

IRI's TOP 5: Generative AI and Innovation Member Briefing

The use of generative AI/LLMs has increased exponentially since ChatGPT burst onto the scene in 2022. Since then, IRI member companies have been working to integrate these technologies into their organizations safely, efficiently, and effectively. Across industry, we have seen some companies embrace generative AI with gusto while others take a more measured approach. The following examples show the range of responses from IRI members as discussed in IRI's monthly Digitalization and AI Roundtable series.

How Has Generative AI Been Used to Increase Efficiency?

- 1 Innovative R&D Assistance:** IRI members have reported that generative AI is increasingly being used to access internal knowledge, and assist leaders with data, summaries, and research inquiries.
- 2 Increasing speed:** From recommendations for Excel formulas to help with report writing to the creation of complex models without having to learn code, practitioners are using generative AI to help them work smarter and faster.
- 3 Data Governance Supercharged:** Member companies are harnessing generative AI to speed up data governance as the technology can quickly evaluate data and identify gaps.
- 4 Improving processes:** Generative AI has been used for optimization plans, performance reviews, predictive maintenance, risk mitigation, and quality control as practitioners report the technology being helpful when seeking multifaceted solutions.
- 5 Redefining Customer Connections:** Members are entering the era of responsive chatbots as they diagnose issues, offer personalized recommendations, and pave the way for manufacturers to forge strong bonds with customers.

How are IRI Members Exploring Generative AI?

- 1 Exploring, Securing and Integrating of Private AI Tools:** Member organizations are exploring different generative AI tools such as Microsoft Copilot, Azure, and AWS, as well as building their own internal models to securely bring generative AI into the organization.
- 2 Consensus that AI assists Critical Thinking:** There is consensus that generative AI technology assists with critical thinking capabilities and can provide different solutions to problems that the user may not have initially considered.
- 3 Improving Training:** Personalized, on-demand training, incorporating organizational archives and capturing knowledge of departing staff will bring new team members up to speed quickly.
- 4 A True Assistant:** While not there yet, generative AI should eventually be able to present information when users need it. For example, presenting the findings from archived scientific reports at decision points in projects. Members are preparing their knowledge management systems for this eventuality.
- 5 Help with reporting:** As environmental and reporting requirements ramp up, generative AI tools will be able to help gather the many threads of data necessary to perform life cycle analyses, Scope 1, 2, and 3 reporting, and other interdisciplinary, interdepartmental tasks.



What are IRI Members Concerned About?

- 1 Security:** Security concerns have led many companies to limit or block public LLM use by staff, hastening the need to roll out internal, secure tools as users clamor to be able to use new technologies in their work.
- 2 Addressing User Apprehension:** While some staff are early adopters, others take a more cautious approach, which could eventually create a disparity in the speed and quality of their work. Reluctant users are being slowly brought on board with use cases and internal champions.
- 3 Competition:** IRI member companies are trying to identify how they can potentially be disrupted by generative AI tools. One strategy has been to look to startups in adjacent fields to see how they are using LLMs.
- 4 Ethical Considerations:** Emphasizing the ethical considerations when AI replaces automated tasks, members are using human validation to ensure secure and ethically sound decision-making.
- 5 Data, data, and more data:** LLMs require a large amount of accurate data to be useful. Getting archived internal data into a consistent, accessible format is a formidable undertaking.

Lean In to Our Powerful Community

Ready to collaborate and connect with experts in digitalization and AI programming at IRI? Contact Sabrina to get involved in these critical initiatives.

Email Sabrina at szarifi@nam.org