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Date : January Monday 14th

Time : 11:00 – 12:00 pm

Location : Room 1505

Title : Crowdsourcing New Product Ideas under Consumer Learning

Abstract:

Crowdsourcing initiatives are becoming a popular tool for new idea generation for firms. On crowdsourced ideation initiatives, individuals contribute new product ideas and vote on other's ideas which they would like the firm to implement. The firm then decides which ideas to implement. Although such initiatives are widely adopted in many different industries, they face increasing criticism as the number of ideas generated often decline over time, and the implementation rates (percentage of posted ideas that are implemented by the firm) are quite low raising concerns about their success.

We propose a dynamic structural model that illuminates the economic mechanisms shaping individual behavior and outcomes on such initiatives. Through counterfactuals, we identify the impact of several potential interventions on the success of such initiatives. We estimate the model using a rich dataset obtained from IdeaStorm.com, which is a crowdsourced ideation initiative affiliated with Dell. We find that, on IdeaStorm.com, individuals tend to significantly underestimate the costs to the firm for implementing their ideas but overestimate the potential of their ideas in the initial stages of the crowdsourcing process. Therefore, the “idea market” is initially overcrowded with ideas that are less likely to be implemented. However, individuals learn about both their abilities to come up with high potential ideas as well as the cost structure of the firm from peer voting on their ideas and the firm's response to contributed ideas. We find that individuals learn rather quickly about their abilities to come up with high potential ideas, but the learning regarding the firm's cost structure is quite slow. Contributors of low potential ideas eventually become inactive, while the high potential idea contributors
remain active. As a result, over time, the average potential of generated ideas increases, while the number of ideas contributed decreases. Hence, the decrease in the number of ideas generated represents market efficiency through self-selection rather than its failure. Through counterfactuals, we show that providing more precise cost signals to individuals can accelerate the filtering process. Increasing the total number of ideas to respond to and improving the response speed will lead to more idea contributions. However, failure to distinguish between high and low potential ideas and between high and low ability idea generators lead to the overall potential of the ideas generated to drop significantly.