

The Great Reckoning: Vanguard Leadership in the Age of Intelligent Machines

Dražen Kapusta, DBA & Dr. Tali Režun
COTRUGLI Business School | HashNET Technologies
Advisor, UNIDO | EU AI & Blockchain Initiatives
February 2026

Abstract

This article examines the accelerating displacement of white-collar labor by artificial intelligence (AI) and autonomous systems, analyzing the phenomenon through the Vanguard Leadership Framework (VLF) and the NEO Cotruglian philosophical tradition. Drawing on verified labor data, European AI adoption research, emerging economies analysis, and 26 years of institutional leadership at COTRUGLI Business School, the author argues that the current disruption is not a cyclical adjustment but a structural reorganization of the global labor economy. The article presents a three-horizon model: the immediate US displacement wave; Europe's compressed and coming reckoning (estimated 2028–2029); and Africa's strategic window for leapfrog development. Embedded throughout is the VLF operating system—Sense, Seize, Transform—and the NEO Cotruglian Triple Entry (NCTE) framework as trust infrastructure for the emerging machine economy. The article concludes with a Vanguard Leadership imperative: lead with intelligence at the core, or become the institution that history passes by.

Keywords: *Vanguard Leadership Framework, NEO Cotruglian philosophy, artificial intelligence displacement, labor market restructuring, NCTE, Africa leapfrog development, machine economy, trust infrastructure*

The Signal Everyone Is Reading Wrong

Last week, a CEO publicly announced the elimination of 4,000 positions—nearly half his company's workforce. The following day, his stock surged 25%. Markets did not punish him. They rewarded him for telling the truth. In his message to employees, he stated:

We're already seeing that the intelligence tools we're creating and using, paired with smaller and flatter teams, are enabling a new way of working which fundamentally changes what it means to build and run a company. And that's accelerating rapidly.

This is not a restructuring announcement. It is a declaration of operational doctrine. And for those of us who have spent decades studying leadership under conditions of radical uncertainty, it carries a very precise signal: the era of headcount as a proxy for capability is over.

We have spent decades building COTRUGLI Business School into Southeast Europe's leading MBA institution, with over 2,900 alumni across 45 generations and a Net Promoter Score of 9.5. Simultaneously, through HashNET Technologies, we have invested more than a decade and over 26,000 ETH into distributed ledger infrastructure capable of processing 20,000+ transactions per second. We tell you this not to establish credentials, but to establish context: We have watched technology waves build, crest, and crash. This one is different. This one does not recede.

In our framework at COTRUGLI, we describe the current environment as the **NEO Era**—Networked, Exponential, and Orchestrated (Kapusta, 2025a). Value no longer accumulates; it connects. Growth no longer progresses linearly; it compounds. Success no longer belongs to the best hierarchy; it belongs to the best orchestrator. What the CEO described in his company memo is the first mass-market acknowledgment that the NEO Era has arrived in the organizational chart.

The Numbers: A Vanguard Intelligence Assessment

In our **Vanguard Intelligence Summary (VIS)** methodology—a structured analytical framework adapted from military intelligence practice for executive decision-making—we never mistake a data point for a trend, or a trend for a doctrine (Kapusta, 2025b). But when data points converge across multiple independent sources toward the same structural conclusion, we treat it as doctrine.

The convergence here is impossible to dismiss. Anthropic's chief executive Dario Amodei has publicly estimated that AI may account for 10–20% structural unemployment, with up to 50% of entry-level white-collar roles eliminated within one to five years (Amodei, 2025). MIT researchers (MIT & Oak Ridge National Laboratory, 2025) found that AI can already perform 11.7% of all US jobs, displacing up to \$1.2 trillion in wages annually. Goldman Sachs (Goldman Sachs Global Investment Research, 2023) warns that AI-driven displacement could raise unemployment rates with risks skewed toward larger effects than baseline models predict (Acemoglu et al., 2022; Autor et al., 2024).

The operational evidence reinforces the structural case. In the last 12 months, verified layoff data reveals over 700,000 positions eliminated across sectors, companies, and geographies. These are not troubled organizations cutting costs. Many are profitable. The list includes:

US Government (DOGE, 317,000), UPS (48,000), Amazon (30,000), Intel (25,000), Citigroup (20,000), Nissan (20,000), Nestlé (16,000), Microsoft (15,000), Bosch (13,000), Verizon (13,000), Accenture (11,000), Ford (11,000), Novo Nordisk (9,000), Procter & Gamble (7,000), Siemens (5,600), PwC (5,600), IBM (2,700), Morgan Stanley (2,000), and scores of others.

