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The First-Rung Problem

AI, Labor, and the Coming Precariat

AI AND THE FUTURE OF WORK | LABOR MARKET TRANSITIONS | AI GOVERNANCE AND PUBLIC POLICY

Acknowledgement

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AI unemployment in the near term is best understood as a first-rung collapse before mass layoffs. When entry pathways shrink, societies lose their training engine and their mobility ladder—before unemployment rises in headline statistics.

Executive Summary

AI-driven labor disruption is no longer theoretical. It is arriving unevenly—first through hiring compression and task erosion at the entry-level, then through deeper sectoral displacement as agentic systems and physical AI mature. The central risk is not simply job loss. It is career-ladder collapse, identity erosion, and legitimacy stress—conditions that may produce an AI precariat: individuals and communities structurally excluded from AI-augmented prosperity.

A second-order consequence is underemphasized in much of today's AI labor discourse: the missing cohort problem. If a generation of junior workers is not hired, trained, and accumulating experience in AI-exposed fields over the next five to ten years, the structural deficit compounds. In a decade, organizations may face a shortage of experienced mid-career professionals, not because people were laid off but because the pipeline was never replenished. First-rung collapse, therefore, represents a slow-motion talent crisis, not merely a youth employment challenge.

To interpret these dynamics, this brief synthesizes recent studies; integrates psychological, sectoral, and geographical analysis; and introduces the AI Anxiety Index linking exposure with trust and fear as a comparative early-warning tool. It also proposes enforceable policy levers: AI Labor Impact Statements, career-ladder preservation obligations, and a Global AI Workforce Compact via an AI Transition Tax.

1.

AI Unemployment as a Social Contract Stress Test

AI is reshaping employment, but it does not introduce a fundamentally new relationship between technology and labor. Like earlier waves of mechanization and computerization, AI alters the task composition of jobs, reorganizes production processes, and shifts skill demand. What distinguishes today's wave is its speed, breadth, and simultaneity. Generative AI extends automation into cognitive work at scale; agentic AI extends it into multi-step workflow execution; and physical AI extends it into service and logistics environments previously resistant to automation.

The deeper issue is not technological; it is institutional. Modern societies have effectively tethered income, healthcare access, social status, and civic belonging to employment. When job pathways narrow, societies lose economic mobility and institutional trust—two core pillars of the social contract.

This brief uses the concept of the AI precariat to describe individuals and communities at risk of structural exclusion from AI-augmented prosperity, whether through displacement, degraded job quality, collapsed career pathways, or persistent underemployment. Without deliberate governance, AI could accelerate the formation of a new insecure labor class that is economically marginal and psychologically alienated. Early signals of this formation may already be visible in entry-level hiring patterns across AI-exposed sectors.

2.

The Scale of Disruption: What the Data Already Shows

Exposure estimates provide useful pressure maps, but they are not job-loss forecasts. The International Monetary Fund (IMF)[1] estimates that around 40 percent[2] of global employment is AI-exposed (approximately 60 percent in advanced economies), while emphasizing that exposure can imply complementarity for some roles and reduced labor demand for others. The International Labour Organization (ILO) refined GenAI occupational exposure index[3] finds that one in four workers globally are in occupations with meaningful GenAI exposure, with intensity concentrated in clerical, administrative, and routine analytical work. Crucially, the ILO emphasizes that job transformation is often more likely than wholesale job elimination, because many occupations include tasks requiring human input that AI cannot fully substitute.

Research on technological change consistently finds that employment outcomes depend not on automation alone but on whether innovation generates complementary human tasks that sustain labor demand.[4] Current evidence suggests that the complementarity dividend may be arriving unevenly, and later than the substitution effect. AI development to date has been disproportionately oriented toward task substitution rather than task creation—an automation-biased trajectory that helps explain declining labor shares and widening inequality alongside productivity gains. This does not imply that AI inevitably reduces employment, but it does indicate that governance choices and deployment incentives actively shape labor-market outcomes.

Stanford University's Canaries in the Coal Mine report[5] provides one of the clearest early signals because it is grounded in high-frequency administrative payroll data rather than survey responses. Its central insight is cohort-specific: early-career workers in the most AI-exposed occupations in the United States show relative employment declines of 13 to 16 percent, while more experienced workers in the same occupations remain stable or grow. This pattern does not reflect a broad displacement; rather, it indicates a hiring compression at the base of the career ladder. Firms appear to be maintaining output while reducing the intake of new entrants.

This brief uses Stanford's findings as an empirical signal, then extends them into a structural interpretation. If entry-level compression persists, it becomes a compounding pipeline risk—the missing cohort—and a legitimacy challenge, even if headline unemployment remains stable.

Research from Yale University's Budget Lab[6] finds no clear correlation between AI exposure measures and economy-wide employment or unemployment trends in the United States. This does not contradict Stanford's finding. Instead, it is consistent with the underlying mechanism: adjustment appears to be occurring through hiring freezes, role redesign, and gradual substitution, rather than sudden mass layoffs. Macro economic stability may therefore coexist with micro-level fragility—a scenario that can keep the problem politically invisible until its social effects become acute.

