

Human + Machine: **Augmented Intelligence Amplifies Performance in the Workplace**

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Rapidly evolving technology is continually reworking the business landscape, requiring management to quickly adapt, learn new skills, and optimize employee performance in an uncharted environment.

Exponential technological growth is disrupting long-established industries, requiring organizations to dramatically increase agility and responsiveness. Thankfully, these same technological advancements also provide managers with unprecedented new tools for success. While it may seem counterintuitive, carefully integrated tech can supplement and complement key components of the human experience. This recognition has prompted many in machine learning fields to replace the term “artificial intelligence” with “augmented intelligence,” which reframes AI by focusing on its ability to assist humanity by optimizing our strengths and neutralizing our weaknesses. Augmented intelligence applies cutting-edge technology to enhance human cognition. It doesn’t replace people, it empowers them. As such, augmented intelligence tools are primed to revolutionize coaching and development in the workplace.

Augmented Intelligence sounds futuristic and, for some workers, can conjure fears of a world populated with robots that have replaced humans in the workforce.

Machine learning and adaptable interfaces exist in our cars, our phones, and our appliances. Advertisers deploy algorithms that analyze our buying patterns so they can compel us to buy products we didn’t know we needed. Social media sites and streaming platforms use AI to predict our future consumption, and identify and recommend the content most likely to keep us consuming.

As much as we interact with AI, its potential for human betterment in the workplace has barely been tapped. We need to recognize and take full advantage of AI’s learning and growth capabilities. What if the next video you are recommended is the one that you needed to enhance critical competencies and address areas of needed growth and development? This scenario isn’t far-fetched; indeed, the same algorithms that recommend Facebook videos based on your past viewing habits can be used to optimize your workplace performance based on your specific developmental needs. It’s time to foster an AI mindset to augment our own performance by upgrading our coaching and development processes.

How can business leaders leverage AI in the workplace? One way is by replacing the traditional performance review with smart technology that can track performance around key behaviors and measure progress in achieving goals over time. By some estimates, more than one-third of U.S. companies are ditching the annual performance review and moving in this direction. Annual reviews are being replaced with frequent, informal check-ins between managers and employees.⁵ A growing number of firms are starting to leverage impactful continuous performance management technology.

**According to Deloitte Insights,
successful tools in this emerging field¹⁰**

- 01** Enable goal-making to be more social and transparent, mobile, and digital
- 02** Enable progress tracking
- 03** Provide continuous feedback
- 04** Provide instant information
- 05** Deploy data/analytics
- 06** Support career development
- 07** Offer easy integration to satisfy organizational and employee needs



Today, when priorities can change by the hour, we can't wait until an EMS-style annual review to share 90% of our feedback on how an employee is performing against goals, what learning and development opportunities they should pursue next, or what they need to do to move to their next role.²



Mobile feedback applications (or “apps”) are a particularly notable new tool in the people development field. PwC, GE, and Deloitte have already adopted mobile feedback apps, including Snapshot and GE’s PD@GE, to improve company communication and employee performance. GE’s forced ranking performance management system, EMS, was renowned for decades, but the company realized rigid categorization and sporadic feedback were no longer effective in the digital age. GE’s management explained the decision to shift: “Today, when priorities can change by the hour, we can’t wait until an EMS-style annual review to share 90% of our feedback on how an employee is performing against goals, what learning and development opportunities they should pursue next, or what they need to do to move to their next role”.² PD@GE facilitates more frequent, meaningful conversations between managers and employees and among teams. The shift from “command and control” to “empower and inspire” has yielded dramatic benefits, as evidenced by the company’s fivefold increase in productivity.²

GE’s transition exemplifies the need for increased organizational agility in a rapidly evolving environment. Below, we explore the nature of agile organizations, the benefits of adopting agile, and the adjustments managers must make to lead effectively.



