AI versus HR: A field experiment in hiring

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Abstract :

The integration of Artificial Intelligence (AI) in hiring practices is gaining momentum across various sectors. However, its broader adoption, particularly for positions requiring only few qualifications, is often impeded by a scarcity of comprehensive employee data. Addressing this challenge, our study hypothesizes that the inclusion of behavioral data can significantly enhance the predictive accuracy of AI in hiring. We begin by assessing whether behavioral measures enhance the efficiency of predicting the productivity of microfinance credit officers. Our findings suggest that survey-based behavioral measures markedly enhance model precision. To validate the robustness of these measures against the selection of the training sample and potential strategic responses by candidates, we conduct two out-of-sample tests: one forecasting the future performance of novice employees and another within a field experiment on hiring. Both tests corroborate the effectiveness of incorporating behavioral data to improve the hiring process. While our field experiment comparing workers hired by the algorithm with those hired by human managers did not reveal significant differences in treatment effects, the performance of candidates recommended by the algorithm is significantly higher than those not recommended. This study not only underscores the viability of AI in roles traditionally reserved for human judgment but also provides practical insights into how AI can be leveraged to bolster the hiring process in data-constrained environments.