

# Researchers find surprising route to better team decision-making

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The next time your manager calls a final meeting to discuss data before making a decision, don't roll your eyes or mutter about wasted time: The practice is actually borne out by science.

Management department senior research scholar Mary Waller and her coauthors examined the decision-making processes among teams and

discovered how teams spent their time working together played a critical role in their outcomes. Those teams that spent more time gathering and examining data before formulating alternative solutions to a complex problem ultimately performed better than other teams. seized on the first option. Their findings, "The Temporal Phase Structure of Team Interaction Under Asymmetric Information Distribution: The Solution Fixation Trap," were published in the *Journal of Organizational Behavior*.

At the heart of high-performing teams' practice of spending more time understanding data was another, more important behavior: They avoided the temptation to rush into generating solutions. By recording teams' discussions and analyzing how they behaved moving back and forth between processing information and formulating plans, Waller and her coauthors found that once some groups began discussing solutions, they never returned to information gathering and analysis. This behavior, which Waller terms "[solution](#) fixation," was found to be a key indicator of a poor performing team.

"As soon as someone said, 'You know, I think we should do X,' it was like a switch was thrown," she said. "It was like, 'Well, I think we should do Y,' and 'Well, I really think we should do Z.' And they were off to the races, into talking about solutions and they never went back to see if they had uncovered all the information."

In contrast, the teams that performed the best took a much more measured approach and avoided discussing solutions—even when potential strategies were floated early.

"On the high performing teams they'd go, 'Yeah, thanks for mentioning that potential solution—we'll get to that. Let's keep going through the information,'" Waller explained. "They had the maturity to say, 'We'll get to the fun part in a little bit, but let's make sure that we understand

really what's going on here."

Importantly, the high performing teams were just as fast overall as the other teams when reaching their conclusions.

## **A simulated crisis for real-world insights**

Digging into team dynamics deep enough to gain clarity on the nuances that drive these decisions required Waller and her coauthors to observe teams as they worked to solve a [difficult problem](#). To do so, researchers entered randomized teams of MBA students into a computer-based simulated expedition to climb Mount Everest. Each team had to work through an [emergency situation](#) in which not all [team members](#) may be able to ascend to the next base camp. Teams ultimately had to choose how to share information and resources efficiently in order to maximize the chances of the entire team continuing its climb.

Adding to the challenge, each team member received different pieces of information that could impact the team's decision. The exercise is designed so that teams that share more information are more likely to succeed; similar scenarios, known collectively as "hidden profile" problems, have been a tool for team dynamics researchers to explore decision-making for several years. While previous researchers have used hidden problem problems to focus on the number of times teams discussed each piece of data, Waller's team pulled back and looked at the larger structure of the decision process.

"We thought that the story is more complex than just counting how many times each unique piece of information gets talked about," she said. "We think that it's more than just counting the number of times a piece of information gets mentioned. We think that the story has to do with these patterns of phases of decision making, activity and behavior in addition to the counting.

Researchers watched video of the teams' approach to the Everest challenge, and analyzed how long and at what point in the simulation teams performed broad categories of actions: sharing and discussing information, determining solutions, confirming results of their decisions and administrative, organizational discussions. By quantifying this behavior and placing it on a timeline, Waller and her colleagues found sharp contrasts between high-performing teams and those that performed poorly or failed outright.

In addition to discovering that the highest-performing teams concentrated on data analysis without getting pulled into the solution-fixation trap, these teams also were very clear on segmenting the discussion portion of their meeting from the point where they took action.

"It's very organized," Waller said. "Are we all on the same page? Do we all agree? OK, here's what we're going to do. To summarize, we agreed to do this, but here's what we're going to do."

## **Avoiding the solution-fixation trap**

"What we want to do with our research is take some of the uncertainty out of team decision-making meetings, as much as we can," Waller explains.

A lot of uncertainty is woven into the team decision-making dynamic when groups come together to address complex problems. Because organizations rely on the many points of view that come together to develop these solutions, they're inherently unstable: Maybe a team will gel and a solution will come together; maybe it'll get lost in the weeds exploring solutions or struggling with a single member caught in the solution fixation mentality.

While there's considerable gap between researchers parsing video of a game simulating a crisis and managers leading teams on the fly, Waller believes anyone in a team can harness her findings to reach better outcomes. By simply being aware of team dynamics and the importance that focused information processing plays in reaching the best solution, they can promote those behaviors.

"You can see if someone is constantly trying to interrupt the team by saying, 'I think we should do this. I think we should do that,'" she said. "You can stop that behavior and redirect the team back to [information processing](#). That's clear."

"If you can do that, you take the wind out of the sails of the solution fixation trap. And it really is a trap—teams become bogged down in pitching solutions once it starts, and never find their way back to building an accurate understanding of what is actually happening," she continued. "You spend the time on the front end, and you reap the rewards on the back end. That's what the high performing [teams](#) showed us in the paper."

**More information:** Serena G. Sohrab et al, The temporal phase structure of team interaction under asymmetric information distribution: The solution fixation trap, *Journal of Organizational Behavior* (2021). [DOI: 10.1002/job.2592](https://doi.org/10.1002/job.2592)

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