Adopting an Agile Organization

Agile organizations are designed to thrive in a world of rapid innovation and frequent change. Such organizations are incredibly customer-centric, open, inclusive, and nonhierarchical. They work in rapid cycles of thinking and doing, breaking work into small packages; executing in short, focused bursts; and frequently recalibrating based on key goals and metrics. This allows them to quickly adapt to market changes, technological advancements, customer feedback, and external regulations.⁶ Agile organizations replace rigid hierarchies with networks of autonomous teams. Successful team functionality requires an underlying creative mind-set of partnership. These teams strive to tap into ideas, skills, and strengths through freedom, trust, and accountability, which requires peer-to-peer relationships based on mutual acceptance and respect.⁶

Adobe provides a compelling example of the transformative benefits of switching to agile ways of working and performance development. The company recognized a need for increased agility when it introduced Adobe Creative Cloud, a subscription-based offering that relies on responsiveness and continuous product refinement instead of periodic, large-scale upgrades. As a result, Adobe replaced its conventional annual performance review with 'Check-in.' Through Check-in, goal setting is encouraged and written expectations are created and frequently revisited to track progress.⁸

Feedback is continuously provided to guide growth and keep employees informed as business requirements shift rapidly. Frequent communication ensures employees understand what is needed from them and can fluidly shift their efforts to consistently maximize the impact of their efforts.

Adobe's subsequent performance improvement has been profound. High-quality employee engagement and retention have improved. For example, there has been a 10 percent increase in affirmative replies to the question "I would recommend Adobe as a great place to work," and a 10 percent increase in affirmative replies to the question "I receive ongoing feedback that helps my performance".¹⁰ Furthermore, Adobe's agile performance management saves over 100,000 hours per year that had been spent preparing for annual performance reviews, freeing managers up to focus on providing impactful leadership. This all contributes to bottom-line growth: the company's stock price has skyrocketed from \$33 per share in 2012 when Check-in was deployed to over \$369 as of 2020.⁸

While agile methodologies create significant benefits, they also pose unique organizational and leadership challenges.

Agility requires two things:

Stability

A platform of things that don't change, providing a stable backbone.

Dynamic Capability

Speed, responsiveness, nimbleness

Balancing dynamism and stability is not easy; it requires managers to fundamentally reconsider how they interact with their teams. Both are essential, however, to the success of a company undergoing rapid change.¹ In order to successfully implement agile ways of working, managers must transform themselves into digital leaders capable of balancing dynamism and stability by setting and conveying shared goals, empowering employees, and embracing technology.

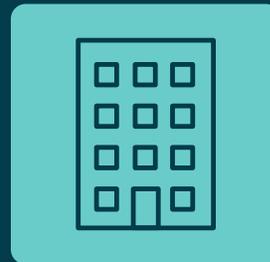
Leaders must be able to distill and impactfully convey an overall purpose for the organization to employees, establishing common ground and a collective vision. This purpose serves as the 'north star' to guide all employees within the organization.⁶ A mutual understanding of the overall organizational purpose, as well as the strategy involved in fulfilling this purpose, is imperative for agile organizations. Because agile teams work largely autonomously, and the overall network of teams evolves organically over time, employees must be united by a common purpose to maintain cohesion and coordination. On a smaller scale, managers must help teams set shared goals, which is essential for measuring progress and creating transparency. It allows teams to work cross-functionally and collectively accomplish overarching objectives instead of working in silos.

Once managers ingrain this collective vision and establish a bedrock of shared goals, they must empower their agile teams to act with confidence. This involves establishing a culture of openness and trust through authenticity, transparency, and integrity. Leaders must enable team members to work without constant updates, briefings, micromanagement, and approvals, which slow progress and sap manager resources.¹ Instead, leaders should provide regular feedback to help employees achieve their goals. Agile team members should feel comfortable leveraging their respective networks to make decisions. In order to accomplish this, hierarchical flattening is essential. Functional authority should take a backseat to subject matter expertise. Leadership should strive to create an environment where ideas are evaluated based on their validity, not their source of origin.

