

## Variable Mapping: From Bibliometrics to Implications

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**Abstract :** Literature review is indispensable in research. One of the key techniques used in it is bibliometric analysis, where one of the methods is science mapping. The classic approach that dominates today in this area consists of mapping areas, keywords, terms, authors, or citations. This approach is also used in relation to the review of literature in the field of marketing. The development of technology has resulted in the fact that researchers and practitioners use the capabilities of software available on the market for this purpose. The use of science mapping software tools (e.g., VOSviewer, SciMAT, Pajek) in recent publications involves the implementation of a literature review, and it is useful in areas with a relatively high number of publications. Despite this well-grounded science mapping approach having been applied in the literature reviews, performing them is a painstaking task, especially if authors would like to draw precise conclusions about the studied literature and uncover potential research gaps. The aim of this article is to identify to what extent a new approach to science mapping, variable mapping, takes advantage of the classic science mapping approach in terms of research problem formulation and content/thematic analysis for literature reviews. To perform the analysis, a set of 5 articles on customer ideation was chosen. Next, the analysis of key words mapping results in VOSviewer science mapping software was performed and compared with the variable map prepared manually on the same articles. Seven independent expert judges (management scientists on different levels of expertise) assessed the usability of both the stage of formulating, the research problem, and content/thematic analysis. The results show the advantage of variable mapping in the formulation of the research problem and thematic/content analysis. First, the ability to identify a research gap is clearly visible due to the transparent and comprehensive analysis of the relationships between the variables, not only keywords. Second, the analysis of relationships between variables enables the creation of a story with an indication of the directions of relationships between variables. Demonstrating the advantage of the new approach over the classic one may be a significant step towards developing a new approach to the synthesis of literature and its reviews. Variable mapping seems to allow scientists to build clear and effective models presenting the scientific achievements of a chosen research area in one simple map. Additionally, the development of the software enabling the automation of the variable mapping process on large data sets may be a breakthrough change in the field of conducting literature research.

**Keywords :** bibliometrics, literature review, science mapping, variable mapping

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