



Generative AI-Enhanced
Knowledge Management in Business

Generative AI for Smarter Knowledge Work: From Ideas to Business Value

Haaga-Helia campus + online
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[Check the whole agenda \(link attached\)](#)



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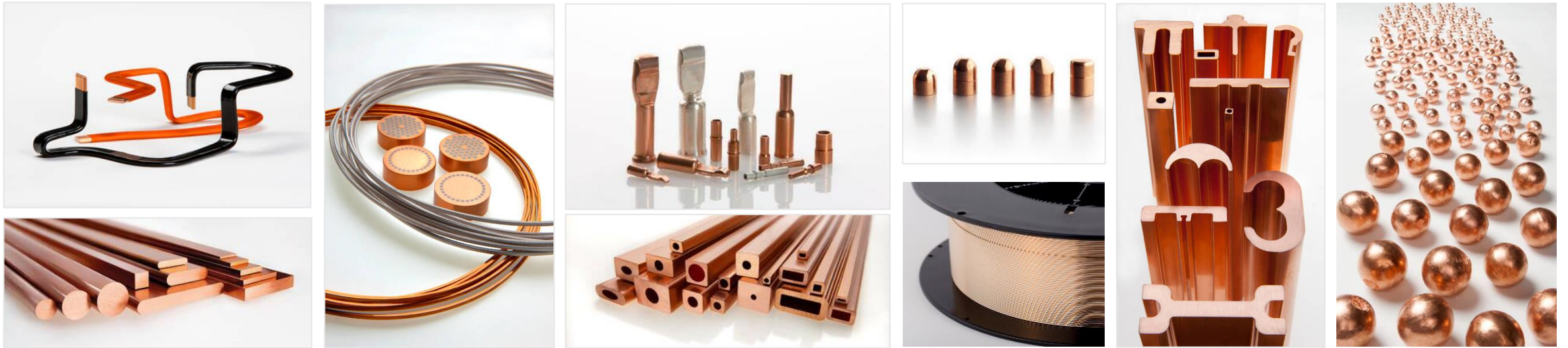


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Current opportunities and challenges companies face in GenAI adoption



