Marketing Colloquia
Fall 2015

Berkeley Dietvorst

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University of Pennsylvania

Thursday, September 3, 2015
Where: *741 JMHH*
When: *12:00 PM* to 1:20 PM

ALGORITHM AVERSION

ABSTRACT: An abundance of research has shown that algorithms (e.g. statistical models, decision rules, actuarial tables) produce more accurate predictions than human experts. However, consumers and managers often elect to use human forecasters instead of algorithms. This algorithm aversion is costly, as it leads to suboptimal outcomes in important domains including: forecasting demand for products, making financial investments, and choosing which products to consume. In my paper, "Algorithm Aversion: People Erroneously Avoid Algorithms After Seeing Them Err", I investigate how people's decision of whether to use an algorithm or a human forecaster is affected by their experience with those forecasters. In a series of experiments, I demonstrate that people are substantially less likely to choose to use an algorithm in favor of a human forecaster after seeing the algorithm perform, even if they have also seen it outperform the human forecaster. In a second paper, "Overcoming Algorithm Aversion: People Will Use Algorithms If They Can (Even Slightly) Modify Them.", I explore prescriptions that increase the likelihood that people will choose to use an imperfect algorithm. I find that people are substantially more likely to use imperfect algorithms when they can use their own judgment to modify the algorithm's forecasts. Interestingly, I also find people are relatively insensitive to the amount that they can modify an algorithm's forecasts, which suggests that giving people even a little freedom to modify an algorithm's forecasts will greatly increase their willingness to use the algorithm.

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