
INFLUENCER MARKETING- A DATA DRIVEN APPROACH OF TRENDS AND STRUCTURES

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ABSTRACT

The paper looks at a data driven approach to analyzing the trends in influencer marketing. Who are the top authors, what are they talking about? What kind of approach is being taken by the papers in terms of methodology and if the key tenets of answering how to recruit the right influencers or find the correct influencer – brand –fit can be achieved today.

KEYWORDS

Data driven review, Influencer marketing analytics, R

1. INTRODUCTION

The COVID-19 pandemic, along with the rise of the Web3 economy has spearheaded the movement of user content and influencer marketing. Both exciting and scary as it sounds - brands, consumers and creators will redefine our way of marketing (Blanchard, 2021) The rise and growth of influencer marketing in order to influence future marketing strategies, requires a thorough review of literature and the opportunities in the space. This study attempts to find answers in the space of influencer marketing through a systematic literature review

H1. Which are the most influential authors and journals that have contributed to the literature on Influencer marketing?

H2. Is there a particular theme that is emerging from this literature and how do these themes evolve over time?

H3. What are the gaps and future research opportunities in influencer marketing and their metrics.?

I undertook this literature review where I reviewed articles from leading peer-reviewed journals on the subject with an aim to understand what exists in this space through a bibliometric analysis lens.

2. METHODOLOGY

A systematic literature review through the lens of data-driven bibliometric analysis through R software has been used in this paper (Donthu et al., 2021).

Database selection: I looked at Scopus which is one of the most popular bibliographic databases. Scopus had about 1234 papers and research articles, and books on the subject. I have chosen Scopus as a database for data collection, which is a popular choice for most bibliometric studies in the area (Dewangan et al., 2022)

Keywords and selections: I refined and searched on Scopus the keywords which were related to “Influencers”, and “Influencer Marketing”, this resulted in a lot of papers which were focused on influencers as a general term so I limited my search to the keyword “influencer marketing”. It resulted in 1234 documents of which 1197 were in English. The search was limited to English language only. I excluded other languages such as Portuguese, Spanish and Mandarin. After filtering for ABDC journals the number of documents found was 847. I have looked at Journal articles, papers, conference papers and book chapters only, excluding letters and other documents.

Exclusions: The search was limited to Business management and accounting, engineering, decision sciences, and computer science, only. I have excluded medicine, dentistry, nursing, veterinary, neurology and related subjects as they are not relevant to my current exercise This resulted in a total of 579 documents that I reviewed. While there may be influencers in the space of medicine, but I am focused on influencer marketing in the management and business context.

Year Selection: The analysis year is 2010 onwards as there is no literature prior to this date on influencer marketing. While a few articles were found between 1994 and 2010, most of them were related to key opinion leaders or decision-makers of marketing rather than influencers as we understand them today. Another trigger could be the beginning of Twitter in 2006 then Instagram being launched in 2012, followed by the app in 2016.

2.1. Data Analysis

After filtering the search results I used inbuilt tools within Scopus and R software to analyse the performance metrics as well as the knowledge structures. Data analysis plan I used Bibliometrix to analyse the data collected from Scopus apart from the inbuilt visual layer in Scopus. Biblioshiny, launched in 2019, is a GUI interface of a R-based package named Bibliometrix developed by Massimo and Corrado in 2017. Bibliometrix is well established as a choice package for conducting scientific bibliometric analysis and allows multiple visualization slices (Munoz, 2020).

Bibliometrix was used in this paper to arrive at three field plots, cluster analysis and word clouds based on author keywords as well as paper keywords. The three-field plots can be used

to look at three-way interactions and were a good way to visualise the relationship between the countries where the papers originated, the journals in which they were published and the keywords that emerged.

