

Artificial Intelligence as a Transformer of Dynamic Capability: The Potential and Illusion of Strategic Agility

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ABSTRACT

This paper examines the dual role of artificial intelligence (AI) as both a transformer and a corruptor of dynamic capability processes. Drawing on Teece's (2007) framework of sensing, seizing, and reconfiguring, we argue that AI fundamentally reshapes how organizations execute strategic processes — not merely accelerating them, but altering who can act, how quickly, and with what degree of rigor. While AI reduces technical barriers in seizing, alleviates cognitive burden in sensing, and lowers resistance in reconfiguring, the same ease generates a new form of failure: AI-induced performative agility, a condition where organizations appear agile while their agility rests on superficial foundations. We trace this illusion across all three processes: epistemic overconfidence in sensing, accelerated but misguided decisions in seizing, and legitimacy-cloaked but shallow implementations in reconfiguring. The paper contributes to the literature by identifying the mechanisms through which AI-generated outputs — always appearing legitimate — can mask strategic dysfunction, and by proposing that organizational learning culture and institutional maturity serve as critical moderators determining whether AI-augmented dynamic capability becomes substantive or merely performative.

Keywords: *Artificial Intelligence; Dynamic Capability; Strategic Agility; Performative Agility; Organizational Learning*

1. INTRODUCTION

Every organization today operates in an environment that is dynamic and difficult to predict. Such conditions demand adaptive capacity that far exceeds the organizational baseline of rigid annual planning. Companies that fail to adjust quickly enough fall behind, and some disappear from the market entirely, whether due to competitive pressure or operational failure. To explain how organizations survive under such pressure, the strategy literature relies on the theory of dynamic capability. Teece, Pisano, and Shuen (1997) sought to make sense of this phenomenon — how organizational continuity is sustained when conditions are highly dynamic. They argued that enduring competitive advantage does not stem from resources that organizations happen to possess, but rather from their ability to reconfigure their competencies as the environment changes. One decade after the original formulation, Teece (2007) specified dynamic capability into three interrelated processes: sensing is the work of detecting opportunities and threats; seizing is the work of capturing opportunities through decisions and resource mobilization; and reconfiguring is the work of rearranging assets so that the organization remains aligned with new conditions.

That framework endured for nearly two decades on an assumption that was rarely questioned: that the three processes were fundamentally carried out by human beings. Managers who read the situation, teams that debated and then decided, units that transferred people and budgets. The arrival of Generative AI has shaken this assumption. When AI-based systems can sift through information, assemble options, and even design and document implementations, the question changes. What is at stake is no longer how fast humans execute the processes, but the integrity of the processes themselves — whether they are augmented or, conversely, corrupted by AI involvement.

This paper argues that AI plays two opposing roles — transformation and corruption — in how the three dynamic capability processes are carried out. The transformation in question runs far deeper than mere acceleration. The argument is constructed in two steps. The first step maps AI's potential across each of the three processes. The second step, which

constitutes the core critique, demonstrates that the same strengths give rise to a new and distinctly AI-driven form of failure: strategic agility that appears real but is in fact performative.

2. THEORETICAL BACKGROUND

2.1 *Dynamic Capability*

Before engaging with the argument, several foundational frameworks underlying the concepts employed here must be clarified. Eisenhardt and Martin (2000) emphasized that dynamic capability consists of identifiable organizational processes — such as routines for reallocating resources, forming alliances, or making strategic decisions — and that these processes create value precisely in markets that move rapidly.

2.2 *Strategic Agility*

Doz and Kosonen (2008, 2010) translated this rather abstract idea into three meta-capabilities of strategic agility. Strategic sensitivity is a sharp awareness of external trends combined with a participatory strategic process. Collective commitment enables the top management team to make bold decisions once a new situation is read, without disruption from internal disputes. Resource fluidity is the ability to move resources and reconfigure business systems quickly. Weber and Tarba (2014) concluded that strategic agility is best understood as a higher-order dynamic capability, not merely operational speed. Empirically, Rocha, Ed-Dafali, and Sharma (2025) demonstrated among small and medium enterprises in Morocco that strategic agility serves as a bridge connecting entrepreneurial orientation with sustained competitive advantage.

The three meta-capabilities map reasonably well onto Teece's three processes: strategic sensitivity corresponds to sensing; collective commitment to seizing; and resource fluidity to reconfiguring. Accordingly, we employ Teece's (2007) vocabulary as the backbone while borrowing Doz and Kosonen's terminology when a more grounded explanation is needed.