A historical lens involving a techlash helps clarify why this matters. The nineteenth-century Luddite movement[7] emerged when British skilled craftsmen and trained artisans believed that mechanized textile machinery threatened their livelihoods. Their reaction reflected not only technological disruption but also the perception that institutional responses favored industrial owners rather than workers, leading to organized protest and machine-breaking. The lesson is not that technological transitions inevitably produce conflict. Rather, when economic transitions are perceived as unfair or unmanaged, institutional legitimacy erodes, and political backlash becomes more likely.
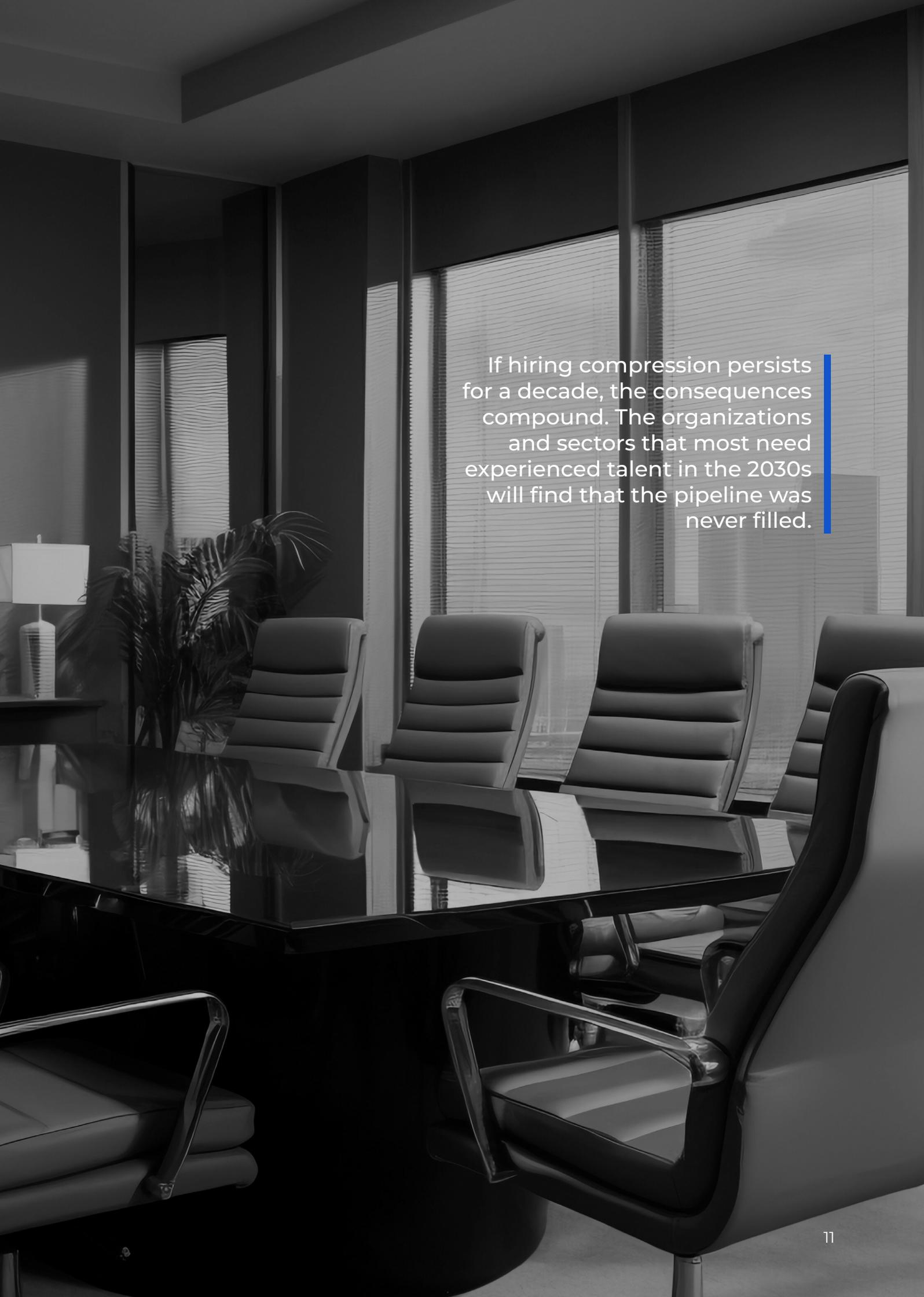
If hiring compression persists for a decade, the consequences compound. The organizations and sectors that most need experienced talent in the 2030s will find that the pipeline was never filled.

3.

The Missing Cohort: A Slow-Motion Talent Crisis

The most underappreciated dimension of first-rung collapse is temporal. When entry-level hiring compresses, the damage extends beyond the workers who cannot secure a first job. It affects the entire experience accumulation pipeline through which professional expertise is built.

Consider the mechanism: A lawyer who joined a firm as a junior associate in 2018 may be a senior associate today and on track for partnership by 2032. A journalist who entered a newsroom as a staff writer in 2020 is an editor by 2030. Similar trajectories exist for accountants, software engineers, financial analysts, and logistics coordinators. Professional competence—skills, judgment, domain depth, and tacit knowledge—is built through years of supervised practice. Training or reskilling programs alone cannot fully substitute for these cumulative learning processes.

