

Bibliometric analysis of Marketing Analytics literature

Varshitha S

Student, MBA Programme – BIET, Davangere
svarshitha.1999@gmail.com

Manasa B

Student, MBA Programme – BIET, Davangere
manasab1998@gmail.com

Vijay K S

Research Scholar
Institute of Management Studies
Davangere University -577002
vijayksscholar@gmail.com

J K Raju

Chairman & Professor
Institute of Management Studies
Davangere University -577002
drjavaliraju@hotmail.com

Abstract

Purpose: Marketing analytics studies data to evaluate marketing activity performance. By applying technology and analytical processes to marketing-related data, businesses can understand what drives consumer actions, refine their marketing campaigns, and optimize their return on investment. This study titled “Bibliometric analytics of Marketing Analytics literature” aims to contribute to the literature by examining the authors, journals, institutions, funding, region, conference, and publisher of the articles regarding marketing analytics.

Design/Methodology/Approach: For this, the articles published between 2010 to 2022 were examined. The bibliometric analysis technique was used for the analysis. The main themes gathered around the articles are Customer analytics, predictive analytics, online advertising, and brand management.

Findings: The study results show that the research work in marketing analytics was incremental up to 2017 and was stable up to 2020. Then, the research works in marketing analytics were found to be decremental over the years. The research was confined to a few specific areas of marketing.

Originality/Value: The recent development in marketing analytics were traced and evaluated. This study helps understand the value added to marketing analytics for organizations.

Keywords: *Marketing Analytics, Sales Analytics, and Marketing Management*

Introduction

As suggested by the name, marketing analytics indicates the data analytics used for studying, evaluating, and predicting trends in marketing within the consumer marketplace. It comprises the management,

measuring, and marketing performance analysis that assists in optimizing returns on investments while boosting efficiency. Appropriate marketing analytics' understanding remains the most vital technique in modern marketing, particularly when discussing promotional content's dissemination and development efficacy within the market on a budget. With the advancement in technology, the marketing analytics' need also develops, with several companies rushing to make sure that there is effective satisfaction for the customer with the help of customized and tailor-made services and products (Mizik & Hanssens, 2018). Marketing analytics assists in allowing marketers to gain and use a great understanding of their consumer's preferences, along with the global economic space trends, making it more effective and easier to develop promotional content and marketing. Marketing analytics is shifting from being merely a buzzword to a full-fledge research area that is termed to be multidimensionally nascent, which is apparent by various systematic literature reviews on the subject concerned in connection to data-rich environments (Wedel and Kannan 2016), web analytics and key performance indicators (Saura et al. 2017), social media metrics (Misirlis and Vlachopoulou 2018).

Considering its importance, it is important to examine the characteristics and intellectual framework on which emerging research is based. Therefore, the purpose of this study is to examine the research related to marketing analytics. Using a bibliometric analysis technique, Marketing analytics literature on lens.org is examined. In addition, the publications and co-citations that the researchers refer to in their studies are analyzed. It is aimed to determine the relationships and effects of the main articles contributing to the subject. The contribution of the research is to provide a new perspective for future research by examining the publications and authors most closely associated with Marketing analytics. The study also provides a basis for meta-analysis as it includes all sources related to the subject. It provides a quantitatively supported resource for a literature review that can be used in future studies. The results obtained from the study are explained, reported, and discussed in tables and figures. Finally, the conclusion section explains the implications and provides suggestions for future research

Marketing Analytics

"Big Data" continuously challenges firms, creating an exhilarating leading edge of prospects in the last couple of years. Contemporary firms are taking initiatives to adopt analytics to gain a superior advantage in the rapidly changing data-rich business environment (Popovič et al., 2016; Nam et al., 2018). The worldwide market in business intelligence and analytics is estimated to be worth \$200 billion by 2020 (IDC, 2016), with many industry experts predicting that the customer analytics capability of a firm would enhance the overall firm's performance in the big data environment (Germann et al., 2014). While big data, marketing analytics, and data mining are here to stay in marketing (Jobs et al. 2016), businesses consider data analysis a particularly critical challenge (Verhoef et al. 2016). Marketing analytics play a central role under these circumstances, considering the need for adequate metrics and analytical methods to improve data-driven marketing operations and decision-making (Wedel and Kannan 2016). As studies have concluded, businesses can achieve favorable and sustainable performance outcomes through the higher use of marketing analytics (Germann et al. 2013).

