ABSTRACT

Nowadays, in the era of the Internet as disruptive technology and way of industrial revolution 4.0, all industrial companies compete in the competition atmosphere to increase their sales with the help of the latest technology and the latest science called industry 4.0. One part of industry 4.0 is big data analysis, data science, data analytics and Business Intelligence (BI). BI helps industrial players to analyze many things using databases which are also part of big data analysis. BI is widely used for a lot of analysis. BI is defined as systems which collect, transform, and present structured data from multiple sources. Yet, BI nowadays called as traditional BI will have problems when the data volumes and the usage frequency of a traditional BI system increase. Then comes up the new BI called as Self-Service Business Intelligence (SSBI). Self-service BI is a facility in BI environment that enables BI users to become more reliant and less dependent on the IT department. Moreover, Self-service BI can also be called as Do-It-Yourself BI (DIY BI) which shows that the environment provided is easy to access, analyze and share data with less IT dependency. In the era of technology that moves rapidly, SSBI is no longer a new item. Many enterprises are competing to create the best SSBI tools. Then the new problem arises after all of this. Many professional users that need the most suitable tool are confused in choosing among many tools on the market. Therefore, the researcher conducted a comparative study to analyze the two most famous SSBI tools on the market based on several experts' recommendation and articles such as Gartner Quadrant. It is because, based on many articles that discuss the advantages and disadvantages of some SSBI tools, none specifically explains using standard parameters. The researcher would analyze the datasets from secondary data using Microsoft Adventure Works database 2017 to conduct deeply comparison study analysis. This research will be supported by several parameters as the comparison goal. Based on a few references, the researcher limits the research to conduct a comparative study of several parameters between two most famous SSBI tools which are Power BI by Microsoft Corporation, and Tableau Desktop by Tableau Software. The result of this research is there are several results of the comparative analysis. The researcher compares 5 standard or Must-Have SSBI Tools parameters. The comparison of the standard parameters shows the equal rating of both tools. Yet, the comparison does not stop there. The differentiator parameters will be added as the additional parameter and to be the benchmark parameters. Then, the differentiator parameters show only one tool which has a better rating than the other one.

Keywords: Business Intelligence (BI), Self-Service Business Intelligence, Comparison Study, Power BI, Tableau