If AI-driven hiring compression results in substantially fewer junior professionals entering these fields between 2024 and 2030, the consequences will not be visible in 2025 unemployment statistics. They will visible in 2033, as organizations search for experienced mid-career professionals who were never trained because the early pipeline contracted earlier. In this scenario, the missing cohort becomes a structural talent shortage not through redundancy but through an empty pipeline.

This dynamic reframes first-rung collapse as an organizational and sectoral risk, not merely a social one. It also raises questions of national competitiveness. Countries and industries that allow the junior pipeline to thin in the short term may find their experienced talent base eroding precisely when AI systems require more sophisticated human oversight, not less.

The policy implication is direct: preserving entry pathways is not welfare policy but long-term competitiveness infrastructure. Sustained entry-level compression today becomes a mid-career capacity deficit tomorrow, potentially weakening a country's ability to deploy, audit, and govern AI systems safely and effectively.

4.

Sectoral Trends and Community-Level Divergence

The central risk in the current transition is not uniform displacement across sectors. Rather, in several high-exposure fields, AI systems increasingly substitute for accelerate the tasks typically assigned to junior workers, including first-pass drafting, research synthesis, document review, and routine analysis. This allows firms to maintain or increase output while reducing the number of new entrants. In professional services and knowledge work—law, finance, accounting, consulting, media, and parts of software development— senior professionals may become more productive while junior intake slows, reinforcing the missing cohort dynamic if sustained.

In manufacturing and logistics, the mechanism differs. Historically, automation in these sectors substitutes across experience levels rather than disproportionately targeting entry-level workers. However, if embodied or physical AI expands rapidly into service and retail environments, first-rung compression could extend beyond white-collar pipelines into the broader service economy.

Healthcare[8] follows a different institutional logic. Regulatory requirements, patient safety constraints, and professional licensing regimes limit direct substitution of clinical roles. As a result, task redistribution and administrative automation are more likely in the near term than wholesale clinician replacement. Nevertheless, entry-level administrative and support roles within health systems may still be vulnerable to automation-driven restructuring.

The geographic dimension is where the current wave may diverge most sharply from earlier automation. Previous waves hit manufacturing-heavy rural and post-industrial regions hardest. Recent OECD analysis[9] suggests the pattern may now partially reverse, with GenAI exposure concentrated in metropolitan and professional-service clusters rather than in non-urban regions. This creates a new and underappreciated form of territorial inequality: cities that simultaneously benefit from AI-driven productivity gains at senior professionals while compressing entry-level opportunities at the base of the labor market.

The downstream consequences may unfold in two directions. High exposure urban clusters risk wage polarization and a hollowed entry tier, even as headline employment remains stable. Lower-exposure regions, meanwhile, may avoid immediate displacement but also miss the productivity gains that accumulate over time, drifting into longer-term economic stagnation. National employment averages obscure both dynamics even though–local fractures are often where political instability emerges.

The decisive question across sectors is therefore not simply how many jobs are exposed, but where entry pathways are most vulnerable. Without career-stage lens, exposure metrics can both overstate some certain risks and understate others. Viewed through this lens, the emerging pattern becomes clearer: the AI transition is likely to appear first as a narrowing of access to skilled careers, rather than an immediate collapse in total employment.

5.

The Human Cost: Identity, Dignity, and the AI Precariat

Unemployment is not merely a financial event. It is also a psychological and social rupture. A 2024 study[10] found that globally unemployed individuals exhibit significantly higher levels of general psychological distress than employed individuals, including increased rates of depression and anxiety. The implication for AI policy is uncomfortable but unavoidable: labor-transition policy is also mental health policy.

Even without mass layoffs, chronic insecurity and degraded job quality can produce anxiety, loss of energy, and social withdrawal. If early-level pathways shrink, young adults face not only income pressure but also identity disruption: the intended future self—lawyer, analyst, journalist, engineer—may no longer be attainable on any recognizable career trajectory. This represents a different category of harm than wage loss and it rarely appears in conventional economic indicators.

The concept of the AI precariat,[11] building on economist Guy Standing's original precariat[12] framework, captures structural exclusion rather than episodic unemployment. For policy-targeting purposes, the AI precariat may be defined as individuals meeting two or more of the following conditions:

- High task exposure combined with weak bargaining power
- Evidence of career-ladder disruption, such as persistent entry-level hiring compression
- Low AI complementarity, meaning limited ability to translate AI tools into productivity or wage gains
- Place-based constraints, such as weak training infrastructure or limited employer diversity
- High perceived insecurity, reflected in rising fear, declining institutional trust, or increased psychological strain