The new analytics have even affected marketing research, allowing researchers to use web-based interactive survey tools, online qualitative analysis, mining, and analyzing large databases (Hauser 2007). Thanks to the digital platform, companies started having access to large customer databases, with information on purchase behavior, marketing contacts, and other customer characteristics stored. In addition, the Internet and social media brought an explosion of real-time data, coupled with improved data generation and collection, reduced computing costs, and advances in statistics (Verhoef et al. 2016). Currently, businesses are using analytics as a significant competitive advantage not just because they can

but also because they should (Davenport 2006). Overall, marketers can use analytics to allocate marketing resources and customer lifetime value, identify and retain profitable customers, and get more from each transaction.

This research analyzes the works published regarding marketing analytics from 2011 to 2022. Customer analytics, predictive analytics, online advertising, and brand management are the main themes addressed in these articles. While it has been around for decades, predictive analytics gained much attention in the late 20th century. This technique includes data mining and big data analytics. Finally, the decision tree methodology, a supervised simple classification tool for predictive analytics, is fully scrutinized below for applying predictive business analytics and decision tree in business applications. France and Ghose (2018) refer to customer analytics as the advanced technology that can solve customer-centric challenges by analyzing massive marketing data. However, a large stream of research focuses on the benefit of customer analytics (e.g., Verhoef et al., 2010; Erevelles et al., 2015; Braun and Garriga, 2018), with relatively little or no attention being devoted to understanding the firm's capacity building of customer analytics in the data-rich environment. Within the customer-oriented paradigm of „brand equity“ is Keller's (1993) definition in terms of „the marketing effects uniquely attributable to the brand“ (p. 1); more precisely, Keller defines customer-based brand equity as „the differential effect of brand knowledge on consumer response to the marketing of the brand“ (p. 2). As noted by Barwise (1993) and by Ailawadi et al. (2003), this notion of differential effect or “added value” is found in many customer-oriented definitions of brand equity. The histrionic increases the scope and diversity of online advertisements more than the conformist one, stating that businesses are extensively using such virtual advertisements to promote versatile products and services. Mediating Role of Supply Chain Integration and Intrapreneurship between Information Technology Infrastructure and Firm Performance in the Iranian Pistachio Industry. They concluded this one is hard for an advertiser to maintain the effectiveness of online advertisements to get a positive reaction from consumers ([Ahmad and Gul, 2021](#); [Bukhari et al., 2021b](#)).

Bibliometric Methodology

Bibliometric analysis is an indispensable statistical tool to map the state of the art in a given area of scientific knowledge and identify essential information for various purposes, such as prospecting research opportunities and substantiating scientific research. The method encompasses instruments to identify and analyze the scientific performance of articles, authors, institutions, countries, and journals based on the number of citations, to reveal the trends of the field studied through the analysis of keywords, and to identify and cluster scientific gaps from most recent publications. This method enables scientific boundaries of science by investigating and identifying relevant and avant-garde research topics. Furthermore, it is an essential element that provides researchers with means to identify and support paths towards developing scientific projects.

Data Interpretation and Results

In the study, the relevant results were listed by searching the lens.org database with the keyword “Marketing Analytics.” Results were filtered according to their relevance to the researched subject, and the works published from 2010 to 2022 are included.

Scholarly works in the year 2021

In the study, the relevant results were listed by taking data from <https://www.lens.org/> with the keyword “Marketing analytics” by narrowing down our search for the year 2021 to get to know the recent scholarly

work. The data were tabulated using Microsoft Excel, and the data is presented below. The studies examined are shown in Figure 1. 87% are journal articles, 7% are book chapters, 3% are on Books, and 3% are a contribution from an unknown source.

