

Board White Paper #1

Strategic Value Creation & Capital Allocation

A board-level perspective on selecting, governing, and scaling AI investments that create durable enterprise value

Prepared by Dr. Ori Marom
Managing Director, Segmentis B.V.

Board purpose	To support board discussion on how AI investments should be prioritized, funded, governed, and scaled in line with long-term strategic value creation.
Primary board question	Where should the organization place a small number of focused AI bets, and how should capital be allocated to ensure those bets strengthen the business rather than merely demonstrate technical capability?
Intended audience	Supervisory board members, non-executive directors, executive board members, and senior leaders responsible for AI-enabled transformation.

Executive summary

AI is becoming a material capital allocation issue for boards. The central challenge is no longer whether AI can improve individual tasks or processes, but whether AI investments are being directed toward the decisions, capabilities, and differentiators that determine long-term enterprise value.

The paper argues that boards should treat AI as a portfolio of focused strategic bets. Each bet should have a clear link to value creation, a credible path to scale, accountable ownership, and explicit criteria for continuation, redirection, or termination. This approach helps avoid the common pattern of successful pilots that fail to translate into enterprise advantage.

For board members, the practical implication is clear: AI governance must move beyond enthusiasm, risk awareness, or technology oversight. It should become part of regular strategic dialogue on ambition, prioritization, capital discipline, organizational learning, and competitive positioning.

1. Board context and relevance

This white paper addresses the board's responsibility to ensure that AI investments are purposeful, disciplined, and linked to long-term value creation. It focuses on deciding where AI matters strategically, how much capital it deserves, and how early learning should translate into sustainable advantage rather than isolated technical success.

This challenge has become more acute as many organizations accelerate AI investment while struggling to convert experimentation into lasting business impact. Business reporting and large-scale surveys consistently point to a widening gap between AI ambition and realized outcomes. One widely cited finding is that a very high share of AI pilots fail to scale⁴.

For boards, the implication is that AI should be governed first as a question of strategic value creation and capital allocation, and only second as a question of technology deployment.

2. Board questions for early discussion

Boards considering AI investment often ask:

1. If we could fund only a small number of AI initiatives over the next two years, which would genuinely matter, and why?
2. Which core business decisions do we expect AI to materially change, rather than merely optimize?
3. Where are we investing out of strategic conviction, and where out of fear of missing out?
4. Which AI initiatives would not survive the same capital discipline applied to other strategic investments we committed to in the past?
5. How will we recognize early on that an AI initiative is strengthening the business rather than merely demonstrating a technical promise?

These are not primarily technology questions. They are questions of strategic focus, prioritization, and disciplined capital allocation. Technology leadership should inform the discussion, but ultimate responsibility for strategic direction and investment discipline rests with the board and executive leadership.

3. How AI creates durable value

Independent research and sustained business reporting consistently show that most AI initiatives fail to scale beyond pilots^{3,4,5,9}. This failure is rarely caused by technical limitations. More often, organizations struggle because early AI efforts are not anchored in decisions that materially affect performance.

AI creates durable value when it changes how important decisions are made, how resources are allocated, or how the organization differentiates itself. Improvements in speed, accuracy, or automation may be valuable, but they are not sufficient on their own. Evidence from executive surveys and industry analysis suggests that AI initiatives embedded directly into core decision-making tend to outperform isolated efficiency projects and local optimizations^{1,2,5}.

This explains why many pilots appear successful yet lead nowhere. They demonstrate capability, but they do not shape outcomes that matter at enterprise level. Boards that fail to address this gap risk accumulating activity without advantage.

Segmentis therefore approaches AI first as a **capital allocation challenge**. The central board question is not whether AI works, but whether it strengthens the business in ways that endure.

4. Setting ambition and scope

As widely evidenced in enterprise surveys and business analysis, organizations declaring broad, enterprise-wide AI ambitions early tend to diffuse decision-making, fragment effort and dilute capital^{4,5}. By contrast, organizations that define a small number of strategically meaningful objectives achieve stronger and more sustainable results^{4,6,9}.

Ambition defines *what must change*. Scope defines *how learning is staged*. Overly cautious ambition fails to mobilize the organization. Overly expansive ambition disperses attention and weakens accountability. Poor scope turns ambition into chaos. The board's role is to hold ambition, scope and discipline simultaneously.

This is where **focused bets** matter. A focused bet is not a pilot run for curiosity's sake. It has a credible path to scale, clear executive ownership, and an explicit link to long-term business impact. Well-defined

scope ensures that early efforts remain narrow enough to generate meaningful learning, while still being connected to broader strategic ambition. Focused bets allow organizations to learn quickly without falling into indiscriminate experimentation.

5. Conditions for successful scaling

Empirical studies on digital transformation, reinforced by real-world experience, show that early learning improves long-term outcomes only when structured and cumulative^{4,9}. Uncoordinated pilots, by contrast, often create the illusion of progress while exhausting organizational attention and capital.

