Bringing Business Intelligence to Health Information Technology Curriculum

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ABSTRACT

Business intelligence (BI) and healthcare analytics are the emerging technologies that provide analytical capability to help healthcare industry improve service quality, reduce cost, and manage risks. However, such component on analytical healthcare data processing is largely missed from current healthcare information technology (HIT) or health informatics (HI) curricula. In this paper, we took an initial step to fill this gap. We investigated the current HIT educational programs, BI industry, and healthcare BI job listings, and students' perceptions of BI and how BI could be incorporated into HIT programs. The student survey results showed strong interests from students in a HIT course containing BI components or a BI course specialized in the healthcare context. Based on the student survey and investigation of BI industry and job market, as well as HIT educational programs, we developed a general curriculum framework and exemplar implementation strategies to demonstrate how BI can be incorporated into an HI or HIT program. To the best of our knowledge, this research is the first of its kind. Our approach of integrating information from students, the HIT industry and other HIT programs can also be used as a model for general HIT curriculum development and improvement.

Keywords: Business intelligence, Health care, Curriculum design and development