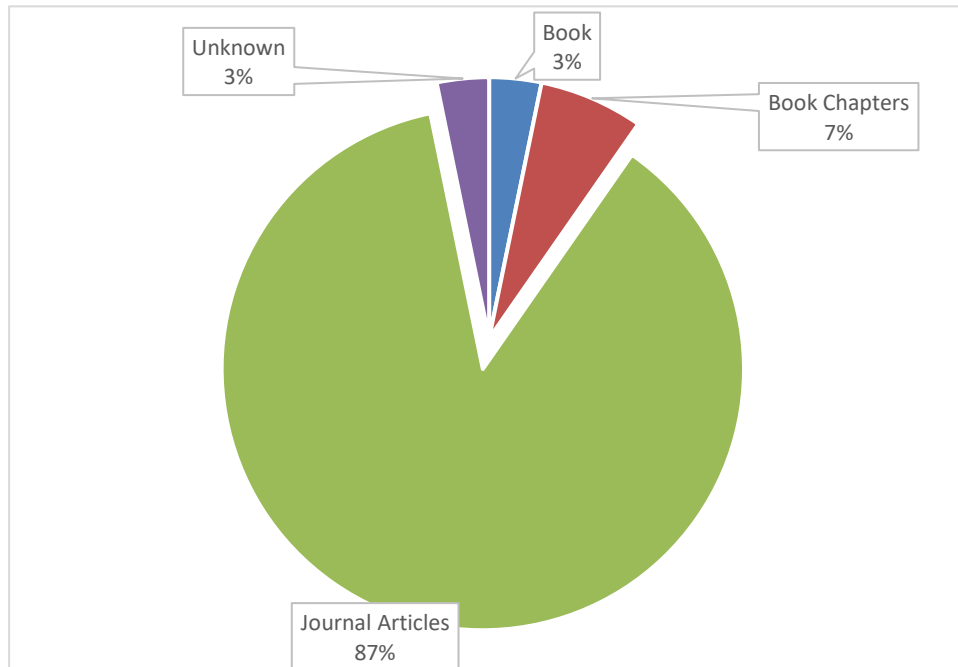


Figure 1: Scholarly work in 2021, Source: <https://www.lens.org/>

Top Universities Worked In The Field Of Marketing Analytics

The University of Nevada is leading in marketing research; they have published 13 articles from 2018 onwards covering areas like business, data science, analytics, sociology, and marketing analytics. The article titled “The state of marketing analytics in Research and Practice has cited the most with 35 citations. This is followed by “Marketing analytics: from practice to academia” with 16 citations. Most of this scholarly work at the University of Nevada was led by Anjala S Krishen and Maria Petreacu. Nova Southeastern University is the second leading university to conduct research in marketing analytics. Business, data science, analytics, marketing, and marketing analytics are the main fields covered under marketing analytics.

5 Babson College	5 Bentley University	3 Birkbeck, University of London	4 City University of Hong Kong	4 Colorado State University
4 Embry-Riddle Aeronautical University, Daytona Beach	4 Giresun University	7 Lancaster University	12 Nova Southeastern University	20 University of Nevada, Las Vegas

Figure 2: Top

Universities worked in the field of Marketing Analytics, Source: <https://www.lens.org/>

Publications of Marketing Analytics-Related Work Over a Period

The articles reviewed were published between 2010 to 2022. In the figure below, the years of the studies and the number of publications made in the year are given to see when the works gained momentum. From 2013, the works on marketing analytics gained momentum and were consistent till 2018. From 2019 onwards, there was a considerable increase in scholarly work. The year 2022-23 is also promising in terms of its progress.