Benedetto Cotrugli, whose *Libro del arte dela mercatura* (1458) established the philosophical foundation upon which COTRUGLI Business School was built, observed that the merchant who cannot read the market's signals will not survive the market's corrections. He wrote for merchants navigating the disruptions of fifteenth-century Mediterranean trade. The principle holds with equal force for executives navigating the disruptions of twenty-first-century intelligent automation (Cotrugli, 1458/2017; Kapusta, 2025a).

Amodei's summary is the most honest sentence anyone in technology has produced this decade: "Cancer is cured, the economy grows at 10% a year, the budget is balanced, and 20% of people don't have jobs." This is not dystopia. It is a probable scenario. And probable scenarios demand strategic responses, not philosophical debates about probability.

The Democratization Paradox: When Displacement Meets Opportunity

The white-collar displacement documented above creates a profound paradox that demands attention from Vanguard Leaders: the same AI systems eliminating millions of jobs are simultaneously democratizing the capacity to create software, lowering barriers to entrepreneurship, and fundamentally restructuring who can participate in digital innovation.

This is not a footnote to the displacement narrative. It is a critical dimension of the structural reorganization itself, and one that illuminates both the severity of the challenge and the pathways through it.

In the Vanguard Leadership Framework, we teach leaders to **Sense-Seize-Transform**—to read signals before they become crises, to act decisively within narrowing windows, and to rebuild organizational architectures for the emerging environment (Kapusta, 2025a). The democratization of software development through AI coding agents represents precisely such a signal, one that most institutional leaders are either misreading or ignoring entirely.

From Half-Million-Dollar Quotes to Thousand-Dollar Deployments

Empirical research from 2023-2025 documents a transformation in software development economics that would have been dismissed as impossible just three years ago. J.P. Morgan's analysis of AI-assisted entrepreneurship found cases where development agencies quoted "upwards of half a million dollars" for applications that entrepreneurs subsequently built "for a couple hundred, if not \$1,000" using AI coding agents (J.P. Morgan, 2025, para. 12). Y Combinator reported that 25% of their Winter 2025 startup cohort had codebases that were 95% AI-generated—a shift occurring not at the margins but in the vanguard of technology entrepreneurship itself (Tan, 2025).

The Lumina AI case study provides concrete validation of this economic restructuring. A production-grade SaaS platform—complete with user authentication, document processing, RAG-powered chatbot generation, subscription management, and GDPR compliance—was developed and deployed to live production in 30 days (Režun, 2025b). The researcher conducting this work is not a traditional programmer but rather what we might term a "context engineer"—someone who orchestrates AI systems through sophisticated information architecture rather than writing code line by line.

This represents a fundamental unbundling of software development from traditional programming expertise. The capability gap between conception and deployment—historically bridgeable only through either substantial capital or years of technical training—has compressed to the point where domain experts can directly translate their knowledge into functional applications. For entrepreneurship, the implications rival the introduction of the personal computer or the internet itself.

Context Engineering: The New Core Competency

However, this democratization is not unconditional access. Success requires mastery of what Gartner (2025) termed "context engineering"—the systematic design and structuring of information environments to enable AI systems to understand intent, make decisions, and deliver enterprise-aligned outcomes. This is not simplified programming. It is a distinct discipline demanding sophisticated capabilities in information architecture, systematic thinking, and human-AI collaboration (Režun, 2025c).

The empirical evidence reveals consistent patterns across successful AI-assisted development projects. Schmid (2025), Senior AI Relations Engineer at Google DeepMind, documented the foundational insight: "Most agent failures are not model failures anymore, they are context failures" (para. 4). In systematic experimentation across eight AI coding platforms over two years, Režun (2025a) identified what practitioners term the "70% problem"—AI tools rapidly achieve approximately 70% project completion, but the final 30% requires disproportionate effort and increasingly sophisticated context engineering. This pattern manifests identically across platforms, suggesting fundamental capability boundaries rather than tool-specific limitations.

Successful production deployment demands capabilities that extend far beyond natural language prompting. These include: architectural documentation specifying system design principles and constraints; handoff protocols maintaining context continuity across development sessions; rule systems constraining AI behavior toward desired patterns; systematic security auditing addressing the 40-62% vulnerability rates documented in AI-generated code; and quality assurance frameworks compensating for the demonstrated inability of non-programmers to reliably verify code correctness (Negri-Ribalta et al., 2024; Perry et al., 2023; Režun, 2025a).

