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Opinion Piece

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The Gift of Time

AI, Automation, and the Future of Work in a Time-Rich Economy

POST-LABOR DYNAMICS | TEMPORAL ECONOMICS | COGNITIVE LABOR SHIFT

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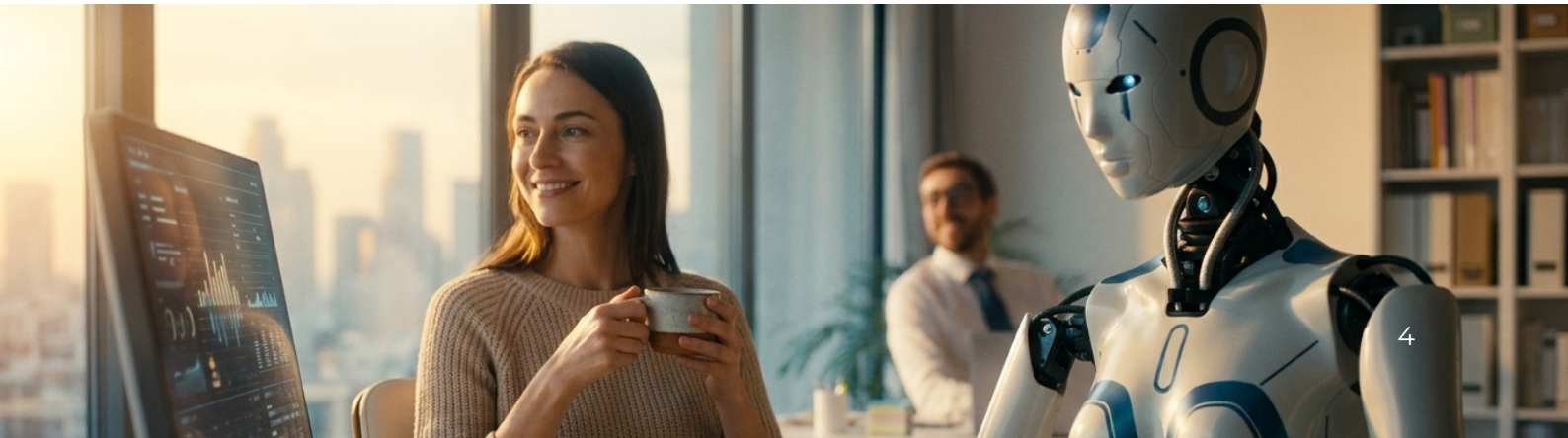
Introduction

Picture a world where the most valued currency is not money. The digital economy stands on the verge of a powerful transformation, fueled by intelligent systems that deliver the ultimate gift: human time. Tasks that once required days, weeks, or even years of human effort can now be completed in minutes or seconds, allowing us to engage in creativity, connection, and well-being in ways previously unimaginable.

This change affects how we live and how we understand work. It redefines how value is created and calls on societies to navigate an economy in which intelligent systems perform essential functions. As AI transforms the digital world from a condition of labor scarcity to one of time abundance, those who treat time as a strategic asset will be positioned to achieve greater advances.

This paper examines how AI is revitalizing work, simplifying everyday tasks, saving vast amounts of human time, driving a broader societal shift from exhaustion toward the promise of a “time dividend.” This dividend serves as a foundation for happiness, well-being, and productivity while prompting a reconsideration of what individuals can meaningfully pursue in their lives.

The paper provides examples, such as Citigroup’s 100,000 hours saved per week through AI adoption, to illustrate the effects of the emerging time-rich organization framework. This idea shows how technological advancements are reshaping the job landscape while underscoring the importance of addressing both the challenges and opportunities of reskilling and inclusive transitions. Ultimately, the paper argues that work in a time-rich economy will depend on how individuals, organizations, and societies adapt to, and govern, the allocation and use of human time. This paper focuses primarily on knowledge workers, as corporations are the fastest-moving towards AI transformation.



1.

From Exhaustion to Time Dividend

For many knowledge workers in the pre-AI era, professional success required continuous travel, long hours at client sites, evening studies, and regular sacrifices of downtime, personal life, and health. Translation required human interpreters, cultural adaptation required repeated onsite visits, and follow-up depended on manual note-taking and reporting. Today, real-time translation, context-aware presentation tools, automated documentation, and virtual collaboration reduce the mental and physical effort required while still allowing organizations and their clients to achieve desired outcomes.

This shift signals the emergence of what can be called the time dividend. Programmers using AI-assisted coding tools can deliver software significantly faster (Kalliamvakou 2024). Attorneys using AI for document review report saving double-digit hours each week (Thomson Reuters 2025). Marketers who rely on AI to understand relevant content spend substantially less time on initial research (Lee 2024). In each case, AI gives people time for strategic thinking, creativity, relationships, health, and rest.

