Fuel50 **Capability** Trends Report™

The Next Frontier: Generative AI Edition

At Fuel50, your future is our passion.

This Fuel50 Capability Trends Report™ brings you the latest capability trends from across the globe.

We encourage you to reflect on their relevance to your organization and hope that they inspire a vision for positive change within your people strategy and capability requirements.

Our dedicated team of Organizational Psychologists and HR Professionals is world-leading in capability design and research. Together, we have developed our own 'Fuel50 Talent Ontology™' to reflect the capabilities showcased in this report and many more. These capabilities are now available for use by all our clients.

For more information on any of the trending capabilities or to discuss how you could increase your organization's bench strength in these areas, please contact Fuel50.

Welcome to the future of work.

In this Fuel50 Capability Trends Report™, we explore recent world events and how those are informing crucial employee capabilities required in the workplace. This report is designed to help you harness the latest global capability trends to ensure that your organizational talent strategy is aligned to the current driving global forces.

What has been happening in the world?

In the fast-evolving world of work, artificial intelligence (AI) stands as the beacon guiding us toward the next frontier. As organizations and professionals adapt to the ever-shifting demands of the workforce, AI has emerged as the transformative force reshaping how we operate, connect, and thrive in this dynamic ecosystem. This next frontier in AI promises to revolutionize how we discover and nurture skills and capabilities and how we harness the full potential of human capital in the age of automation and digitalization. In this report, we explore the evolving technologies, ethical considerations, and limitless opportunities that are transforming the world of work.

Notice anything unusual about the above introduction?

Most likely not, save that it has been composed by ChatGPT with a simple one-sentence prompt. The introduction above is yet another demonstration of the power of AI and, in particular, Generative AI, or GenAI, as it is more commonly known.

The origin of AI goes back thousands of years to inventors who made mechanical automatons like the famous pigeon created by Archytas of Tarentum in 350BC, and later automatons created by Leonardo da Vinci in 1495[1]. In the early 1900s, the groundwork for AI was laid when inventors considered the possibility of the creation of an artificial brain, and robots emerged as a result. By mid-1950, the term 'artificial intelligence' was coined and matured later that century with the development of programming languages still in use today[2].

An AI winter followed from 1987 to 1993 with a lack of available funding and waning interest. Despite this, researchers made significant breakthroughs, and from 2012 onwards, AI was used 'in the basement' dictating our Netflix movie recommendations, directional navigation, Google search results, and so on[3]. Today, we have reached a stage where GenAI platforms can create new text, images, art, and music as opposed to simply processing or analyzing existing data[4].

How are developments in GenAI shaping the future of work?

Rapid developments in AI are undoubtedly transforming our personal and work lives daily. Global consulting firm McKinsey & Company predicts that up to 70% of business activities will be automated by 2030[5], and the benefits are obvious[6]:

- Accelerated productivity due to automated processes
- Reduced potential for human mistakes
- Heightened operational efficiency
- Greater emphasis on analytics and data analysis
- Enhanced capacity for making strategic decisions and achieving better outcomes.

Until recently, there was a prevailing belief that AI's limitations lay in its inability to grasp cultural subtleties, comprehend, and appropriately react to human emotions, and partake in advanced cognitive activities that demand creativity and strategic thinking. To some extent, these limitations remain true. GenAI platforms like the emotional support chatbot Pi cause us to pause and reflect on how far AI will go in detecting and responding to human emotion, thereby supporting psychological well-being[7].

Increased research attention on Emotion AI, a subset of GenAI that assesses, comprehends, replicates, and responds to human emotions, may revolutionize workplace wellness – increasing employee accessibility to real-time mental health support – but not without its challenges[8].

Ethical issues and considerations are evolving as rapidly as the technology itself. Elon Musk and other heavyweights at the forefront of AI's new frontier called for a development slowdown to allow regulation to catch up. The Tesla titan reportedly warned US senators in September 2023 that "we have to be proactive rather than reactive" when regulating AI[9]. The caution was preceded in March 2023 by a controversial letter signed by 1,800 researchers and scientists – including Elon Musk, Apple co-founder Steve Wozniak, and engineers at Amazon, Meta, and Microsoft. The letter called for a six-month moratorium on advanced AI training to allow for the development of a set of shared safety protocols that are "rigorously audited and overseen by independent outside experts"[10].

What are some of the potential ethical concerns that researchers and engineers highlight[11]?