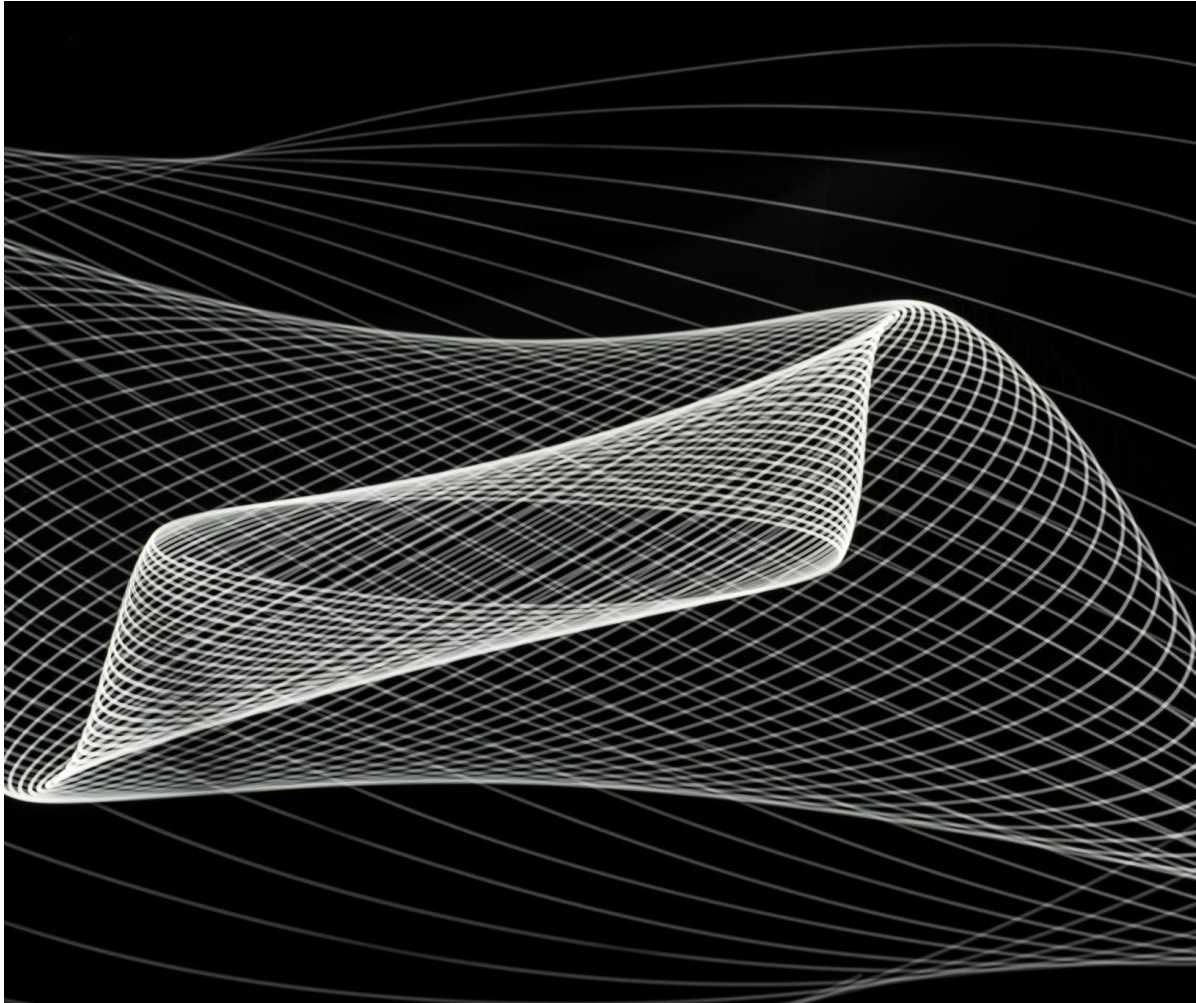
Nikke Syväkuru
17.9.2025

LUVATA
Partnerships with a Promise

Agenda

- Luvata and its approach to AI
- Luvata's AI journey
- Real-world use cases of GenAI at Luvata
- Challenges in AI adoption
- Opportunities unlocked by GenAI
- Conclusion

The current state of GenAI adoption



GenAI adoption

Generative AI adoption is like a wave, with different people at varying stages of engagement and learning.

User engagement Levels

Some professionals are actively using GenAI, while others are beginning to explore or observing cautiously.

From 0 to 200

Luvata went from 0 users to 200 active users in 6 months.

Luvata and its approach to AI

Global footprint



1500 employees 10 locations 6 countries

Luvata Group and Mitsubishi Materials Corporation



Global workforce

Mitsubishi Materials employs about 18,000 people worldwide, highlighting its global presence and scale.

