Factors affecting on adoption of business intelligence to Small and Medium Enterprises in Anuradhapura district, Sri Lanka

H.M. Ranasinghe and D.M.T. Madushanka

Department of Information Systems, Faculty of Management Studies, Rajarata University of Sri Lanka, Mihintale Corresponding author: rhansikamadumali@gmail.com

Abstract

Business Intelligence (BI) is one of the decision support tools that offer the ability to gather, store, access and analyze the huge amounts of data and support for making effective decisions. There is a rich body of literature relating to the BI adoption and their related benefits over the SMEs in developed countries. But the researcher's pilot survey depicts that in developing countries, especially in Sri Lanka, if larger companies adhere to the new technologies, it's remaining very low to the SMEs. Therefore, those companies still taking a long time to analyze data, interpret data and present data so on. The objective of this study was to address this research gap by examining the factors affecting Business Intelligence adoption by Small and Medium-sized Enterprises in the Anuradhapura district in Sri Lanka. By initiating the deductive approach, a research model was developed using independent variables of relative advantages, complexity, organizational resource availability, competitive pressure and the dependent variable of BI adoption by SMEs. 100 SMEs considered the sample out of 4987 SMEs of the total population which the details obtained through the Divisional Secretariat Office in Anuradhapura. An administrative questionnaire was distributed to collect the data adhering to the Stratified Sampling technique. The collected data were analyzed using SPSS version 21.0 and the results revealed that relative advantages, complexity, organizational resource availability and competitive pressure showed a high effect on BI adoption and the mean value is higher than 3.0. According to correlation analysis, three factors showed a significant and positive relationship with the dependent variable except for complexity with BI adoption. According to that three hypotheses were accepted and one was rejected. The research findings elaborate and statistically proved the reasons for minor adoption of new technologies including Business Intelligence by SMEs in Anuradhapura District. Further, this study highlighted the actions that need to be taken by the Sri Lankan government and IT/IS vendors while providing direction for future researchers.

Keywords: Business intelligence, information systems, small and medium-sized enterprises