Research in psychology on the “time dividend” shows that when individuals feel they have sufficient discretionary time, they are happier, healthier, and more likely to do good things for others, even when material income is held constant (Kasser and Sheldon 2008; Whillans 2020).

2.

The Compression of Work

A consistent trend is visible across many domains. At its core is the compression of work, where automation, augmentation, and parallelization reduce the time required for tasks and generate a time dividend. Processes that previously required a year are now compressed into a month. Workflows that took a month can be completed in a week. Activities that filled a week are condensed into a day. Routines that once took a full day can now be executed in seconds.

Citigroup offers a strong corporate example of how AI creates a time dividend for professionals while also increasing productivity and earnings. The bank has trained nearly 180,000 of its staff across 83 countries to use AI tools, including automated code review, data analysis, and content creation. These tools have already recorded seven million uses in a single year. CEO Jane Fraser said on the Q3 2025 earnings call that these tools now give back 100,000 hours of developer time each week (Reuters 2025).

Citi's own research anticipates that AI will raise global banking profits by $170 billion (9 percent) by 2028 while reducing regular working hours to minutes. This allows engineers and product groups to concentrate on system design, security, and customer innovation, which in turn drives growth (Citigroup 2024). An internal document stated that AI is "making work that used to take hours into tasks done in minutes" and signaling "the start of a new way of working" (Davis 2025).

The transformation of traffic management in São Paulo offers an urban-scale example. In the 1960s, traffic police stood at road junctions using hand signals and whistles to direct traffic of cars, buses, and pedestrians. As the city grew to over ten million people, this approach led to severe congestion and long travel times, even with the introduction of electronic semaphores. The current AI traffic management system uses sensors, cameras, and adaptive signal timing to adjust and improve traffic flow. Journeys that once took about an hour for two miles during peak periods can now be completed in approximately fifteen minutes. The city benefits from reduced fuel consumption, fewer accidents, lower pollution, and millions of hours of commuter time saved (World Bank Group 2023).

There are many other examples. Mount Sinai Health System reduced emergency room wait times by 50 percent using AI models that forecast patient admissions based on local events and weather forecasts, resulting in faster admissions, fewer holdups, and improved allocation of beds and staff (Dezyit 2025). Doctors and nurses now spend more time on direct patient care, including triage and treatment, rather than managing queues. AI also offers real-time decision support by highlighting risks early, helping doctors prioritize difficult cases.

Amazon's AI-driven logistics (predictive inventory stocking, real-time route optimization, and warehouse robots) delivered over 13 billion items same- or next-day in 2025 alone, up from two-day shipping, which was revolutionary in 2005. Amazon reports that Prime subscribers now save an average of 51 minutes per order and get back hours previously lost to watching for and tracking packages. This highlights an important distinction between system-level time savings and behaviorally realized time, the latter determining whether these gains translate into meaningful improvements in family life, work, and well-being (Amazon News 2026).

3.

Shifting Structures of Employment

Previous periods of technological development have markedly altered the nature of employment. In agriculture and manufacturing, machines reduced the demand for manual labor. Digital technologies reshaped office work, supply chains, and service industries. With these changes, many jobs were eliminated while new ones were created. Since 2000, manufacturing in a few of the more developed nations has shed approximately 1.7 million jobs, and worldwide, it is thought that automation eliminated roughly 75 million positions by 2022 (TeamStage 2024; World Economic Forum 2024).

In parallel, technology has created about 133 million new jobs in fields that did not exist in 1940, including many digital and knowledge work. Forecasts for the next ten years indicate that between 400 and 800 million people globally may need to change jobs or acquire new skills by 2030 as automation advances (Batra et al. 2017).

Recent calculations show that even with significant job losses, job creation will often exceed them. For example, the World Economic Forum predicts 170 million new jobs and 92 million displaced workers across the economies studied by 2030, resulting in a net gain of 78 million jobs (World Economic Forum 2025). The biggest challenge, however, is not solely the quantity of jobs but the speed, distribution, and accessibility of this transition.

4.

AI as an Intelligence Partner

Earlier technological advancements enhanced physical power. Today's AI extends cognitive capabilities and continuously improves its performance. Systems can compose emails, summarize complex information, schedule meetings, create first drafts of products, and handle administrative workflows. As a result, workers are relieved of many routine and repetitive tasks, freeing up hundreds of hours each year (Kurzweil 2024; Dilmegani and Ermut 2025).

Some experts predict that AI and robotics could eventually handle up to 99 percent of tasks currently performed by paid workers (Burleigh 2025). AI systems are increasingly assisting with research, design, medical diagnosis, legal analysis, and financial modeling while humans focus on setting objectives, defining constraints, choosing values, and managing tradeoffs. Work shifts from what one must do to live to what one wants to do to make a difference, driven by personal curiosity.

