

ABSTRACT

This study explores the impact of AI tool adoption on job performance, satisfaction, and job security among SME employees.

Using surveys and interviews, we found that higher AI proficiency correlates with increased efficiency and reduced errors, though non-technical users benefit most.

A section of this study explores SME employees' perceptions of AI in creative roles. Findings reveal both benefits, like efficiency gains, and concerns, such as job security risks and creativity constraints.

The research highlights a need for balanced AI use that preserves human artistry while enhancing productivity.

Transparent, balanced AI usage is critical to maintaining employee trust and morale, offering SMEs guidance for ethical and effective AI integration.

INTRODUCTION

This study examines how third-party artificial intelligence (AI) tools relate to employee job performance, satisfaction, and perceptions of job security in small and medium-sized enterprises (SMEs).

As SMEs adopt AI technologies to improve efficiency and productivity, it is crucial to understand the implications for employees, particularly regarding how these tools enhance or challenge their work experiences. This study aims to fill the gap in understanding the specific effects of AI integration on employees in these resource-constrained environments.

The research focuses on AI's role in enhancing operational efficiency, its application across different business sizes, and the relationship between AI skills and employees' sense of job security. Additionally, it investigates employee perspectives in creative fields, where AI intersects with unique job demands and skills.

By addressing these areas, this research aims to provide a comprehensive understanding of AI's diverse impacts within SME environments.