Leaders must embrace technology and digital tools in order to reap the benefits of innovation and maintain flexible structure. Firms recognize the necessity of increasing technological capabilities, and are investing accordingly: based on NewVantage Partners' '2019 Big Data and AI Executive Summary,' a survey of C-level technology and business executives from corporations such as American Express, Ford Motor Company, and Johnson & Johnson, 92% of survey respondents reported that the pace of their big data and AI investments is accelerating.

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55% of companies reported that their investments in big data and AI now exceed \$50 million.



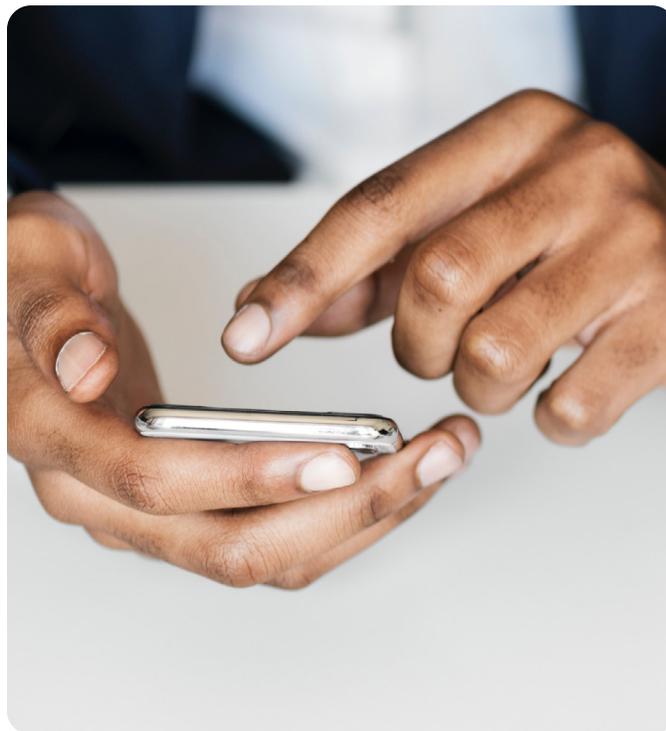
That's a 15% increase from last year.³

Unfortunately, most firms aren't seeing a return on their investment: 72% of survey participants report that they have yet to forge a data culture.³ Why the disconnect? Rather than a lack of technology, **93% of respondents identify people and process issues as the obstacle to Big Data and AI adoption.**³ Firms are spending heavily on AI, but its benefits are hindered because leaders are neglecting background research and not sufficiently planning strategically for culturally-compatible integration.

Unfortunately, leaders are neglecting to consider the specific needs technology can address and failing to articulate the value it provides to employees throughout the organization. This diminishes confidence that managers are prepared to lead in the digital age.

82%

of MIT Sloan survey respondents believe that “leaders in the new economy will need to be digitally savvy”.⁹



Less than 10% of respondents “strongly agree that their organizations have leaders with the right skills to thrive in the digital economy”. Purchasing digital tools without a comprehensive understanding of the benefits they will bring and a detailed plan for successful implementation will waste time and resources. Leaders must understand the underlying reasons for introducing technology and have a robust plan in place to culturally embed it over time.

Investing in technologies is essential, but investment alone is insufficient. In addition to cultivating digital literacy, leaders must culturally attune themselves to the needs and desires of their workforces.



Integrating AI with a Changing Workforce

Real-time feedback apps, like all digital tools, must be thoughtfully integrated to ensure cultural change, robust adoption of the technology as a workplace solution. Millennials, who now comprise the majority of the workforce, have different communication and learning styles than their predecessors. It follows that learning and development programs, including AI-enhanced performance management apps, must be designed with their preferences in mind.

Millennials and their successors, Gen Z, reject stagnation and change jobs with unprecedented frequency.

