A Dale Carnegie White Paper

A New Workplace Transformation:

Preparing People for Success with Generative AI

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Artificial intelligence (AI) continues to evolve, with more organizations and employees choosing to integrate AI tools into their workplaces. Recently, AI technology has taken yet another leap forward in a new form, generative AI, with the potential to completely transform the way we work.

Workplace disruptions caused by great leaps and advancements in technology are not a new phenomenon. The digital revolution in the 1990s brought the internet into the workplace and relegated countless jobs to the history books in the process, like telephone operators and retail bankers. Other roles became more automated or digitized, like data entry clerks and warehouse jobs.

Now, we're experiencing a new revolution, where smart machines can both simplify and potentially replace human jobs, and the rate of change feels even more rapid than before. In the long term, generative AI can increase productivity, taking over repetitive or menial tasks and allowing a human employee to focus more time on strategic, creative, or more complex responsibilities. In the short term, it can completely transform the way we work, in ways that may not always be comfortable or welcome.

Three key areas to build stronger partnerships with AI

Foster resilience in the face of change

Build an agile workforce

Recognize & reward emotional intelligence

AI goes from a smart machine to learning how to create its own content

Imagine having an assistant who can instantly summarize a lengthy contract or hundreds of pages worth of research. That assistant can also transcribe meeting notes, review lengthy email chains to quickly recommend a reply, brainstorm, draft and proofread copy for campaigns, or instantly create slides, charts and presentations based on a single Word document.

Generative artificial intelligence, or generative AI, has become that assistant. And these are just some of the ways it can transform our workplace.

As generative AI continues to evolve, more organizations and employees want to know how best to integrate it into their workplaces. At the same time, there are uncertainties, risks, and fears about its role in our lives and the workplace that are unfolding in real time.

First, let's zoom out from generative AI specifically, to discuss artificial intelligence as a concept. AI describes the ability of a machine to perform cognitive functions that are normally associated with the human mind (for example, natural language understanding and generation) and physical tasks that are performed using cognitive functions (e.g., robotics, autonomous driving and manufacturing).[1]

AI	Generative AI
Smart machines that can analyze existing content and react. **Examples:** • Robotics • Autonomous driving and manufacturing • Natural language generation	Large language models that are trained and then generate content independently based on user prompts. **Examples:** • ChatGPT • CoPilot • Google's Bard

[1] The state of AI in 2022—and a half decade in review. QuantumBlack AI by McKinsey, December 2022. https://www.mckinsey.com/capabilities/quantumblack/our-insights/the-state-of-ai-in-2022-and-a-half-decade-in-review

Generative AI learns to provide conversational responses using any information it's been "trained on," which for most generative AI systems includes the entirety of the public internet. It uses large language models to predict how to respond as a human being would, informed by its vast training data.

Many of us were introduced to the newest version of generative AI as recently as November 2022, when OpenAI launched its viral chatbot, ChatGPT. By January 2023, OpenAI estimated the viral AI chatbot reached 100 million active users.

People were captivated by conversations with an AI that could learn and adapt over the course of an online chat, creating an eerily sentient, human-like experience. Now other generative AI tools like Google's Bard and DALL-E are competing for leadership in this rapidly advancing space.

With generative AI, users can make a request in simple language, and then customize results with direct feedback based on style, tone, and language. Anybody can easily instruct a chatbot or another generative AI model to create and refine text, audio, code, images, simulations, video and nearly all other types of content. Rather than reacting to existing content, generative AI can create new content on its own.[2]

Organizations can use generative AI to enhance employees' workflow

In early 2023, Microsoft and Google launched new generative AI-powered features for their workplace platforms. OpenAI debuted GPT-4, an even faster, more accurate AI model than its predecessor which powers ChatGPT.