- Dealing with unemployment because of automation
- Disseminating harmful content, whether deliberate or inadvertent, stemming from flawed AI training
- Data protection issues arising when AI systems are fed with and process personal data
- Intellectual property (IP) and copyright issues arising as a result of the inability to validate the source of input data
- Amplifying bias that pre-exists in datasets, for example, where data collected is not representative of the population being studied or data contains existing cultural and linguistic biases due to the language and cultural sources from which they are trained
- Unclear understanding of how an AI system justifies its suggested outcome
- Malicious use of AI-generated content posing security risks, including cyberattacks and social engineering

The European Union has taken the initiative by proposing a regulatory framework for the "safe, transparent, traceable, non-discriminatory, and environmentally friendly use of AI" . The Artificial Intelligence Act was presented to EU Members of Parliament on 14 June 2023, and discussions are underway with EU countries for conclusion by year-end.

US President Joe Biden issued an Executive Order on Safe, Secure, and Trustworthy Artificial Intelligence on 30 October 2023[13]. The Executive Order, along with other objectives, establishes set criteria for AI safety and security, safeguards the privacy of American citizens, promotes fairness and civil rights, and fosters innovation and competition.

How can businesses contribute to the responsible preparation and management of GenAI and other advanced AI technologies?

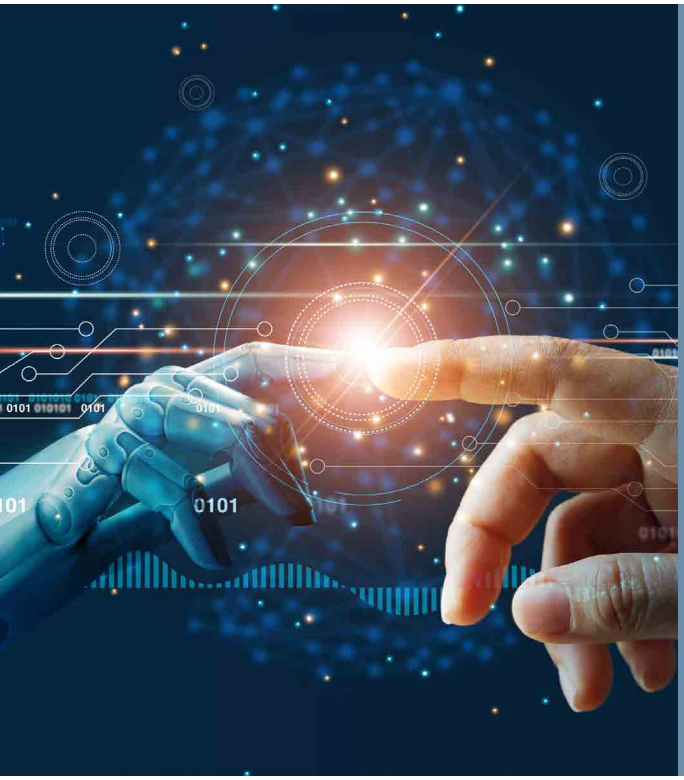
Business has a significant role to play in the responsible development and use of advanced AI technology. American psychologist and author Gary Marcus said that:

"There are serious near-term and far-term risks and corporate AI responsibility seems to have lost fashion, right when humanity needs it most... Blundering so quickly into uncharted territory with so much at stake doesn't seem like a great way to go ".

The following are key areas of accountability for businesses concerning the use of AI:

- To conduct regular assessments of AI risks and document methods of mitigation[13]
- To ensure that AI systems undergo independent audits conducted by data scientists and other experts not involved in AI systems development[13]
- To implement disclosure requirements to indicate that AI[12] generated the content
- To update governance measures to address key areas of risk related to the use of GenAI[15]
- To upskill employees in the responsible use of GenAI, including[15]:
    - Not inputting any proprietary, confidential, or sensitive data into GenAI tools, nor using any outputs for commercial products or solutioning
    - Ensuring human oversight of all uses of GenAI
    - Documenting how GenAI was used in specific instances
    - Turning off chat history.

Fuel50's research reveals pivotal skills and capabilities to support organizations in preparing for and managing advanced AI. These skills and capabilities can be introduced at three levels: individual, leadership, and organizational.



In this report, we identify 12 of our trending capabilities associated with Generative AI. These capabilities have been categorized under the following headings:

Individual Enablers: Generative AI, Emotion AI, Responsible AI, Computational Model of Emotion (CME)

Leadership Capabilities: Ethical Data Use, Digital Fluency, Change Management, AI Project Management

Organizational Strategic Imperatives: Algorithmic Impact Assessments (AIA), AI Regulatory Frameworks, AI Governance, Team Learning

We have included some reflection questions to help you evaluate the importance of each capability for your organization.

Individual Enablers

Team members must each be responsible for staying actively informed on advanced AI capabilities and limitations to harness the benefits effectively. Embracing a proactive approach to understanding and adapting to AI can empower individuals to contribute to an efficient and ethically sound work environment.

Generative AI

Develops computer programs and algorithms to generate new content (e.g., text, imagery, audio, and synthetic data) that resembles existing data.