In the AI transition, precarity may emerge primarily through blocked mobility—the hiring compression mechanism—rather than through wage reductions or mass layoffs. This dynamic makes the problem harder to observe, measure, and mobilize policy responses around. It is precisely for this reason that early-warning frameworks and monitoring mechanisms become essential.
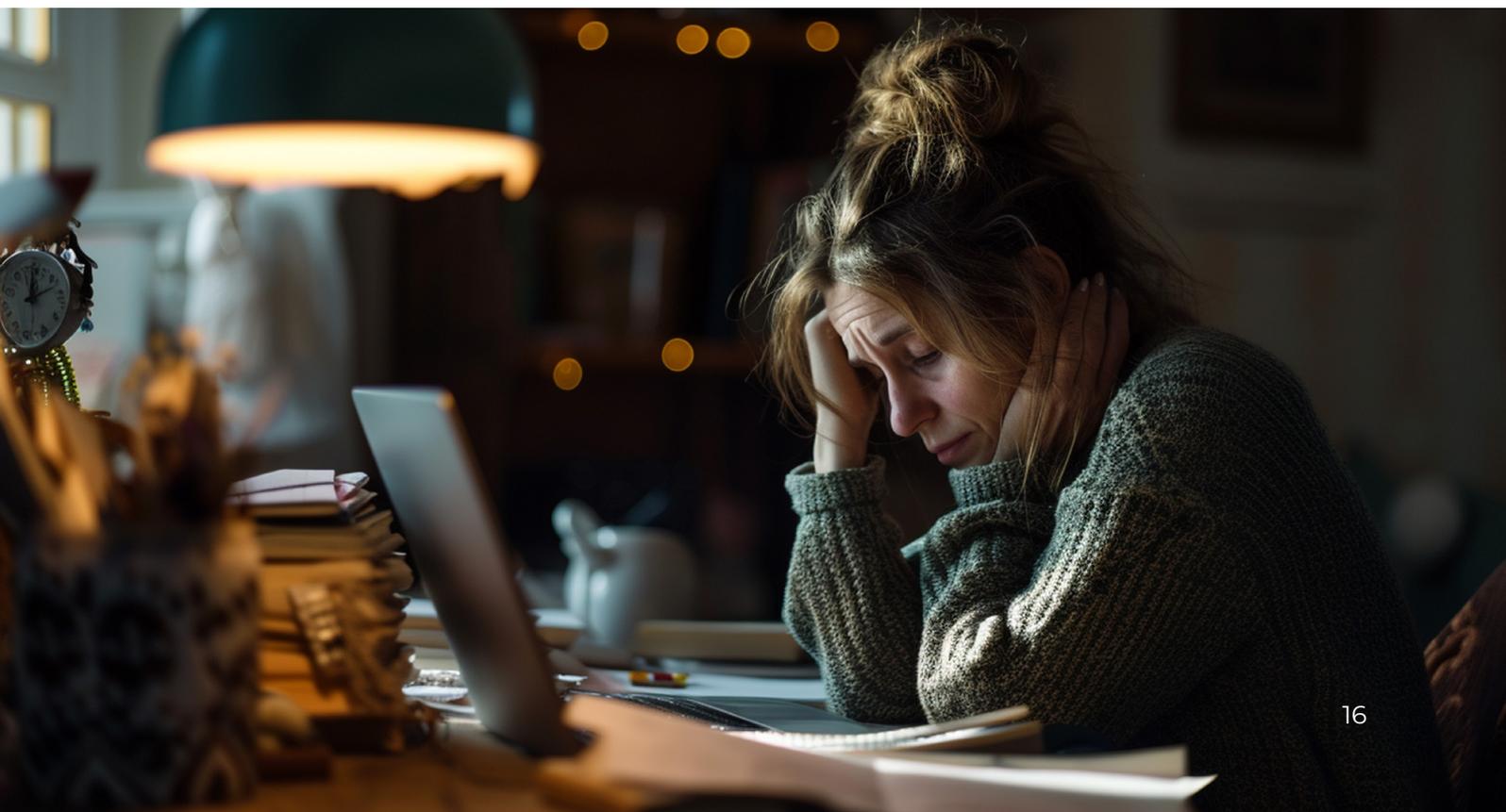
6.

AI Anxiety Index: A Comparative Early-Warning Tool

The AI Anxiety Index is designed to identify where AI-driven labor disruption is most likely to translate into social anxiety and legitimacy stress—conditions that often precede political backlash and policy whiplash. It is not intended as a job-loss forecast. Rather, it functions as a lead indicator of governance risk.

This pilot index was developed by the lead author with support from her NYU research team, using publicly available data sources. The results should therefore be interpreted as directional rather than definitive, intended to illustrate a monitoring framework rather than provide a final ranking.

6.1 Design and Methodology

The index combines three dimensions:

- **Exposure:** Derived from the ILO's refined GenAI occupational exposure framework, which estimates the share of tasks in each occupation that may be affected by generative AI.
- **Fear:** Measures public concern that AI will reduce job opportunities, using Ipsos[13] cross-national sentiment data.
- **Trust:** Uses the Edelman Trust Barometer[14] as a proxy for institutional capacity and public confidence in government and institutions to manage AI-related risks, including unemployment.

