



Penomic

INVESTMENT COMMITTEE DECISION BRIEF / RESEARCH DOSSIER

Lead this investment - or preserve capital for the next one?

Should the firm lead, follow, resize or decline a proposed investment when thesis fit, ownership, valuation, dilution, reserves, portfolio overlap and downside cases are resolved together?

Decision frame

PUBLIC STARTING POINT

Public materials indicate a private-capital investor focused on backing technology businesses across multiple stages.

PRIVATE KNOWLEDGE REQUIRED

valuation cases, return model, reserves and follow-on assumptions

REQUIRED WORK PRODUCT

An executive memo, committee pack or board-ready deck

EXECUTIVE ANSWER

The call to lead with conviction, follow on defined terms, resize the exposure or decline and preserve capacity changes when Illustrative Private-Capital Firm’s rules are applied.

Public materials indicate a private-capital investor focused on backing technology businesses across multiple stages. That establishes the outside-in case. It does not reveal Illustrative Private-Capital Firm’s thesis fit, target ownership, entry valuation, dilution tolerance, reserve strategy, portfolio overlap, downside thresholds or comparable internal decisions - the variables that determine whether to lead, follow, resize or decline.

01 Position sizing - ownership, dilution and reserve economics may support a different check size	02 Portfolio construction - concentration, overlap and follow-on capacity may change the preferred action	03 Committee control - assumptions, exceptions and decision authority remain visible in one approval record
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EXHIBIT 1 The management choice			
MANAGEMENT ACTION01 Lead with conviction Highest-conviction action; requires the full firm evidence set.	MANAGEMENT ACTION02 Follow on defined terms A controlled alternative when the evidence supports only partial commitment.	MANAGEMENT ACTION03 Resize the exposure A controlled alternative when the evidence supports only partial commitment.	MANAGEMENT ACTION04 Decline and preserve capacity Preserves capital or risk capacity when the case fails the firm test.

MANAGEMENT IMPLICATION	The investment committee can compare lead, follow, resize and decline, see what changes the recommendation and approve or override the action from one traceable record.
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RESEARCH BASE

Public evidence frames Illustrative Private-Capital Firm’s decision arena, but cannot determine the answer.

The outside-in research establishes what Illustrative Private-Capital Firm publicly does and which financial decision is worth testing. It cannot establish private definitions, current case facts or approval authority.

01 Multi-stage technology investment mandate	02 Active ownership and company-building model	03 Portfolio construction across themes and market cycles
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EXHIBIT 2 Public evidence reviewed			
PUBLIC EVIDENCE Source A Public materials indicate a multi-stage technology investment mandate and an active company-building model.		PUBLIC EVIDENCE Source B Public materials describe investment activity across early-stage and growth opportunities.	
PUBLIC EVIDENCE Source C Published perspectives emphasize technology-market shifts and long-term portfolio development.			

MANAGEMENT IMPLICATION	Treat every company-specific conclusion below as a hypothesis to validate - not as an audit finding.
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DECISION ARCHITECTURE

The committee must compare every viable action on one consistent firm basis.

Should the firm lead, follow, resize or decline a proposed investment when thesis fit, ownership, valuation, dilution, reserves, portfolio overlap and downside cases are resolved together?

01 Each alternative changes capital, risk or portfolio exposure differently.	02 The preferred action can change when one firm definition or constraint changes.	03 The accountable decision owner - not the model - retains approval and override authority.
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EXHIBIT 3 Alternatives to compare on one firm basis			
MANAGEMENT ACTION01 Lead with conviction Compare against the same definitions, approved evidence, scenarios and authority.	MANAGEMENT ACTION02 Follow on defined terms Compare against the same definitions, approved evidence, scenarios and authority.	MANAGEMENT ACTION03 Resize the exposure Compare against the same definitions, approved evidence, scenarios and authority.	MANAGEMENT ACTION04 Decline and preserve capacity Compare against the same definitions, approved evidence, scenarios and authority.

MANAGEMENT IMPLICATION	A useful system must show why one alternative dominates - and what evidence would reverse that conclusion.
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DECISION ECONOMICS

The missing evidence can change the action, structure or size.

The report separates decision logic from quantitative evidence. Missing values remain visibly unresolved rather than being estimated by the language model.

01 Every source number is replaced with an evidence token before model reasoning.	02 The model can arrange evidence tokens but cannot create a new financial value.	03 Only the evidence service restores approved values in the rendered report.
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EXHIBIT 4 Quantitative evidence still required			
EVIDENCE REQUIRED 01 Evidence required A investment-thesis fit and decision classification. No value is asserted until an approved source is connected.	EVIDENCE REQUIRED 02 Evidence required B cap table, security terms, ownership and dilution. No value is asserted until an approved source is connected.		
EVIDENCE REQUIRED 03 Evidence required C valuation cases, return model, reserves and follow-on assumptions. No value is asserted until an approved source is connected.	EVIDENCE REQUIRED 04 Evidence required D partner conviction, portfolio overlap, precedent and approval authority. No value is asserted until an approved source is connected.		

