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Crowdsourcing Creativity: Generating and Combining Ideas using Crowds

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Abstract: We introduce and test a crowdsourcing technique for creative problem solving. In total, 1853 workers from Amazon's Mechanical Turk produced 468 ideas for solving the 2010 oil spill problem in the Gulf of Mexico. In our technique, one crowd generated initial ideas, another crowd evaluated the creativity of these ideas, and yet another crowd combined pairs of ideas produced by the previous crowd. The selection of the two ideas to be combined was random in one condition, and in the other condition, biased toward more creative ideas. A new crowd judged the best 5 solutions by crowds to be as creative as the best 5 solutions by experts. This crowd also rated the crowds' solutions combined through the biased selection as more creative than the initial solutions. Through the collective process of generating, evaluating, and combining ideas, crowds can produce solutions that are as creative as experts'.