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A crystal ball is surrounded by a visual representation of the application of a predictive algorithm's results. Decision-makers at all levels would love to know about the future effects of current decisions. This special issue focuses on what we currently can (and cannot) predict using the emerging conjunction of machine learning, big data, and human understanding. See page 468. Illustration: C. Bickel/Science; Data visualization: Mauro Martino/IBM Research and Northeastern University

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