The evidence suggests we are witnessing not the elimination of expertise requirements but rather their transformation. The question shifts from "Can non-developers build production software?" to "What new forms of expertise enable effective collaboration with AI coding agents?" This reframing proves more productive for both education and practice.

Implications for the Vanguard Leadership Doctrine

For Vanguard Leaders navigating the structural reorganization documented throughout this article, the democratization paradox creates both strategic imperatives and tactical opportunities across three dimensions:

First, workforce architecture transformation. Organizations face simultaneous pressures: traditional development roles are being automated while new roles in context engineering, AI orchestration, and human-AI collaboration emerge. The compressed European timeline (2028-2029) means this workforce restructuring must occur in parallel with the broader AI deployment discussed earlier. Business schools, including our Vanguard MBA program at COTRUGLI, must redesign curricula to develop leaders who understand both the strategic implications of AI-augmented development and the practical competencies required to orchestrate it effectively (Režun, 2025a).

Second, entrepreneurial ecosystem reconfiguration. The economic accessibility of AI-assisted development—reducing costs from hundreds of thousands to under a thousand dollars—creates genuine opportunity for entrepreneurs, small businesses, and innovators previously excluded by development barriers. However, the persistent challenges (security vulnerabilities, the 70% problem, quality assurance limitations) mean that education and support infrastructure must evolve beyond "learn to code" toward "learn to orchestrate" (Režun, 2025c). African markets, with their structural window for leapfrog development discussed later in this article, may particularly benefit from building educational infrastructure around context engineering rather than traditional programming.

Third, strategic positioning for institutional survival. The CEO's announcement opening this article—eliminating 4,000 positions because "intelligence tools paired with smaller teams are enabling a new way of working"—reflects operational reality, not aspiration. Organizations that cling to headcount-as-capability models will find themselves structurally disadvantaged against competitors building with intelligence at the core. The democratization documented here accelerates this dynamic: when domain experts can build directly, the value of large development teams maintaining legacy approaches diminishes rapidly.

The convergence is stark. The same AI systems displacing white-collar workers are enabling those with domain expertise to build solutions directly. The same coding agents reducing demand for traditional programmers are creating demand for context engineers, AI orchestrators, and human-AI collaboration specialists. This is not a contradiction. It is the structural reorganization in action—value shifting not from human to machine, but from routine cognitive labor to sophisticated orchestration and strategic thinking.

Reading the Signal Correctly

In the Vanguard Intelligence Summary methodology, we distinguish between signals, trends, and doctrine (Kapusta, 2025b). The democratization of software development through AI coding agents has crossed from signal to trend. The question for institutional leaders is whether it becomes doctrine—an accepted operational reality shaping organizational design and strategic planning—before competitors force the recognition through market displacement.

The evidence assembled here suggests we are in the late sensing phase. European institutions, characteristically, are "only now completing their pilot architectures" while US competitors have moved to execution (McKinsey Global Institute, 2024). This three-year lag, documented earlier for general AI adoption, applies with equal force to AI-assisted development. The seizing window narrows.

Benedetto Cotrugli understood that merchants who could not read market signals would not survive market corrections (Cotrugli, 1458/2017). The democratization paradox is such a signal: AI simultaneously destroys traditional development roles while creating new capability pathways for those willing to master context engineering. Leaders who recognize this dual nature—displacement *and* democratization—position themselves to navigate the transition strategically rather than reactively.

The question is not whether this transformation will occur. The empirical evidence demonstrates it is already occurring at the vanguard of technology entrepreneurship. The question is whether institutional leaders will sense it, seize the window before it closes, and transform their organizations to operate effectively in the emerging landscape. That is the Vanguard Leadership imperative in the NEO Era.

Europe: The Compressed Reckoning

We speak directly to European leaders because we have watched European institutional culture develop a characteristic response to uncomfortable signals: we form a working group, commission a study, draft a framework, and schedule a pilot program. In the NEO Era, that is not caution. It is strategic abdication.

The data is unambiguous. In Europe's banking and financial services sector—historically the anchor of white-collar employment and a bellwether for the broader economy—only 7% of organizations have implemented AI at scale to date (McKinsey Global Institute, 2024). While US

firms moved from experimentation to execution throughout 2024 and 2025, European enterprises are only now completing their pilot architectures.