They want to flourish at work and find personal fulfillment in what they do, and they need frequent, specific feedback about their abilities and performance in order to improve. Data-driven smart learning and development tools provide a massive recruiting and retention advantage for firms looking to attract talented, driven workers. In Adobe's case, 8 out of 10 new hires discussed Check-in as a key tenet of the Adobe culture before their first day on the job.⁸ On the flip side, organizations that fail to evolve will face severe talent droughts. Young workers will reject these organizations and instead search until they find meaningful opportunities for learning and growth.

Fortunately, augmented intelligence tools culturally complement the capabilities and desires of younger generations. Millennials and Gen Z are lifelong learners, continually acquiring new skills and capabilities, whereas older generations traditionally mastered and repeatedly applied a specific skill set. In addition, these younger workers embrace diversity, both socially and professionally. This is a boon to their workplaces: embracing diversity of thought makes them highly meritocratic. They value the ideas most likely to produce results, regardless of their source. Millennials and Gen Z carefully tailor their personal brands and appreciate personalized content accordingly. Lastly, they recognize the power of technology and fluently leverage it to achieve their goals. These workforce generations are comfortable with both the data-driven methodologies used to construct solutions and the digital medium through which they are delivered.



Overcoming Managerial Limitations through AI-Supported Tech

In addition to supporting shifting workplace demographics, AI-driven digital tools such as performance management apps can combat several major limitations that today's managers face. Let's examine a few in detail.

Combating Human Finitude with Infinite Scalability

The problem: Employees rely on managers for coaching and development, but the busy schedules of managers limit the amount of time they can spend with each employee. Although many a manager has wished otherwise, they can only be in one place at a time. Time spent coaching an employee one-on-one is by default time spent away from the rest of the team, and at times, away from urgent priorities.

How AI can help: AI is endlessly scalable. It provides all employees access to a continuous pipeline of professional development. Scalability allows AI to conduct analyses at any desired level of detail and scope. AI can coach individuals, teams, and even organizations without sacrificing granularity. Scalability allows feedback to be everywhere (or at least everywhere data is being stored) at once. Employees can access AI-based coaching insights at will, ensuring they receive crucial supplemental training and development.

Banishing Bias with Democratized Coaching

The problem: Although managers try their best, it is impossible to provide equally-distributed coaching and development to employees. Factors such as job function or proximity to leadership can significantly influence the amount of support employees receive. Not only that, but biases—both conscious and subconscious—can lead to favoritism or imbalance in coaching. This unequal access significantly affects employees' growth and career trajectories. Would-be top talent might be needlessly relegated to stagnation and mediocrity.

How AI can help: Augmented intelligence can't eradicate unequal access to learning and development, but it can significantly mitigate the issue. AI evens the playing field by providing all employees with a common base of information and insights. Personalized AI coaching is available to all employees, all the time. Knowledge is power and by providing consistent access to learning and development, AI eradicates barriers to self-improvement. Access to information grants employees increased agency over their careers. This makes organizations fairer, more meritocratic, and more effective. AI accurately reflects team members' talent areas, which helps put the right people in the right positions and decreases the chance of firms losing talented workers due to stagnation.

Unlocking Data-Driven Growth

The problem: Companies want to be more data-driven but have barely begun to realize the potential of Big Data, especially as it relates to people. Managers try to be as objective as possible, but consistently must make decisions with incomplete information. They rely on a blend of instinct and intuition daily. While managers excel in this area (it's part of the reason they were chosen to be managers!), they are always making decisions based on limited, biased information.

How AI can help: AI tools designed to enhance human potential are uniquely positioned to harness the power of Big Data and transfer its benefits to employees. AI processes and analyzes copious amounts of data with unparalleled efficiency. Furthermore, all available data is comprehensively weighted and incorporated into solutions. Nothing is forgotten or ignored. Thus AI delivers holistic solutions based on empirical evidence rather than speculation. And because AI is data-driven, it is impartial, executing its programming without prejudice. AI is unaffected by tiredness, mood, and similar factors that alter human decision-making. Ultimately, AI has no stake in any outcome other than maximizing the potential of all employees.