AI itself is not new, nor is its impact on the modern workplace. Machine learning and automation has been a source of excitement (and some anxiety) for business leaders and employees alike for years. Many AI applications have become embedded in daily life, from predictive texting on cell phones to smart home systems like Siri or Alexa to facial detection and recognition at airports. It's no surprise it's also becoming just as ubiquitous in the workplace. In McKinsey's most recent 2022 annual survey of the state of AI in business, 50 percent of respondent businesses reported adopting AI in at least one business area, and investment in AI has kept pace.

Despite its seemingly limitless potential, many experts caution where unchecked evolution of smart machines may end. There is growing concern that contemporary AI will compete directly with humans and automate away not just drudgery, but also creative, fulfilling tasks.

In March of 2023, hundreds of leaders in the tech industry signed an open letter urging AI labs to hit pause on training new machines for at least six months. They even cautioned that unimpeded advancement in AI without more intentional planning and management could spell "profound risks to society and humanity."[3] On the other hand, many leaders in tech are optimistic of its impact, with Bill Gates predicting AI will be as revolutionary as cell phones and the internet, with applications that can solve global issues such as climate change and economic inequality.[4]

The ethics of generative AI's future are still being debated and will be for many years to come. In the meantime, no company wants to be left behind in the race to leverage AI for a bottom-line advantage. Organizations are investing in AI and expecting employees to incorporate it into their workday. How can organizations help employees overcome anxiety and embrace a new technology and harness their own productivity?

ChatGPT, Google Bard, CoPilot, Bing Chat and other generative AI tools are smarter than search engine or a trendy online chat tool. They represent a powerful, complex multi-modal learning model. GPT-4, the most recent AI model from OpenAI, is so intelligent it exhibits human level performance on professional and academic markers. For example, a report by Cornell University found GPT-4 scored in the top 10% of test takers on a simulated bar exam.[5]

[2] Kelly, Samantha Murphy. "The way we work is about to change." CNN, March 19, 2023. https://www.cnn.com/2023/03/19/tech/ai-change-how-we-work/index.html
[3] "Pause Giant AI Experiments: An Open Letter." Future of Life, March 22, 2023. https://futureoflife.org/open-letter/pause-giant-ai-experiments/
[4] Gates, Bill. "The Age of AI Has Begun." GatesNotes. March 21, 2023. https://www.gatesnotes.com/The-Age-of-AI-Has-Begun
[5] "GPT-4 Technical Report." Cornell University, March 27, 2023. https://arxiv.org/abs/2303.08774

Generative AI has the potential to speed up tasks, increase productivity and improve quality of outputs for human employees, all while freeing up their time to tackle more creative and strategic tasks.

As with any new, rapidly evolving technology, there is also the threat of a significant amount of disruption as it's leveraged in more industries and specialties. Research by Goldman Sachs found as many as 300 million jobs could be lost or negatively impacted by the advent of generative AI.[6] According to Pew Research, about half of experts felt that while AI will indeed displace a significant number of jobs, this loss would be offset as AI creates more jobs than it takes.[7] Still, the possibility of a new job being created in the future is cold comfort for an employee whose job is being replaced by AI right now.

Organizations that want to see a strong bottom-line impact from integrating new forms of generative AI into their workplace need to make employees a central part of their strategy.

With change comes risks if organizations don't see or understand how they can best leverage the technology without alienating or displacing employees.

So, the question is, how can we turn this perceived threat into a tool to improve employee output, predictability, a competitive edge, and ultimately improve customer satisfaction?

In this paper we present our research around employee attitudes toward AI, the intersection of human and machine performance, and how an organization should develop the unique skills needed by human employees to make them better able to partner with new AI tools as they become available in the workplace.

By emphasizing the strengths, soft skills and emotional intelligence that make human workers more unique and valuable than any new technology, organizations can give employees the tools they need to remain agile, be resilient and positively transform the way they work with AI to enhance their success.

Employees are optimistic about AI when they trust their leaders

In Dale Carnegie's 2019 survey of more than 3,500 employees in 11 countries across a wide range of industries and company sizes, we asked them how they feel about AI and what they expect from it. What we found is that employees are more than three times more likely to be extremely positive about AI when they trust their leaders, understand how AI works and have received soft skills training in the past three years to help them feel relevant at their roles.

