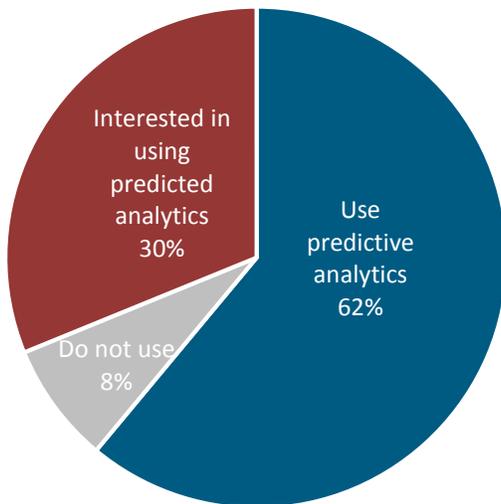


Survey Results on Predictive Analytics Use, 2017

April 2017

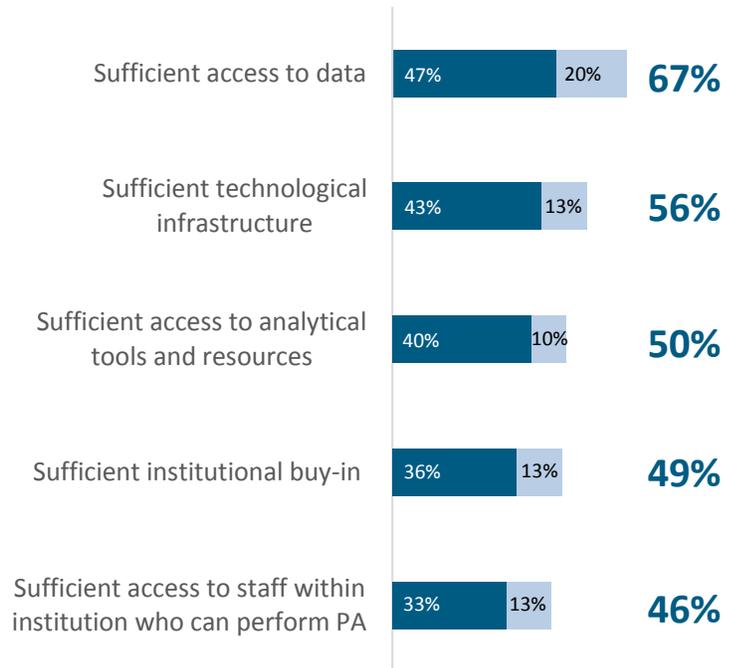
Increasing use of predictive analytics has been identified as a strategy under the Texas higher education strategic plan, 60x30TX, to assist students at risk of not completing degrees. The term *predictive analytics* (PA) refers to statistical analysis that extracts information using various technologies to uncover relationships and patterns within a large volume of data that can be used to predict behavior and events.¹ To better understand the integration and use of predictive analytics by Texas public institutions of higher education (IHEs), the Texas Higher Education Coordinating Board (THECB) invited the Chief Academic Officer or Chief Instructional Officer of each Texas public IHE to participate in a brief survey conducted January 23 to February 22, 2017. The survey had 76 respondents, providing a response rate of 75 percent.

Ninety-two percent of respondents reported use or interest in using predictive analytics to improve student completion. All interested institutions were somewhat to extremely likely to engage in predictive analytics within the next two years.



Overall, **1 out of 3** institutions surveyed contract with a vendor to perform predictive analytics (*n* = 25).

Despite the high percentage that reported use or interest in predictive analytics, the majority of institutions did not report sufficient access to staffing or institutional buy-in for its use. Of those who responded to the question, approximately 7 percent indicated insufficient capacity in all areas listed below.



■ Uses Predictive Analytics ■ Does Not Use Predictive Analytics
 Question respondents N=70

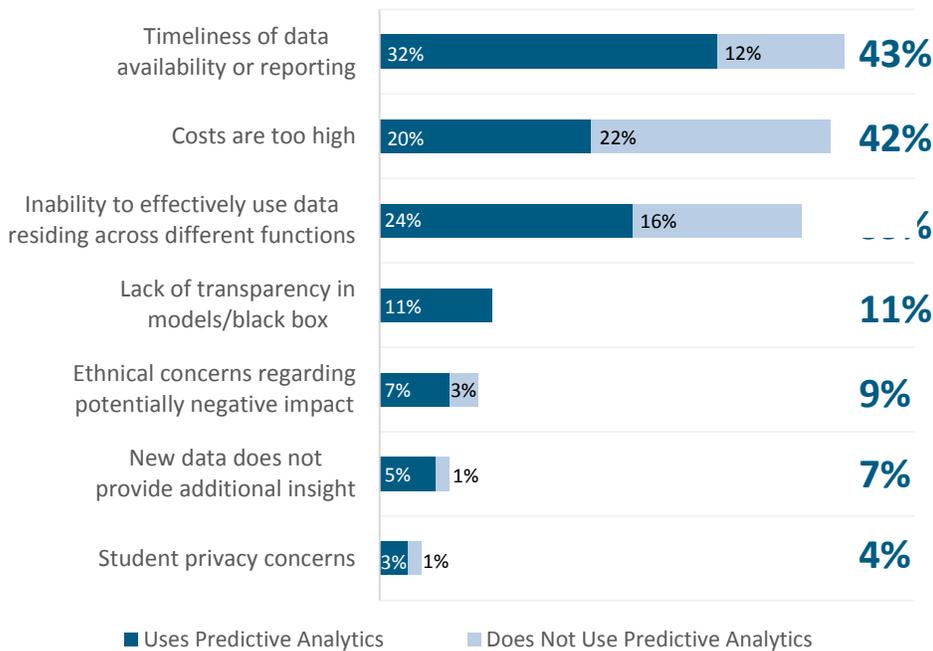
¹ Ekowo, M. and Palmer, I. (2016). The promise and peril of predictive analytics in higher education: A landscape analysis. *New America Foundation*. Accessed Nov. 14, 2016, from http://na-production.s3.amazonaws.com/documents/Promise-and-Peril_4.pdf

² The percentages presented in the charts of this report may not sum up to the cumulative percentages due to rounding.



28% of respondents integrate or embed predictive analytics in an *automated* action or decision process (such as an early alert system).

The top challenge to institutions' use of predictive analytics was the timeliness of data availability or reporting. Cost was the most cited barrier for institutions that did not currently use PA.



Approximately **5 out of 6 institutions** (83%) that use predictive analytics (PA) *agreed or strongly agreed* that using predictive analytics helps improve their student completion performance.

How the THECB can support institutions' use of predictive analytics

Top Recommendations by Institutions

Provide training and coordination of statewide collaboration on various PA methods and best practices (n = 16).

Develop strategies to lower costs to institutions for PA tools and applications, such as providing grants, cost-sharing, or negotiated statewide contracts with vendors (n = 13).

Share results of predictive models or analysis based on data collected at the state level (n = 10).

Increase institutions' accessibility to state data (n = 8).

Establish statewide data governance policies and use standards (n = 6).

Promote a culture of analytics (n = 6).

Improve timeliness of reports and data available through THECB (n = 5).

"The move to analytics (forward-looking) from reporting (backward-looking/historical) is a major paradigm shift."

- Survey Respondent

Predictive analytics are used by institution to:

