

## **MARKETING EFFECTIVENESS EVALUATION POSSIBILITIES AND CHALLENGES FOR BUSINESS: A BIBLIOMETRIC ANALYSIS**

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**Abstract.** The importance of marketing effectiveness evaluation and its impact on businesses is the core discussion in this article. After reviewing scientific articles on marketing effectiveness topics, the lack of a unified approach for marketing effectiveness evaluation was determined. In order to measure marketing effectiveness, it is important to set the specific goals and objectives for particular marketing activity, as well as select for evaluation the appropriate measurement methods and metrics. The selected evaluation system has to contribute to the company's marketing strategy and the achievement of the overall business goals. It leads businesses to effective marketing strategies and gain better results on marketing investments. Bibliometric analysis of scientific literature provides the overview significant scientific sources, such as the latest relevant articles, leading authors, contributing countries and journals with publications on marketing effectiveness evaluation field, as well most significant keywords for future analysis.

**Keywords:** Marketing effectiveness evaluation, marketing effectiveness, bibliometric analysis.

**JEL Classification:** M31, M30.

### **Introduction**

*Novelty and relevance of the topic.* Constantly developing technologies have a tremendous impact on business effectiveness and give marketing opportunities to deal with huge amounts of data (Rahman et al., 2021), develop marketing strategies in line with changing business environment, reach challenging business objectives and create value for company (Cao et al., 2021; Del Vecchio et al., 2018; O'Sullivan et al., 2009). The ability of companies to carry out marketing activities effectively is crucial (Germann et al., 2013; Järvinen & Taiminen, 2016). Every company choose and employ different marketing activities, the selection of those depends on unique business goals and objectives (Milichovský & Šimberová, 2015). Companies constantly increase marketing budgets (Arnett & Wittmann, 2014; Frösén et al., 2016). Successful marketing strategies help companies find new clients and keep existing (Agnihotri et al., 2016), increase brand awareness, and perform sales growth (Dinner et al., 2014). Businesses expect to get the return on the marketing investment and facing challenges evaluating it (Dekimpe & Hanssens, 2018). Different marketing activities can be measured using specific marketing effectiveness

measurement metrics (Milichovský & Šimberová, 2015). It is important to understand and know how to evaluate marketing effectiveness, in order to select the most effective marketing activity and get better results (Milichovský & Šimberová, 2015; Roitman et al., 2014).

*Problem definition.* Lack of effectiveness evaluation of marketing activities in companies leads to ineffective marketing strategies (Ferreira et al., 2017; Arnett & Wittmann, 2014; Afriyie et al., 2019; Alabdulkader et al., 2017). In the academic literature, is missing the precise, structured, and unified system for marketing effectiveness evaluation (Cao et al., 2021; Dekimpe & Hanssens, 2018). In complex marketing campaigns with different activities it is difficult to set evaluation criteria (Dinner et al., 2014; Roitman et al., 2014), understand what measurement metrics to use for specific marketing activity (Milichovský & Šimberová, 2015) and how to measure those activities from all perspectives (Liang et al., 2018; O'Sullivan et al., 2009). Businesses face challenges selecting appropriate methods and metrics to evaluate marketing effectiveness (Frösén et al., 2016; Munnukka et al., 2016). To answer this question, it is important to identify what scientific literature to use for analysis, who are the

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most significant researchers in the field, what journals are publishing studies, which countries are contributing and what are the major keywords to use for information search and analysis on the marketing effectiveness research area.

*The aim of the research is to identify the most significant academic sources in the field of evaluation of marketing effectiveness.*

*The objectives are:*

- review the latest scientific studies on evaluation of marketing effectiveness;
- identify countries, journals and authors, which contributed most for the research field;
- revise and select the latest studies for marketing effectiveness evaluation analysis.

*Research object* – marketing effectiveness evaluation.

This article is organized as follows. Firstly, the contextual background of marketing effectiveness evaluation concepts presented, and secondly, the bibliometric data analyses for the research field are performed. Finally, the conclusions about findings conferred.