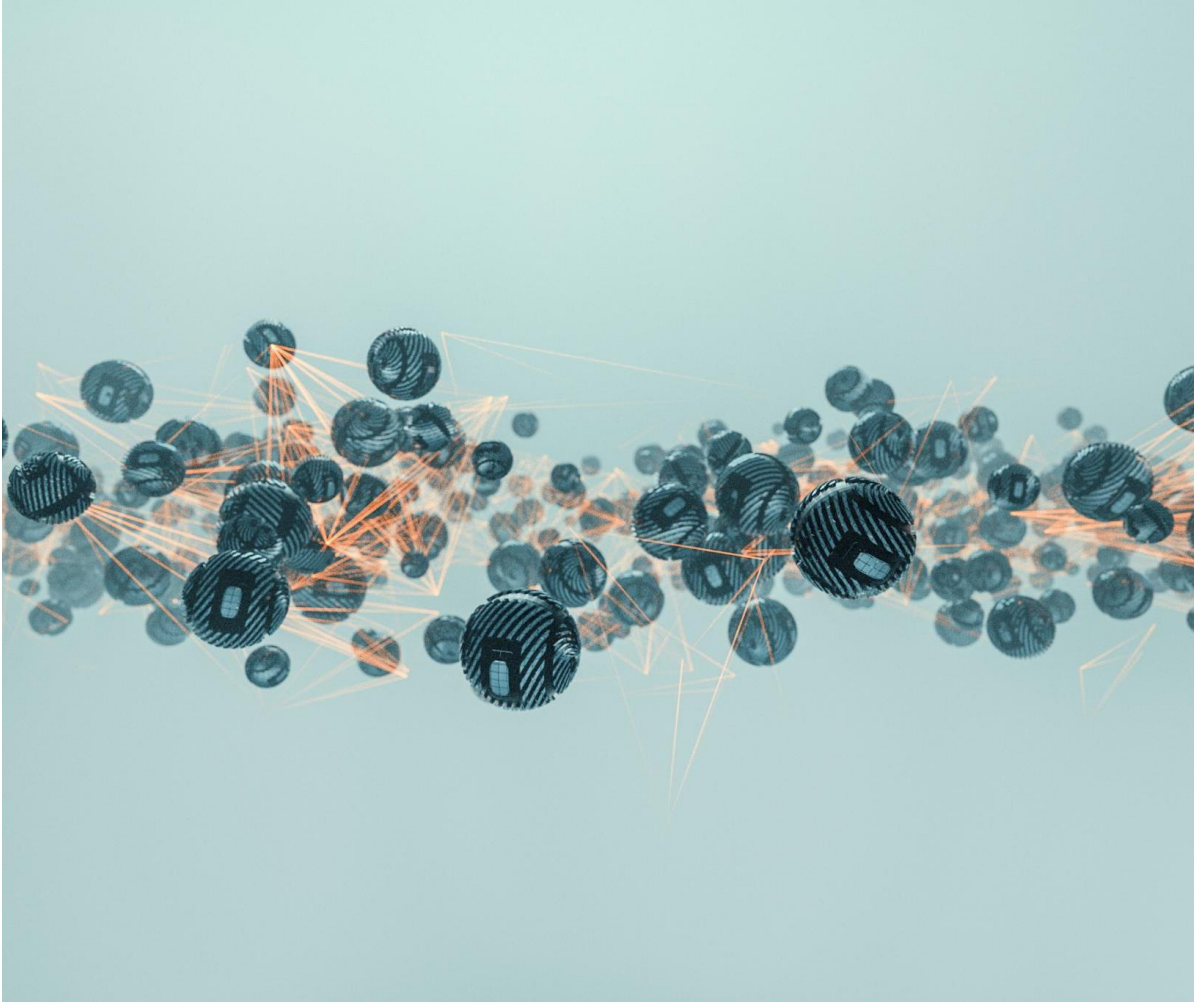
Leadership in AI usage

Luvata leads in the use of AI within Mitsubishi Materials, driving innovation in manufacturing processes.

Commitment to values

Luvata combines tradition and innovation with a focus on sustainability, precision, and partnership.

Copper's role in AI infrastructure and Luvata's evolving mindset



Copper in AI computing

Copper is essential in electrical systems and data centers, supporting AI computing power and storage growth.

Global and local mindset

Operating globally while adapting locally allows us to listen, evolve, and meet diverse market needs effectively.

Evolving with AI

Our company embraces AI advancements by integrating innovative solutions and evolving alongside technology trends.

Why AI is important for Luvata



Smarter decision making

AI enables making smarter and data-driven decisions to improve business outcomes effectively.

Waste reduction

AI helps identify inefficiencies and reduce waste in production and operational processes.

Quality improvement

AI supports improving product quality through real-time monitoring and predictive maintenance.

Empowering people

AI empowers employees by automating routine tasks and enhancing their productivity.

Luvata's AI Journey



Starting with Microsoft Copilot and policy development



Adopting Microsoft Copilot

Microsoft Copilot was embraced not just as a tool but as a new mindset for enhancing productivity and collaboration.

Security concerns and communication

Initial efforts focused on addressing IT security concerns about AI accessing sensitive data like OneDrive and emails.

Developing GenAI usage policy

A company-wide policy was created to guide safe use of GenAI tools, limiting data access and specifying approved applications.

Pilot projects, global rollout, and training approach



Initial pilot project

A POC launched with few users at Pori factory sparked enthusiasm led by local IT manager.

Global program expansion

Company-wide promotion grew from 50 Finnish users to all Luvata sites globally.

Training and use case focus

Coaching and training sessions emphasize real use cases for effective AI adoption.

License and training requirement

Copilot licenses are given to interested users who attend GenAI trainings regularly.

Expanding AI initiatives beyond Copilot



AI for predictive maintenance

AI is being explored to predict equipment failures before they happen, reducing downtime and maintenance costs.

Production alarm filtering

AI helps filter and prioritize production alarms to improve response times and operational efficiency.

Energy data automation

Automating energy data collection and analysis supports smarter energy management and cost savings.

Improving casting quality

AI analyzes past casting furnace data to identify improvements that enhance casting quality and consistency.

The GAIK project



Leveraging combined knowledge

Collaborative effort allows sharing expertise to innovate and develop AI solutions with real business value.

Identifying valuable ideas

GAIK team provided sample ideas that were quickly assessed for positive impact and business potential.

