

Study taps artificial intelligence to streamline the crowdsourcing of ideas

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Recent research has found a way to leverage the power of artificial intelligence (AI) to more efficiently screen out bad ideas to focus on only good ideas in the crowdsourcing process within ideation.

More specifically, the research has arrived at a simple model for screening out ideas that experts might consider "bad." Importantly, managers can adjust their model to determine how many bad ideas to screen out without losing good ones. The research also found a single new predictor that screens out atypical ideas and preserves more inclusive and rich ideas.

The article, [published](#) in the journal *Marketing Science*, is called "Can AI Help in Ideation? A Theory-based Model for Idea Screening in Crowdsourcing Contests." The authors of the study are J. Jason Bell of the University of Oxford, Christian Pescher of Universidad de los Andes in Chile, Gerard Tellis of the University of Southern California, and Johann Füller of the University of Innsbruck in Austria.

Business managers often use [crowdsourcing](#) to generate the most ideas for a new product or service. These crowdsourcing contests can generate thousands of ideas, forcing [managers](#) and their teams to physically and manually wade through each to identify the best ones. This is not only time-consuming but may lack consistency and continuity in the evaluation.

The study authors aimed to address this by focusing on what AI could do to improve the process.

"Idea generation and screening are fundamental to marketing success because they comprise the start of new product development," says Tellis. "They belong to the 'fuzzy front end,' a key leverage point in new product development."

The researchers used data from Hyve, an innovation company that runs a crowdsourcing platform for idea generation and selection. They asked the platform to specify the threshold of accuracy that would satisfy Hyve's clients. Using a data set of 21 crowdsourcing contests that included 4,191 ideas, they tested how AI could assist in the crowdsourcing process. The model was fitted on 20 contests and used to predict success in the 21st idea left out.

"What we found was that once developed, AI models are relatively low-cost to operate; they do not share internal biases or succumb to internal biases," says Bell. "By 'internal biases,' we mean a natural bias that may

occur when the human evaluator may see an idea as challenging their own favored approach."

Pescher adds, "We also found that AI models are private, improving the ability to protect [intellectual property](#), they cannot suffer from exhaustion, and they are transparent."

"People and experts are still needed," says Füller. "In the selection phase, AI can replace humans in the screening and narrowing of those [ideas](#). But in the long run, if automation is used properly, it can even eliminate the need for human idea generators and make crowdsourcing itself obsolete."

More information: J. Jason Bell et al, Can AI Help in Ideation? A Theory-Based Model for Idea Screening in Crowdsourcing Contests, *Marketing Science* (2023). [DOI: 10.1287/mksc.2023.1434](https://doi.org/10.1287/mksc.2023.1434)

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