## 1. Contextual background of marketing effectiveness evaluation, its impact, and challenges for businesses

The impact of marketing effectiveness for businesses is dramatic (Milichovský & Šimberová, 2015; Liang et al., 2018). Marketing transformed over the last decade and this was influenced by impressive technological development (Cao et al., 2021; Del Vecchio et al., 2018), which drastically changed business and marketing activities (Liang et al., 2018; O’Sullivan et al., 2009). Accordingly American Marketing Association [AMA] – “Marketing is the activity, set of institutions, and processes, creating, communicating, delivering, and exchanging offerings that have value for customers, clients, partners, and society at large” (AMA, 2017). Kotler presents marketing as a process, when customers’ needs are satisfied and value is created for them (Kartajaya et al., 2019). Satisfied and happy customers bringing businesses to desired success (Germann et al., 2013). Marketing main target is to reach, attract and win the customers, acquire the bigger share of their wallet and make them loyal (Del Vecchio et al., 2018; Nuryakin & Ardyan, 2018). Marketing helps to increase the number of customers and retain them through the whole sales cycle (Ferreira et al., 2017). Correspondently to the Chartered Institute of Marketing [CIM], one of the most important marketing functions is identify the potential customer, satisfy needs, and get profit from it (CIM, 2015). Businesses expect to have accountable marketing (Järvinen & Taiminen, 2016; Munnukka et al., 2016), in order to understand what brings the most value back.

Measurement of marketing effectiveness helps organizations identify opportunities for constant growth, maintain stability, strengthen customer satisfaction, and

grow competitive advantage (Munnukka et al., 2016; Nuryakin & Ardyan, 2018). Evaluation of marketing effectiveness helps businesses achieve their business goals and objectives. Marketing effectiveness can be measured by competitiveness level, the share of advertising and promotion in the market (Rahman et al., 2021). The ability of companies to execute effective marketing strategies, employing the appropriate marketing activities in the preferred channels, helps to get the return on marketing investments (Roitman et al., 2014; Dinner et al., 2014; Kantar, 2020); to achieve marketing results in particulate timelines and with defined marketing budgets (Ferreira et al., 2017), and finally create value for customers (Kartajaya et al., 2019). For open and transparent organizations, the evaluation of marketing effectiveness is vital (Wedel & Kannan, 2016). Evaluation of results in real time, brings better decisions, strengthen the weak but important components of marketing campaigns (Nuryakin & Ardyan, 2018; Cao et al., 2021). In order to find clear and systematic approach to evaluate marketing effectiveness, the bibliometric analysis of the scientific literature was performed.

## 2. Research methodology

Bibliometric analysis of the most relevant information about marketing effectiveness was performed using the Web of Science [WoS] Core Collection search engine of the Clarivate Analytics database. Basic search parameters were defined are following: search by title, period: all years, document type – articles; publication years- all years. The search was performed using the WoS Core Collection for evaluating marketing effectiveness and related synonyms. Search summary: Keywords were used for TITLE: (“marketing effectiveness” OR “marketing efficiency” OR “marketing performance” OR “marketing productivity” OR “marketing analysis” OR “marketing analytics” OR “marketing evaluation” OR “marketing measurement” OR “marketing assessment” OR “marketing factors” OR “marketing metrics” OR “key performance indicators marketing” OR “marketing ROI” OR “marketing ROMI” OR “marketing optimization” OR “marketing impact” OR “marketing data” OR “AI marketing” OR “marketing automation”) AND DOCUMENT TYPES: (Article). Timespan: All years). Information analysis and visualizations for bibliometric analysis were prepared using WoS Clarivate analytics results analysis tool, Microsoft Office Excel, and VOS viewer programs. Search results 330 articles found and 321 publications selected in English language from WoS Core Collection (n.d.).

## 3. Analysis of research results

To determine which are the leading research areas of the Core Collection database results and which are most relevant to current research, the analysis of published articles was performed. By research areas, publications

classified using TreeChart of Web of Science (n.d.), which are visible at Figure 1.

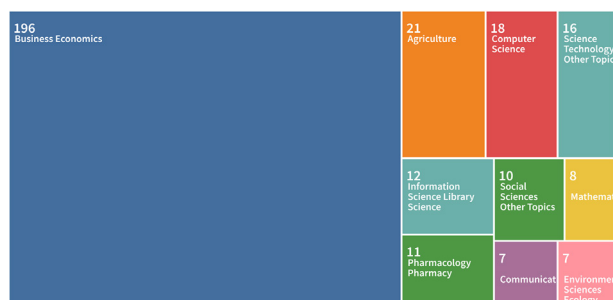


Figure 1. Search results of the WoS Core Collection database by research areas. (Source: WoS Clarivate analytics data, n.d.)

By research areas, publications classified using TreeChart of WoS. Principal categories were found: Business Economics (196 publications), Agriculture (21 publications), Computer Science (18 publications), Science Technology (16 publications), Information Science, Library Science (12 publications), Pharmacology Pharmacy (11 publications), Social Sciences (10 publications) and other research areas: Mathematics, Communication, Environmental Science, Ecology (7 publications per category). The most relevant area for current research is Business economics and articles published in this category and it was decided to include 196 articles for analysis.