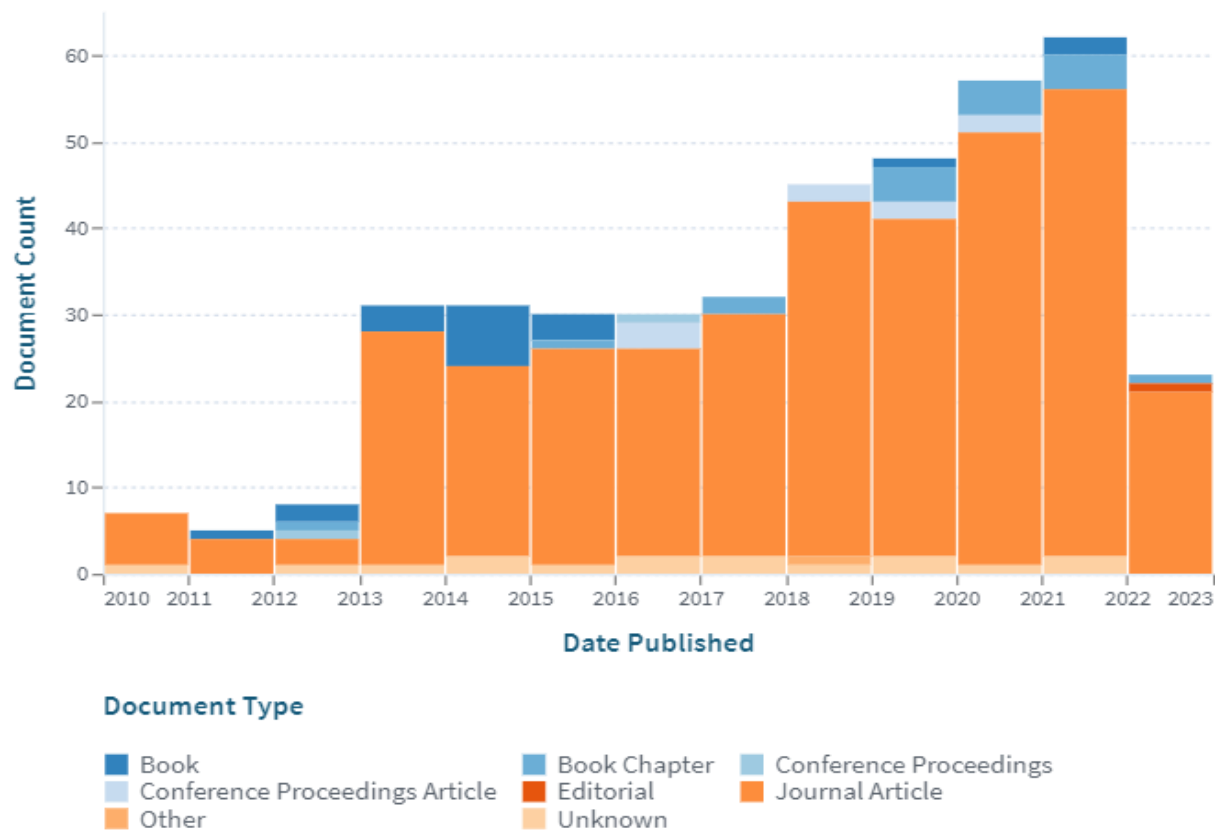


Figure 3: Publications of marketing analytics-related work, Source: <https://www.lens.org/>

Top fields of Study Under Marketing Analytics

The top research fields under the marketing analytics concepts are depicted in the figure below.

46 Advertising	77 Analytics	46 Big data	180 Business	115 Computer science
22 Consumer behaviour	23 Context (language use)	38 Customer relationship management	57 Data science	27 Digital marketing
21 Engineering	44 Knowledge management	21 Machine learning	124 Marketing	39 Marketing analytics
31 Marketing research	23 Marketing strategy	40 Psychology	36 Social media	21 Sociology

Figure 4: Top fields of study under Marketing Analytics, Source: <https://www.lens.org/>

Prominent Authors Related to Marketing Analytics

The works published between 2010 to 2022 were analyzed in the study conducted. The prominent authors who contributed to marketing analytics work can be depicted in Fig.5. Maria Petrescu is the author who contributed about 21 works and has made a maximum contribution to this field of study. His work also peaked during the year 2021 and gradually decreased in the year 2022. Anjala S Krishen also did a great amount of work in Marketing analytics and contributed 20 journal articles. It can also be observed that various authors contributing to the field of marketing analytics indicate the interest of scholars in it. The analysis depicts that the Indian authors have played an important role in providing light on marketing analytics.

