



Problem Solving:
Why We Only Consider Adding Instead of Subtracting

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Do people systematically overlook opportunities to improve objects, ideas, and situations by subtracting from them? Eliminating features may enhance usability. Deleting words may clarify communication. Removing barriers may encourage desired behaviors. Yet, my research team and I have found that subtractive improvements are not as common as additive improvements in the changes that people pursue, and subtractive improvements are often overlooked entirely in the ideas that people generate. In our experiments, participants failed to identify advantageous subtractive improvements. This was true unless participants were explicitly prompted to consider subtraction, given multiple opportunities (versus only one) to recognize the shortcomings of additive solutions, or when not cognitively burdened (versus under high cognitive loaded). Pursuing additive improvements without considering comparable, sometimes superior, subtractive ones may contribute to overburdened schedules, minds, and ecosystems.

Dr. Adams is an Assistant Professor at the Frank Batten School of Leadership and Public Policy at the University of Virginia. A social psychologist by training, she conducts research on interpersonal dynamics, ethics, and conflict resolution. Her research has been published in *Nature* as well as top-tier social psychology and organizational behavior journals, and has received coverage from outlets including the *New York Times*, the *Washington Post*, the *Wall Street Journal*, and the *Financial Times*. Dr. Adams has received UVA's highest teaching award and was also named one of the top 40 under 40 business school professors. She sits on the board of 3 start-up companies and is an affiliate of ideas42. A native Californian, she received her BA from Colby College and her PhD in Organizational Behavior from the Stanford Graduate School of Business, and was a Fellow-in-Residence at Harvard University's Edmond J. Safra Center for Ethics.

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