



2024

Top Skills in Technology



The Technology Skills Landscape

The technology industry is known to be at the forefront of innovation, but with such rapid evolution comes hurdles, and even leading organizations are starting to face critical skills gaps.

A substantial 46% of technology employees fear their skill set will become obsolete in 2024¹. What's more, according to the Digital Leadership Report² as much as 67% of senior technology leaders cite a lack of skills as a reason why their companies are falling behind the pace of change.

To remain competitive through 2024 and beyond, technology organizations need to prioritize skills – understand the skills present in their organizations now and identify the skills that need to be planned for in the future.

The state of the tech industry

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Artificial intelligence (AI) is the hot topic of the moment and arguably the fastest evolving area of technology, followed by cloud computing and data analytics. According to the World Economic Forum, executives estimate that 40% of their workforce will need to reskill in the next three years to keep up with artificial intelligence (AI) and automation innovations.³

To mitigate the risk associated with this, the launch of the EU's AI Act⁴ *"aims to provide AI developers and deployers with clear requirements and obligations regarding specific uses of AI. At the same time, the regulation seeks to reduce administrative and financial burdens for business"*.

In a recent Robert Half survey⁵, 95% of technology

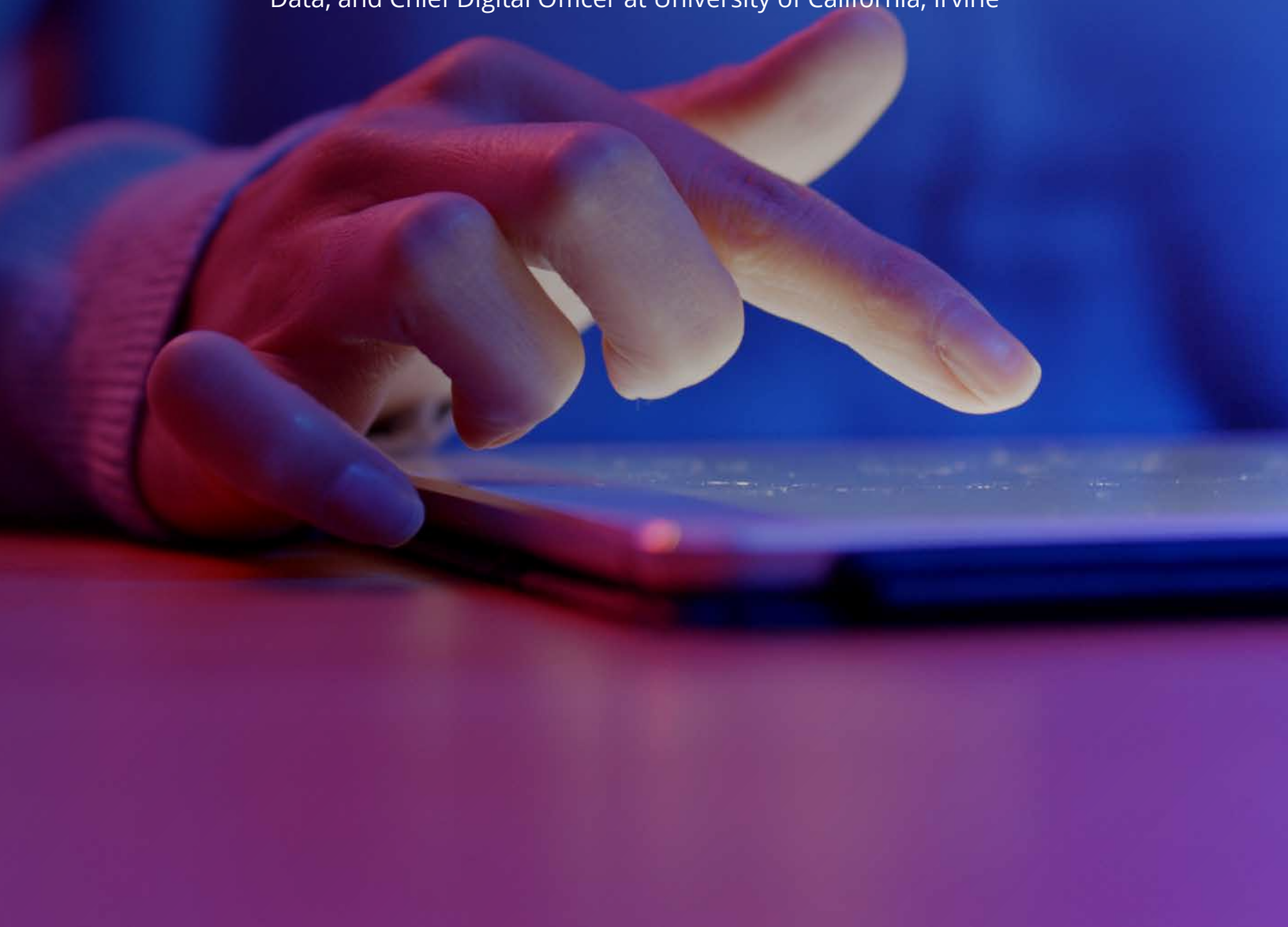
managers say they face challenges finding skilled talent, 69% said they are hiring for new positions, while 29% reported that they are recruiting talent for vacated roles. Of those 69% hiring for new roles, it is anticipated that many of these will be related in some way to AI – be it as specialists, trainers, security and compliance managers, and other areas that haven't yet been developed but will be soon.