In such an environment, human judgment still plays a vital role. Individuals determine which problems are worth solving, which risks are acceptable, and which tradeoffs are preferable. AI accelerates the search for answers, offers options, and manages intermediate processes. The relationship becomes a collaboration rather than one in which one replaces the other.

As AI transforms the workplace, competitiveness will depend on how well human and machine strengths work together. The "Human Advantage" report presents this as a financial necessity: investing in "stronger brains" to protect brain health and develop skills, such as judgment, creativity, and relationship-building, that AI cannot replace (McKinsey, World Economic Forum 2026).

5.

Two Time-Rich Futures

As people gain more free time due to advancements in AI, two distinct societal paths become clear. First, this time is used to enhance learning, foster creativity, boost community engagement, and support personal development. Institutions cultivate curiosity, self-awareness, critical thinking, and a sense of life's purpose. Individuals deepen their relationships, their involvement in public life, and their contemplation of questions about significance, beauty, and fairness that cannot be answered by simple calculation.

On the other hand, a substantial share of the time AI makes available is spent in digital environments designed to capture attention and deliver short-term rewards (Wang and Wang 2025). Social media, video platforms, and immersive virtual realities provide pastimes that are appealing, responsive, and constantly available (Clark and Zack 2023). Young people and adults may find it easier to exist in these spaces than in real-world groups, particularly when avatars allow them to escape judgment or social limitations (Middleton 2025). The structure of these systems often supports prolonged use, repeated engagement, and reward mechanisms that favor continued screen time (World Health Organization 2024).

An account of a child whose life increasingly revolves around online games demonstrates the power of these developments. Playing at night, diminished family interaction, and a strong emotional attachment to virtual achievements show how easily digital activities can take over. The question is less about the existence of such environments and more about how design, education, and regulation will influence their role in a context of increased free time.

6.

The Reskilling Divide and Time

The reskilling divide is both an educational and a time issue. People with financial flexibility and free time can enroll in classes, explore different roles, and gradually transition into expanding sectors of the economy. However, those under constant time pressure from multiple jobs, caring for family, or illness find it difficult to make time for learning, even when opportunities are available (Human Act 2025).

Recent research on higher education shows that students experiencing severe time poverty earn fewer credits and are significantly more likely to drop out, partly because they must sacrifice sleep, health, and social connections to meet academic demands (Wadlis 2024). Parallel analyses indicate that workers in low-wage or unstable jobs often lack predictable schedules, making it difficult to participate in training programs designed to support adaptation to AI. This structural constraint on time further widens the reskilling gap (Li, Henry, Manyika 2020).

The arrival of AI adds another layer. People who understand AI tools and are confident in using them can increase both their productivity and adaptability (World Economic Forum 2025). Others may experience AI primarily as an external force, one that raises expectations without providing clear pathways for participation.

The World Economic Forum estimates that fifty-nine out of one hundred workers will require substantial training by 2030 to remain effective in their roles or transition into new ones. Of these, twenty-nine can be retrained within their current jobs, and nineteen can move into new roles within their organizations. The remaining eleven face an increasing risk of exclusion without adequate support (World Economic Forum 2025). This finding highlights a reskilling divide that runs alongside existing inequalities in income and opportunity.

Narrowing this divide requires organizations, governments, and communities to treat time as a critical resource in upskilling and reskilling strategies (Nitzberg and Zysman 2024). Employers can allocate protected learning time, supported by AI-guided curricula and coaching. Governments can promote portable learning accounts and invest in community-based learning infrastructure. AI itself can function as a tutor for both basic skills and advanced topics, making high-quality instruction widely accessible (Joshi 2025).

Proposals for retraining and learning accounts, funded jointly by employers and the public sector, offer a practical way to give workers both the financial means and the time required to reskill in an AI-driven economy (West 2025).

From a financial standpoint, investing in reskilling and learning aligns with the idea that demonstrates how ethical AI adoption can generate long-term returns (Bevilacqua et al. 2025). Organizations that support their workforce during AI transitions protect their reputations, reduce regulatory risks, and sustain their long-term capacity to innovate (Upmann 2025). Those that underinvest may realize short-term savings but risk future backlash and restrictions that limit their ability to use AI safely and creatively (PwC 2025).

7.

Governance, Ethics, and the Economics of Time

Assessments of AI investments typically focus on immediate financial benefits, such as revenue growth, cost savings, and increased efficiency. More recent approaches to AI governance and principles also include reducing risk, complying with regulations, and intangible benefits such as reliability and brand strength (PWC 2025). A comprehensive financial analysis of AI should also consider how AI systems change how time is used.