AFFILIATES



CONTACT

The DataScienceAI-2 Research Team

Breda University of Applied Sciences

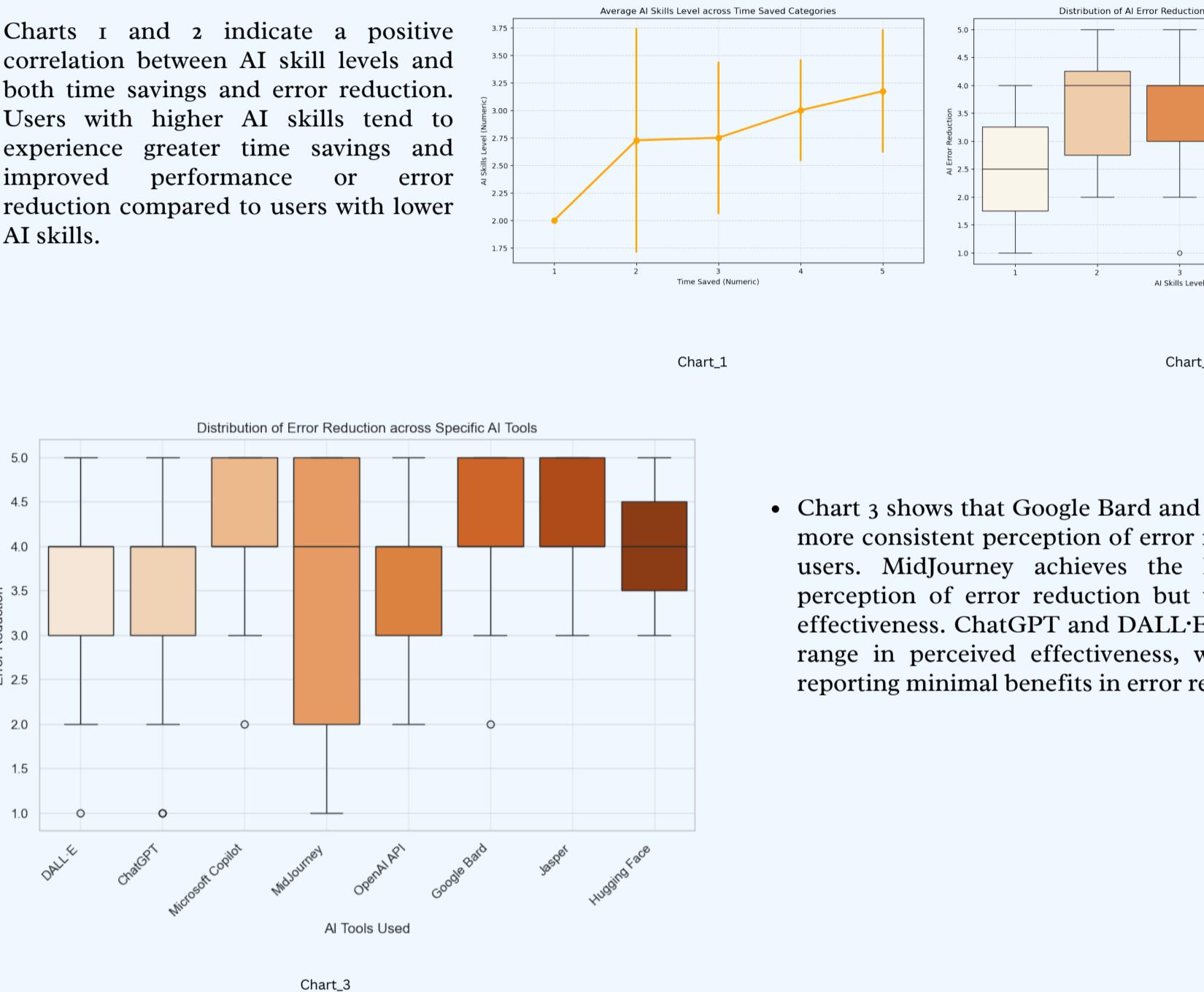
<https://www.buas.nl>

Research Team Email :

- 235065@buas.nl
- 231265@buas.nl