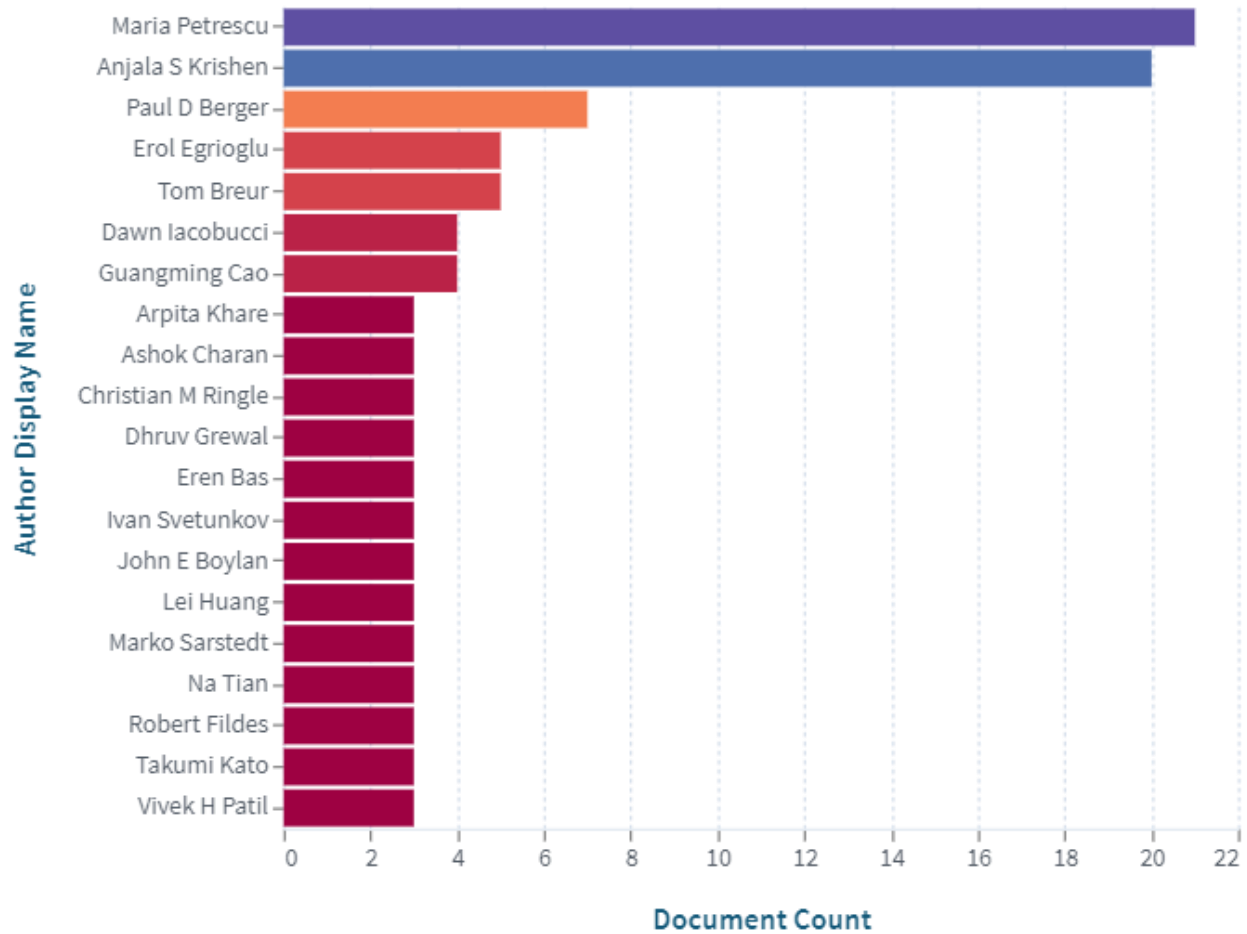


Figure 5: Top fields of study under Marketing Analytics, Source: <https://www.lens.org/> Top Publishers

An overview of the publishers of works Fig.3 towards marketing analytics from 2010 to 2022 depicts that Springer Nature has published the highest number of works, about 209, followed by Emerald and Informa UK limited, contributing to publishing about 24 and 21 works. It can be analyzed that most of the publishers published less than 30 works.

