



Science Mapping for Sustainable Business Model : A Bibliometric Analysis

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Abstract. The importance of the Sustainable Business Model has recently received increased interest in society and among scholars. The studies about the review of the current Sustainable Business Model were few, so it is essential to understand the mapping of the Sustainable Business Model.

This study is a Bibliometric Analysis of the articles on Sustainable Business Model. This study aims to find a new research area of the Sustainable Business Model. The research was conducted with three stages: search criteria and source identification, software and data extraction, and data analysis and interpretation. The initial studies were selected from the articles published between 2003–2023 in English-language reputable journals indexed by Scopus. There were 1,101 articles selected to be used and analysed. The result of this study refers to the new research area Sustainable Business Model is the research about Sustainable Business Model Innovation and Circular Business Model.

Keywords: Bibliometric Analysis, Circular Business Model, Sustainable Business Model Innovation, Sustainable Business Model.

Introduction

A Sustainable business model creates competitive advantage through superior customer value and contributes to the sustainable development of the company and society¹.

The importance of a sustainable business model has recently received increased interest in society and among scholars. At the same time, firms attempt to innovate their business models toward sustainability or create new businesses to address sustainability issues, and there is no one-size-fits-all model when it comes to sustainable business model².

The studies about reviewing the current Sustainable Business Model and revealing essential aspects that must be possessed were few³. Furthermore, the knowledge on experimentation with the Sustainable Business Model is even scarcer⁴.

Therefore, it is essential to understand the mapping of the Sustainable Business Model. This study aims to find a new research area in Sustainable Business Model.

Methods

The method used in this study was Bibliometric. Bibliometrics combines two main procedures: performance analysis and science mapping⁵. There are three stages of Bibliometric Analysis :

Stages 1: Search criteria and source identification

- a. Bibliographic data source: Scopus database
- b. Search topic: Sustainable Business Model
- c. Total document (first search): n = 17,613
- d. Exclusion criteria: document type: short survey, editorial, note, book review
- e. Inclusion criteria: document year 2003-2023, English language, subject area of economics and business
- f. Data selection (final search): n = 1,101

Stages 2: software and data extraction,

- a. Microsoft Excel 2013: statistical analysis
- b. The VOSViewer software: construction and graphic representation of the bibliometric map

Stage 3: Data analysis and interpretation.

- a. Performance analysis: document by subject area, document by year, document by origin country, document by author.
- b. Analysis of bibliometric maps: network visualisation of keywords, keyword trend.

Result and Discussion

The 1,101 articles used and analysed can be categorised by year from 2003 to 2023, by the origin country and the author. By the year, the first position (199 articles) was in 2022. The first position is the United Kingdom (243 articles) by the origin country. According to the author, the first position is Bocke, N.M.P (13 articles).

The VOSviewer obtained the publication keywords related to the Sustainable Business Model. Figure 1 portrayed 64 keywords related to the Sustainable Business Model, which is divided into 4 clusters: Cluster 1 (25 keywords), Cluster 2 (15 keywords), Cluster 3 (12 keywords) and Cluster 4 (12 keywords).