Dale Carnegie's survey on employees' opinions of AI showed that this is the type of AI development to which people are most receptive. Seventy percent of employees said they were positive about AI taking on routine tasks that would allow them to focus on more meaningful work.

In the workplace, the applications are nearly endless. On a practical level, they have the capacity to transform the average employee's daily tasks significantly. Initial research from the National Bureau of Economic Research shows generative AI improves productivity, especially for newer or less experienced workers. How can organizations help employees adapt to this change and harness it for their productivity?

Our research shows that managers and learning and development professionals can build strong partnerships between humans and new AI technology by focusing on three key areas of development for employees: fostering resilience in the face of change, building an agile workforce, and recognizing and rewarding emotional intelligence.

[6] Briggs, Joseph, Kodnani, Devesh et. al. "The Potentially Large Effects of Artificial Intelligence on Economic Growth." Goldman Sachs Economics Research. March 26, 2023.

[7] Smith, Aaron, Anderson, Janna. "AI, Robotics, and the Future of Jobs." Pew Research Center. Aug. 6, 2014. https://www.pewresearch.org/internet/2014/08/06/future-of-jobs/

Building trust makes employees more resilient toward new AI applications

Resilience, or being able to bounce back from adversity to adapt and change, is not an inherent skill that an employee either has or doesn't have. Instead, the ability to withstand and recover from change can be learned, developed, and strengthened over time. Resilience helped companies recover, and in many cases emerged better than ever, as they adapted to the changes of the post-pandemic business landscape.

That resilient mindset can now be used to promote a mindset of flexibility and growth to successfully integrate advanced AI technologies.

The foundation for building resilience toward new technology is establishing trust with employees that these new tools are not a threat if they are used responsibly. While most employees are open to becoming more productive, coming face to face with the speed and efficacy of a generative AI tool can lead others to wonder: if some of my tasks can be taken over by AI, does that mean it will eventually take over *all* of them?

Luckily, this does not seem to be the case. In Deloitte's fifth annual survey of the state of AI, survey results revealed only a minority of organizations (30%) had a strong desire to automate as many jobs as possible. Instead, more and more companies now see the benefits of using AI to augment the workforce, rather than automate and replace a maximum number of jobs.[8]

Instead, generative AI can be framed as a specialized personal assistant that can help with routine tasks, allowing a human employee to then take more time and effort on longer, more strategic outputs.[9] An AI assistant can help complete tasks faster and improve quality of outputs, in particular for work that is more repetitive and routine in nature.

Distinguishing AI as an assistant or copilot can help reframe the conversation and also alleviate fears about excessive automation and replacement.[10] It also emphasizes the vital role employees play in AI's integration into the workplace, making employees more likely to adjust and adapt to using AI in new ways. All the advancements in generative AI technology cannot replace the innate skills and strengths of human employees. In fact, they complement one another.[11]

In our own survey, a lack of trust in leaders to make the right decisions about AI was a barrier to effective AI adoption. **Less than half, or 45%, of employees indicated a high level of trust in leadership to make the right decision about implementing AI.** Employees learning to cope and be resilient to change need to feel psychologically safe in order to do so. Clear communication from leaders, and full transparency about how generative AI is being integrated into workplace tools, will help build trust with employees toward AI.

Only 45%

Of surveyed employees have a high level of trust in leaders to make the right decisions about AI

**Dale Carnegie survey*

We know that people support a world they helped create, including in the workplace. Involving employees in the development and deployment of generative AI can help shift culture and attitudes more smoothly. It can make employees more willing to adapt and change their routines to integrate new tools into their jobs. [12]

[8] Abril, Danielle. "AI is changing jobs across industries. Here's what to expect." Washington Post, March 20, 2023. https://www.washingtonpost.com/technology/interactive/2023/ai-jobs-workplace/