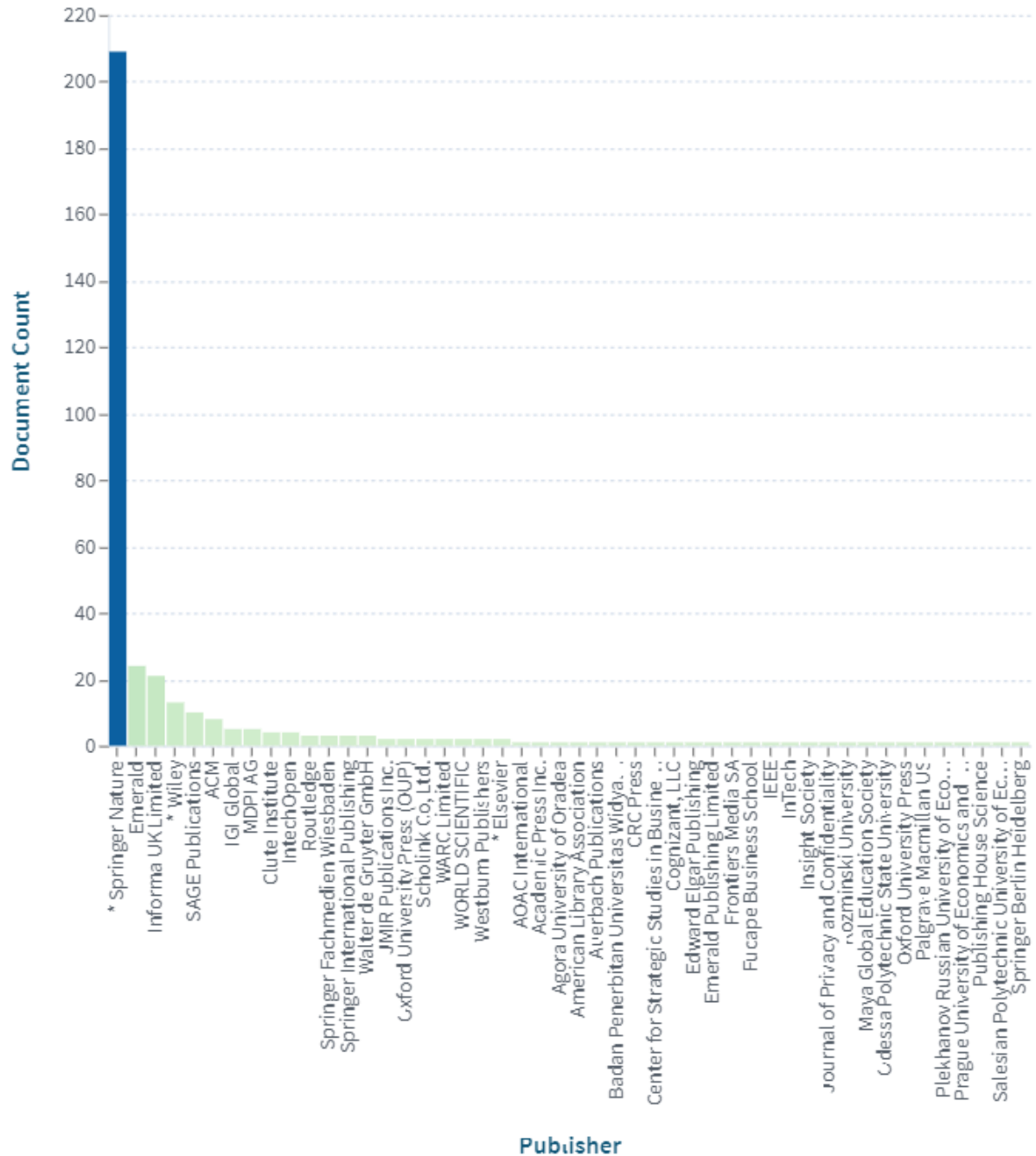


Figure 6: Top publishers in the field of Marketing analytics, Source: <https://www.lens.org/>

Top Journal by Publishers

Springer science is the publisher topped in publishing articles related to marketing analytics. It’s been observed that one of their journals, titled Journal of Marketing Analytics, published 187 journal articles between 2010 to 2022. This journal has nearly 46% of the total articles published.

