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Review of business analytics maturity assessment models

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Business Analytics (BA) refers to use of computing to gain insight from data and includes Business Intelligence (BI) and statistical analysis. Organizations are increasingly using BA at strategic and operational levels in order to gain competitive advantage in the marketplace. Organizations that adopt BA, are at different maturity levels. There are maturity models that can be used to assess the maturity of BA and BI. The initial objective of this study was to critically examine BA maturity models in the literature and find gaps and issues in current research in the context of a developing country setting. Maturity models developed by Gartner and TDWI have taken a more practitioner knowledge perspective for the model development, while others have taken a more theoretical approach and require more empirical study. Due to the technical background of BA some of the models developed are associated in technological progress. A few others have taken a business perspective with a technical aspect. Data and information management, people, organizational culture and technology are key components of these models. Hewlett-Packard's BI maturity model has considered a business view focusing on information, strategy and business enablement components. Pros of these models is more realistic in real world but lack integration with other systems in the business. A similarity among these models is, many of them have been formatted in stages or levels providing a roadmap to achieve growth in BA maturity. However, a majority of these maturity models have been developed considering the resources, capabilities and competencies available in developed countries like USA, UK, Slovenia and Australia. Developing countries like Sri Lanka are in the initial stages of deploying and using BA. With relatively limited infrastructure facilities, social and technical differences compared to developed countries, the use of these maturity assessment models developed, have been found to be inadequate. Technology development, human behaviour and business models in Sri Lanka have dissimilarities compared to developed countries. Today's organizations have integrated inter and intra information systems which are Enterprise Resource Planning systems (ERP), Customer Relationship Management (CRM), Supply Chain Management (SCM) systems and Internet of Things (IoT) tools into their functions. To assess BA maturity in Sri Lankan organizations, an integrated model incorporating both theoretical and practitioner knowledge while considering the business perspective and incorporating new technological advances in today's business models is required.

Keywords: Business analytics, business intelligence, maturity models