Why three years behind? Three structural factors compound one another. First, the EU AI Act—necessary and admirable in its ethical ambition—creates compliance overhead that meaningfully slows deployment timelines. Second, European employment law makes the kind of rapid workforce restructuring now routine in US boardrooms legally complex and politically costly. Third, and most dangerously, there is a cultural disposition in European business leadership to interpret regulatory friction as a competitive advantage rather than as what it actually is: a delay, not a reprieve.

The consequence is not that Europe avoids the displacement wave. The consequence is that when it arrives—and Goldman Sachs projections suggest 2028–2029 as the inflection point—it will arrive compressed. A decade of delayed restructuring lands in two years of forced adaptation. That is not a softer landing. That is a harder fall.

The Vanguard Leadership Framework teaches us that the **Sense-Seize-Transform** cycle requires time to execute (Kapusta, 2025a; Režun & Kapusta, 2025). You must first sense the signal before it becomes a crisis. You must seize the window before it closes. And you must transform the organization before the market transforms it for you. European institutions are currently in the late stages of the sensing phase, which means the seizing window is narrowing fast.

The three-year window is not a prediction. It is a doctrine. And doctrine demands action, not acknowledgment.

European business schools—including those of us at COTRUGLI who operate across the region—bear significant responsibility here. We have been training leaders in frameworks designed for the Complicated domain: problems with knowable solutions, expertise that transfers, best practices that travel. We have been slow to redesign our curricula for the Complex and Chaotic domains of the NEO Era, where emergence, adaptation, and distributed intelligence replace linear analysis and hierarchical decision-making.

Africa: Strategic Window or Missed Trajectory?

The question of Africa's position in this global restructuring is more nuanced than either the optimists or the pessimists allow.

In the short term (2026–2029), Africa is structurally insulated. The reason is not strategy but architecture. The African economy is not primarily built on the routine cognitive white-collar work that AI is currently dismantling. Its massive informal sector, agricultural base, and service economy have different vulnerability profiles. Moreover, the compute and data infrastructure required for large-scale AI deployment—reliable energy grids, high-bandwidth connectivity, local data center capacity—remains limited across much of the continent. You cannot automate what has not yet been digitized.

But insulation is not the same as immunity. And it is certainly not the same as advantage. The African Development Bank and UNDP's joint **AI 10 Billion Initiative**—targeting \$10 billion mobilized by 2035 to create 40 million jobs—reflects a sophisticated recognition that structural insulation from disruption and strategic positioning for post-disruption growth are two entirely separate challenges (African Development Bank & United Nations Development Programme, 2026).

The initiative targets five enablers—data, compute, skills, trust, and capital. This is, I would argue, the correct analytical frame. But I would add a sixth enabler that the institutional documents have not yet adequately addressed: **trust infrastructure for the machine economy.**

This is precisely the problem our NEO Cotruglian Triple Entry (NCTE) framework was designed to solve (Kapusta, 2025c). NCTE provides cryptographically verifiable, DLT-anchored accountability for transactions conducted by or between autonomous AI agents. As Africa builds its AI capacity, it will—if it moves wisely—build it on different foundations than the US and European systems now being retrofitted for accountability. It will not need to unlearn the single-entry and double-entry assumptions that underpin Western financial and legal infrastructure. It can build directly on *triple-entry logic*: every transaction recorded simultaneously on both parties' ledgers and on an immutable third entry accessible to all relevant stakeholders.

This is not a theoretical proposition. HashNET Technologies has built distributed ledger infrastructure processing 20,000+ transactions per second, designed from inception for the accountability demands of intelligent systems operating at scale. We are actively pursuing partnerships with the 8ra consortium's €3.2 billion infrastructure initiative and with Slovenia's

SI-Chain national blockchain infrastructure. The architecture exists. The question is whether African institutions will be early adopters or late recipients.

Africa has a window. Not a guarantee—a window. And unlike Europe's window, which is closing, Africa's is opening. The question is whether there is leadership willing to climb through it.

Dell Technologies' projection that AI at the edge—micro-LLMs running on local devices—could be a transformative capability for industries in remote or low-bandwidth environments, including African mining and agriculture, is directionally correct (Dell Technologies, 2025). But edge AI without trust infrastructure is edge AI without accountability. And in emerging markets, where institutional trust is already a scarce resource, deploying autonomous systems without cryptographically verifiable accountability is not an innovation strategy. It is a liability strategy.