Two initial use cases

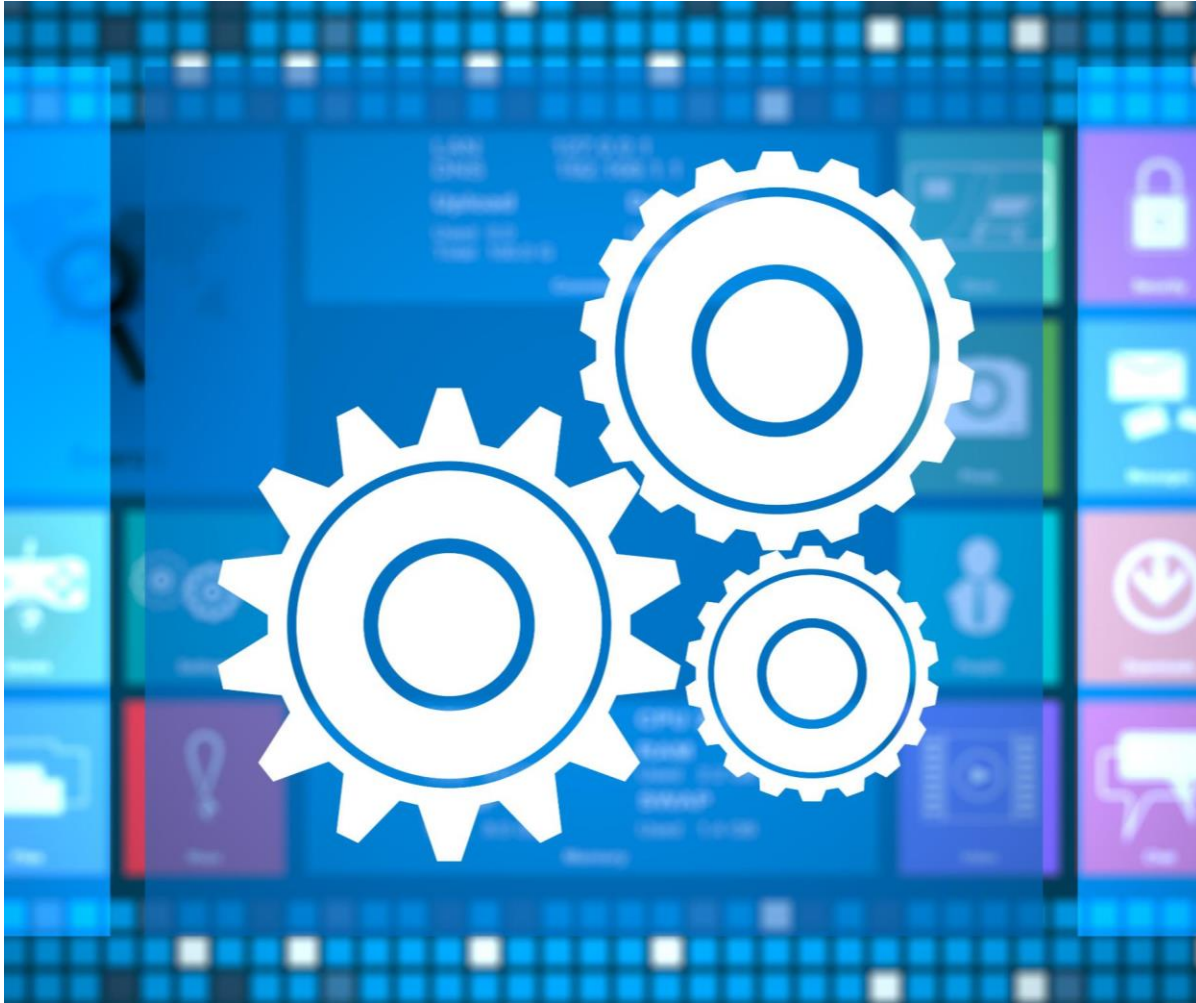
Sales order assistant

Incident reporting app



Use cases of GenAI at Luvata

Sales order assistant: automating order processing



Problem with manual order processing

Manual order processing involves reviewing many attachments and specifications, which is time-consuming and error-prone.

