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Business Intelligence and Analytics: An Exploration of Academic Interest Compared to Google Search Volume

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ABSTRACT

Chen, Chiang and Storey [2012] provide a framework that identifies the evolution, applications, and emerging research areas of Business Intelligence and Analytics (BI&A) in terms of their key characteristics and capabilities. This bibliometric study of critical BI&A publications, researchers, and research topics based on more than a decade of related academic and industry publications. This study uses the BI&A framework for academic publishing in business intelligence and analytics to see if it follows the same trend as Google search volume data. In addition, it explores what google search terms and volume tell us. Google Trends is used as an online search data tool that allows the user to see how often specific keywords, subjects and phrases have been queried over a specific period of time. The results are displayed in a graph that Google calls a "Search Volume Index" graph. Data in the graph can be exported into a .csv file, which can be opened in Excel and imported into other statistical applications.

This research-in-progress finds that Google searches may be indicative of particular attitudes or behaviors that would otherwise not be easy to measure, therefore keywords can give general insight into particular attitudes or behaviors and allow you to see what the world is searching for by entering a keyword or a topic. This research looks at the BI&A evolution time line, specifically that *Business intelligence* became a popular term in the business and IT communities in the 1990s and that in the late 2000s, *business analytics* was introduced as an analytical component of BI. More recently *big data* and *big data analytics* have been used to describe the data sets and analytical techniques in applications that are so large (from terabytes to exabytes) and complex (from sensor to social media data) that they require advanced and unique data storage, management, analysis, and visualization technologies.

In addition, it explores if the BI&A publishing and search interest have similar trends, if BI&A will be considered one area of technology as the tools, techniques and terminology become more integrated, if Business Intelligence regional search volume is similar to publishing affiliation and investigates if search terms may not include all related publications or all related search volume and therefore are a limitation.

This is an important study which can help researchers see if what the world is searching for by entering a keyword or a topic is congruent with academic research and curriculum.

Keywords

Business Intelligence, Analytics, Google Search Volume

REFERENCES

1. Chen, H., Chiang, R. H., & Storey, V. C. (2012) Business Intelligence and Analytics: From Big Data to Big Impact. *MIS quarterly*, *36*, 4, 1165-1188.