Analysis flow

- a. Data gathering using Scopus APIs collection
- b. Data filtering (Language, Year, Type of publication, type of Journal)
- c. Performance Metrics:
 - i. Sources
 - ii. Authors
 - iii. Documents
- d. Clustering by Coupling
 - i. Analysis of three structures of Knowledge (K-structures):
 - ii. Conceptual Structure
 - iii. Intellectual Structure
 - iv. Social Structure
- e. Research gap identification and next steps
- f. Identification of emerging clusters based on content analysis through manual coding based on selection criteria from the above steps in a through d.

3. FINDINGS

3.1 Performance Metrics



Figure1: Performance figures

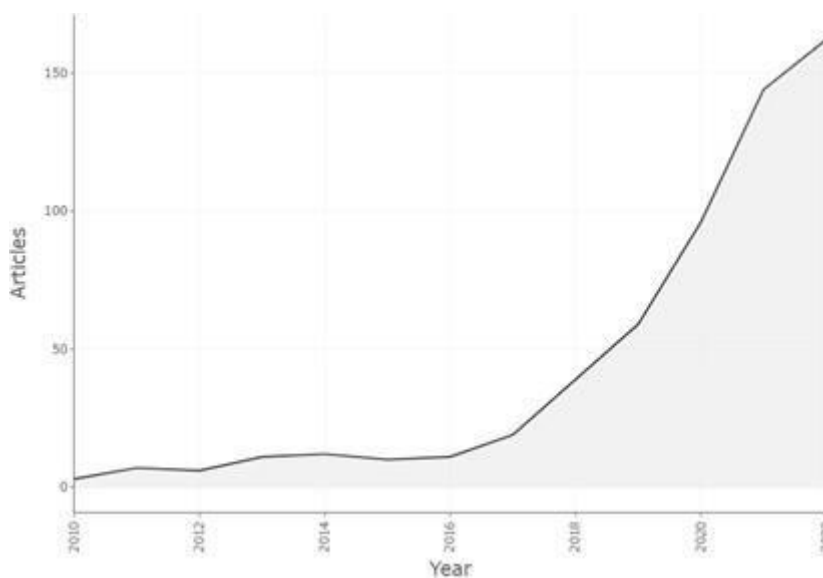


Figure 2: No of articles per year

3.1.1 Overview

The average growth rate per year in this space has been high in the last 5 years, while on average about 3 people collaborate on this topic. There is not a lot of international collaboration as influencer marketing is a very local construct. There are many single authors in the space as it's a relatively new area of research. The number of research papers has gained momentum post 2018, most likely with the advent of the Instagram app in 2016 and TikTok in the same year(D'Souza, 2022).

3.1.2 Source and country

I built a three-field plot for the country (Figure 3), keywords and the journal. In these graphs, the box size is akin to the mode of the occurrence (Riehmman et al., 2005). It is clear that the USA has the maximum publications in this space and in the area of “influencer marketing”, and “Social media”, published in journals like “International Journal of Advertising” and “Journal of Digital and social media marketing”. It is interesting to note that keywords coming from China and Korea are mostly around “Instagram”. India, UK, Germany and Spain are also publishing a lot in the space, markets where Influencer marketing and social media are trending topics. We can see that most cross-country collaborations happened in India but countries like UK and CHina had more inter- country collaborations on the subject.

