

## APPLICATION OF BIG DATA PREDICTIVE ANALYTICS IN HIGHER EDUCATION



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In the United Kingdom, the Higher Education Statistics Agency (HESA) is charged with the responsibility for collecting data from higher education colleges, universities and other providers of higher education. The data is provided to the UK governments and higher education funding agencies to inform state regulation, funding policy and mechanisms in the higher education sector. For many universities, however, the government-encouraged data-driven culture is generally seen as a compliance necessity – something that has to be done for reporting purposes. Thus, the potential use of internally-generated data remains largely untapped. The recent phenomenon of Big Data, a quantum increase in the amount of digital data that exist and the innovation that surrounds the use of this data, has brought home the importance of analytics in the higher education sector. This is more so as an increasing amount of student data, especially on student learning, is fluid and the need to perform analytics on the data – for example, on student course selection, student learning, attrition, progression, achievement, satisfaction and destinations – becomes a critical necessity. The paper examines the phenomenon of Big Data more broadly and how analytics can be used to derive actionable insights from universities' own internally-generated data. The paper concludes that engaging with big data analytics will help universities to make better use of, as well as leverage their data assets.