Can artificial intelligence (AI) assist human employees in increasing employee creativity?

AI is sold as freeing employees from repetitive, well-codified and structured tasks so they can focus more on tasks that require creativity and higher-level decision-making. Is this belief merely theory or is there some merit to the claim?

Using a mixed methods approach, Xueming Luo and his colleagues examined whether AI can assist employees in creatively solving higher-level problems. They conducted a field experiment and semi-structured interviews with low and high-skilled employees (based on their varying expertise in performing the same task) at a telemarketing company.

AI assistance, on average, increased high-skilled employees’ creativity in answering customers’ questions by intensifying employees’ workload with unstructured, high-level problem-solving. The psychology of these employees improved as well as job satisfaction and performance through increased sales.

In contrast, these benefits were limited for lower-skilled employees. They had limited abilities to take advantage of AI assistance and experienced negative emotions at work with AI assistance. These employees reported greater stress, a stronger sense of defeat and lower morale.

AI-augmented creativity is skill-biased by favoring higher-skilled employees. When implementing AI, organizations must make sure that low-skilled employees are not left behind. These lessons can be applied in various domains from sales to human resources to healthcare.

MAJOR TAKEAWAYS:

- AI can be a double-edged sword. There is a greater benefit for higher-skilled employees than for lower-skilled employees.
- AI caused a psychological threat for lower-skilled employees because of the worry that their jobs would become obsolete.
- Because AI technologies can effectively perform repetitive work, employees can remain focused on more interesting work that requires creativity in problem solving, which may result in a more meaningful work experience.

WHO NEEDS TO KNOW:

- Financial sector
- HR sector
- Healthcare sector
- Employers
- Policymakers

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- When and how Artificial Intelligence Augments Employee Creativity: https://journals.aom.org/doi/abs/10.5465/amj.2022.0426