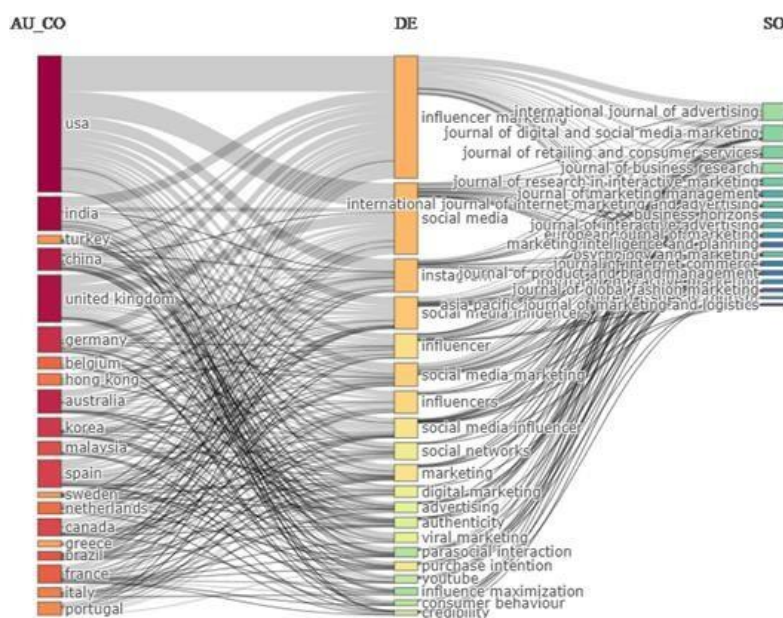


Figure 3: Three box plot

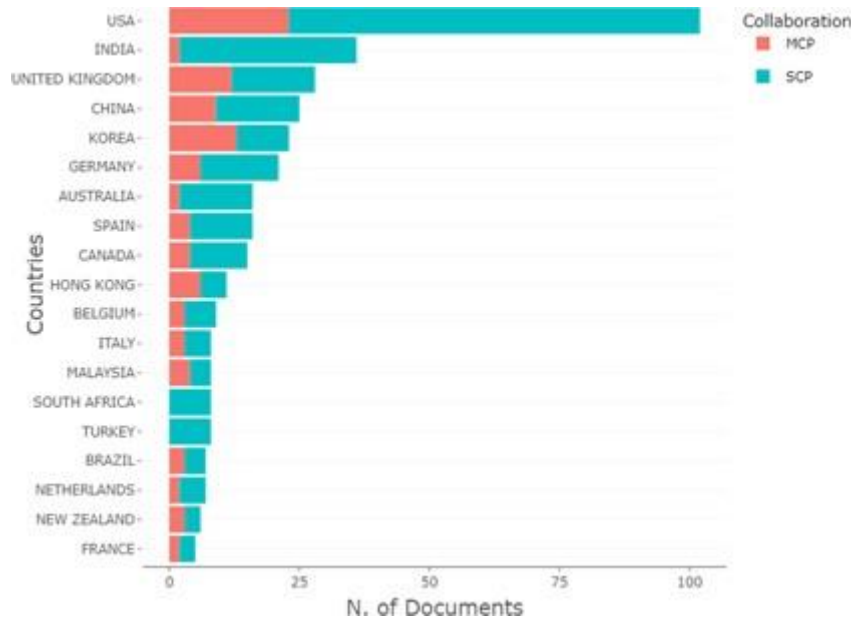


Figure 4: Documents by country of collaboration

3.1.3 Impact of authors

Some of the authors like Hudders and Veirman M, Jin SV have high impact in the space (Figure 5). The analysis has been done using H-index for citation, which looks at both the quantity and the quality of citations over time by comparing publications with citations. This is a better way of analysis than merely looking at number of citations (Sarli, 2022). The below chart means that 7 publications for Hudders have received at least 7 citations each.

