supporting 5x+ growth without major investment	+0.1x
1	Good scalability supporting 3-5x growth with optimization	0x
2	Adequate scalability supporting 2-3x growth with moderate investment	-0.1x
3	Constrained scalability supporting 1.5-2x growth, significant investment required	-0.2x
4	Severe constraints at 80%+ capacity, major architectural changes required	-0.3x
5	At capacity limits, growth constrained, complete re-architecture required	-0.3x

Your Score: _____ | Multiple Impact: _____

Key Evidence:

- Current capacity utilization: _____%
- Growth projection: _____x over _____ years
- Binding constraint: _____

Results Summary

Total Risk Score

Dimension	Score	Multiple Impact
Infrastructure Efficiency	_____	_____
Technical Debt	_____	_____
Security & Compliance	_____	_____
Integration Complexity	_____	_____
Scalability	_____	_____
TOTAL	_____	_____

Go/No-Go Recommendation

- Score 0-5:** Minor technical issues manageable through normal operations—proceed with standard terms
- Score 6-10:** Caution warranted; include technical findings in 100-day plan, consider 5-10% valuation adjustment
- Score 11-15:** Material technical risk requiring 10-20% price adjustment or structural protections (escrows, earn-outs)
- Score 16-20:** Serious walk-away consideration; if proceeding, require 20-30% adjustment plus strong protections
- Score 21-25:** Technical issues threaten business viability—walk away

Your Recommendation: _____

Valuation Impact Calculation

Base EBITDA Multiple: _____x

Total Multiple Adjustment: _____x

Adjusted Multiple: _____x

EBITDA: \$_____M

Base Enterprise Value: \$_____M

Adjusted Enterprise Value: \$_____M

Valuation Impact: \$_____M

Cloud Spend Benchmarks by Industry

Use these benchmarks to assess infrastructure efficiency (Dimension 1).

Industry	Business Model	Stage	Cloud Spend % of Revenue
SaaS	SaaS	Early (<\$10M ARR)	8-15%
SaaS	SaaS	Growth (\$10M-\$50M)	4-8%
SaaS	SaaS	Scale (>\$50M)	2-5%
E-commerce	Marketplace	All	3-6% of GMV
E-commerce	D2C	All	1-3%
Financial Services	Fintech	All	5-10%
Financial Services	Payments	All	2-4% of volume
Healthcare	Healthcare SaaS	All	6-12%
Healthcare	Telemedicine	All	8-15%
Media	Streaming	All	15-25%
Media	User-Generated	All	10-20%
Enterprise B2B	Cloud-Native	All	3-7%
Enterprise B2B	Hybrid/Legacy	All	8-15%

Deal Structure Recommendations by Issue Type

Different technical issues call for different structural approaches:

Quantifiable Waste (Clear Remediation): Direct purchase price adjustment

- Example: \$1M annual waste = \$10M price reduction at 10x EBITDA

Security Gaps (Uncertain Scope): Escrow covering estimated remediation plus 50% buffer

- Example: \$500K estimated remediation = \$750K escrow for 18 months

Technical Debt (Constraining Growth): Earn-outs tied to performance targets

- Example: 20% of consideration contingent on achieving growth targets post-remediation

Undisclosed Issues: Strong reps and warranties with indemnification

- Example: 24-month survival period, 15-20% indemnification cap

Complex Commitments: Working capital adjustment

- Example: Reflect prepaid capacity and unused commitments in working capital calculation

Next Steps

For Pre-LOI Screening

Complete Quick Assessment. If score >7, reconsider proceeding.

For Due Diligence

Complete Comprehensive Assessment with supporting evidence.

For Negotiation

Use total multiple adjustment to justify valuation changes.

For Deal Structure

Apply appropriate structural protections based on issue types.

For Post-Close

Use dimension scores to prioritize remediation efforts.

About the Author



Mark A. Richman helps mid-market private equity portfolio companies and high-growth technology firms turn cloud infrastructure into competitive advantage—optimizing for scale, cost, and business outcomes.

As a Principal Solutions Architect at AWS operating in a Field CTO capacity, he advises executives on cloud economics, technical due diligence, and infrastructure transformation. His focus: helping companies navigate the critical shift from MVP to scale without burning capital on cloud waste.

With 30+ years across software engineering, product leadership, and executive consulting, Mark has led cloud migrations, optimized multi-million dollar cloud environments, and helped PE-backed companies unlock 30-50% savings while improving performance. He translates technical infrastructure decisions into financial outcomes that matter to investors and operators.

Mark specializes in cloud economics for private equity—one of the few advisors focused on this specific intersection. He translates cloud infrastructure findings into EBITDA adjustments, valuation changes, and deal pricing decisions across the entire PE deal lifecycle from pre-LOI screening through exit preparation. His experience spans hundreds of PE-backed companies across SaaS, fintech, healthcare tech, and e-commerce, providing practical benchmarks for what's normal versus what's a red flag.

Mark is the author of *Cloud Economics for Private Equity*, a comprehensive 24-chapter guide covering the complete deal lifecycle. Unlike general FinOps books that teach operational practices, this book addresses PE-specific challenges: evaluating targets during diligence, translating technical findings into deal pricing, and optimizing portfolio companies for exit. The book is grounded in empirical research and interviews with PE professionals, providing practical benchmarks based on actual observed results.

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