[9] Dykes, Brent. "Generative AI: Why An AI-Enabled Workforce Is a Productivity Game Changer." Forbes, April 12, 2023. https://www.forbes.com/sites/brentdykes/2023/04/12/generative-ai-why-an-ai-enabled-workforce-is-a-productivity-game-changer/?sh=1b4db1323a53

[10] 4.Folz, Christina. "How to Manage Generative AI and ChatGPT in the Workplace." Society for Human Resource Management, April 10, 2023. https://www.shrm.org/resourcesandtools/hr-topics/technology/pages/generative-ai-chatgpt-workplace.aspx

[11] 1.Fueling the AI transformation: Four key actions powering widespread value from AI, right now. Deloitte's State of AI in the Enterprise, 5th Edition report, October 4, 2022. https://www2.deloitte.com/content/dam/Deloitte/us/Documents/deloitte-analytics/us-ai-institute-state-of-ai-fifth-edition.pdf

12 1.Fueling the AI transformation: Four key actions powering widespread value from AI, right now. Deloitte's State of AI in the Enterprise, 5th Edition report, October 4, 2022. https://www2.deloitte.com/content/dam/Deloitte/us/Documents/deloitte-analytics/us-ai-institute-state-of-ai-fifth-edition.pdf

By involving business specialists and frontline employees directly in developing and implementing these tools, companies can foster trust in algorithms.

In a survey of more than 17,000 people from 17 countries conducted by the University of Queensland,[13] it was found that most people (55%) are comfortable with the use of AI at work, and they actually tend to prefer AI involvement to sole human decision-making. However, they wanted humans to be in control.

Employees who are more resilient will adapt quickly to change. When it comes to new technology, especially applications like generative AI where the impact is still being developed and will evolve over time, employees with a resilient mindset will also be more likely to work smarter, be more collaborative and become more productive when introduced to new tools. This leads to the next soft skill business leaders can foster in their employees in order to make transitions to new AI tools smoother – agility.

How do people feel about AI at work?

55% are comfortable

with the use of AI at work to augment and automate tasks and inform managerial decision-making, if it is not used for human resource and people management purposes. People prefer AI involvement to sole human decision-making, but they want humans to retain control.

** "Trust in Artificial Intelligence: A Global Study." The University of Queensland and KPMG Australia. 2023.*

Employees who embrace agility take to using generative AI more quickly and effectively

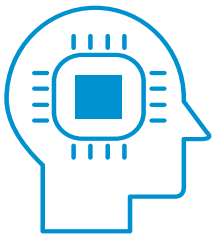
Agility allows people to accept a certain level of risk and act without having all the answers beforehand. This type of soft skill can make an employee more willing to dive into exploring how best to use generative AI as an assistant, without years of programming and IT experience. Organizations that encourage employees to become comfortable acting quickly and making decisions will likely also see a workforce curious and willing to experiment with new AI tools.

Ultimately, agile employees are what make AI models of all sorts successful in the workplace, but especially generative models. Gen Z may come into the workplace with greater familiarity and ease with adapting to new technologies, while older millennial and Gen X employees may exhibit a sharper sense of anxiety or distrust. That makes it essential for companies to make sure as many stakeholders as possible are trained and have the resources they need to effectively deploy AI technology.

[1] Gillespie, N., Lockey, S., Curtis, C., Pool, J., & Akbari, A. (2023). Trust in Artificial Intelligence: A Global Study. The University of Queensland and KPMG Australia. 10.14264/00d3c94 https://ai.uq.edu.au/project/trust-artificial-intelligence-global-study

Organizations that prioritize creating a sense of trust and psychological safety for employees to learn and grow are leading the way to making AI work for their businesses.[14]

Our own survey results show employees are open to learning how to create these types of strong partnerships with AI, with 68% saying additional training would be important to avoid losing their job to AI.



68%

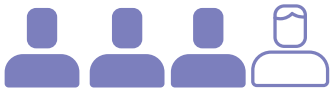
Of employees want additional training to avoid losing jobs to AI.

