ABSTRACT

Data has become one of the most vital and important elements that guides decision-making in business enterprises, the availability and authenticity of which facilitate adequate and informed decision-making. Business organizations both small and large are become more proactive when it comes to data collection and analytics, especially with the emergence of paradigms such as Big Data. However, despite the obvious benefits of data in business decision making process, the rate of adoption and incorporation of data collection and analytics into business processes and activities remain relatively low, especially among small and medium-sized enterprises (SMEs), thus adversely impacting their decision-making process. The implication of this on SMEs is slow growth rate, haphazard decision making and ultimately loss of revenue, reduction in productivity and other kinds of business loss. Although there are quite a number of reasons for the low rate of adoption of data collection and analytics practice by SMEs, the high cost of procurement and development of computer infrastructure needed for data collection and analytics is a key reason. Similar to this, the technical expertise required for data and collection is often unavailable in SMEs.

On this premise, this study aimed at developing a Cloud-based platform for SMEs that can be used for collecting, analyzing and visualizing data. Data as used in this context includes all kinds of data from customers, clients and prospects, as well as business operation data such as marketing campaigns, employee performance and sales record. At the end of the study, the platform was designed and implemented, instances of operation of the system are provided in the system implementation section of the report. Finally, it was recommended that SMEs become more proactive about data collection and analytics and strive to incorporate it into all of their business operations and activities.