Boards should encourage iteration while insisting that learning converges. Early AI initiatives should test assumptions about scalability, economics, and organizational readiness, not only technical feasibility. When pilots multiply without sharpening strategic direction, iteration has lost its purpose. At that point, leadership should pause, reassess, and redirect effort toward fewer, more consequential priorities.

Segmentis recommends a disciplined dialogue between ambition and evidence. Learning should refine direction, not proliferate initiatives. Over time, capital allocation should become more selective, not more diffuse.

6. Indicators that the board is on the right path

Boards know they have set the right direction when AI discussions shift from enthusiasm or anxiety to deliberate choice. Capital allocation becomes intentional. Initiatives converge rather than multiply. Decisions to scale, stop, or redirect AI efforts are made with confidence rather than defensiveness.

Business reporting and longitudinal studies suggest that organizations achieving this shift outperform peers in both return on AI investment and strategic coherence^{2,3,4,9}. AI becomes a managed portfolio of **focused bets** rather than a collection of disconnected experiments.

At that point, AI is no longer a separate topic. It becomes an integral part of how strategy is executed.

7. Board implications

Board action	Implication for AI investment governance
Ask for strategic clarity	Each AI initiative should be linked to a material business decision, capability, or source of differentiation before capital is approved.
Limit strategic AI bets	Fewer, better-defined initiatives create stronger accountability and clearer learning than broad experimentation.
Require scale criteria	Pilots should include explicit assumptions about economics, adoption, operating model fit, governance, and future investment needs.
Use stop-or-redirect decisions	Ending or narrowing an AI initiative should be treated as evidence of capital discipline, not as failure.
Preserve strategic identity	AI should strengthen the organization’s distinctive position, not push it toward a basis of competition where it lacks structural advantage.

Taken together, these actions help convert AI oversight from a periodic technology update into an ongoing discipline of strategic choice and capital allocation.

8. Case study: When better models began to weaken judgment

A mid-sized maritime insurance company introduced AI to support actuarial decision-making. Early results were strong: improved loss ratios, faster pricing, and greater consistency across underwriting teams. Encouraged by these outcomes, the CTO, who recently came from the Media and Entertainment sector, proposed expanding AI deeper into underwriting operations.

The board was not convinced.

The concern was not technical performance. The models appeared to work remarkably well. The concern was strategic. The company operated in a niche market where relationships, sector expertise, and trusted judgment mattered as much as pricing precision. Several board members began questioning whether the company was slowly shifting competition onto terrain dominated by scale, computing power, and investment capacity.

One external board member, a maritime financier, framed the issue directly. If AI became the company's central strategic pillar, why would larger global competitors with deeper pockets not eventually dominate the same space? The firm's advantage had never been superior technology budgets. It had been eight decades of maritime industry know-how, long-standing client relationships based on hard-earned trust, and the ability to exercise careful judgment in difficult cases, including occasional severe loss incidents.

The board member's concern was that AI might improve technical performance while gradually eroding the very judgment, relationships, and sector understanding that defined the company's competitive identity.

The CEO intervened. She immediately reframed the increasingly heated discussion. The question was not whether AI should be used, but **which decisions defined the company's competitive identity**. The board agreed to focus investment on a small number of strategically critical actuarial decisions. For these, AI had to remain explainable, reviewable, and subordinate to accountable human judgment.

Capital was redirected away from expanding pilots and toward a limited set of focused bets, supported by shared decision frameworks and clear ownership. AI adoption slowed in breadth but deepened in impact.

Over time, AI strengthened rather than diluted the company's strategic position.

Selected references

1. Brynjolfsson, E., Mitchell, T., & Rock, D. (2018). *What can machines learn, and what does it mean for occupations and the economy?* AEA Papers and Proceedings, 108, 43–47.
2. Bughin, J., Seong, J., Manyika, J., Chui, M., & Joshi, R. (2018). *Notes from the AI frontier: modeling the impact of AI on the world economy*. McKinsey Global Institute Discussion Paper.
3. McKinsey Global Institute (2025). *The state of AI in 2025: agents, innovation, and transformation*. McKinsey & Company.
4. MIT Project NANDA. (2025). *The GenAI divide: state of AI in business 2025*. Massachusetts Institute of Technology.
5. MIT Sloan Management Review (2020). *Expanding AI's impact with organizational learning*. MIT Sloan Management Review, Vol. 61, No. 4.
6. OECD (2025). *AI Adoption by Small and Medium-Sized Enterprises*. OECD discussion paper.
7. Tamburri, D., Tonnarelli, M., & van Hillegersberg, J. (2025). *Challenges in adoption and scaling of AI: a case study at a high-tech firm and research roadmap*.

8. Westerman, G., Bonnet, D., & McAfee, A. (2014). *Leading digital: turning technology into business transformation*. Harvard Business Review Press.
9. World Economic Forum (2026). *Where is AI moving beyond experimentation? 6 leaders on what's actually scaling*. World Economic Forum White Paper.