**Dale Carnegie survey*

In their annual 2022 review of the state of AI, McKinsey identified "AI high performers" as those organizations who are seeing the biggest bottom-line impact as a result of adopting AI. They found these high performers are investing in higher levels in training to help their workforce adapt to using higher-level AI tools. Leaders in AI are much more likely to go above and beyond in providing training to upskill even nontechnical employees, from self-directed online coursework to promoting peer learning and certification programs.[15]

Companies can also focus on adapting technology to reflect individual company norms and values. Workplaces succeed when the culture promotes an environment of agility and resilience, but AI models on their own will not automatically reflect those values. Making generative AI tools a culture fit requires expertise and computing power. More importantly, it requires keeping a human being in the loop as essential to making sure new technology fits with the values of a particular organization, especially when AI models impact human welfare or use high levels of resources. [16]

Just like becoming proficient in Excel or public speaking, using AI effectively requires technical know-how and understanding. People need to be taught the basic skills of how to deploy and leverage it day to day, and that's only the beginning. Nearly three-quarters of employees we surveyed already felt soft skills were the key to staying relevant in the advent of AI.



3/4 of employees feel soft skills are the key to staying relevant.

**Dale Carnegie survey*

Agility is developed through these soft skills, such as enhanced communications, teamwork, and professionalism. It allows employees to utilize their knowledge of the wants and needs of stakeholders and contextualize the history of client relationships and projects when creating outputs. Generative AI does not possess those skills, and without that emotional intelligence, cannot function successfully without the oversight of a human employee.

That makes it even more important that humans remain central to the integration and adoption of AI tools, in particular tools that are new and require experience to learn and utilize appropriately.

[14] De Cremer, David and Garry Kasparov. "AI Should Augment Human Intelligence, Not Replace It." Harvard Business Review, March 18, 2021. https://hbr.org/2021/03/ai-should-augment-human-intelligence-not-replace-it
[15] The state of AI in 2022—and a half decade in review. QuantumBlack AI by McKinsey, December 2022. https://www.mckinsey.com/capabilities/quantumblack/our-insights/the-state-of-ai-in-2022-and-a-half-decade-in-review
[16] "What is generative AI?" McKinsey, Jan. 19, 2023. https://www.mckinsey.com/featured-insights/mckinsey-explainers/what-is-generative-ai

Emotional intelligence can act as a counterbalance to generative AI limitations

One of generative AI's greatest limitations today is that it is only as good as the prompts and guidance given by a user. This means no matter how integrated these tools become into workplace platforms, no one should expect to fully sit back and relax and let generative AI do all the work just yet.

The launch of ChatGPT and subsequent integrations of generative AI into the workplace is exciting, but even the founders of these technologies caution about their limitations. OpenAI CEO Sam Altman tweeted that the technology behind generative AI systems is "still flawed, still limited, and it still seems more impressive on first use than it does after you spend more time with it."[17]

OpenAI also reiterated of its new GPT-4 AI model that "great care should be taken when using language model outputs, particularly in high-stakes contexts."[18]

Organizations should make all employees aware of the limitations of generative AI tools, which include, but are not limited to:

Limitations of Generative AI

Accuracy limitations:

Generative AI cannot on its own tell the difference between facts and falsehoods. Without factchecking by humans armed with real world context, generative AI outputs can sound confident and coherent, even when they are producing something that is demonstrably incorrect.[19]

Bias:

AI learns from vast swathes of online data that has been created by fallible humans. Human biases common online become "ingrained" in the algorithm and reinforced over time.[20]

Ethical concerns:

AI relies on mining large amounts of text and data, which can lead to outputs that display elements of plagiarism, the development of so-called "deepfakes," and spreading of misinformation and propaganda.[21]