The trend of investing in AI-related skills will likely continue, especially given that global spending on digital transformation is expected to reach \$3.4 trillion within the next three years⁶. For many businesses now, skills prioritization initiatives are no longer about catching up — but getting ahead.



“ The concept of a skills gap is always going to be there. The question is, what is your organizational strategy to be able to continue to close those gaps when the target is constantly moving on you? And this is where a platform like Fuel50 becomes very, very powerful.







Tom Andriola, Vice Chancellor for Information Technology and Data, and Chief Digital Officer at University of California, Irvine







What are the top skills in tech today?

Researched and validated by our team of Skills Strategy experts, technology organizations must have the following skills to be at the forefront of the industry in 2024.

Top Technology Skills:

-  Agile Methodologies
-  Cyber Security Risk Assessment
-  Information Security Risk Management (ISRM)
-  Risk Management, Security, and Information Assurance
-  Software Development Life Cycle (SDLC)
-  Workflow Automation

Bonus Soft Skills:

-  Innovation
-  Problem-Solving
-  Process Improvement
-  User and Customer Support (can be either a hard or soft skill)

The top skills explained

Agile Methodologies	Understands the various agile methodologies and selects the appropriate methodology / combination of methodologies for the situation.
Cyber Security Risk Assessment	Identifies the information assets that could be affected by a cyber-attack and then identifies the risks that could affect those assets. These assets could include hardware, systems, laptops, customer data, and intellectual property.
Information Security Risk Management (ISRM)	Manages risks that are associated with the use of information technology. Identifies, assesses, and treats risks that might affect the confidentiality, integrity, and availability of the organization's assets.
Risk Management, Security, and Information Assurance	Manages risks and protects knowledge, information, and data. Ensures the availability, integrity, authentication, and confidentiality of information and systems. Puts measures in place to manage risks for the protection of information and information systems from unauthorized access, use, disclosure, disruption, modification, and destruction.
Software Development Life Cycle (SDLC)	Recognizes and follows the steps in common Software Development Life Cycle (SDLC) models.
Workflow Automation	Gains insight of business processes through the data in the Information Technology (IT) systems. Uses these insights to design, execute, and automate manual tasks or processes based on workflow rules.
Innovation	Questions orthodox approaches. Is imaginative and inventive. Produces creative solutions to situations and problems. Generates new ideas.
Problem-Solving	Leverages knowledge, previous experience, and skills to identify the crux of an issue and creates a workable solution to resolve problems. Understands verbal or numerical information and how to make reasoned decisions based on this analysis.
Process Improvement	Develops and implements improved processes and procedures to increase efficiencies or to meet business requirements.
User and Customer Support	Provides technical support to help internal and/or external customers implement and solve problems related to IT. Communicates effectively with customers, listens to symptom descriptions, analyzes problems, responds effectively, and provides constructive feedback to the client on problem resolution.

How leading tech organizations like Smartsheet are prioritizing skills

When surveyed, more than a third (34%) of organizations state they are investing in internal training programs to upskill their workforce.⁷ Software company Smartsheet, is one of them.

