Business Analytics and Big Data: What Do Statisticians Need to Succeed?

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The demand for statistical skills is unprecedented in sectors of business and government where value, competitiveness, and efficiency are driven by large amounts of data. A 2011 study by McKinsey Global Institute predicts a shortfall of 140,000 to 190,000 “deep analytical positions” in the United States by 2018. Yet the statistics profession is largely unaware of the opportunities in these areas. This presentation explains what business analytics means for statisticians—and how they can contribute—using examples of critical business problems and analytical approaches. The presentation also describes related trends, including the use of unstructured data and distributed computing. The challenges for our profession are to better prepare students for careers in these environments, and to help them develop the skills they need to flourish within their organizations.

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