AI Anxiety Score = 0.30 × Exposure + 0.40 × Fear + 0.30 × (100 – Trust)

AI Index Anxiety (2025) - Final 10 Country Ranking
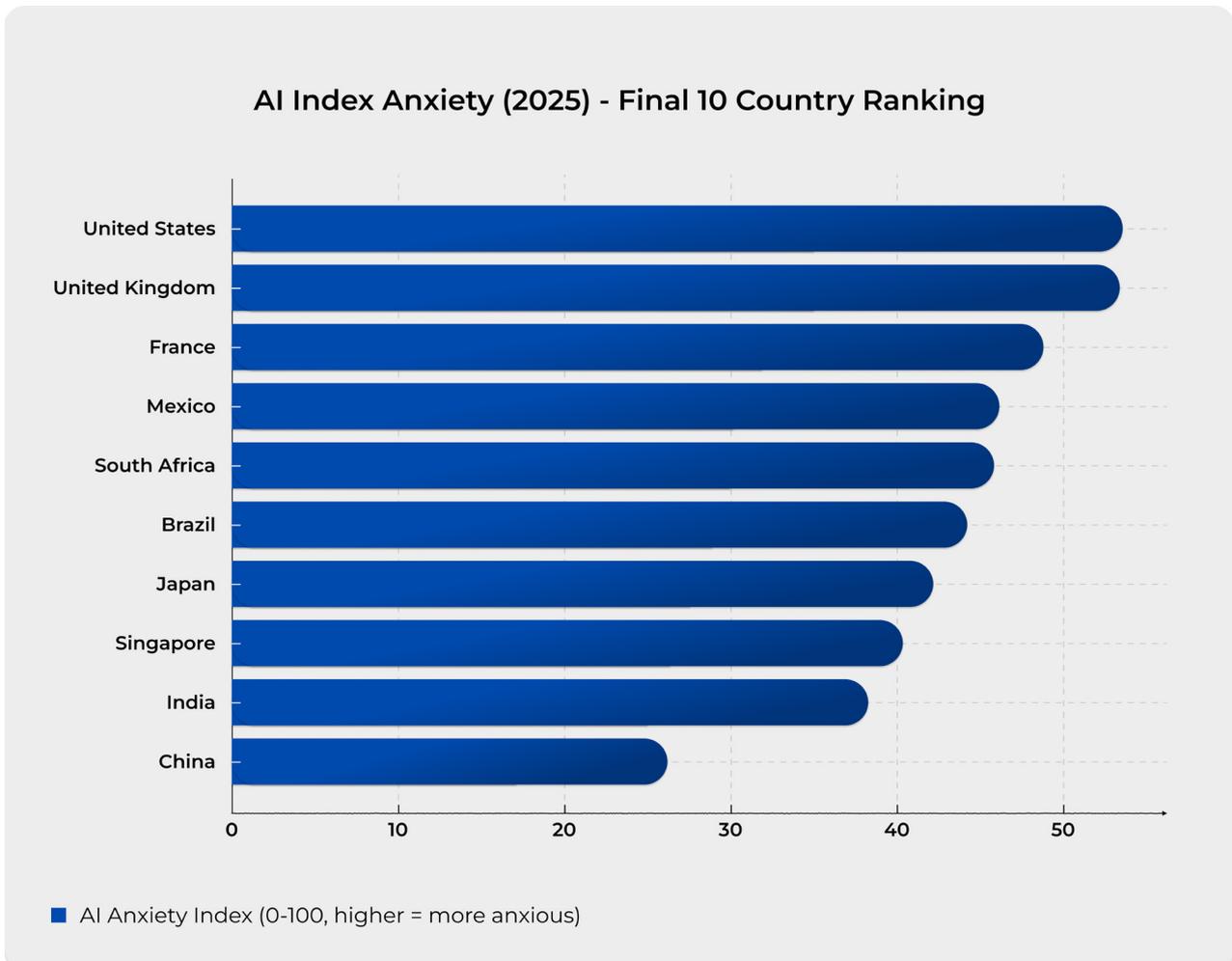
Figure 1. AI Anxiety Index (2025)

The weighting reflects a substantive hypothesis about governance dynamics. Fear receives the heaviest factor (0.40) because public sentiment tends to be the most proximate driver of political backlash. Trust functions as the most consequential stabilizer: a 10-point increase in institutional trust reduces the overall score by approximately 3 points, often enough to shift a country's relative position in the index. Exposure alone is therefore insufficient to predict social instability.

6.2 Ten Country Pilot (2025) and Key Takeaways

The pilot results show a clear clustering pattern. The United States and the United Kingdom appear at the higher end of the sample, with France also relatively elevated, while China emerges as a low-end outlier. The most strategically important pattern is the cross-regional divergence: the Asian quartet (Japan, Singapore, India, China) averages 36.8, whereas the Western trio (United States, United Kingdom, France) averages 52.1. One plausible interpretation is that institutional trust moderates how labor market exposure translates into public anxiety. This interpretation should be treated as a working hypothesis rather than a causal conclusion, given the limited sample size of the pilot.

Because fear carries the heaviest weight (0.40), shifts in sentiment have a measurable impact on overall scores. A 10-point reduction in public fear reduces the index by roughly 4 points. In this small panel, fear and trust together explain more cross-country variation than exposure alone, suggesting that governance capacity and public confidence may be as important as technological exposure in shaping social outcomes.

China's position as a low-end outlier warrants interpretive caution. High reported institutional trust may partly reflect survey-response dynamics or political context rather than a purely comparable measure of social stability. Policymakers should therefore be careful when drawing direct cross-national comparisons from trust-based indicators.