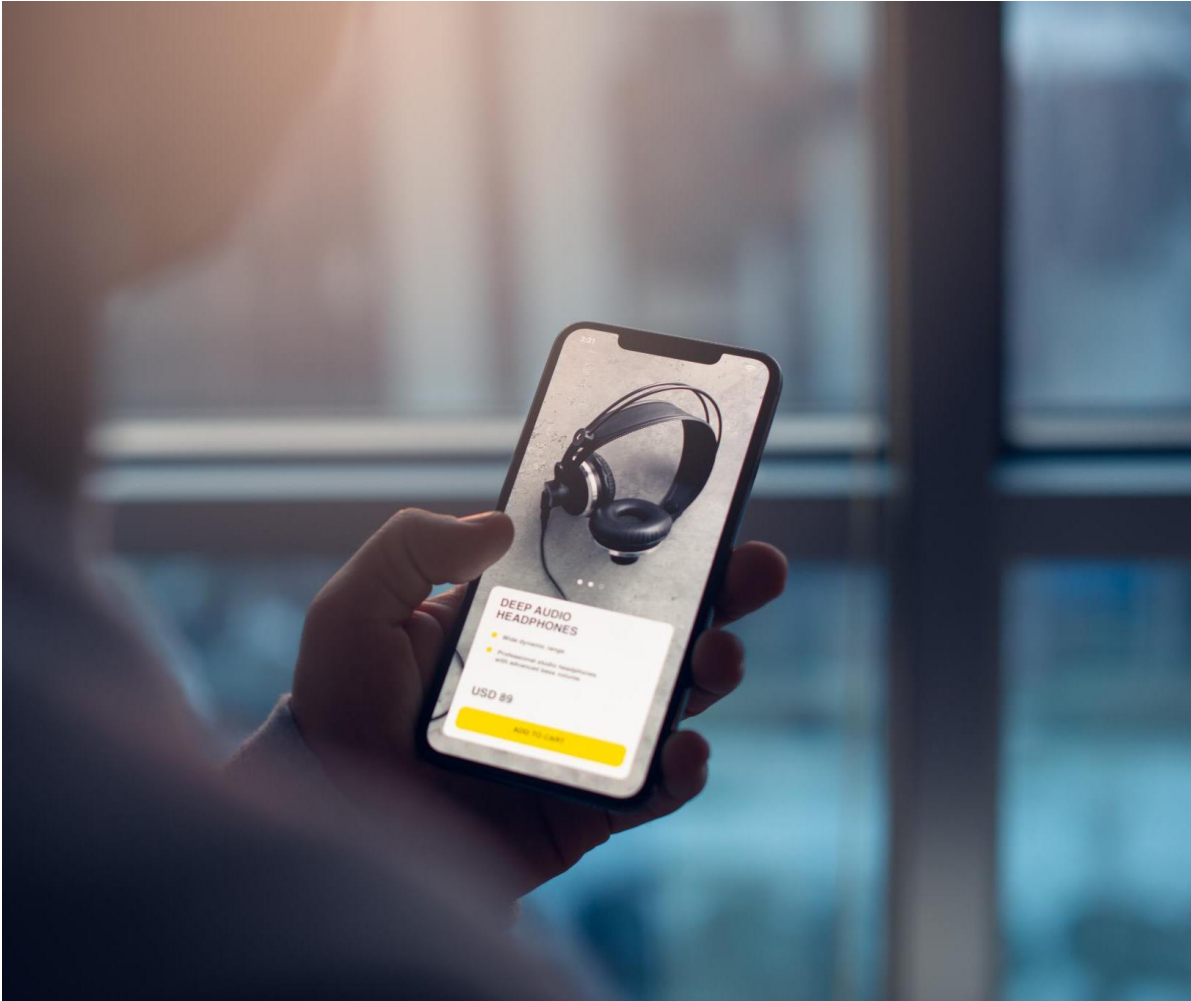
AI-driven automation

AI reads attachments, understands context, and automatically fills in order forms, reducing human error significantly.

Improved efficiency and accuracy

Automating order processing frees specialists to focus on complex tasks while improving order accuracy and speed.

Incident reporting app: improving safety with AI



Workplace safety priority

The app encourages all staff to report potential safety incidents to improve workplace safety culture.

AI-powered reporting

GenAI uses speech-to-text processing technology to simplify report creation by processing spoken input.

Multilingual support

The app supports both Finnish and English, making safety reporting easier for diverse users.

Exploring additional use cases: HR, maintenance, and customer service



AI in HR onboarding

GenAI can streamline HR onboarding by automating repetitive tasks and improving employee integration.

Maintenance logs automation

Using GenAI to automatically update and manage maintenance logs increases efficiency and accuracy.

Customer service bots

Customer service bots powered by GenAI enhance response times and improve customer support quality.

Challenges in AI adoption



Senior management motivation and cultural barriers



Challenges in senior management motivation

Senior management can be conservative and slow to embrace new technologies like AI in traditional industries.

Budget allocation priorities

Funding for innovative tech like AI is often low priority in budget planning within conservative organizations.

Shifting perspectives with AI agents

The introduction of autonomous AI agents has helped management see potential for real business value from GenAI.

User motivation and technology overload



User motivation essentials

Users need to see clear value and benefit to stay motivated; imagination and success stories help inspire adoption.