Future AI ROI models can include specific calculations of time returned to workers, customers, and the public. For example, this may include hours saved on travel through smart mobility, hours saved on routine paperwork thanks to AI agents, hours gained for caring for others and learning because of automated homework, or hours saved waiting for a package in the Amazon case previously mentioned. Using these figures, leaders can evaluate projects based on the money they generate, their impact on people's lives, and their growth potential.

Laws being developed, such as the EU's AI Act, address risk levels, human oversight, and the societal impact of high-risk systems (European Commission 2024). These approaches incentivize the adoption of AI governance practices centered on transparency, accountability, and consideration of social and ecological impacts. Including time-based outcomes in these studies will further align AI use with what society ultimately prioritizes.

Organizational governance also evolves as AI agents are integrated into operational structures. AI systems assist customers, serve as analysts, ensure compliance, and support new staff members. Companies must establish clear rules for how these AI agents operate, which decisions require human oversight, and how to evaluate performance. They must also need strategies to make sure that the time AI frees up for people at work results in better jobs and meaningful work rather than just more tasks (Carter 2025).

8.

The Time-Rich Organization Framework

A “time-rich organization” framework begins with the premise that time is a strategic asset that should be developed and managed. As AI and automation cut down the time needed for routine tasks to minutes, the key question for leaders shifts from “How can we maximize people’s time?” to “How can we give back time to people in a way that allows them to think, learn, and contribute more meaningfully?”

A time-rich organization treats the time dividend created by intelligent systems as carefully as financial capital, asking who gains more time, who falls short, and how that reclaimed time is used for creativity, learning, connections, and health.

In practice, a time-rich organization redesigns work so that the time dividend is something people actually experience rather than just something it talks about. Leaders assess how tasks are done, meetings, reports, and digital workflows, and ask one key question: Does this absolutely require people to rely on their own judgment and relationships, or can AI assist or take over so people can reclaim time?

The goal is to increase efficiency while easing constant pressure and to protect time for deep work, reflection, and reskilling. Policies like scheduling dedicated learning hours, setting aside time without meetings, using AI for administrative tasks, and establishing clear availability standards help ensure that the time freed by automation isn’t quietly filled with trivial tasks.

Looking at the bigger picture, a time-rich organization extends this idea beyond itself to its network and society. It measures and shares the time it gives back to employees, customers, and communities as a key success metric, alongside financial and environmental measures, as Citigroup did. When it introduces AI into customer service, distribution, or product design, it considers how these systems affect people's time: Do customers gain hours of easier access? Do partners have time to develop new ideas? Do local communities benefit from shorter commutes or fewer administrative tasks?

By treating time as something everyone shares and planning AI deployments to increase time abundance rather than worsen time scarcity, a time-rich organization becomes a force for a healthier, fairer, and more human-centered digital economy.

To operationalize these ideas, organizations can use well-designed systems to guide the effective use of time-rich methods at various levels. The chart below illustrates how leaders can manage time as a valuable resource by applying specific actions and key questions to ensure that having enough time becomes part of how people work, improve their skills, and the organization functions. This framework provides a plan to translate a time-rich organization's vision into measurable results.

Level	Focus	Key Question for Leaders	Example actions
Micro (Time-aware design)	Individual time dividend	Do our people have time for deep work, learning, and rest?	Protected time blocks, AI replacing low-value tasks, and time-affluence surveys.
Meso (Time-inclusive reskilling)	Reskilling time gap	Who lacks the flexibility to learn and transition?	Guaranteed learning hours, time-backed learning accounts, and AI tutors for shift workers.
Macro (Time governance)	Time as a public good	How do our AI systems change the time budget of workers, customers, and citizens?	Time-return KPIs in AI ROI, partnership with smart mobility, and digital public infrastructure projects.

Table 1. Operational framework for time-rich organizations

9.

What Leaders Must Do Now

To lead in a time-rich economy, leaders must act with clarity and urgency. The following priorities outline concrete steps to translate the time dividend from AI into a lived reality for their people and organizations:

- **Measure the time dividend.** Include hours returned to employees, customers, and communities as a standard outcome of AI initiatives, alongside revenue and cost.
- **Redesign roles for human strengths.** Use freed time to shift work toward creativity, relationships, and care, and away from routine execution.
- **Protect time for deep work and renewal.** Establish clear blocks for focused work, reflection, and rest, supported by norms on meetings, messages, and availability.
- **Build learning into the workweek.** Reserve regular, paid hours for reskilling and upskilling, supported by time-backed learning accounts and AI-supported guidance.
- **Track time dividend.** Regularly assess who experiences enough time for focus, learning, and rest, and adjust AI and HR policies to ensure the time dividend reaches a broad range of roles and groups.

10.