MANAGEMENT IMPLICATION	Until those sources are connected, the defensible output is a decision architecture and research agenda - not a fabricated valuation, forecast or return.
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KNOWLEDGE MAP

Firm definitions, rules, evidence and authority must resolve as one context map.

valuation cases, return model, reserves and follow-on assumptions is the selected knowledge priority. Penomic connects that meaning to the entities, instruments, calculations, evidence and authority used in the live decision.

01 Definitions establish what each financial concept means inside the firm.	02 Relationships show how entities, instruments, periods and exposures connect.	03 Rules, exceptions, precedent and authority determine what the system may recommend or do.
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EXHIBIT 5 Knowledge map to validate with domain experts			
FIRM DECISION CONTEXT One governed meaning Definitions, relationships, evidence and authority resolve together.	FIRM KNOWLEDGE 01 Definitions investment-thesis fit and decision classification	FIRM KNOWLEDGE 02 Calculations cap table, security terms, ownership and dilution	
	FIRM KNOWLEDGE 03 Policy and precedent valuation cases, return model, reserves and follow-on assumptions	FIRM KNOWLEDGE 04 Authority partner conviction, portfolio overlap, precedent and approval authority	

MANAGEMENT IMPLICATION	This layer is configured and maintained in Knowledge Architect; it is not handed over as a static taxonomy file.
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SCENARIO CHALLENGE

Base, downside, reverse and precedent tests show what changes the choice.

A public model can produce a persuasive market thesis and valuation range while recommending the wrong position size. It may support leading where Illustrative Private-Capital Firm’s ownership economics, reserve requirements or portfolio exposure favor a smaller investment - or support passing where the firm’s thesis and operating advantage justify conviction.

01 Base case - the approved definitions and current evidence support the central action.	02 Downside case - adverse assumptions expose the capital, risk or liquidity boundary.	03 Reverse case - the system identifies the smallest change that flips the preferred action.
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EXHIBIT 6 Challenge structure before values are loaded			
EVIDENCE REQUIRED01 Base case Approved evidence, current state and governing definitions.	EVIDENCE REQUIRED02 Downside Adverse but decision-relevant assumptions and constraints.		
EVIDENCE REQUIRED03 Reverse stress The threshold at which another alternative becomes preferred.	FIRM KNOWLEDGE04 Precedent check Comparable accepted and rejected cases tested on the same basis.		

MANAGEMENT IMPLICATION	The committee should be able to challenge the recommendation live without losing the evidence trail.
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AGENTIC WORKFLOW

Alex carries governed context from the question to the committee artifact.

Knowledge Architect captures the investment definitions, underwriting rules, return logic, exceptions and approval authority. Alex combines those rules with approved deal materials, cap table, valuation model and portfolio context in PenomicOS to compare ownership, dilution, return, reserve and downside scenarios, challenge the assumptions and produce an executive memo, committee pack or board-ready deck for human approval or override.

01 Knowledge Architect governs definitions, relationships, rules, exceptions and authority.	02 Alex orchestrates research, analysis, model challenge and presentation inside PenomicOS.	03 The same governed service is available through Penomic, API, MCP, A2A and approved agentic harnesses.
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EXHIBIT 7 One connected production path

01 MANAGEMENT ACTION 01 • Frame Resolve the decision, alternatives and governing firm meaning.	02 MANAGEMENT ACTION 02 • Analyze Load approved evidence and execute the financial model or scenario.	03 MANAGEMENT ACTION 03 • Challenge Test assumptions, precedent, downside and exceptions.	04 MANAGEMENT ACTION 04 • Produce An executive memo, committee pack or board-ready deck	05 MANAGEMENT ACTION 05 • Decide Human approval, override and permitted next action remain explicit.
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MANAGEMENT IMPLICATION

The output is not another chat response; it is a decision-ready model, memo or executive deck with its basis attached.

CONTROLS

Source, meaning, analysis and authority remain attached to every output.

The production workflow keeps evidence identity, definition versions, model assumptions, reviewer challenge and approval together from question to final artifact.

01 Source identity - every decisive fact resolves to an approved evidence object.	02 Semantic control - every operative definition has an owner, version and effective state.	03 Decision control - approval, exception and override remain with accountable professionals.
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EXHIBIT 8 Control points for production			
FIRM KNOWLEDGE01 Evidence Source, effective date, perimeter and permitted use.	FIRM KNOWLEDGE02 Meaning Definition version, relationship and governing rule.	FIRM KNOWLEDGE03 Analysis Model, assumptions, scenario and challenge record.	FIRM KNOWLEDGE04 Authority Reviewer, approver, exception and override.