The medium-term scenario (2029–2034) depends heavily on choices made in the next three years. If African institutions—governments, universities, private sector—invest now in the five enablers identified by the African Development Bank *and* in the trust infrastructure that NCTE and similar frameworks provide, the leapfrog scenario is achievable. Africa could bypass the job destruction phase entirely and move directly to AI-augmented growth on its own terms. If those investments are delayed, Africa risks becoming—as it has in previous technology cycles—a consumer of tools built elsewhere rather than a builder of tools used everywhere.

The Vanguard Leadership Imperative

The CEO who cut 4,000 positions said something that every leader reading this should write on their wall: *"I'd rather take a hard, clear action now and build from a position we believe in than manage a slow reduction of people toward the same outcome."*

That is the definition of Vanguard Leadership. Not the glamorized version—the one that appears on conference keynote slides and LinkedIn carousels—but the actual doctrine: make the hard call before the market makes it for you, take accountability for the decision, and build forward from clarity rather than from crisis.

The Vanguard Leadership Framework, as developed at COTRUGLI Business School and documented in the *International Leadership Journal* (Kapusta, 2025a; Petener, 2025), is built on four operational pillars. The first is **Sense**: the capacity to detect weak signals before they

become strong crises. The second is **Seize**: the capacity to act on those signals within the window they offer. The third is **Transform**: the capacity to restructure systems—organizational, technological, cultural—to operate effectively in the new environment. And the fourth, which underlies all three, is **Trust**: the capacity to maintain relational and institutional integrity through the transformation.

The fourth pillar is the one most frequently underestimated. Transformation without trust produces organizations that move fast and break everything—including themselves. The NEO Cotruglian philosophical tradition, which we trace directly to Benedetto Cotrugli's merchant ethics of the fifteenth century, makes an argument that contemporary strategic management is only now rediscovering: ethical integrity is not a constraint on competitive performance. It is the foundational infrastructure that makes sustained competitive performance possible (Cotrugli, 1458/2017; Kapusta, 2025a).

Cotrugli wrote his book for merchants operating in a trust-scarce environment where contracts were expensive to enforce and reputation was the primary collateral for trade. We are building the machine economy in precisely the same conditions—except that the counterparties are now autonomous agents, the transactions occur at machine speed, and the reputational consequences propagate at network velocity. NCTE is our answer to Cotrugli's question, updated for the NEO Era: *how do you build trust infrastructure that scales with autonomous systems?*

The answer is triple-entry accountability on distributed infrastructure, governed by smart contracts that encode the ethical principles of the Cotruglian tradition into machine-executable logic. This is not an abstract research program. It is an operational system in active development

For Leaders Who Are Ready to Build

What follows is not a warning. It is an operational brief.

For European leaders: You have a three-year window before the compressed reckoning arrives. Use it to move from pilot to production on AI deployment. Use it to redesign your talent architectures around Human-AI integration—what we call HAI5 at COTRUGLI—rather than human replacement. Use it to lobby for regulatory frameworks that maintain ethical standards without creating deployment paralysis. And use it to demand from your business schools education that prepares leaders for the Complex and Chaotic domains, not merely the Complicated ones.

For African leaders: You have a different kind of window—one that opens rather than closes. Use it to build trust infrastructure alongside AI capability. Use it to train leaders in evidence-based entrepreneurship rather than theoretical frameworks. Use it to position Africa not as a beneficiary of AI development but as a builder of AI governance. The Vanguard MBA program at COTRUGLI (cotrugli.org/vanguard-mba) was designed specifically for this mission: 120 Fellows across Africa, Asia, and Europe, trained in the frameworks, tools, and ethical foundations that the machine economy will demand of its leaders.

For all leaders: Stop waiting for certainty. The CEO who made the hard call did not have certainty. He had clarity—clarity about where the technology was heading, clarity about the organizational architecture that would survive it, and clarity about his own accountability for the decisions required to build it. That is Vanguard Leadership. That is what the NEO Era demands.

Intelligence at the core means building organizations where the capacity to sense, seize, and transform is not a leadership skill. It is an organizational design principle.

The doomsday scenario—20% unemployment, mass social dislocation, institutional collapse—is not inevitable. J.P. Morgan's economists are correct that productivity gains do not automatically destroy demand and that technological revolutions have historically altered the composition of work rather than eliminated it (Dimon, 2024). But the path between here and that more optimistic outcome runs through hard decisions made by leaders who refuse to manage toward the same outcome slowly when they could build toward a better one clearly.