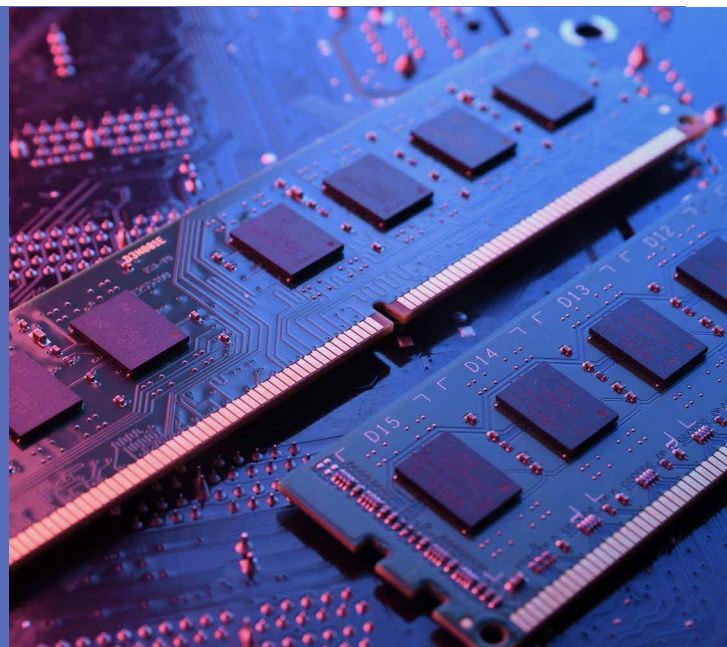
Initially faced with high attrition and low engagement rates, they needed to find a way to make internal opportunities clearly visible to employees so that they could discover future career paths, drive their own development, and take charge of their careers.⁸

With Fuel50, Smartsheet have transformed their traditional skills taxonomy and gone beyond basic datasets by defining the interconnected relationships between skills, roles, proficiency levels, capabilities, tools, and technologies. Employees are now well-equipped to grow and develop at Smartsheet no matter where they are, which role they are in, or what their goals are; while the organization is simultaneously building a motivated, engaged, and future-proofed workforce.



We really want to provide employees with transparency so they can understand their skill sets, recognize where they may have areas to grow, and have a better understanding of other opportunities they want to take on in the future.

Kaitlyn Warter, Senior Manager
Talent Management at Smartsheet



Looking for guidance on becoming a skills-based organization?



Download the Skills
Transformation Roadmap
fuel50.co/strm

If your organization needs to bridge skills gaps, it is essential to embed these top technology skills into your workforce. Fuel50 can help by empowering employees through personalized reskilling and upskilling initiatives designed to close these gaps – a pivotal step in cultivating agile, future-ready workforces capable of embracing change.



References

- ¹ Shogunle, Omotola. (2023). *Tech Skills Gap 2024: Essential Skills You Should Consider*. She Can Code.
<https://shecancode.io/blog/tech-skills-gap-2024-essential-skills-you-should-consider/#:~:text=Understanding%20the%20Tech%20Skills%20Gap,those%20demanded%20by%20the%20industry>
- ² Nash Squared (2023). *The Digital Leadership Report 2023*.
<https://www.nashsquared.com/dlr-2023/dlr-2023>
- ³ Tulchinsky, Igor. (2024). *Why we must bridge the skills gap to harness the power of AI*. World Economic Forum.
<https://www.weforum.org/agenda/2024/01/to-truly-harness-ai-we-must-close-the-ai-skills-gap/>
- ⁴ European Commission. (2024). *Shaping Europe's digital future: AI Act*.
<https://digital-strategy.ec.europa.eu/en/policies/regulatory-framework-ai>
- ⁵ Half, Robert. (2024). *The Skills Gap in Tech Is Poised to Expand. Employers, What's Your Action Plan?*. Robert Half.
<https://www.roberthalf.com/us/en/insights/management-tips/the-skills-gap-in-tech-is-poised-to-expand>
- ⁶ Shirer, Michael. (2022). *IDC Spending Guide Sees Worldwide Digital Transformation Investments Reaching \$3.4 Trillion in 2026*. IDC.
<https://www.roberthalf.com/us/en/insights/management-tips/the-skills-gap-in-tech-is-poised-to-expand>
- ⁷ Thornhill, Jo., Pratt, Kevin. (2023). *IT Skills Gap Report 2023*. Forbes Advisor.
<https://www.forbes.com/uk/advisor/business/software/digital-skills-gap/>
- ⁸ Fuel50. (2023). *Smartsheet's journey to creating an equitable employee experience*.
<https://fuel50.com/stories/smartsheet/>
- ⁹ Fuel50. (2023). *How UCI Increased Employee Retention with Fuel50's Talent Marketplace*.
<https://fuel50.com/stories/uci/>

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 activates 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.

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.

Fuel50 powers the workforce of the future.

Learn more: **fuel50.com**