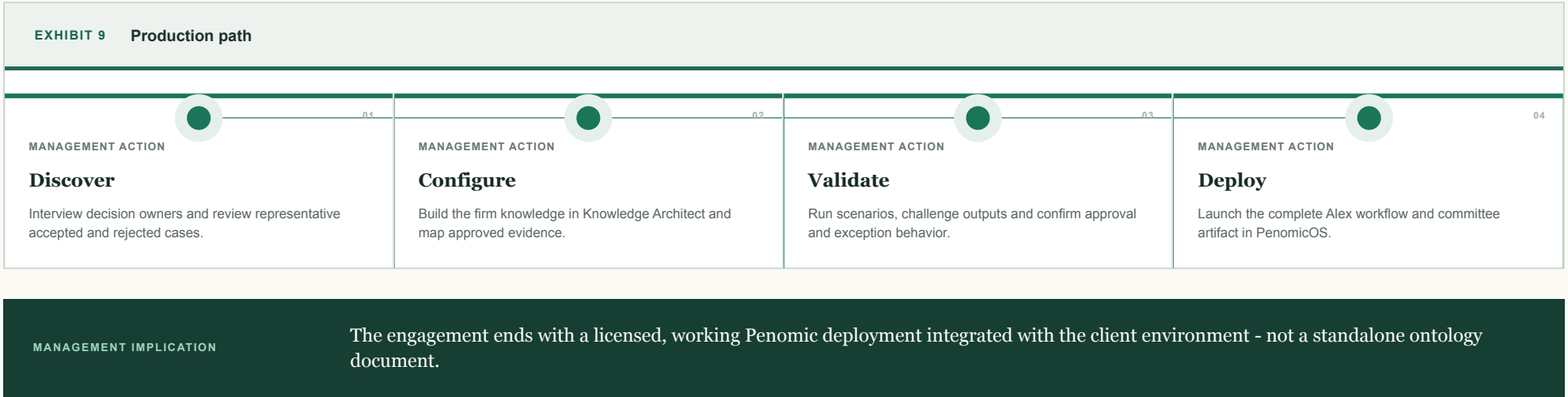
MANAGEMENT IMPLICATION	A reviewer can move from the headline conclusion to its exact source, definition and decision authority.
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PRODUCTION PLAN

The first financial mission moves from representative cases to production in four stages.

Put investment committee underwriting into production in 4 - 8 weeks: validate the decision logic against representative accepted and rejected cases, configure the firm's definitions and rules in Knowledge Architect, connect approved deal evidence and models, and deploy the complete Alex workflow and committee output in PenomicOS.

01	02	03
An underwriting model with ownership, dilution, return, reserve and downside scenarios	An executive memo, committee pack or board-ready deck	A governed Alex workflow with sources, challenge, approval and override



MANAGEMENT AGENDA

Management can now confirm the mission, evidence owners and first live output.

The next conversation is not a generic product demo. It is a working session to validate the decision boundary, inspect the evidence gap and choose the first production output.

01 Confirm whether “Investment committee underwriting” is consequential, repeatable and bounded enough for a first deployment.	02 Name the decision owner, the representative cases and the approved evidence sources.	03 Agree the first decision-room artifact: an executive memo, committee pack or board-ready deck.
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EXHIBIT 10 Decision requested from the sponsor			
MANAGEMENT ACTION 01 Mission Is this the decision where better firm context creates immediate operating value?		MANAGEMENT ACTION 02 Evidence Can the sponsor provide representative cases, models, working files and source owners?	
MANAGEMENT ACTION 03 Authority Who validates definitions, challenges outputs and approves production use?		MANAGEMENT ACTION 04 Output What must the first live workflow produce for management?	

MANAGEMENT IMPLICATION	If the answers are clear, Penomic can scope the production mission and return with the evidence request, deployment design and delivery plan.
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FROM RESEARCH TO PRODUCTION

Deploy one governed financial mission - not another disconnected AI pilot.

01 Discover Interview decision owners and inspect representative accepted and rejected cases.	02 Configure Build the firm knowledge in Knowledge Architect and map approved evidence and models.	03 Validate Run scenarios, challenge outputs and confirm approval, exception and override behavior.	04 Deploy Launch the complete Alex workflow and decision-room artifact in PenomicOS.
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PUBLIC RESEARCH LEDGER

S1	Visitor-supplied context Public materials indicate a multi-stage technology investment mandate and an active company-building model.
S2	Visitor-supplied context Public materials describe investment activity across early-stage and growth opportunities.
S3	Visitor-supplied context Published perspectives emphasize technology-market shifts and long-term portfolio development.

RECOMMENDED MANAGEMENT ACTION

Validate this as the first production mission.

Put investment committee underwriting into production in 4 - 8 weeks: validate the decision logic against representative accepted and rejected cases, configure the firm's definitions and rules in Knowledge Architect, connect approved deal evidence and models, and deploy the complete Alex workflow and committee output in PenomicOS.

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