Becoming more People-Centric through AI

AI supplements human gaps in capability and informs face-to-face coaching from a perspective that did not previously exist. For example, because AI-driven solutions can update their recommendations every time new data is added, employees receive performance coaching in real time as opposed to having to wait until the next annual performance appraisal or the next sit-down with their manager. Employees can access feedback even when managers are not present, and managers can review the data at any time to track employee progress. Managers can review AI insights to optimize time they spend coaching employees. This lets managers devote more time to reinforcing key behaviors or competencies, concentrating heavily on complex coaching tasks requiring high emotional intelligence.

AI-enhanced coaching and development will propel human performance to new heights. But while AI is a cutting-edge tool, it is not a magic bullet. Well-trained and experienced managers can provide more nuanced, “rationally irrational” coaching than AI is currently capable of. By combining these factors with the rational advice provided by AI, managers can develop their employees with unparalleled objectivity and transparency.

Once leaders truly understand the parameters of what AI is (and isn't) capable of and are capable of powerfully explaining why it will make employees' lives better, they can introduce new tools and capabilities to the workplace.

Investing Strategically to Optimize Human Performance

Real-time feedback and performance management apps are not confined to use as internal tools of massive companies. For example, Thinaër has introduced a platform that makes performance assessment a real-time, continuous, 360-degree process involving management, employees, and peers. It modernizes performance management and development by providing individuals the opportunity for continuous feedback exchange in real-time around key competencies tied to team success. These competencies are customized to align with success factors impacting the organization's performance in achieving its purpose. This enables agility by keeping teams aligned and constantly mindful of the overall strategic vision, as well as their own performance, which helps them act dynamically and effectively.



Thinaër creates targeted feedback around goals, promotes impactful, varied communication, and helps foster a culture of continuous learning and growth. As such, it serves as a perfect example of an AI-based digital tool managers can utilize to maximize the capabilities of its workforce that aligns with modern business needs and ways of working.



In addition to facilitating impactful, targeted communication, Thinaër empowers users to define and achieve their goals. Users can set performance goals within the app, and request feedback specifically around those goals. They have real-time access to goal-attainment progress. Furthermore, Athena, Thinaër's AI-based coach, complements human coaching by monitoring user feedback activity and algorithmically intervening to provide impactful coaching based on user and organizational goals. A combination of human and AI coaching elevates user performance and provides users a platform for continuous growth.

Culturally, the platform is designed to help flatten hierarchies and promote openness, ensuring users receive developmental information from a variety of perspectives. Building trust by establishing feedback as a tool for learning and growth promotes honest communication. The results of cultural alignment with real-time coaching are significant. In a study featuring MBA students who provided one another real-time feedback on relevant team-based competencies, the platform helped increase learning goal orientation, which measures an individual's desire to self-develop by acquiring new skills and tackling challenging situations.⁴ Once users feel comfortable using the app and realize the benefits of feedback, positive feedback loops, in which high-performing users regularly seek and give feedback to expedite their growth, are solidified.

Conclusion

Augmented Intelligence coaching and development tools have already significantly impacted workplace coaching and development. However, particularly given the heavy investment in these technologies, the benefits of AI have yet to match their incredible potential in the workplace. Once leaders understand the transformative value of AI—its strengths, weaknesses, and ability to complement and enhance human performance— and how it enables modern ways of working, fulfills the needs of today's workforce, and can articulate it compellingly, they can introduce AI tools successfully. The result? Agile, innovative organizations comprised of employees leveraging cutting-edge training and development to become the most effective, empowered versions of themselves.

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Thinaër

Thinaër solves complex organizational challenges with a holistic solution that integrates proprietary data collection technology, analytics, and strategy consulting. We partner with leaders from Fortune 500 firms, large healthcare organizations, and multi billion-dollar companies.

With each engagement, we leverage our data collection technology—which integrates machine-data with human feedback—to develop a 360° view of the organization. We use these insights to inform our consulting approach, designing solutions that align with the organization's best opportunities and greatest needs.

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