

Deployment of Electronic Healthcare Records and Development of Big Data Analytics Capabilities in the Healthcare Industry: A Systematic Literature Review

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Abstract : Electronic health records (EHRs) can help to store, maintain, and make the appropriate handling of patient histories for proper treatment and decision. Merging the EHRs with big data analytics (BDA) capabilities enable healthcare stakeholders to provide effective and efficient treatments for chronic diseases. Though there are huge opportunities and efforts that exist in the deployment of EMRs and the development of BDA, there are challenges in addressing resources and organizational capabilities that are required to achieve the competitive advantage and sustainability of EHRs and BDA. The resource-based view (RBV), information system (IS), and non- IS theories should be extended to examine organizational capabilities and resources which are required for successful data analytics in the healthcare industries. The main purpose of this study is to develop a conceptual framework for the development of healthcare BDA capabilities based on past works so that researchers can extend. The research question was formulated for the search strategy as a research methodology. The study selection was made at the end. Based on the study selection, the conceptual framework for the development of BDA capabilities in the healthcare settings was formulated.

Keywords : EHR, EMR, Big data, Big data analytics, resource-based view

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