The index is useful because anxiety is not merely a social mood. It can function as an early indicator of backlash politics, policy whiplash, and institutional distrust, especially if the first-rung collapse dynamic accelerates.

7.

Second-Order Effects and Legitimacy Risks

If AI-driven labor disruption affected only wages and employment counts, it could be treated as a standard economic adjustment problem. The deeper risk is that it interacts with preexisting social fractures, including low institutional trust, polarization, rising living costs, youth insecurity, and regional inequality. Under these conditions, a labor-market trend can evolve into a broader legitimacy crisis.

Political backlash and polarization[15] represent the most direct second-order effect. When technological transitions are experienced as imposed rather than negotiated, individuals often mobilize against against institutions—firms, governments, universities, and the professional class. Historical experience suggests that backlash is inevitable, but its intensity depends on whether the transition is perceived as fair and whether institutions provide credible pathways for adjustment and mobility.

A second pathway involves educational legitimacy. The longstanding social bargain—invest in credentials, gain entry into a profession, accumulate experience, and achieve upward mobility—weakens[16] if entry-level opportunities narrow. Universities and training institutions may therefore face legitimacy pressure while graduates face cynicism[17] about the value of their education. Intergenerational resentment can intensify as younger cohorts perceive that the mobility pathways available to earlier generations are closing. In several advanced economies, this tension is already politically salient even before AI-driven displacement has occurred at scale.

A third dimension concerns democratic resilience.[18] AI concentrates not only capital and computational infrastructure but also cognitive production and informational influence within a relatively small number of model ecosystems, platforms, and technical gatekeepers. When fewer individuals can produce greater economic output, collective bargaining power may weaken. At the same time, AI-mediated writing, analysis, and reasoning may become the default interface for knowledge work, increasing dependency on a limited number of model providers.

In this environment, independent idea formation and dissent may narrow indirectly, not through explicit censorship but through economic fragility, platform dependency, and attention concentration. A credible countervailing possibility exists: AI can also empower small teams, local journalism initiatives, and civic entrepreneurship. Realizing this positive trajectory depends on broad access to AI capabilities, constraints on excessive platform concentration, and equitable distribution of productivity gains. In this sense, labor policy and democratic resilience are increasingly intertwined. When individuals lose both economic security and civic voice, political systems become more fragile.

A fourth dimension concerns collective mobilization. Unions in several sectors—film and television writing, acting, dockworkers, and parts of the public sector—have already negotiated AI-specific contractual provisions. These provisions often include disclosure requirements for AI use, restrictions on replacing workers with AI-generated content, and bargaining rights over deployment decisions.

These developments matter for two reasons. First, they demonstrate that worker participation in AI governance is feasible, not merely aspirational. Second, they reveal where legitimacy pressures have already intensified enough to generate organized resistance. In sectors where unions are weak or absent—often the same sectors where AI-precariat exposure may be highest—this countervailing force does not exist, making enforceable policy levers even more important.

8.

Future Scenarios to 2030

This brief adopts the World Economic Forum's (WEF) four-scenario framework[19] for jobs in 2030, built around two core factors: the pace and scale of AI capability (exponential versus incremental progress) and workforce readiness (widespread versus limited). This analysis introduces two additional variables often absent from scenario planning: career-ladder integrity (whether entry pathways survive) and institutional trust (whether people believe the transition is fair and governed). Together, these two variables help explain why early AI unemployment may appear first as hiring compression and mobility loss, long before mass layoffs become visible.

Scenario 1: Supercharged Progress

The World Economic Forum's Supercharged Progress scenario describes exponential AI breakthroughs alongside widespread AI readiness, driving major productivity gains and fast innovation; many jobs disappear, but new occupations scale quickly and human roles shift toward orchestrating portfolios of capable machines.

- **First-Rung Integrity:** Entry roles do not vanish but mutate. They become AI-native apprenticeships: verification, oversight, auditing, workflow orchestration, and exception handling. The biggest risk is not unemployment per se; it is that entry becomes more selective and gated by access to high-quality training, networks, and tools, creating a quieter stratification between those who can convert AI into compounding human capital and those who cannot.

- **Missing Cohort Risk:** Lower than in displacement-heavy futures, but still possible if firms treat junior pipelines as optional.

- **Policy Posture:** Lock in redesigned entry pathways, enforce transparency about hiring shifts, and treat trust as infrastructure through credible transition supports, not slogans.

Scenario 2: Age of Displacement

The WEF's Age of Displacement scenario describes exponential AI advancement outpacing workforce adaptation: businesses race to automate; agentic AI takes over key processes; unemployment spikes; consumer confidence erodes; and social fracture creates instability risks.

- **First-Rung Integrity:** This is the world where first-rung collapse becomes the primary early mechanism. Firms preserve output by substituting AI for junior tasks and shrinking entry intake, so mobility breaks before the economy registers mass layoffs. The political danger is that the transition feels imposed and asymmetric: productivity rises while access to the future narrows.