The Time Paradox: Reclaimed Time at Risk

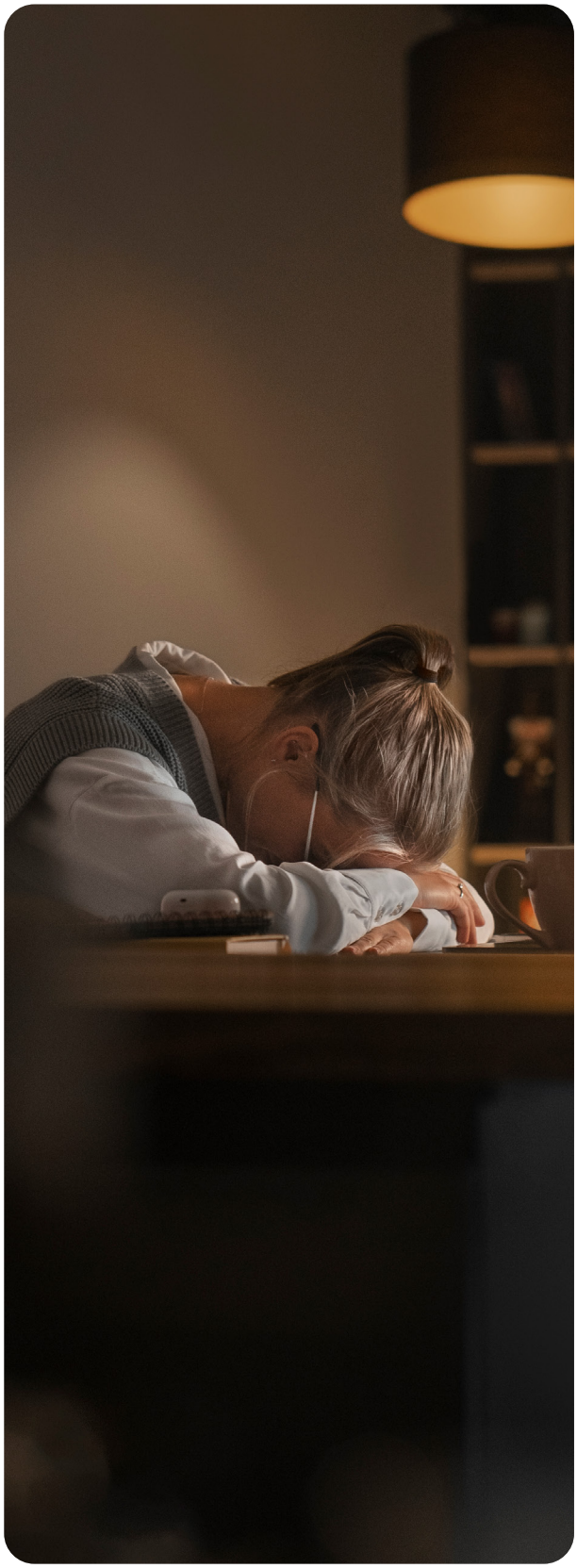
Individuals and organizations are reclaiming time through the efficient use of AI. However, recent studies from 2026 reveal an irony: while AI saves hours each week, most workers simply take on more tasks.

An eight-month UC Berkeley Haas study tracked two hundred tech employees at a Fortune 500 firm (Counts 2026). Those using AI tools worked faster, completing routine coding and analysis in half the time, but then expanded their scope. They took on cross-team projects, multitasked with AI outputs during meetings, and continued prompting during lunch or in the evenings, creating what researchers branded an “infinite workday.” What initially felt like momentum later revealed itself as sustained, unsustainable motion for both humans and systems (Ranganathan, Xingqi 2026).

This pattern validates the earlier governance warning: organizations need strategies to ensure AI-free time yields better work and a role redesign. Existing literature attributes this outcome more to design gaps rather than to the individual mindset. Without guardrails, such as protected focus blocks, no-meeting days, or metrics tracking actual time dividend, humans default to familiar busyness.

Boston Consulting Group (BCG) data show that only one-third of firms guide time reallocation, while the rest watch productivity rise alongside burnout (Beauchene et al. 2025). BCG's 10/20/70 principle reinforces human leadership here: AI implementation success demands 10 percent algorithms, 20 percent technology, and 70 percent people/process changes, such as reskilling, adoption of new rituals, and cultural shifts (Gauger et al. 2024). Neglect the human's 70 percent impact, and the technical advancements are meaningless.

The time-rich organization framework breaks this cycle. At the micro level, policies like AI-handled administrative work and scheduled deep-work hours help prevent task creep. At the meso level, guaranteed learning slots redirect capacity toward development. At the macro level, time-return KPIs measure well-being gained rather than tasks completed. Time-dividend research confirms that structured free time boosts health and prosocial behavior; left unstructured, it evaporates. Absent deliberate design and AI's dividend risks dissipation. On the other hand, with deliberate design, technology finally serves human flourishing (Counts 2026).



11.