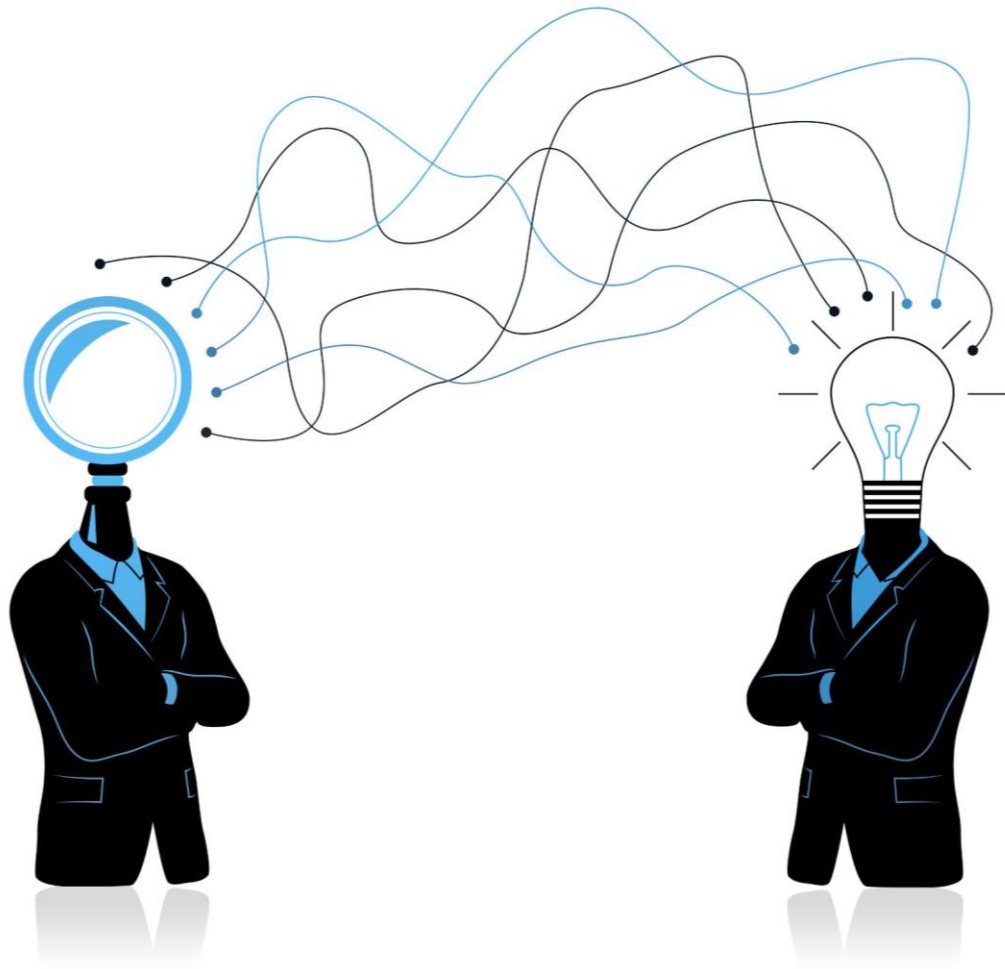
Technology abundance

The overwhelming number of platforms, tools, and AI products can cause technology overload and fatigue among users.

AI saturation

AI tools are heavily marketed and can feel forcefully introduced, contributing to user fatigue and skepticism.

Imagination as a limiting factor and the importance of sharing ideas



Imagination limits AI development

An individual's imagination defines the boundaries for AI innovation and development possibilities.

Sharing ideas accelerates growth

Collaborative events help share findings and expand perspectives, fostering broader AI possibilities.

Daily reflection enhances insight

Regularly questioning tasks invites creative solutions and new AI applications in daily work.

Technical challenges: tool selection, integration, and data quality



Tool selection importance

Choosing the right tool is critical for successful AI implementation and overall project success.