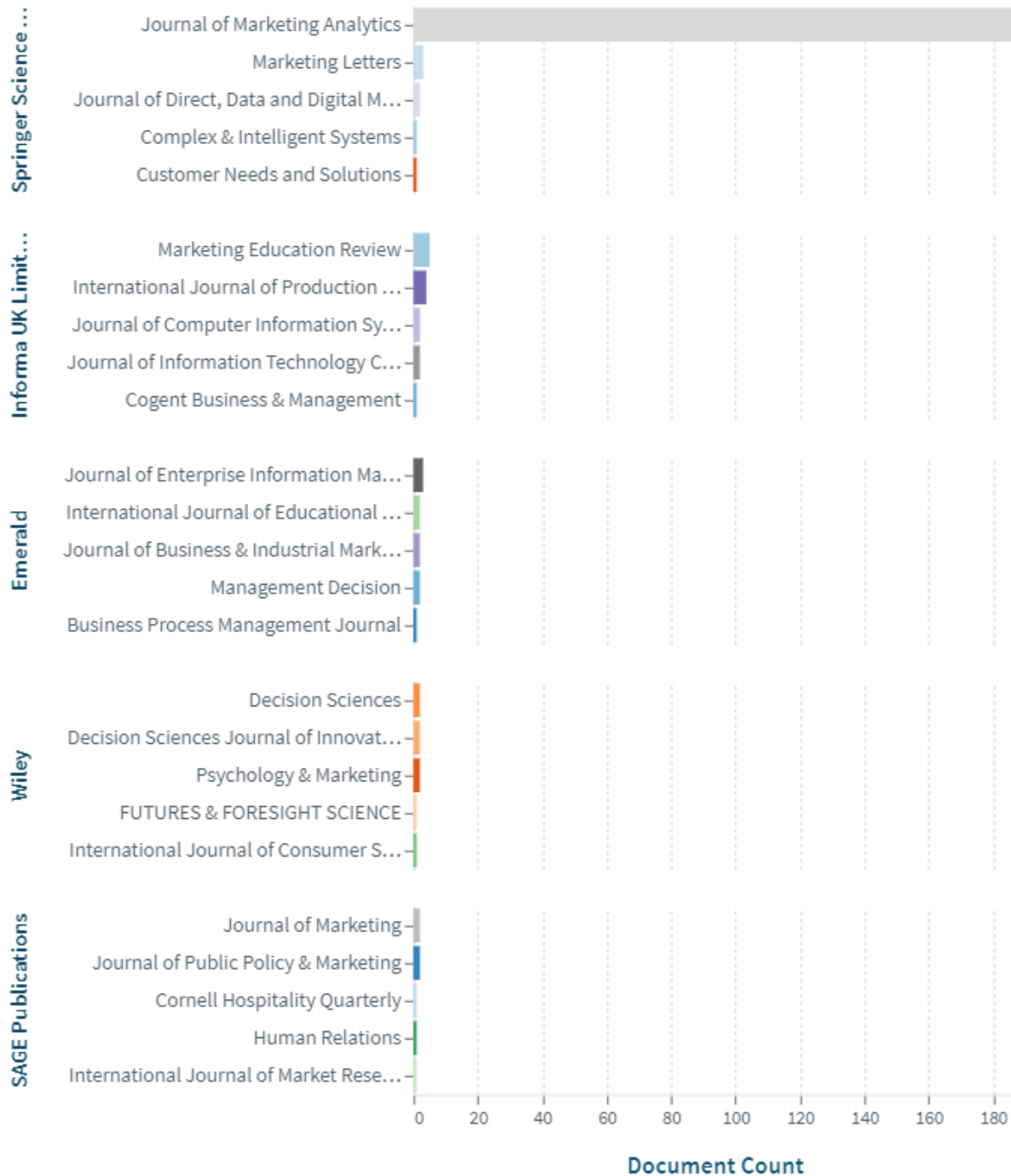


Figure 7: Top journal by the publisher, Source: <https://www.lens.org/>

Most Active Countries or Region

From the regional analysis of works related to marketing analytics from 2010 to 2022, it can be found that the United States had more interest in marketing analytics and had 121 works during the year of consideration, while the United Kingdom stands second by contributing 43 works. India and China followed this by contributing 14 and 12 journal articles, respectively.