Systemic and Continuous Adaptation and Public Time Returns

The transformation in how São Paulo manages its traffic shows how AI can restore people's time as a public benefit. When commuting takes less time, individuals gain hours they can use for relaxation, exercise, time with family, learning, or starting a business. Research links long commutes to lower life satisfaction, poorer health, and less physical activity, indicating that every minute saved through improved, smarter mobility could lead to better health and a higher quality of life (Han, Peng, Xu 2022). When this happens on a large scale, it affects public health, educational outcomes, and civic engagement. Similar potential exists in energy systems, healthcare, services, and public infrastructure.

Investments in AI-enabled public systems can also strengthen AI deployments in businesses. A strong foundation of digital public systems for transportation, payments, identity, and service access reduces friction and saves time across everyday transactions. In regions that develop these systems with fairness and ethics in mind, AI improves the quality of life and access to opportunity.

The patterns observed at Citigroup, São Paulo, Mount Sinai Health System, Amazon, and similar contexts reveal how human roles can evolve. Workers move from directly managing processes to supervising, designing, maintaining, and understanding complex systems. New expertise develops from combining knowledge of a specific subject, data, and ethical reasoning. With proper support, many individuals can transition into these roles. Without support, some may find themselves left out.

12.

Educators of the Time-Rich Society: Bridging the Pace Gap with Corporations

Today's corporations are advancing rapidly, leveraging AI and related technologies to transform industries, streamline operations, and unlock new efficiencies at a remarkable pace. In stark contrast, education systems, constrained by tradition, regulations, and limited resources, tend to adapt much more slowly even though they are responsible for preparing future generations to succeed in an increasingly AI-enhanced world.

This discrepancy presents a significant challenge: while companies are already benefiting from AI developments that save time, education systems must equip students with both technical knowledge and personal skills that enable them to thrive amid constant change, such as adaptability, resilience, continuous learning, comfort with uncertainty, creativity, emotional regulation, collaboration, critical thinking, ethical judgment, inquiry, self-direction, and the ability to find meaning in experience (Twani 2021). New research on "brain capital" refers to these brain skills and shows they are becoming increasingly important for productivity, innovation, and inclusive growth in the age of AI (McKinsey, World Economic Forum 2026).

The speed gap risks leaving graduates unprepared for the realities of tomorrow's workplace, where both technological fluency and the ability to make meaningful use of time will be essential (Twani 2026). At the same time, the rapid pace of business transformation provides both an example and a reason for education reform. Greater alignment between business and education systems can help ensure that the benefits of the AI-driven time dividend are broadly shared and that human potential keeps pace with technological progress.

What education systems can do:

- Accelerate innovation in learning by adopting flexible approaches, piloting new learning technologies and pedagogies that reflect the adaptability of business.
- Emphasize technical proficiency with AI, but most of all, the unique human skills that technology cannot replace.
- Create flexible learning environments where students can practice making choices about technology use, time management, and collaboration, mirroring the dynamic nature of modern workplaces.

What corporations can do:

- Support educational innovation through funding and sharing expertise, mentorship, and real-world project opportunities that connect the classroom and the workplace.
- Invest in continuous staff training, recognizing that the fast pace of change requires lifelong learning and upskilling for all employees.
- Promote the importance of time as a resource by adopting measures of success that focus on employee well-being, creativity, and meaningful work rather than just productivity.

Conclusion

As AI continues to shape what is possible in both work and life, the true measure of progress will be how effectively the resulting time dividend is used to foster well-being, creativity, and lifelong learning. The future will favor individuals and organizations that choose to invest this new time not just in economic output, but also in learning, innovation, and meaningful human relationships.

AI offers a rare combination: rising productivity alongside the prospect of deeper human flourishing. Realizing this promise depends on treating time as a strategic resource and designing roles, systems, and cultures that cultivate human judgment, character, and capacity across every sector of society.

The choices made in this decade—about how we learn, how we work, and what we define as success—will determine whether the time dividend becomes a shared foundation for a more humane economy. Ultimately, those who thrive in the age of AI will be those who treat time as their most valuable asset and who intentionally design, protect, and distribute its use so that individuals and societies can flourish.