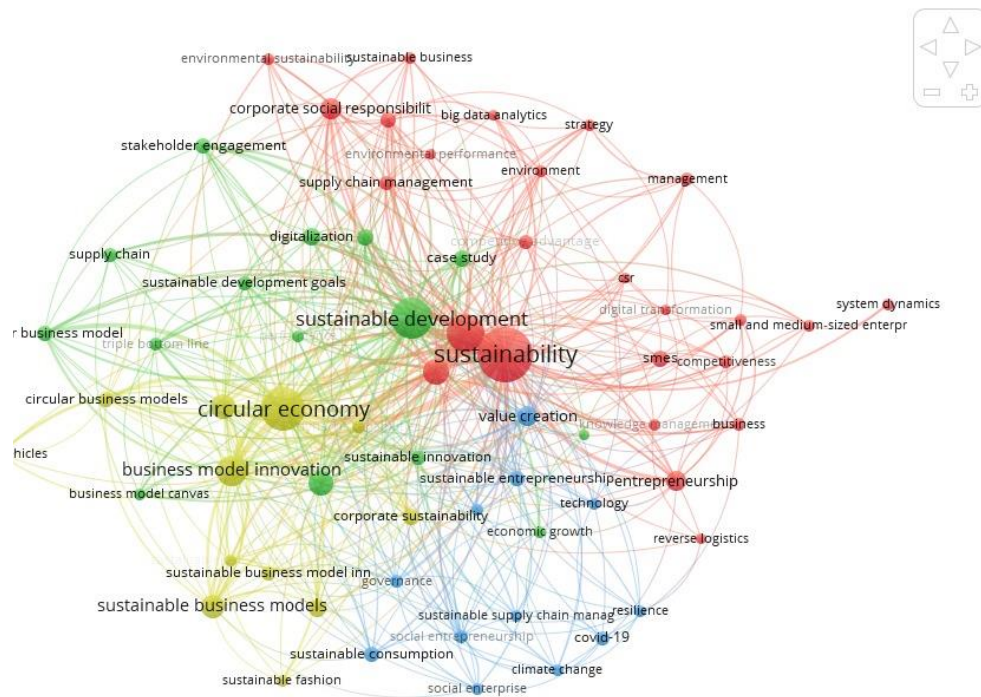


Figure 1. Network Visualisation of Keywords

The frequency of co-occurrence between two nodes is represented by the strength of the link between them. The three highest positions for occurrence are sustainability (199 articles), circular economy (123 articles) and sustainable development (112 articles). The three highest positions for total link strength are sustainability (334 articles), circular economy (245 articles) and sustainable development (190 articles). Figure 2 portrays the keywords trend of the Sustainable Business Model year 2018 – 2021. In 2021, the keywords sustainable business model innovation and circular business models are the keywords that rarely appear. It implies that Sustainable Business Model Innovation and Circular Business Model are the new research areas in Sustainable Business Models.

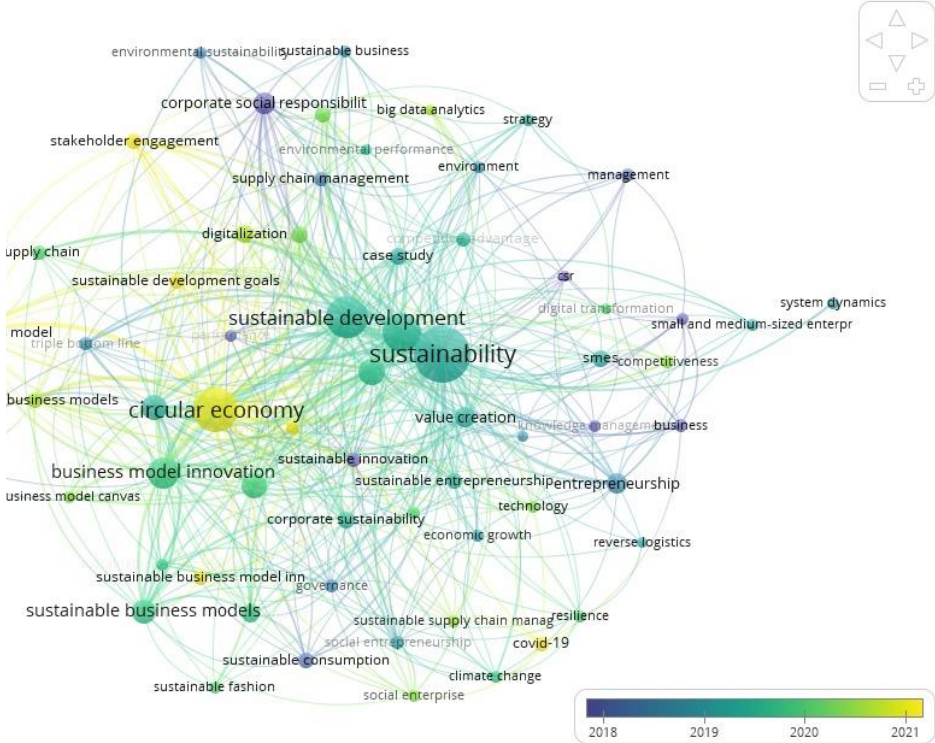


Figure 2. The trend of Keywords of Sustainable Business Model year 2018 -2021

The findings that sustainable business model innovation become a new area of research follow the statement that sustainable business model innovation is a crucial factor for a sustainable transition⁶; and for a company, sustainability transition challenges refer to the need to move toward complete new and more sustainable value propositions and business models⁷. Moreover, within academia and industry, business model innovation is seen as a promising means to integrate sustainability into business⁸; the relationship between sustainability innovations and business models depends on the specific purpose of these innovations, the introduction of new organisational forms, or the solution of social problems⁹; sustainability innovation together with deliberately designed business model can create and extend business case opportunities¹⁰.

The findings that the circular business model becomes a new area of research follow the statement that the still relatively young circular business model has never been summarised in one holistic circular business model framework entailing antecedents, moderators and outcomes and has never been assessed for its paradigmatic status¹¹. At the same time, one possible response for the company to socio-economic megatrends is to apply the circular business model¹². Thus, the concept of circular economy started in

recent years in response to the scarcity of resources and the awareness that traditional business models are unsustainable¹³; the synergies between the triple bottom line, the circular economy and the sustainable business model should be further research¹⁴. Furthermore, the adoption of five circular business models has grown substantially in the past decade, although many perspectives remain to change¹⁵.

Conclusion

Bibliometric analysis was used to find the new research area of the Sustainable Business Model. The study used and analysed 1,101 articles from the Scopus database. The result of this study refers to a new area of research on Sustainable Business Models: Sustainable Business Model Innovation and Circular Business Model.

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