Emotion AI

Develops or maintains an awareness of advanced AI that identifies and responds to human emotion via text, audio, and video.

Responsible AI

Develops, assesses, and/or deploys AI systems in a trustworthy, safe, and ethical manner. Ensures that AI technologies are designed and utilized in alignment with human values while respecting fundamental rights and proactively addressing potential harmful consequences.

Computational Model of Emotion

Contributes to emerging research by understanding software systems that use computational models to assess, evoke, and generate emotional responses.

Reflection Questions

- Are our team members aware of the potential benefits and risks of using GenAI in their day-to-day work?
- How well do our team members understand the role of Emotion AI within the organization, and are they comfortable with its applications?
- How do we educate and train team members on responsible AI practices in the organization?
- What mechanisms do we have in place to actively seek feedback from team members on products/services influenced by computational models of emotion, and how do we use this feedback to implement improvements?

Leadership Capabilities

Leaders should actively drive the successful implementation and ethical use of GenAI and other advanced forms of AI by establishing boundaries for using the technology and overseeing the change processes required for implementation.

Ethical Data Use

Uses data in a responsible, honest, transparent, and sustainable manner. Does the right thing for people and society. Refers and adheres to the principles and values on which human rights and personal data protection laws are based.

Digital Fluency

Has a deep understanding of all current and emerging technologies. Selects and uses appropriate digital tools and technologies to achieve a particular outcome.

Change Management

Understands different change models and how to put in place successful organizational, system, or employee change programs. Ensures limited disruptions to the team by making the changes as easy, inclusive, and transparent as possible.

AI Project Management

Plans and executes projects related to the development, implementation, and/or utilization of AI systems in the organization.

Reflection Questions

- Do our leaders actively demonstrate ethical data usage? What measures have we put in place to promote a culture of ethical data use among the team and organization?
- How can our leadership foster a culture of continuous learning and digital fluency among team members and encourage them to adapt to evolving AI technologies?
- How do our leaders manage resistance to the responsible adoption of GenAI and other advanced AI technologies? How can our leaders encourage a positive attitude toward the adoption of these technologies in the organization?
- Are our organization's AI project goals and objectives aligned with the overall vision, mission, and values?

Organizational Strategic Imperatives

Organizations must proactively consider evolving AI regulatory frameworks and how these will impact the use, management, and governance of advanced AI in business. Business is instrumental in promoting and executing ethical AI practices.

Algorithmic Impact Assessments (AIA)

Uses an AIA tool to evaluate and mitigate the impact of deploying AI systems in the organization. Identifies AI risks and documents how to minimize and resolve these risks.

AI Governance

Develops and implements policies and procedures to govern the use of AI within an organization, ensuring compliance with both local and global AI regulatory frameworks.

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Team Learning

Captures shared knowledge to collaboratively pursue organizational objectives. Encourages continuous reflection and proactively builds a collective knowledge and skill base within the organization.

AI Regulatory Frameworks

Monitors and remains informed about the development of local and global AI regulations. Demonstrates an understanding of how regulatory provisions are practically applied within an organization.

Reflection Questions

- Have we effectively integrated AIA tools into AI deployment processes to evaluate and mitigate potential risks?
- Have we put in place processes to stay informed about developments in AI regulations and to adjust our AI strategies in response to these developments?
- How well have we developed and implemented policies and procedures for AI usage in alignment with local and global AI regulation frameworks?
- How do we encourage knowledge sharing and the transfer of AI learning experiences among team members and departments?

The bottom line is that what was the future frontier of AI development is here now. Regulations are imminent. Are you ready for the journey?

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www.fuel50.com/capability-trends

Fuel50 is the AI Talent Marketplace solution that delivers internal talent mobility and workforce reskilling.

With hyper-personalized AI and a deeply embedded commitment to diversity and inclusion, Fuel50 mobilizes your talent. Fuel50's ethical AI matches your people to opportunities in real-time, automatically maps your workforce architecture, and provides deep data insights for predictive talent and workforce planning.

We believe that a deep commitment to inclusive talent practices is needed and it must start with a charter that is built into your skills architecture & organizational DNA.

Using the Fuel50 Talent Ontology™ drives more inclusive working cultures through:

- Incorporating critical D&I capabilities in all executive and manager level roles, supporting a shift of mindset from the top down
- Amplifying behavioral standards around D&I and holding leaders accountable for driving positive change
- Putting a spotlight on unconscious bias throughout the organization
- Ensuring D&I practices are present in recruitment, performance management and leadership development

The trending capabilities showcased in this report are now available for use by all our clients.

Over 80 organizations around the globe saw immediate impact since deploying Fuel50, with up to 65% increase in lateral movement, 35% increase in internal recruitment, and 60% reduction in employee churn.

Learn more: **www.fuel50.com**