References

1. “Amazon Sets New Prime Delivery Speed Record in 2025.” 2025. Amazon News. https://www.aboutamazon.com/news/retail/amazon-prime-same-day-next-day-delivery-2025.
2. Batra, P., Bughin, J., Chui, M., Ko, R., Lund, S., Manyika, J., Sanghvi, S., and Woetzel, L. 2017. “Jobs Lost, Jobs Gained: What the Future of Work Will Mean for Jobs, Skills, and Wages.” McKinsey Global Institute. https://www.mckinsey.com/featured-insights/future-of-work/jobs-lost-jobs-gained-what-the-future-of-work-will-mean-for-jobs-skills-and-wages.
3. Bevilacqua, M., Berente, N., Domin, H., Goehring, B., Rossi, F. 2023. “The Return on Investment in AI Ethics: A Holistic Framework.” Cornell University. https://arxiv.org/abs/2309.13057.
4. Blumenfeld, I., Gurdeniz, E., Kosar, J., Sen, R. 2025. “PwC’s 2025 Responsible AI Survey: From Policy to Practice.” PwC. https://www.pwc.com/us/en/tech-effect/ai-analytics/responsible-ai-survey.html.
5. Burleigh, E. 2025. “AI Expert Says It’s ‘Not a Question’ That AI Will Take Over All Jobs—But People Will Have 80 Hours a Week of Free Time.” Fortune Magazine. https://fortune.com/2025/09/09/ai-expert-tech-take-over-jobs-careers-record-unemployment-80-hours-free-time/.
6. Clark, L.; Zack, M. 2023. “Engineered Highs: Reward Variability and Frequency as Potential Prerequisites of Behavioural Addiction.” Science Direct. https://www.sciencedirect.com/science/article/pii/S0306460323000217.
7. Carter, S., et al. 2025. *AI Agents as Employees*. The Digital Economist. https://thedigitaleconomist.com/publications/ai-agents-as-employees.
8. Citi. “AI in Finance: Bot, Bank, and Beyond.” 2024. Citigroup. https://www.citigroup.com/global/insights/ai-in-finance.
9. “Citigroup’s AI Usage Frees Up 100,000 Hours for Developers a Week.” 2025. Reuters. https://www.reuters.com/business/citigroups-ai-usage-frees-up-100000-hours-developers-week-2025-10-14/.
10. Counts, L. 2026. “AI Promised to Free Up Workers’ Time. UC Berkeley Haas Researchers Found the Opposite.” UC Berkeley Haas. https://newsroom.haas.berkeley.edu/ai-promised-to-free-up-workers-time-uc-berkeley-haas-researchers-found-the-opposite/.

11. Davis, E. 2025. “Citi Is Requiring AI Prompt Training for Hundreds of Thousands of Employees.” *Entrepreneur*. https://www.entrepreneur.com/business-news/citi-is-mandating-ai-training-for-entire-workforce/497844.
12. Dilmegani, C., Ermut, S. 2025. “When Will AGI/Singularity Happen? 8,590 Predictions Analyzed.” AI Multiple. https://research.aimultiple.com/artificial-general-intelligence-singularity-timing/#easy-footnote-bottom-4-583.
13. Dizikes, P. 2024. “Does Technology Help or Hurt Employment?” MIT News. https://news.mit.edu/2024/does-technology-help-or-hurt-employment-0401.
14. Fleming, S. 2020. “A Short Story of Jobs and Automation.” World Economic Forum. https://www.weforum.org/stories/2020/09/short-history-jobs-automation/.
15. “Four Futures for Jobs in the New Economy: AI and Talent in 2030.” World Economic Forum. https://reports.weforum.org/docs/WEF_Four_Futures_for_Jobs_in_the_New_Economy_AI_and_Talent_in_2030_2025.pdf.
16. “Future of Jobs Report 2025: 78 Million New Job Opportunities by 2030, but Urgent Upskilling Needed to Prepare Workforces.” 2025. World Economic Forum. https://www.weforum.org/press/2025/01/future-of-jobs-report-2025-78-million-new-job-opportunities-by-2030-but-urgent-upskilling-needed-to-prepare-workforces/.
17. “Future of Professionals Report 2025.” Thompson Reuters. https://www.thomsonreuters.com/content/dam/ewp-m/documents/thomsonreuters/en/pdf/reports/future-of-professionals-report-2025.pdf.
18. Gauger, C., Kataeva, N., Levin, A. 2024. “The Stairway to GenAI Impact.” Boston Consulting Group. https://www.bcg.com/publications/2024/stairway-to-gen-ai-impact.
19. Giurge, L., Whillans, A. V., West, C. 2020. “Why Time Poverty Matters for Individuals, Organisations and Nations.” *Nature Human Behaviour Journal*. https://www.nature.com/articles/s41562-020-0920-z.
20. Han, L., Peng, C., Xu, Z. 2022. “The Effect of Commuting Time on Quality of Life: Evidence from China.” *International Journal of Environmental Research and Public Health*. https://pmc.ncbi.nlm.nih.gov/articles/PMC9819363/.
21. Henry, M. K., Li, F., Manyika, J. 2020. “As AI Shifts Jobs, How Do We Prepare the Workforce?” Stanford University Human-Centered AI. https://hai.stanford.edu/news/ai-shifts-jobs-how-do-we-prepare-workforce.