- 211066@buas.nl
- 231781@buas.nl

RESULTS

Does AI Play a Role in Operational Efficiency?



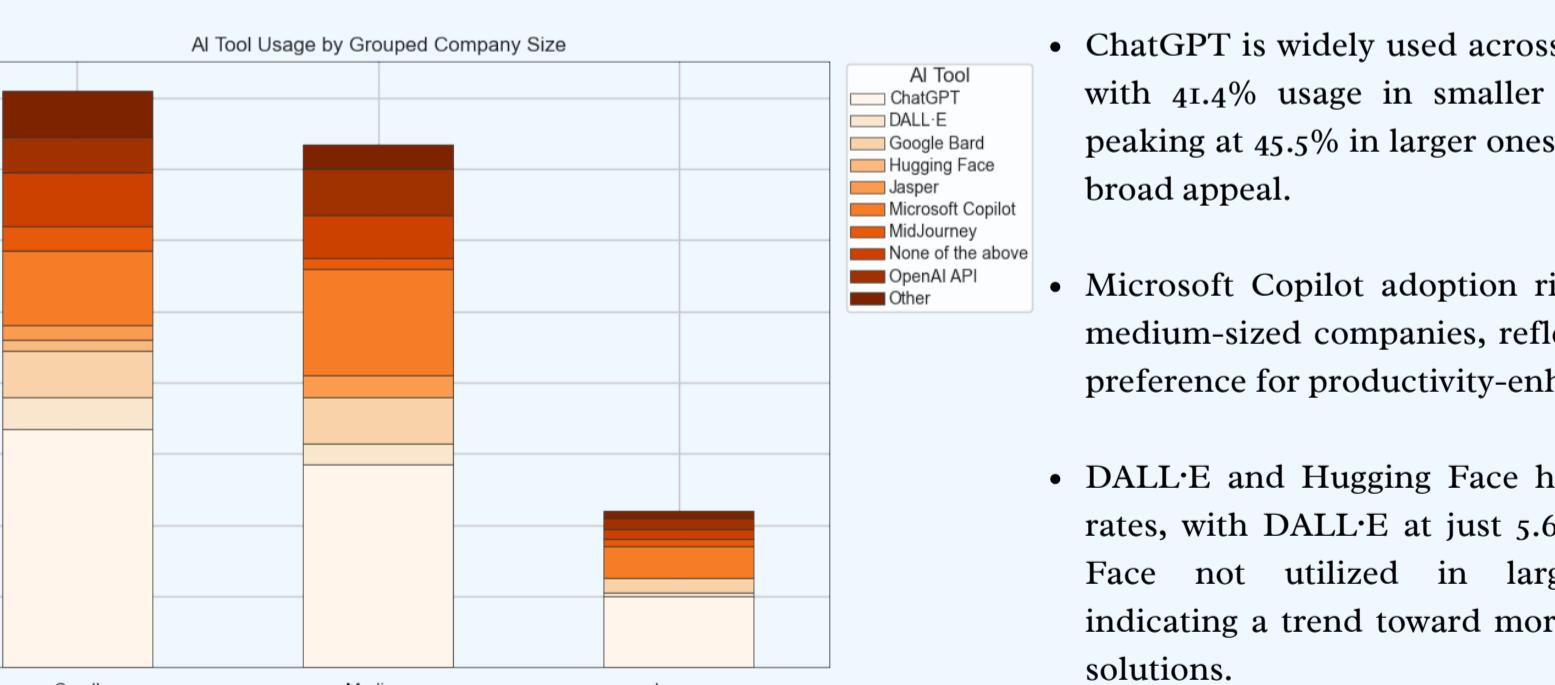
How do employees perceive the implementation of AI in creative fields?