- **Missing Cohort Risk:** Highest. If entry cohorts are thin for even five to seven years in key professions, the downstream shortage of mid-career talent becomes a structural deficit, without requiring millions of layoffs, only persistent hiring compression at the base.

- **Policy Posture:** Treat this as a potential legitimacy emergency. Mandate enforceable labor-impact transparency, require ladder-preservation obligations, and deploy churn-ready safety nets with embedded mental health support. Governance speed matters as much as policy design.

Scenario 3: Co-Pilot Economy

The WEF's Co-Pilot Economy scenario describes gradual AI progress paired with AI-ready skills, with the emphasis on augmentation rather than mass automation as human–AI teams reshape value chains over time.

- **First-Rung Integrity:** This future is most compatible with preserving career ladders, if institutions actively design them. Entry-level work becomes supervised practice with AI: juniors produce more, learn faster, and are evaluated more on judgment, verification, and domain understanding than on routine drafting.

- **Missing Cohort Risk:** Moderate and policy-sensitive. Even in an augmentation world, firms may quietly reduce junior hiring because AI raises senior productivity. The difference between a healthy pipeline and a missing cohort is whether incentives and norms keep entry pathways open.

- **Policy Posture:** Institutionalize what works: standardized apprenticeships, credible certification pathways, AI fluency plus verification training, and career-ladder KPIs for major employers in exposed sectors.

Scenario 4: Stalled Progress

The WEF's Stalled Progress scenario describes steady AI progress meeting a workforce lacking critical skills: productivity gains are patchy; gains concentrate in firms and geographies with AI expertise; routine roles face displacement; and adoption gaps fuel inequality and frustration.

- **First-Rung Integrity:** Ladders do not collapse uniformly but become geographically and institutionally uneven. Some places build resilient entry pathways; others become AI deserts where juniors cannot acquire the skills or experience needed to convert work into mobility.
- **Missing Cohort Risk:** High in lagging regions and sectors. The missing cohort becomes spatially concentrated, not a national lost generation but multiple local ones, with predictable political consequences.
- **Policy Posture:** Focus on place-based capacity—regional compacts, local employer-training coalitions, mobility supports, and targeted infrastructure for skills and access. The key problem is not just disruption; it is bifurcation and legitimacy erosion driven by unequal adaptation.

Physical AI is best understood as an accelerant that can intensify either Supercharged Progress or the Age of Displacement. Once automation expands into human-designed environments, entry-level compression can spread beyond white-collar pipelines into the service economy. First-rung protection should not be framed as a white-collar policy alone.

Across all four futures, no-regret strategies remain consistent: protect entry pathways, build enforceable transparency, and finance transitions visibly because legitimacy is easier to maintain than to rebuild.

9.

Policy Recommendations: From Rhetoric to Enforcement

9.1 Require AI Labor Impact Statements (ALIS) and an AI Labor Market Dashboard

Policies that encourage AI deployment solely for cost reduction are more likely to intensify displacement pressures. By contrast, policies that support augmentation, new task creation, and workforce adaptation are more likely to align productivity gains with inclusive employment outcomes. The recommendations below are designed around this second logic.

The first shift must be enforceable transparency. Firms deploying AI at scale should publish standardized AI Labor Impact Statements, covering roles affected, entry-level hiring shifts, wage distribution impacts, redeployment outcomes, and mitigation investments. ALIS must not be voluntary. A practical enforcement lever is public procurement: eligibility for major public contracts and AI-related tax incentives should be conditioned on ALIS compliance and credible mitigation plans. Without enforceable requirements, disclosure risks become performative rather than substantive.

ALIS should be paired with an AI Labor Market Dashboard tracking leading indicators, such as entry-level hiring trends in AI-exposed occupations, workforce churn and redeployment rates, wage polarization, and place-based divergence in labor market outcomes. Monitoring these indicators would help prevent a the scenario in which governments wait for unemployment rates to spike before recognizing structural harm that has already accumulated.

9.2 Treat Career Ladder Preservation as Economic Infrastructure

The most important near-term labor policy may be protecting the first rung of the career ladder, not as a welfare provision but as long-term talent infrastructure. A career-ladder preservation agenda should combine targeted subsidies or tax credits for junior hiring in high-exposure occupations, modern AI-era apprenticeships (focused on verification, workflow oversight, compliance roles), and professional standards requiring supervised practice pathways even as AI performs first-pass tasks.

A backstop mechanism is necessary. Firms that automate away junior roles at scale should be required either to maintain structured apprenticeship equivalents or contribute financially to a Career Ladder Fund, supporting placements, training, and geographic mobility. Such mechanisms would convert productivity gains into pipeline investment rather than allowing organizations to optimize solely for short-term labor cost reduction and absorb the missing cohort problem as a future talent shortage they did not anticipate.

Education reform belongs within this framework, rather than as a separate agenda. AI literacy alone is insufficient. Durable human-complementary capabilities include verification, judgment, critical thinking, nuanced communication, and deep domain depth—skills that allow workers to remain valuable alongside AI systems rather than easily substitutable by them.

9.3 Build Churn-Ready Safety Nets with Mental Health as Core Infrastructure

Labor-market safety nets must evolve beyond traditional unemployment checks. Wage insurance and benefit portability are increasingly important because displacement often occurs through downshifts, reduced hours, or underemployment rather than clean layoffs.

