Big Data Business Analytics: Attitude and Readiness

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Abstract

This research studies the attitude and readiness of big data business analytics by means of a survey research with a total of 500 usable responses, with respect to STEM (science, technology, engineering, and mathematics) related issues that are essential and fundamental to skills relevant to big data business analytics. Business analytics makes extensive use of data, including data mining, statistical analysis, quantitative modeling, and explanatory and predictive analytics, to help make actionable decisions and to improve business operations. According to McKinsey & Company, the projected demand for deep business analytical positions could exceed the supply produced with the current trend by 140,000 to 190,000 positions, in addition to the projected need of 1.5 million managers and analysts in dealing with big data business analytics in the United States. Increasingly, top thinkers in academia and business believe that business analytics, especially analytics connected with big data, is going to be a driving force in our economy and society in the next 10 to 20 years. We found that there is a statistically significant correlation between STEM interests and critical skills in big data business analytics, which is a natural step forward to filling in the talent gap.

Keywords

Business Analytics, Big Data, Critical Skills, Empirical Research, Survey Questionnaire

Biography

Xin James He is Chair and Professor of Information Systems & Operations Management Department in the Dolan School of Business at Fairfield University. He received his Ph.D. in Business Administration from the Pennsylvania State University. He has published over 20 refereed research articles in such journal as *Operations Research*, *European Journal of Operational Research*, *Stochastic Models*, *Total Quality Management*, *Naval Research Logistics*, *Information Systems Journal*, *International Journal of Production Economics*, *Harvard Business School Cases*, and *Asia American Review*. Dr. He teaches both undergraduate and graduate courses in Information Systems, Operations Management, and Business Analytics at Fairfield University's Dolan School of Business.

Myron Sheu is professor and department chair of information systems and operations management, which offers four concentrations of the undergraduate business administration degree program and two concentrations of the MBA program at California State University, Dominguez Hills. Dr. Sheu earned his PhD in computer science from Old Dominion University, a master's from Brigham Young University in computer science, and an MBA in finance from California State University Long Beach. He has published in refereed journals such as Journal of Information Systems Education, Systems Research, and Behavioral Science.