- AI as a Tool: Employees see AI primarily as a means to improve efficiency in technical tasks, not as a source of creativity.
- Job Satisfaction Impact: AI reduces workloads but can lower professional pride and satisfaction, leading to a disconnect from work.
- Job Security Concerns: About 70% of participants worry about AI threatening their job security, with concerns linked to discomfort in using AI.

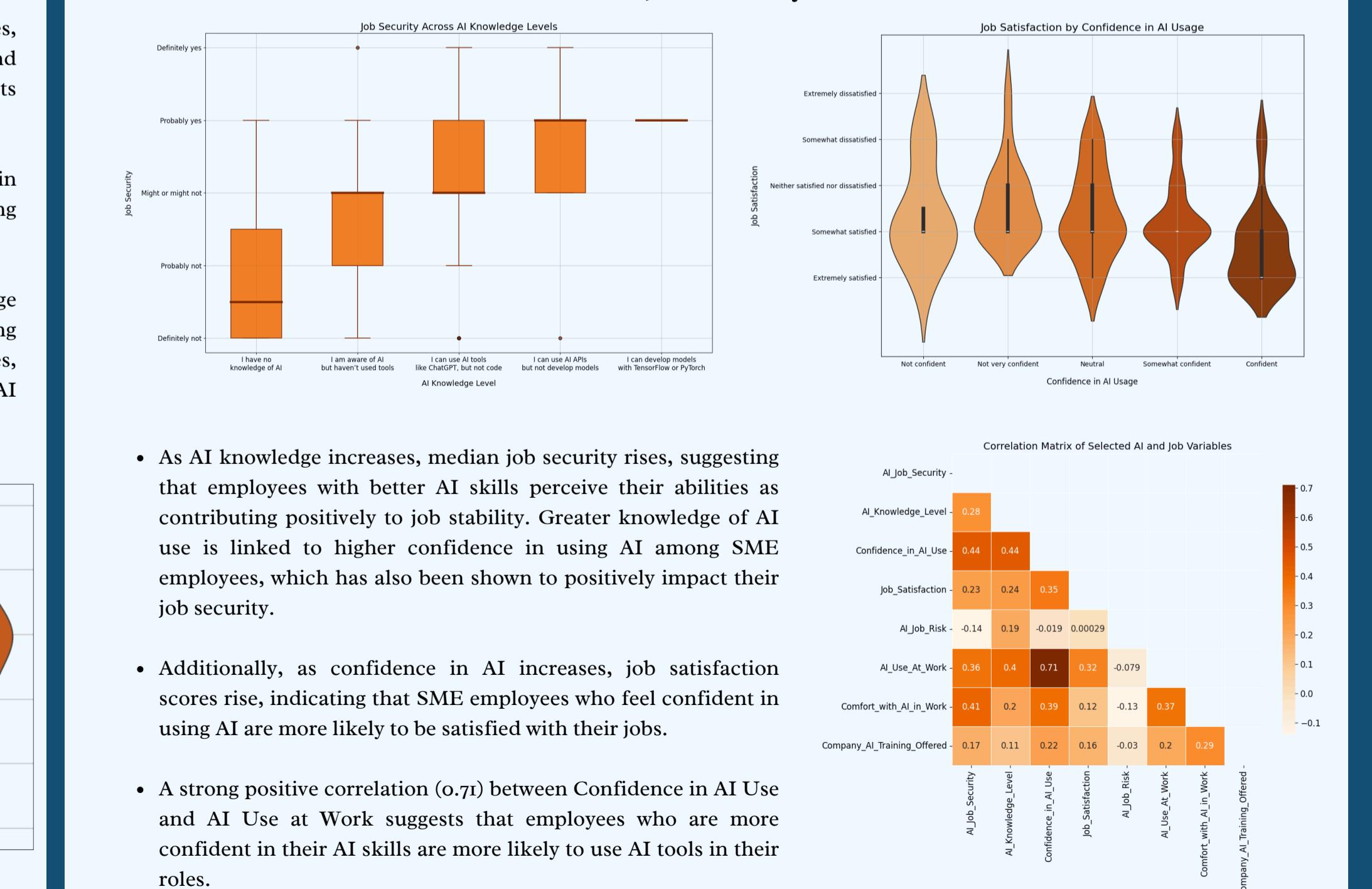


- Chart 3 shows that Google Bard and Jasper provide a more consistent perception of error reduction across users. MidJourney achieves the highest median perception of error reduction but varies widely in effectiveness. ChatGPT and DALL-E exhibit a broad range in perceived effectiveness, with some users reporting minimal benefits in error reduction.
- Trust and Acceptance: Transparency and training increase trust in AI; skepticism arises from a lack of understanding of its purpose.
- Ethical Concerns: Issues of originality and reliance on AI highlight the need for regulations to safeguard human artistry.
- Preferred Integration: Employees advocate for a balanced approach to AI that supports rather than replaces human creativity.
- Skill Development Issues: Over-reliance on AI for technical tasks may impede skill development, raising concerns about expertise stagnation.
- Management's Role: Support for AI integration differs among managers; those with creative backgrounds value human creativity more than efficiency, causing potential tensions.

How does the frequency of AI tool usage at work vary across businesses of different sizes?



How does having the skills to use AI tools relate to SME employees' perceptions of job security?



DISCUSSION

These findings suggest that increasing AI skills and confidence in AI usage among employees can enhance perceptions of job security and job satisfaction, reinforcing the value of AI in the modern workplace. However, employees with advanced AI skills also recognize potential job risks associated with AI implementation, underscoring the need for companies to address these concerns as they adopt more AI tools.

This study found no significant difference in AI tool usage frequency among small, medium, and large businesses, suggesting that resource availability alone doesn't drive AI adoption. Instead, organizational culture and leadership may play a stronger role in influencing AI usage. These results encourage businesses to prioritize a culture of innovation over solely expanding resources for AI integration.

The study reveals a nuanced view of AI in creative fields: while AI enhances task efficiency, employees feel it lacks the depth required for creative inspiration, potentially diminishing job satisfaction. Concerns about job security, ethical implications, and creative authenticity are prevalent, highlighting the need for balanced AI integration that respects human creativity and prioritizes transparency and trust.

The study suggests that higher AI skills are linked to greater time savings, highlighting skill development as a driver of productivity, especially for less technical users. For error reduction, tool choice is more influential than skill level: reliable tools like Google Bard and Jasper minimize errors, while flexible options like ChatGPT and MidJourney show more variable results.

CONCLUSIONS

Employees with AI skills tend to perceive greater job security, with higher confidence in AI usage positively correlating with both job satisfaction and a stable sense of their roles in SMEs.

Factors like culture and leadership play a crucial role, suggesting that fostering innovation may be more impactful than resource allocation alone. Future studies should examine industry-specific factors and leadership attitudes to gain deeper insights into effective AI integration.

Employees appreciate AI's efficiency but worry about its impact on creativity, job security, and job satisfaction. They call for transparent AI use and supportive management to foster trust. Overall, employees favor AI as a supportive tool, not a replacement, to preserve the human element in creativity.

The study suggests that enhancing AI skills boosts time savings, particularly benefiting non-technical users, while tool choice is essential for error reduction. Reliable tools like Google Bard and Jasper ensure accuracy, whereas flexible tools like ChatGPT and MidJourney show varied results.

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