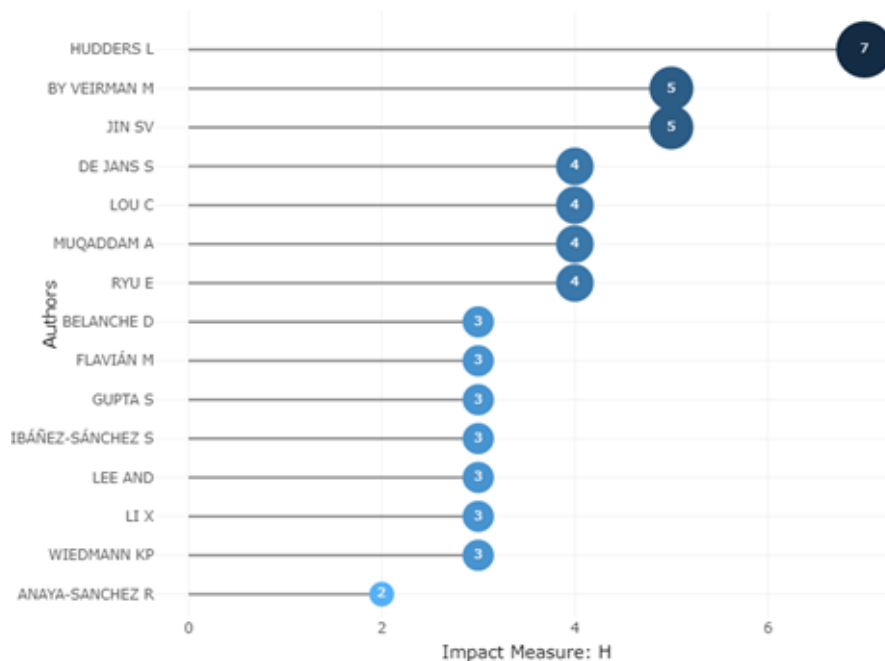


Figure 5: Impact of Authors

3.2 Keyword analysis

The most talked about keywords by the authors are around social media marketing, influence maximisation techniques, economic and social effects, applications of deep learning etc as shown in Fig 6 and 7.



Figure 6: Word cloud

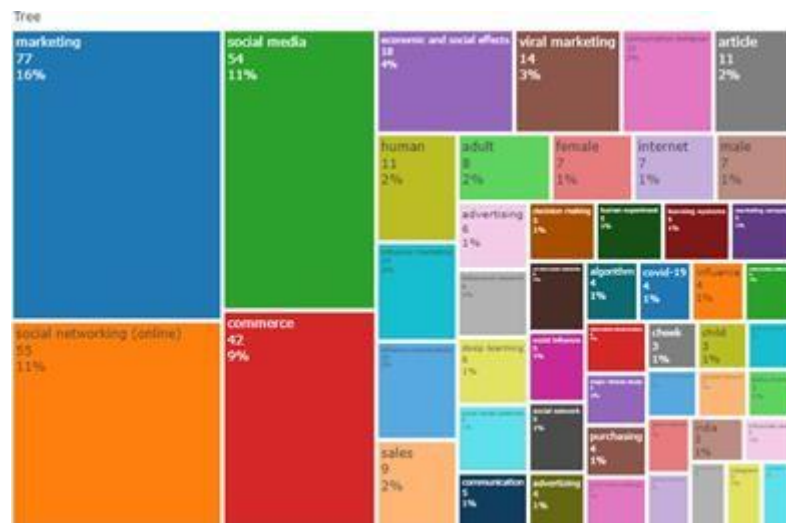


Figure 7

3.3 Thematic analysis and evolution

If we look at all the literature in the space and run a cluster analysis there are 3 key themes or clusters that emerge namely - behavioural intention, influence maximisation and influencer marketing as a study. Figure 8 shows the clusters and the keywords within each cluster. How these themes have evolved over the last 10 years and especially in the face of the COVID 19

pandemic, post the pandemic in 2022. If in the last 10 years between 2010 and 2021 people talked about influence marketing while the focus has shifted in 2022 to trust, credibility and user generated content getting viral(Thomas, 2021). Figure 9

| Occurrences | Words | Cluster | Cluster_Label | btw centrality |
|-------------|------------------------|---------|------------------------|------------------|
| 2 | behavioral intention | 1 | behavioral intention | 5.72179392275908 |
| 2 | information quality | 1 | behavioral intention | 54.4399366989043 |
| 11 | influence maximization | 2 | influence maximization | 476.107745320591 |
| 7 | information diffusion | 2 | influence maximization | 386.977407544382 |
| 5 | online social networks | 2 | influence maximization | 9.99380111156466 |
| 5 | social network | 2 | influence maximization | 197.057945100018 |
| 2 | heuristic algorithm | 2 | influence maximization | 0 |
| 168 | influencer marketing | 3 | influencer marketing | 5333.9956467942 |
| 107 | social media | 3 | influencer marketing | 5626.434248452 |
| 43 | instagram | 3 | influencer marketing | 2240.04863659627 |