Equally important are rapid training-to-placement pipelines since training programs without credible job pathways can trap workers in cycles of repeated reskilling without stable employment outcomes. Mental health support must be embedded within labor transition systems, not treated as a secondary or optional component. Evidence linking unemployment and chronic insecurity to psychological distress and depression is robust. In the AI transition, economic stability and psychological resilience are interconnected policy concerns.

9.4 Fund Place-Based Transition Compacts

National employment averages often conceal localized shocks. Governments should therefore fund place-based transition compacts: regional coalitions bringing together employers, training institutions and local governments aligned around regional exposure mapping.

These compacts should operate in both high-exposure urban clusters and vulnerable communities with limited adjustment capacity. Their objective would be to transform local labor markets into adaptive systems capable of accelerating credential conversion, placement, and the creation of AI-complementary roles before political pressures escalate into crisis.

9.5 Establish a Global AI Workforce Compact and AI Transition Tax

AI-driven labor disruption is inherently transnational. Value chains, model access, and labor-market spillovers cross national borders. A Global AI Workforce Compact[20] should therefore be understood as risk management rather than utopian ambition. The compact could establish baseline commitments around transparency (ALIS-equivalent reporting), career-ladder preservation, transition security, worker participation in AI deployment decisions, and inclusion of Global South economies to avoid reinforcing existing global inequalities.

A carefully designed AI Transition Tax[21] with clear guardrails may also warrant consideration. Such a mechanism should focus on capturing rents and externalities rather than discouraging productive AI adoption. Possible design options include the following:

- Excess-profit component levies in highly concentrated AI markets
- Compute or energy externality charges associated with large-scale model deployment
- Displacement-linked contributions when automation replaces taxable labor at scale.

Existing global governance frameworks provide partial scaffolding. The United Nations Global Digital Compact offers a platform for digital cooperation while the ILO's social dialogue ecosystem provides institutional grounding for labor-related governance.

A coalition-first approach may be more realistic than universal consensus. Smaller but agile states—such as Singapore in governance tooling or the United Arab Emirates in convening and norm entrepreneurship—could help pilot policy frameworks. At the same time, China's role in the global ecosystem, while politically contested, remains strategically consequential and will need to be considered in any durable multilateral governance arrangement.

The canary signal is already
visible in early-career
employment patterns
in exposed occupations.
The question is whether
institutions move before
instability does.

Conclusion

AI-driven unemployment is unlikely to manifest primarily as sudden job losses in headline statistics. The more consequential question is whether entry pathways into skilled careers survive, productivity gains are broadly shared, and institutional trust remains intact long enough for societies to adapt.

An economy can appear statistically healthy while becoming structurally brittle. If the first rung of the career ladder erodes, the emergence of an AI precariat becomes plausible even in a context of net job growth because mobility, dignity, and legitimacy weaken before unemployment rates rise. If the missing cohort dynamic compounds over a decade, the damage may not become visible until the professional pipeline is already depleted and rebuilding it becomes costly and slow.

The policy choice is therefore not AI versus no AI but unmanaged transition versus deliberately governed transition. The distinction between these futures lies not in the technology itself but in whether governments, employers, and institutions treat career ladders as economic infrastructure, transparency as enforceable rather than voluntary, and institutional legitimacy as a finite resource that must be actively maintained.

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Imen Ameur is a Senior Fellow at The Digital Economist, co-chair of the Tech Policy and Governance workgroup, a professor of practice at Hult International Business School, and an instructor at Columbia University specializing in AI governance, technology policy, and entrepreneurship. With over 17 years of experience spanning ICT, healthcare, higher education, and public sector innovation, she has held leadership roles at Microsoft, Neuledge, and IA Consulting, while also founding initiatives that advance sustainability and digital transformation. She leads innovation and research at the Africa Digital Cluster Think Tank and directs the Hult Founders Lab Boston incubator, fostering ventures at the intersection of ethics, technology, and economic development. Fluent in English, French, and Arabic, she holds an MBA, MPA, MGPP, CSP-SM, and CSPO.

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About

The Digital Economist, headquartered in Washington, D.C. with offices at One World Trade Center in New York City, is the world's foremost think tank on innovation advancing a human-centered global economy through technology, policy, and systems change. We are an ecosystem of 40,000+ executives and senior leaders dedicated to creating the future we want to see—where digital technologies serve humanity and life.

We work closely with governments and multi-stakeholder organizations to change the game: how we create and measure value. With a clear focus on high-impact projects, we serve as partners of key global players in co-building the future through scientific research, strategic advisory, and venture build out.

We engage a global network to drive transformation across climate, finance, governance, and global development. Our practice areas include applied AI, sustainability, blockchain and digital assets, policy, governance, and healthcare. Publishing 75+ in-depth research papers annually, we operate at the intersection of emerging technologies, policy, and economic systems—supported by an up-and-coming venture studio focused on applying scientific research to today's most pressing socio-economic challenges.

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- Digital Assets & Blockchain
- Sustainability in Technology
- Tech Policy & Governance
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- Healthcare Innovation

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