2.3 *Digital Transformation and AI*

The digital transformation literature has long highlighted how technology reshapes strategy. Bharadwaj and colleagues (2013) called for business strategy and information technology strategy to be treated as a unified whole. Warner and Wäger (2019) showed that building dynamic capabilities for digital transformation is an ongoing process of strategic renewal, not a one-time project to be completed. Vial (2019) mapped how digital technologies compel firms to reshape their value propositions while simultaneously demanding structural responses.

These studies generally treat technology as an accelerant of existing processes. However, AI cannot be equated with previously discussed technologies. The agentic potential of AI — its capacity to act autonomously in sensing, deciding, and executing actions — enables it to transform Teece's processes fundamentally rather than merely accelerate them. AI also alters who the actors are, how high the threshold of expertise is, and how the texture of the three dynamic capability processes takes shape.

3. AI AS TRANSFORMER OF DYNAMIC CAPABILITY

3.1 *Transforming Seizing*

The most fundamental change occurs in seizing. Until now, the gap between the decision to exploit an opportunity and its realization was guarded by a wall of technical expertise. A director might have a revolutionary idea, yet its realization depended heavily on the capability of the technical team available. This dependency slowed seizing and concentrated it within a handful of individuals who commanded specific tools or sharp competencies (Warner & Wäger, 2019).

AI can fundamentally alter how seizing occurs. With AI, a manager — even a staff member at the lowest level — can now design and test a prototype of an idea independently, without having to queue at the technology department. For example, a branch head who suspects a seasonal pattern in customer complaints previously depended on a data team queue that often delivered results only after the moment had passed. Now the same person can test the hypothesis within hours. Opportunities that once died on paper because no technical personnel were available to test them can now be tried immediately. The findings of Liu and colleagues (2025) align with this: the adoption of AI-based information systems improved decision quality, and decision quality became the strongest driver of innovation in their model.

This change touches structure, not merely tempo. When the capacity to capture opportunities is no longer locked to technical specialists, seizing opens up to anyone within the organization. The fundamental shift lies in who is now authorized and able to carry it out.

3.2 Transforming Sensing

In sensing, AI's most tangible contribution lies in reducing the cognitive burden. Sensing the environment means confronting an enormous volume of information — from market reports and competitor signals to customer complaints and regulatory shifts. Filtering all of this into something meaningful consumes expensive time and attention, and frequently becomes the principal barrier to strategic sensitivity. AI drastically reduces that filtering cost. Organizations can sort, summarize, and cluster information in large volumes with far less effort.

More importantly, AI helps formulate the right questions, not merely provide answers. In environmental scanning, knowing which questions deserve to be asked is often more valuable than the answers themselves, and this is where engaging in dialogue with AI helps sharpen focus. Atanassova and colleagues (2025) cautioned that strategic sensitivity flourishes when organizational learning is embedded in culture, and AI can strengthen that learning when used properly.

3.3 Transforming Reconfiguring

In reconfiguring, the accelerating factor comes partly from outside the technology itself. Sentiment toward AI is currently dominated by optimism. This high acceptance reduces organizational resistance that typically hampers transformation initiatives. When a program is framed as 'AI-powered,' it tends to gain support, funding, and legitimacy more easily compared to similar initiatives in the past.

Consequently, organizations can carry out reconfiguration at a scale and continuity previously unattainable. Process restructuring, program launches, and operating model adjustments can proceed almost without pause, as adoption barriers shrink and the tools for implementation become more affordable. In the language of Doz and Kosonen, resource fluidity increases, because assets and attention can be redirected with less friction.

4. THE ILLUSION: AI-INDUCED PERFORMATIVE AGILITY

The three preceding accounts paint a rosy picture: AI accelerates seizing, lightens sensing, and smooths reconfiguring. Yet the very ease plants the seeds of a problem. When each process becomes so light to execute, a subtler and more dangerous issue emerges. We call it AI-induced performative agility — a state in which an organization appears nimble and agile, yet its agility rests on a rotting foundation. This illusion afflicts the three processes in sequence, flowing from one error to the next.

4.1 Epistemic Overconfidence in Sensing

In sensing, AI can produce an understanding that appears comprehensive yet is excessively simplified. When a model summarizes a complex market situation into several neat and convincing bullet points, the organization easily feels it already understands. What it actually receives is a flattened version, and the sharp angles that matter most are often lost in the summarization. What is born is excessive epistemic confidence — the conviction that the environment has been read, when in fact only its simplified reflection has been captured.