23

Figure 8: Cluster analysis

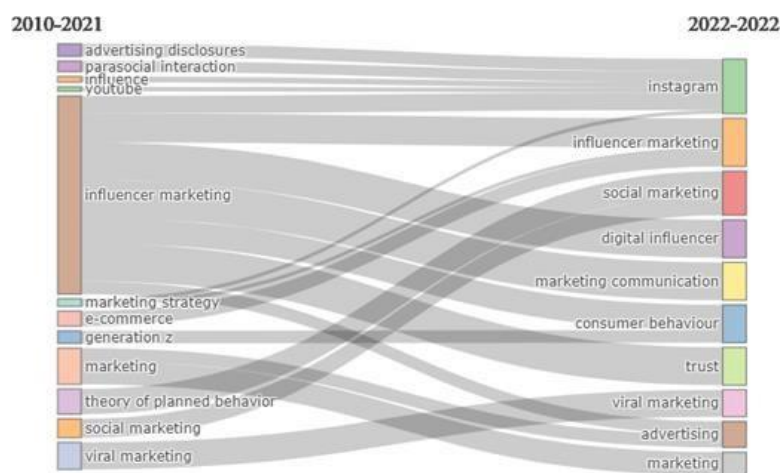


Figure 9

4. GAP ANALYSIS THROUGH LITERATURE REVIEW

4.1 Methodology

I have looked at the top most cited journals in the category and the most influential authors to arrive at the gap analysis. The coding done has been manual and based on criteria such as the

platform of marketing being talked about, key themes, methodology used, metrics of influencer marketing analysed. Overall about 40 papers were thoroughly analyzed and 16 coded for this purpose, based on the appropriateness of the topic

4.2 Who are influencers?

With the rise of mobile devices, and digital revolution post the pandemic, some of the content creators have gathered a fan base and have become mini-celebrities in their own right, giving rise to the influencers (Vrontis et al., 2021). For a few people, this has also become a career choice (Vrontis et al., 2021). While in the past we had key opinion leaders, these influencers now have become the new age KOL or key opinion leaders, placed between an acquaintance and a celebrity, an opportunity that has shown itself with social media growth. “Influencers might be described as self-made “microcelebrities”” (Belanche et al., 2021). Furthermore, (Vrontis et al., 2021) define influencers as people whom brands cultivate or hire by paying them in cryptocurrency, in kind or through gifts/products to endorse and promote their products or services. This transaction between a brand and influencer is called influencer marketing. influencer marketing is defined as “identifying and targeting users and stimulating them to endorse a brand or specific products through their social media activities” (Chen et al., 2021). Brands use influencers to cultivate consumer responses regarding their interests, resulting in both the influencer as well as their followers to co- create the brand image on social media (Martínez-López et al., 2020).