Integration and security concerns

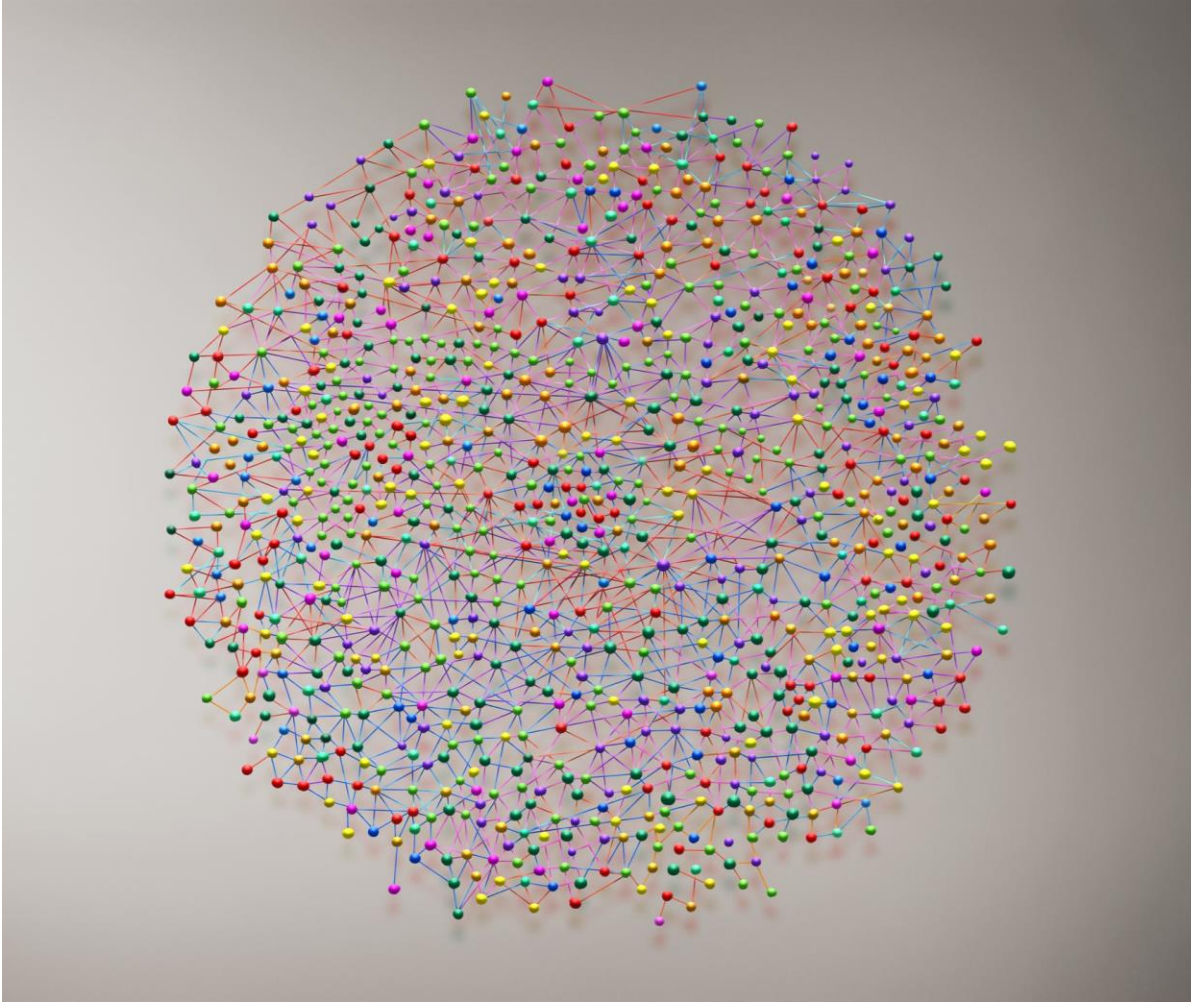
Integration, security, and scalability remain key challenges in deploying AI solutions effectively.

Data quality challenges

AI performance depends heavily on high-quality data, yet much collected data is often unusable due to poor quality.

Opportunities unlocked by GenAI

Unlocking new services, markets, and efficiencies



Expanding services and markets

GenAI enables businesses to create new services and access untapped markets, driving growth and opportunity.

Enhancing operational efficiencies

GenAI improves efficiency by automating processes and optimizing workflows without displacing employees.

Empowering workforce development

GenAI supports upskilling teams, attracting talent, and fostering a culture of continuous innovation.

Improving data usage and quality



Efficient data usage

Improving data usage enables more efficient operations and decision-making processes.

Enhanced decision making

Better data utilization leads to improved forecasting and customer experience outcomes.

AI-driven data quality

Generative AI improves data quality by spotting inconsistencies, filling gaps, and learning patterns.

Building a scalable and coherent AI ecosystem



GenAI-capable users

Empowering users skilled with generative AI is essential for building effective AI tools and solutions.

Data quality and platform selection

Having fixed, high-quality data is critical to selecting the right AI platform for developing robust tools.