This danger compounds because language models tend to answer with a confident tone even when their grounding is fragile, causing users to lose the signal of doubt that normally invites re-examination. This symptom intersects with what the human factors literature calls automation bias: the tendency for people to over-trust outputs of automated systems and relax their critical vigilance (Parasuraman & Manzey, 2010).

4.2 Cascading Errors in Seizing

Errors in sensing cascade into seizing. Rapid decisions that rest on flawed understanding are still flawed decisions — only now they are taken faster and with greater confidence. The speed that was once an advantage becomes an error multiplier. The paradoxical finding of Liu and colleagues (2025) acquires a deeper meaning here: they found that excessive strategic agility actually weakens the link between decision quality and innovation.

We argue that AI exacerbates this paradox rather than alleviating it, because AI makes the processes of sensing and deciding feel so effortless and convincing that the temptation to move fast on a shallow foundation becomes far greater.

4.3 Superficial Reconfiguring

The peak of this illusion is visible in reconfiguring. With AI tools, organizations can design and launch programs in record time — a practice that might be termed strategic 'vibe coding,' when implementation is undertaken carelessly based on momentary impressions without a mature design. The result is often sophisticated-looking projects that are in fact gimmicks: AI-powered programs that are merely ordinary algorithms draped in jargon, failing to exploit AI's fundamental advantages at all, and piling up as wasteful and repetitive work.

The danger lies in a layer of false legitimacy. AI produces neat and convincing documentation, so that shallow projects appear to have been thought through carefully. The very quality of that documentation dampens oversight, because when everything looks well-managed, no one feels the need to inspect further. The organization believes it has accomplished something meaningful, when in reality it has only appeared to do so.

5. THE CONTAGION EFFECT

One feature unites the three symptoms described above: AI outputs always appear legitimate. A polished summary, a well-structured list of options, complete documentation — all exude an impression of competence. It is this veneer of legitimacy that makes the illusion of agility so difficult to recognize from within. The organization is unaware that it is being agile in the wrong way, because every signal it ordinarily uses to assess quality is now seamlessly counterfeited by the machine.

Within Teece's framework, this failure does not stop at a single process. It is contagious: it flows from flawed sensing to rushed seizing, then hardens into fruitless reconfiguring, such that the entire dynamic capability cycle spins on a false foundation.

It must be emphasized that the magnitude of this illusion is not uniform across all settings. Abdalla and colleagues (2025) cautioned that institutional context determines what strategic agility can accomplish. In environments with weak oversight and immature professional norms, few counterweights exist to restrain an organization when it is tempted to trust AI outputs uncritically. Conversely, in environments with a strong audit tradition and a culture of challenging assumptions, even convincing documentation is still treated as a claim requiring verification. In other words, the same technology can produce substantive strategic agility in one organization and performative agility in another, depending on the quality of oversight surrounding it. This conclusion shifts the locus of the problem from the sophistication of the tool to the maturity of its user, thereby placing responsibility on the human who decides, not on the machine that presents options.

6. PROPOSITIONS FOR FUTURE RESEARCH

From this analysis, we draw several propositions worthy of further investigation.

Proposition 1: AI adoption appears to alter seizing most fundamentally among the three processes, because it shifts the capacity for opportunity capture from holders of technical expertise to all layers of the organization.

Proposition 2: The more convincing AI outputs are at the sensing stage, the greater the risk of epistemic overconfidence, such that decision quality at the seizing stage may deteriorate even as decision speed increases.

Proposition 3: The legitimacy generated by AI documentation at the reconfiguring stage is inversely proportional to the intensity of oversight, thereby increasing the likelihood of performative implementation.

Proposition 4: The effectiveness of AI-based strategic agility depends on the organization's capacity to distinguish substantive agility from performative agility, a capacity rooted in organizational learning culture. This final proposition links the present argument with the findings of Atanassova and colleagues (2025) regarding the role of learning culture, and simultaneously with the caution of Abdalla and colleagues (2025) that context always constrains what strategic agility can achieve.