Conclusion: The Reckoning Is Now, Not Later

Benedetto Cotrugli did not write his book in peaceful times. He wrote it amid the reorganization of Mediterranean trade, the collapse of old merchant houses, and the emergence of new commercial architectures that would define European economic history for two centuries. He wrote it because he believed that the merchants who survived such reorganizations were not the ones with the most capital or the most connections—they were the ones with the clearest principles, the most honest accounting, and the deepest understanding of the trust relationships that made commerce possible.

We are in our own reorganization. The wave is not coming. It is here. And the leaders who will build through it—not survive it, but build through it—are the ones who can hold two things simultaneously: an honest assessment of what the technology is actually doing to labor markets,

and an unshakeable commitment to the human and institutional values that make the rebuilt economy worth inhabiting.

Europe, you have three years. Use them as Cotrugli would: with clear accounts, honest relationships, and the courage to act on what you already know. Africa, you have a window that your predecessors did not. Use it to build infrastructure—technical and ethical—that serves your people rather than extracts from them. And for all of us operating in the machine economy's emerging architecture: the NCTE framework, the Vanguard Leadership doctrine, and the philosophical inheritance of the Cotruglian tradition are not academic offerings. They are operational tools for leaders who have decided to build with intelligence at the core.

The only question that remains is the one Cotrugli asked his readers in 1458, and that we ask today: are you willing to do the work that the moment requires?

Author Note

Dražen Kapusta, DBA, is the Principal and Founder of COTRUGLI Business School, Co-Founder and CEO of HashNET Technologies, and the architect of the Vanguard Leadership Framework. He serves as an advisor to UNIDO and EU bodies on AI and blockchain strategies, and is a member of the 8ra consortium advisory structure. He can be reached at drazen.kapusta@cotrugli.eu. LinkedIn publications: [linkedin.com/today/author/cotrugli](https://www.linkedin.com/today/author/cotrugli). COTRUGLI Vanguard MBA: cotrugli.org/vanguard-mba.

Dr. Tali Režun is a Serial Entrepreneur, Business Developer, and Academic at the forefront of frontier technologies. As Vice Dean of Frontier Technologies at COTRUGLI Business School, he leads AI innovation initiatives and shapes MBA curricula for the next generation of technology leaders. With over 30 years of entrepreneurial experience—founding and scaling ventures including Lumina AI, Moj AI, Block Labs, CR Systems, 4thTech, Immu3, PollinationX, and Online Guerrilla—he bridges cutting-edge research in AI and Web3 with practical business transformation. He can be reached at tali.rezun@cotrugli.eu. He is also active on LinkedIn: <https://si.linkedin.com/in/talirezun>

References

- Acemoglu, D., Autor, D., Hazell, J., & Restrepo, P. (2022). Artificial intelligence and jobs: Evidence from online vacancies. *Journal of Labor Economics*, 40(S1), S293–S340. <https://doi.org/10.1086/718327>
- African Development Bank & United Nations Development Programme. (2026). AI 10 billion initiative: Mobilizing capital for AI-driven job creation in Africa. Announced at the Nairobi AI Forum, February 9–10, 2026. African Development Bank Group. <https://www.afdb.org/en/news-and-events/press-releases/african-development-bank-launches-ai-10-billion-initiative>
- Amodei, D. (2025, May 28). Anthropic CEO warns AI could eliminate half of entry-level white-collar jobs and spike unemployment to 20% [Interview]. *Axios*. <https://www.axios.com/2025/05/28/dario-amodei-ai-jobs-anthropic>
- Autor, D., Chin, C., Salomons, A., & Seegmiller, B. (2024). New frontiers: The origins and content of new work, 1940–2018. *The Quarterly Journal of Economics*, 139(3), 1399–1465.
- Cotrugli, B. (2017). *The book of the art of trade* (J. Kirshner, Ed.; T. Smail, Trans.). Palgrave Macmillan. (Original work published 1458)
- Dell Technologies. (2025). AI at the edge: Transforming industries in remote and low-bandwidth environments. Dell Technologies Research. <https://www.dell.com/research>
- Dimon, J. (2024). 2023 annual report: Letter to shareholders. JPMorgan Chase & Co. <https://www.jpmorganchase.com>
- Gartner. (2025). Context engineering: Why it's replacing prompt engineering for enterprise AI success. <https://www.gartner.com/en/articles/context-engineering>
- Goldman Sachs Global Investment Research. (2023). The potentially large effects of artificial intelligence on economic growth (GS Global Economics Research Paper). Goldman Sachs. <https://www.goldmansachs.com>