[17] Kelly, Samantha Murphy. "The way we work is about to change." CNN, March 19, 2023. https://www.cnn.com/2023/03/19/tech/ai-change-how-we-work/index.html
[18] Brynjolfsson, Erik et. al. "Generative AI at Work." National Bureau of Economic Research, April 2023. https://www.nber.org/papers/w31161
[19] OpenAI GPT-4 release landing page. OpenAI, accessed May 1, 2023. https://openai.com/research/gpt-4
[20] "What is generative AI?" McKinsey, Jan. 19, 2023. https://www.mckinsey.com/featured-insights/mckinsey-explainers/what-is-generative-ai
[21] Bond, Shannon. "It takes a few dollars and 8 minutes to create a deepfake. And that's only the start." NPR, March 23, 2023. https://www.npr.org/2023/03/23/1165146797/it-takes-a-few-dollars-and-8-minutes-to-create-a-deepfake-and-thats-only-the-sta

The good news is, there is already an effective counterbalance to these limitations, thanks to a skill that gives skilled employees a significant competitive advantage – emotional and social intelligence.

While AI tools are faster, more accurate and more rational, they lack the intuition, emotion and cultural sensitivity that undergird nearly all interactions between employees, leadership, clients, and other stakeholders.

Organizations should make sure employees know how valuable their human intuition is when using AI.

Employees should be encouraged to use their own contextual knowledge and social awareness to review, edit, refine, provide feedback, and make sure what's being created by an AI assistant makes sense based on the actual context of a situation.[8] AI is only responsive to available data, and while those datasets are vast, humans have a greater ability to fully imagine and anticipate changes to a given scenario. AI requires a constant flow of externally provided data, while human employees can rely on imagination, feelings, and judgment in their assessment of and reaction to situations and scenarios.

With this in mind, organizations should make sure employees know how valuable their human intuition is when using AI. In particular, when it comes to recognizing and preventing one of generative AI's biggest and strangest limitations – it can be wrong, and sound like it's right.

What is an "AI Hallucination?"

When generative AI doesn't understand the prompt or doesn't have access to complete or accurate information, it may not tell the user it doesn't know.

Instead, it confidently generates entirely inaccurate information in response to a user question.

The term "AI hallucination" refers to a phenomenon when chatbots don't understand the prompt they've been given. So, they invent incorrect answers, or get confused and say things that don't make sense.

AI then confidently generates entirely inaccurate information in response to a user question. It has no way to signal this inaccuracy to a user, so it's the user's responsibility to critically analyze and interpret all AI outputs, to make sure what it's producing is real and correct.[22]

As AI becomes ever more ubiquitous, its weaknesses and limitations will become clearer. In the meantime, employees can use soft skills and emotional and social awareness to take advantage of AI's strengths, without being taken in by its weaknesses.

[22] Chui, Michael, et. Al. "Generative AI is here: How tools like ChatGPT could change your business." McKinsey, Dec. 20, 2022. https://www.mckinsey.com/capabilities/quantumblack/our-insights/generative-ai-is-here-how-tools-like-chatgpt-could-change-your-business

Effective human-machine partnerships are the key to success with generative AI

There's no question that generative AI can help employees' roles evolve, becoming quicker and more productive. The key will be making sure the integration of this new technology into more and more platforms makes employees' roles more meaningful, not less, to the success of their organization.

Our research shows that effective employees demonstrate resilient mindsets in the face of change and adversity, and act with agility to take risks and act quickly. These skills, combined with the insight and context provided by strong emotional intelligence, should be the focus of any manager or L&D professional who wants to leverage generative AI as its applications and uses continue to expand.

Helping employees adapt to any type of AI requires recognizing the value of soft skills that are outside the scope of machine learning.

Managers and learning and development professionals can build strong partnerships between humans and new AI technology by focusing on three key areas of development:

1) Fostering resilience in the face of change.

2) Building an agile workforce.

3) Recognizing and rewarding emotional intelligence.

Automation can't yet fill roles that require creativity, problem-solving and qualitative skills. Instead, employees need to find the best way to learn and use these AI as a tool to enhance these skills, and leaders need to support and promote the training and soft skills needed to make those partnerships strong.

AI is driven by logic. People, however, are not. As Dale Carnegie himself understood, when dealing with people, "We are dealing with creatures of emotion." Employees who learn how AI can best be a partner will be well-prepared to succeed in a new workplace infused with AI tools.