

Brainstorming works best in less specialized efforts, study says

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Applying brainstorming techniques to new product development works best when the collaboration employs participants from varied specialties gathering to develop a less complex product, according to the Management Insights feature in the current issue of *Management Science*, the flagship journal of the Institute for Operations Research and the Management Sciences (INFORMS).

When new products will be highly technical, a better way to develop them is for specialists to do their work in private and collaborate through 'nominal' groups, the study says.

"The Effects of Problem Structure and Team Diversity on Brainstorming Effectiveness" is by Stylianos Kavadias of the Georgia Institute of Technology and Svenja C. Sommer of HEC Paris.

Management Insights, a regular feature of the journal, is a digest of important research in business, management, operations research, and [management science](#). It appears in every issue of the monthly journal.

Since the 1950s, the effectiveness of brainstorming has been widely debated. While some researchers and practitioners consider it the standard idea generation and problem solving method in organizations, part of the social science literature has argued in favor of nominal groups, in which the same number of individuals generate solutions in isolation.

The authors revisit this debate and explore the implications that the underlying problem structure and the team diversity have on the quality of the best solution as obtained by the different group configurations.

They conclude that nominal groups perform better in specialized [problems](#), even when the factors that affect the solution quality exhibit complex interactions (problem complexity). In cross-functional problems, the brainstorming group exploits the competence diversity of its participants to attain better solutions.

More information: The current issue of Management Insights is available at mansci.journal.informs.org/cgi/reprint/55/12/iv

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