Core platform consolidation

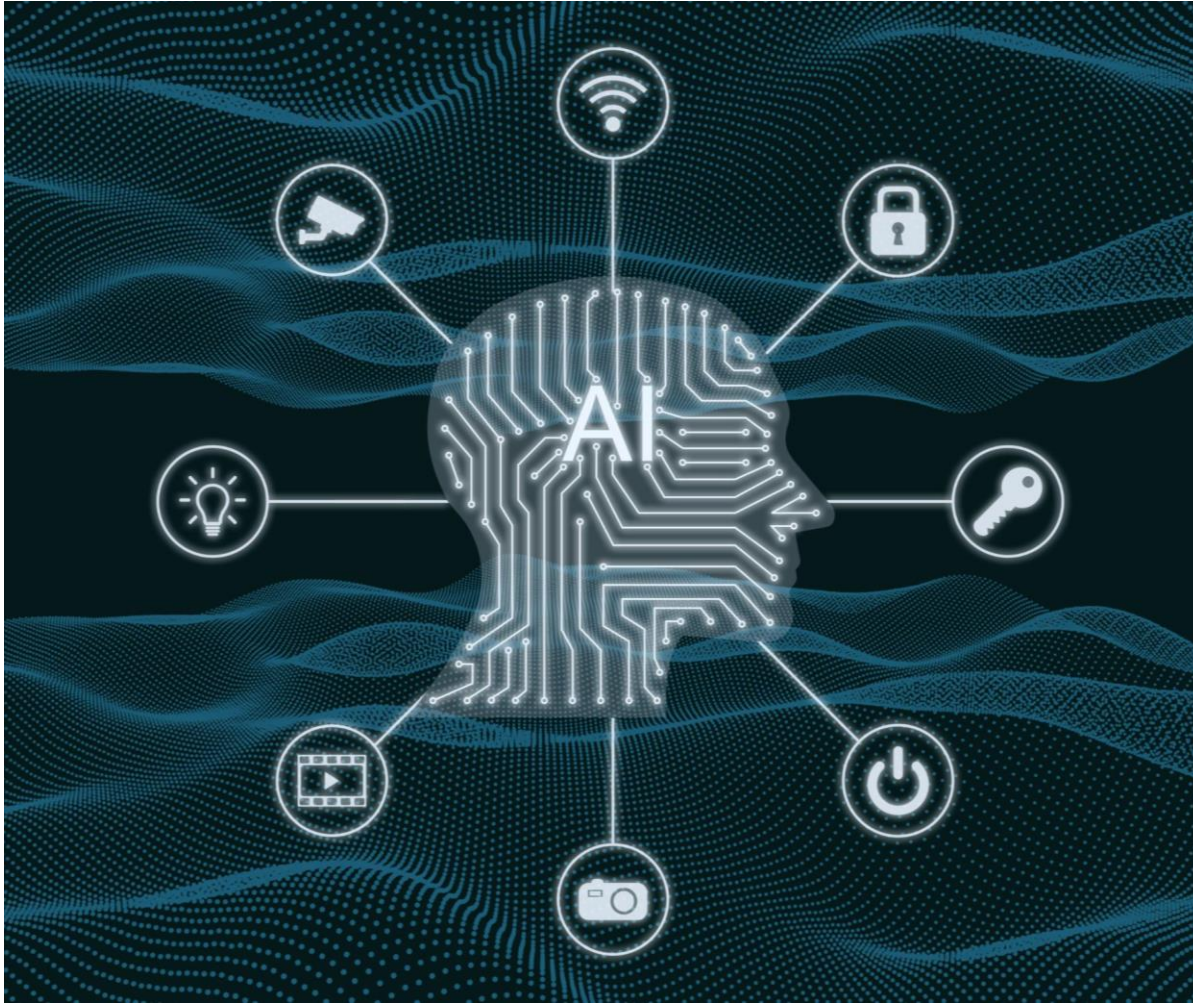
Consolidating AI efforts into 2–3 core platforms enables unified global service and efficient scaling.

Coherent AI ecosystem

Building a coherent AI ecosystem rather than isolated tools ensures sustainable, scalable AI growth.

Conclusion

GenAI as a transformation and enabler



GenAI as transformation

GenAI is fundamentally changing work, thinking, and growth across industries.

Building GenAI together

Collaborative development of GenAI involves offices, factories, universities, and partners.

Empowering people

GenAI empowers people to imagine, experiment, and lead transformative initiatives.

Purposeful impact

GenAI drives improvements in safety, quality, sustainability, and customer satisfaction.

Final Thoughts

Innovation journey

Generative AI symbolizes a continuous journey of innovation and improvement within the company.

Collaboration

Collaboration is key to successfully adopting and leveraging generative AI.

Industry transformation

Embracing generative AI can position a company at the forefront of transforming the industry landscape.

The most powerful
AI tool is human
imagination

Thank you!

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