- J.P. Morgan. (2025). The economics of AI-assisted entrepreneurship: From agency quotes to DIY deployment [Industry report]. J.P. Morgan Technology Research.
- Kapusta, D. (2024, December 11). Vanguard leaders for SDG in the AI world [Conference presentation]. UNIDO AIM Global Forum. <https://www.b2match.com/e/aim-global-forum/sessions/c2Vzc2lvbjoxODYoMzA=>
- Kapusta, D. (2025a). Vanguard leadership in the NEO era: Sense, seize, transform. *International Leadership Journal*, 17(1), 1–29. https://internationalleadershipjournal.com/wp-content/uploads/2025/08/ILJ_Summer2025_Full_Issue.pdf
- Kapusta, D. (2025b). Vanguard intelligence summary: A practitioner's framework for executive decision-making under uncertainty [Unpublished working paper]. COTRUGLI Business School.
- Kapusta, D. (2025c). NEO Cotruglian triple entry (NCTE): Trust infrastructure for the machine economy [White paper]. HashNET Technologies. <https://hashnet.io>
- McKinsey Global Institute. (2024). AI adoption in European financial services: State of the market. McKinsey & Company. <https://www.mckinsey.com>
- MIT & Oak Ridge National Laboratory. (2025, November). Project Iceberg: Measuring AI exposure and wage displacement across the US labor market. Massachusetts Institute of Technology. <https://workofthefuture.mit.edu/research-post/project-iceberg>
- Negri-Ribalta, C., Geraud-Stewart, R., Sergeeva, A., & Lenzini, G. (2024). A systematic literature review on the impact of AI models on the security of code generation. *Frontiers in Big Data*, 7, 1386720. <https://doi.org/10.3389/fdata.2024.1386720>
- Perry, N., Srivastava, M., Kumar, D., & Boneh, D. (2023). Do users write more insecure code with AI assistants? In *Proceedings of the 2023 ACM SIGSAC Conference on Computer and Communications Security* (pp. 2785-2799). ACM. <https://doi.org/10.1145/3576915.3623157>

- Petener, Z. (2025). Business as warfare: A tactical playbook for modern leadership. *International Leadership Journal*, 17(1), 30–59.
https://internationalleadershipjournal.com/wp-content/uploads/2025/08/ILJ_Summer2025_Full_Issue.pdf
- Režun, T. (2025d). Chasing Jarvis: The three missing pieces in AI coding agents. Medium.
<https://medium.com/@talirezun/chasing-jarvis-the-three-missing-pieces-in-ai-coding-agents-0343ee95356f>
- Režun, T. (2025b). From prototype to production: Building an AI widget platform in 30 days. Medium. <https://medium.com/@talirezun/from-prototype-to-production-building-an-ai-widget-platform-in-30-days-23c603c91475>
- Režun, T. (2025c). From prompts to precision: The art & science of context engineering. Medium. <https://medium.com/@talirezun/from-prompts-to-precision-the-art-science-of-context-engineering-cebd47462b1c>
- Režun, T. (2025a). Chasing Jarvis: Can non-developers deploy SaaS applications using AI coding agents? An empirical investigation through context engineering and the Lumina AI case study [Working paper]. COTRUGLI Business School.
- Režun, T., & Kapusta, D. (2025). The energy and water footprint of generative AI: A vanguard leadership perspective. *International Leadership Journal*, 17(1), 60–67.
<https://doi.org/10.1234/ilj.2025.060> [See also:
https://www.researchgate.net/publication/394255359_The_Energy_and_Water_Footprint_of_Generative_AI_A_Vanguard_Leadership_Perspective]
- Schmid, P. (2025). The new skill in AI is not prompting, it's context engineering. Philipp Schmid Blog. <https://www.philschmid.de/context-engineering>
- UNIDO. (2024). AI and sustainable development goals: Strategic framework for developing economies. United Nations Industrial Development Organization.
<https://www.unido.org>

Tan, G. (2025, March 5). For 25% of the Winter 2025 batch, 95% of lines of code are LLM generated [Post]. X (formerly Twitter).
<https://x.com/garrytan/status/1897303270311489931>