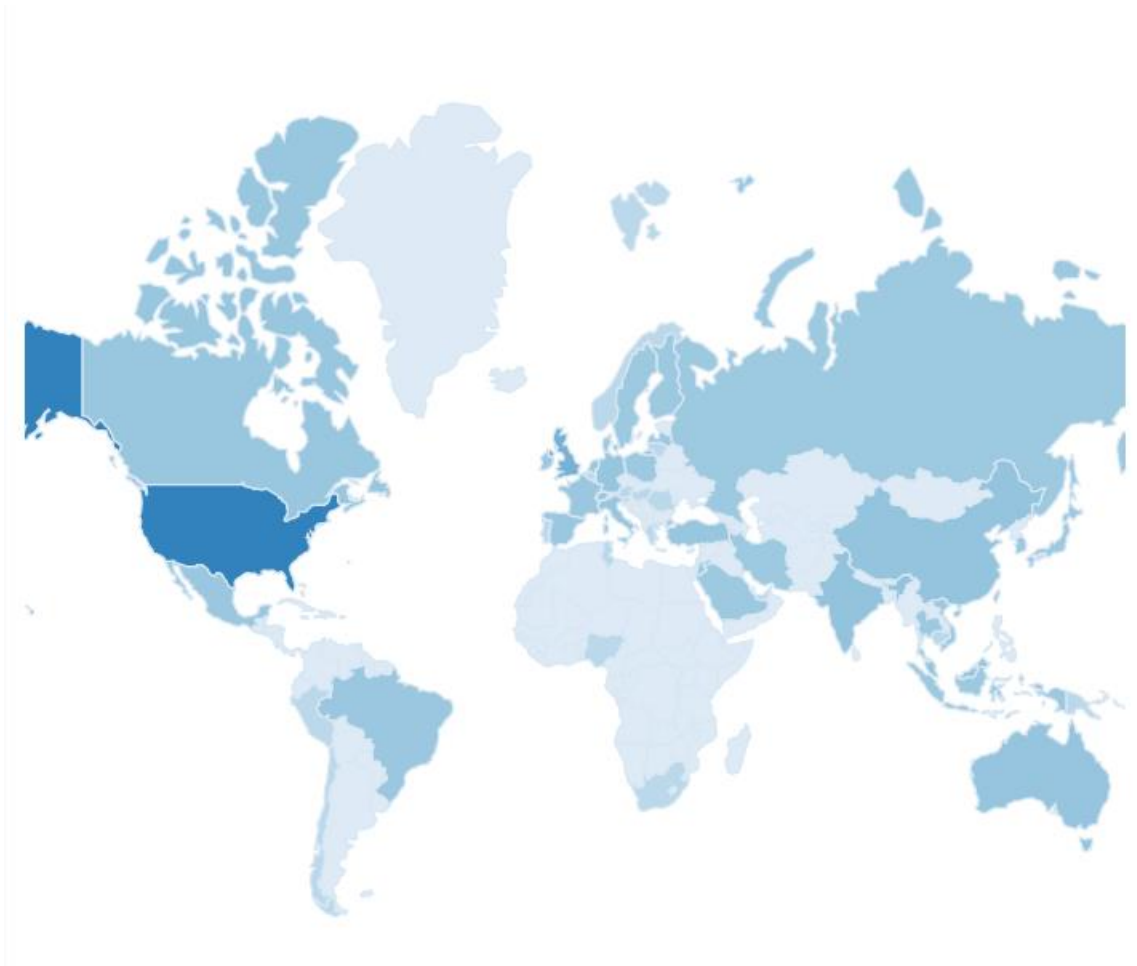


Figure 8: Most active countries or regions, Source: <https://www.lens.org/>

Discussion

The journal articles published have taken the major share in the scholarly work. There is also a need for equal work in educating the students and the industry people by putting the research finding into readable formats like books, Book chapters so that they can be benefited.

Only two universities worldwide take the major share in publishing scholarly work in marketing analytics. This work needs to be matured and addresses the different issues faced by marketers and business firms that are prevailing in a particular area. The other universities that can understand the localized macro and micro business environment can contribute better to Marketing Analytics.

There was a drastic increase in the number of publications from 2013 onwards, and there was a sturdiness in the number of publications between 2013 and 2018. More books were produced in the year 2014-15. After 2018 the research in the area of Marketing Analytics gained momentum, and there was considerable growth from 2017 onwards. There were some efforts of editorials in the year 2022.

Under the roof of Marketing Analytics, most of the research focus was on Business, Computer science, and marketing. After that, analytics and data science applications were the next focus.

The two authors did most of the scholarly work, and one publisher also dominated the publications. The observation is that the other publishing agencies can also show interest and encourage research in the field of Marketing analytics. Again only scholarly journals have got the majority of the publications.

Western countries have pioneered research in the area of marketing analytics and slowly disseminated it to south Asian countries. First, most of the research was done in the USA, followed by the United Kingdom. The research in India and China shows progress in the field of Marketing analytics.

Conclusion

This study presented a bibliometric analysis of marketing analytics literature studies since 2010. In line with previous research, the study results show that research interest in marketing analytics has increased in recent years. Although the technical aspects of marketing analytics literature, such as data collection and analysis, are emphasized in the early years of the development period, the studies conducted in the last five years emphasize the involvement of behavioral concepts of marketing, and the influence of social media has emerged. The emergence of new tools and techniques has brought new dimensions to the field of Marketing analytics. The increase in the number of smartphone users and easy access to the internet also help the marketing analytics domain to some extent. The philosophical shift is required to think beyond the existing marketing analytics practices, and that can be the area of attention.

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