Decision-Making With Big Data Using Open Source Business Intelligence Systems

**Summary:** The importance of supporting decision making for improving business performance is a crucial, yet challenging task in enterprise management. The amount of data in our world has been exploding and Big Data represents a fundamental shift in business decision-making. Analyzing such so-called Big Data is becoming a keystone of competition and the success of organizations depends on fast and well-founded decisions taken by relevant people in their specific area of responsibility. Business Intelligence (BI) is a collection of decision support technologies for enterprises aimed at enabling knowledge workers such as executives, managers, and analysts to make better and faster decisions. We review the concept of BI as an open innovation strategy and address the importance of BI in revolutionizing knowledge towards economics and business sustainability. Using Big Data with Open Source Business Intelligence Systems will generate the biggest opportunities to increase competitiveness and differentiation in organizations. In this chapter, we describe and analyze four popular open source BI systems - Jaspersoft, Jedox, Pentaho and Actuate/BIRT.