7. CONCLUSION

AI does indeed transform dynamic capability in fundamental ways. It dismantles technical dependencies in seizing, lightens the burden on sensing, and smooths reconfiguring at a scale previously difficult to attain. All of this is real and valuable. Yet the same forces, absent critical judgment, produce agility that is performative rather than substantive. The issue is not about rejecting AI, but about maturing how we use it. As long as organizations can resist the temptation to equate speed with competence, and as long as they maintain the ability to distinguish meaningful movement from

movement that merely appears so, AI will genuinely become a transformer of dynamic capability. Without that capacity, all that remains is an expensive theater of agility.

The most urgent next step, therefore, is not to expand AI adoption, but to build verification mechanisms capable of penetrating convincing documentation and asking whether the apparent movement truly changes the state of affairs.

REFERENCES

- Abdalla, S., Amankwah-Amoah, J., Khan, Z., & Hirekhan, M. (2025). Strategic agility in the B2B sharing economy ecosystem of emerging economies: Empirical insights from the Middle East. *Industrial Marketing Management*, 125, 431–445. <https://doi.org/10.1016/j.indmarman.2025.01.018>
- Atanassova, I., Bednar, P., Khan, H., & Khan, Z. (2025). Managing the VUCA environment: The dynamic role of organizational learning and strategic agility in B2B versus B2C firms. *Industrial Marketing Management*, 125, 12–28. <https://doi.org/10.1016/j.indmarman.2024.12.008>
- Bharadwaj, A., El Sawy, O. A., Pavlou, P. A., & Venkatraman, N. (2013). Digital business strategy: Toward a next generation of insights. *MIS Quarterly*, 37(2), 471–482. <https://doi.org/10.25300/MISQ/2013/37:2.3>
- Doz, Y., & Kosonen, M. (2008). *Fast strategy: How strategic agility will help you stay ahead of the game*. Wharton School Publishing.
- Doz, Y., & Kosonen, M. (2010). Embedding strategic agility: A leadership agenda for accelerating business model renewal. *Long Range Planning*, 43(2–3), 370–382. <https://doi.org/10.1016/j.lrp.2009.07.006>
- Eisenhardt, K. M., & Martin, J. A. (2000). Dynamic capabilities: What are they? *Strategic Management Journal*, 21(10–11), 1105–1121. [https://doi.org/10.1002/1097-0266\(200010/11\)21:10/11<1105::AID-SMJ133>3.0.CO;2-E](https://doi.org/10.1002/1097-0266(200010/11)21:10/11<1105::AID-SMJ133>3.0.CO;2-E)
- Liu, Y., Zhang, J., Zheng, L. J., & Kamal, M. M. (2025). How AI-enabled information systems influence decision-making and innovation performance in B2B firms: The moderating role of strategic agility. *Industrial Marketing Management*, 127, 164–174. <https://doi.org/10.1016/j.indmarman.2025.04.003>
- Parasuraman, R., & Manzey, D. H. (2010). Complacency and bias in human use of automation: An attentional integration. *Human Factors*, 52(3), 381–410. <https://doi.org/10.1177/0018720810376055>
- Rocha, C., Ed-Dafali, S., & Sharma, S. (2025). Entrepreneurial orientation, strategic agility, CSR and sustained competitive advantage in Moroccan SMEs. *Journal of Small Business and Enterprise Development*, 32(2), 470–495. <https://doi.org/10.1108/JSBED-04-2024-0224>
- Teece, D. J. (2007). Explicating dynamic capabilities: The nature and microfoundations of (sustainable) enterprise performance. *Strategic Management Journal*, 28(13), 1319–1350. <https://doi.org/10.1002/smj.640>
- Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal*, 18(7), 509–533. [https://doi.org/10.1002/\(SICI\)1097-0266\(199708\)18:7<509::AID-SMJ882>3.0.CO;2-Z](https://doi.org/10.1002/(SICI)1097-0266(199708)18:7<509::AID-SMJ882>3.0.CO;2-Z)
- Vial, G. (2019). Understanding digital transformation: A review and a research agenda. *The Journal of Strategic Information Systems*, 28(2), 118–144. <https://doi.org/10.1016/j.jsis.2019.01.003>
- Warner, K. S. R., & Wäger, M. (2019). Building dynamic capabilities for digital transformation: An ongoing process of strategic renewal. *Long Range Planning*, 52(3), 326–349. <https://doi.org/10.1016/j.lrp.2018.12.001>
- Weber, Y., & Tarba, S. Y. (2014). Strategic agility: A state of the art. *California Management Review*, 56(3), 5–12. <https://doi.org/10.1525/cmr.2014.56.3.5>