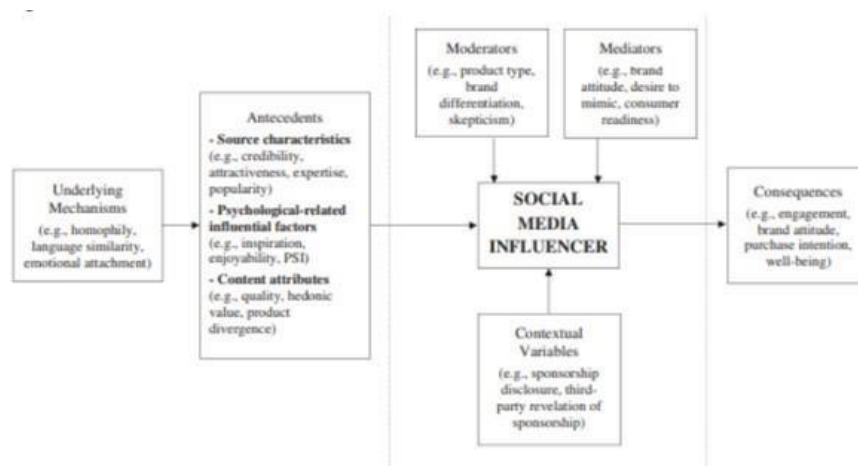


Figure 10: Framework by Vrontis et al., 2021

The framework Figure 10 by (Vrontis et al., 2021) is a combination of systematic review and further develops the phenomenon of influencers and influencer marketing on social media.

ABLE 5 Key underlying mechanisms explaining the characteristics attributed to SMIs

| | Underlying mechanisms |
|---|---|
| Credibility | Trustworthiness, expertise, social influence, argument quality, information involvement, PSI, physical attractiveness, attitude homophily |
| Trustworthiness | Popularity, influencer-brand fit, PSI |
| Attractiveness | Familiarity, likeability, similarity |
| Expertise | Popularity, influencer-brand fit |
| Popularity | Three dimensions of homophily (attitude, values, appearance), emotional attachment to the influencer |
| PSI | Social attractiveness, attitude homophily, audience participation (e.g., likes, shares, comments), credibility, physical attractiveness |
| Sense of friendship with the influencer | language similarity, interest similarity and self-disclosure |
| Self-congruency with the influencer | language similarity, interest similarity and interaction frequency |

Figure 11

5. WHAT ARE THE KEY EMERGING THEMES ON INFLUENCER MARKETING CONSIDERATIONS

The above table shows that credibility was the most important factor considered by consumers to evaluate influencers (Tsen & Cheng, 2021). Consumers have a higher purchase intent and also positive feelings towards a product when the influencer who endorses the product is thought to be more credible by the consumer (Tsen & Cheng, 2021). The key to an influencer's effectiveness is understanding the fit between the influencer and the product or brand that the influencer is endorsing. High endorser/influencer-brand-product fit would result in more engagement and hence increased affinity towards the soft advertisement, the product and the brand, and in turn impacting the purchase intentions (Vrontis et al., 2021). (von Mettenheim & Wiedmann, 2021) explores the importance of the congruency of the influencer personality with (1) brand personality and consumers similar to what (Tsen & Cheng, 2021) have proposed (2) actual/ (3) ideal selves. This means there is also extension of the self and identification with the influencer. The moderating role of involvement in a purchase cycle also impacts the trust and purchase intention for a brand. A consumer is more involved in the purchase of a motor vehicle or a face cream than in a notebook or a pen, which is a moderating effect when considering the impact of influencers. (Belanche et al., 2021) further study the hypothesis to clarify the complex relationships among influencers, products, and followers (i.e., potential consumers of the brands). Consumer identity is transmitted to the brands and also to influencers which allows them to express their belonging to social groups. The methodology used across most papers in order to look at influencer metrics are quantitative in nature, ranging from Structural equation modeling to PLS (Lou & Yuan, 2019) and regressions (Arora et al., 2019). There are very few qualitative studies (Sokolova & Kefi, 2020). While a lot of literature reviews have been done on the subject, yet the analysis and outcomes have been done through the lens of

Instagram data, Twitter data or any one channel data using quantitative methods. There is no real attempt in the space to understand how a brand can use metrics to recruit an influencer. There are not many theories used in these papers, nor is the impact of social issues take up by brands or influencers a part of the influencer metric studies. One key theory used in these studies are around theory of Planned behaviour (Schouten et al., 2019)

6. FUTURE DIRECTION

A comprehensive analysis of both a brand and influencer fit can be achieved by looking at brand metrics (outcomes that brands want to achieve) and mapping it with influencer metrics (that can be used to recruit influencers). While in terms of methodology, most papers have used quantitative methods such as PLS, SEM, another approach would be to use MCDM techniques to arrive at identifying the right influencer

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