22. “How Mount Sinai Uses AI to Reduce Patient Wait Times by 30%.” 2025. Dezyit. https://www.dezyit.com/post/how-mount-sinai-uses-ai-to-reduce-patient-wait-times-by-30.
23. “Job Lost to Automation Statistics in 2024.” TeamStage. https://teamstage.io/jobs-lost-to-automation-statistics/.
24. Joshi, S. 2025. “The Transformative Role of Agentic GenAI in Shaping Workforce Development and Education in the US.” *Iconic Research and Engineering Journals*. https://www.academia.edu/127526482/The_Transformative_Role_of_Agentic_GenAI_in_Shaping_Workforce_Development_and_Education_in_the_US.
25. Kalliamvakou, E. 2024. “Research: Quantifying GitHub Copilot’s Impact on Developer Productivity and Happiness.” GitHub Blog. https://github.blog/news-insights/research/research-quantifying-github-copilots-impact-on-developer-productivity-and-happiness/.
26. Kasser, T., and Sheldon, K. M. 2008. “Time Dividend as a Path toward Personal Happiness and Ethical Consumption.” *Journal of Business Ethics*. https://link.springer.com/article/10.1007/s10551-008-9696-1.
27. Kurzweil, R. 2024. *The Singularity is Nearer: When We Merge with AI*. Random House.
28. Lee, S. 2024. “10 Stats Revealing AI’s Impact on Content Marketing Success.” Number Analytics. https://www.numberanalytics.com/blog/ai-stats-content-marketing-success.
29. Middleton, C. 2025. “Online Safety—the Challenge When Children Feel Safer Online Than in the Physical World.” Diginomica.
30. Nitzberg, M., Zysman, J. 2024. “Generative AI and the Future of Work: Augmentation or Automation?” SSRN. https://diginomica.com/online-safety-challenge-when-children-feel-safer-online-physical-world.
31. Perez, L., Bishen, S. 2026. “The Human Advantage: Stronger Brains in the Age of AI.” World Economic Forum. https://reports.weforum.org/docs/WEF_The_Human_Advantage_Stronger_Brains_in_the_Age_of_AI_2026.pdf?utm_source=substack&utm_medium=email.
32. Ranganathan, A., Xingqi, M. Y. 2026. “AI Doesn’t Reduce Work—It Intensifies It.” Harvard Business Review. https://hbr.org/2026/02/ai-doesnt-reduce-work-it-intensifies-it.

33. Beauchene, V., Duranton, S., Kalra, N., Martin, D. 2025. “AI at Work: Momentum Builds, but Gaps Remain.” Boston Consulting Group. https://www.bcg.com/publications/2025/ai-at-work-momentum-builds-but-gaps-remain.
34. “Smart Mobility Program for São Paulo.” 2023. World Bank Group. https://www.worldbank.org/en/topic/transport/publication/what-makes-a-city-smart.
35. “Teens, Screens, and Mental Health.” World Health Organization. https://www.who.int/europe/news/item/25-09-2024-teens--screens-and-mental-health.
36. “The Future of Jobs Report 2025.” World Economic Forum. https://reports.weforum.org/docs/WEF_Future_of_Jobs_Report_2025.pdf.
37. “Time Poverty: The Rising Cost of Time in an Unequal World.” Human Act. https://humanact.org/time-poverty-the-rising-cost-of-time-in-an-unequal-world/.
38. Twani, E. 2021. Becoming Einstein’s Teacher: Awakening the Genius in Your Students. Relational Learning Inc.
39. Twani, E. 2026. “Dystopian or Utopian Future.” https://www.erikatwani.com/blog/dystopian-or-utopian-future.
40. Upmann, P. 2025. *The ROI of AI Governance—Why Responsible AI Pays Off*. LinkedIn.
41. Wadlis, C. 2024. “Time Poverty Impacts College Students with Jobs and Kids, Especially for Certain Groups, a Study Shows.” Fast Company. https://www.fastcompany.com/91177566/time-poverty-college-students-jobs-kids-women-black-hispanic-study.
42. Wang, J., Wang, S. 2025. “The Emotional Reinforcement Mechanism of and Phased Intervention Strategies for Social Media Addiction.” National Library of Medicine. https://pmc.ncbi.nlm.nih.gov/articles/PMC12108933/.
43. West, D. M. 2025. “Ways to Help Workers Suffering from AI-Related Job Losses.” Brookings Institute. https://www.brookings.edu/articles/ways-to-help-workers-suffering-from-ai-related-job-losses/.

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Erika Twani is a globally recognized innovator, bestselling author, TEDx speaker, social entrepreneur, and Fortune 100 veteran focused on advancing human potential. As CEO of the Learning One to One Foundation, she pioneered the Relational Learning system, integrating neuroscience and technology to foster learner autonomy. She advises leaders on the next frontier in education: the development of human consciousness, where AI reduces the burden of routine tasks and creates space for uniquely human capabilities.

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