Figure 2 shows the distribution of the number of articles by year over the period from 2011 until 2021, where is visible constant grow of the publications for selected period. Publications' number grew up four times since 2011 and last year and at 2021 there were 40 studies related to examined research field.

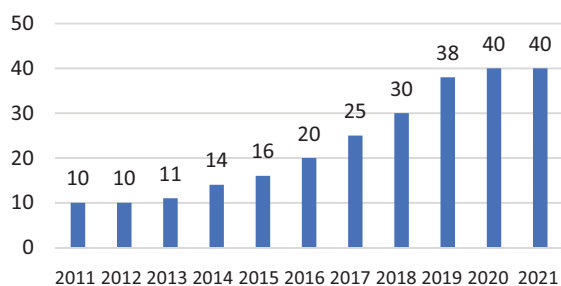


Figure 2. Distribution of the number of publications by year (created by author, based on data from WoS Clarivate analytics)

Figure 3 shows which authors written the biggest number of publications on the marketing effectiveness evaluation topics. Total 1009 entries were found and 25 authors are presented in the Figure 3 below. Many authors contributed to the research field and many of them collaborated on the common works. The largest amount of articles produced by Cao. Dekimpe, Ferdinand, and Tian and other authors correspondingly published 2 and fewer articles related to marketing effectiveness evaluation topic.

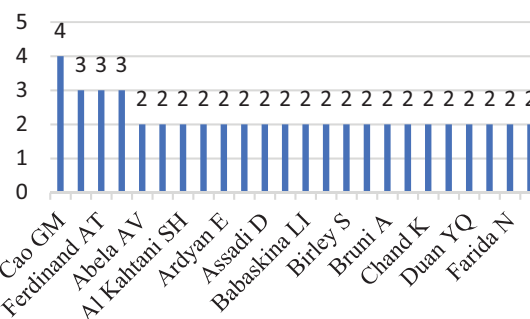


Figure 3. The authors published the highest number of articles related to the evaluation of marketing effectiveness (created by the author, based on WoS Clarivate analytics)

The most publications on the marketing effectiveness evaluation field are found in the Journal of Business Research, Industrial Marketing Management, and Marketing Science journals. Other journals and number of publications provided in Table 1.

Table 1. Journals that have the biggest number of publications related to marketing effectiveness evaluation (created by the author, based on WoS Clarivate analytics)

Title	Articles
Journal of Business Research	12
Industrial Marketing Management	9
Marketing Science	7
European Journal of Marketing	6
Journal of Marketing Quality	6
Access to Success	6
International journal of Research in Marketing	5
Journal of Interactive Marketing	5
Journal of Marketing Analytics	4
Journal of Business Industrial Marketing	4
Journal of Marketing Theory and Practice	4
Sustainability	3
Decision Science Journal of Innovative Education	3
Indian Journal of Economics and Development	3
International Marketing Review	3
International Transaction Journal of Engineering Management Applied Sciences Technologies	3
Marketing and Consumer Behavior Concepts Methodologies Tools and Applications	3
Service Industries Journal	3
African Journal of Business Management	2
Journal of Agricultural Economics	2

In total articles related to marketing effectiveness were published in 73 countries. At Figure 4 the data provided about 27 countries, which published the biggest number of articles and minimum 5 articles.

Figure 5 illustrate a network of 27 countries, showing the bibliographic coupling of countries. The overall network contains the 6 clusters with 327 links and total

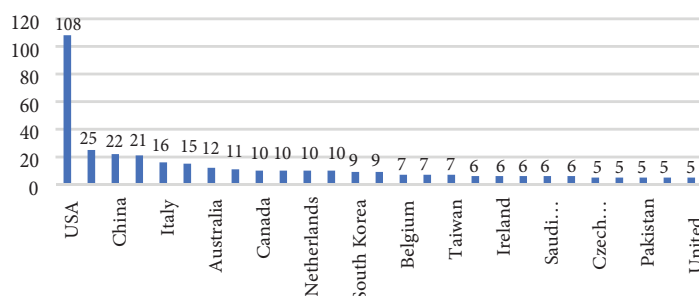


Figure 4. Countries with the highest number of articles related to marketing effectiveness evaluation (created by the author, based on data from WoS Clarivate analytics)

strength of the links with 19 588. Below the data are presented of the most compelling countries from different clusters representatives. From the red cluster there are countries such as – USA with 106 articles, which are quoted 3131, total link strength 7289, Australia – 12 articles quoted 633, total link strength 2935, Ireland – 6 articles 242 quoted, total link strength 1972, Finland (red) 7 articles quoted 408, total link strength 1590, Italy (red) – 16 articles quoted 181, total link strength 1583, Indonesia (red) – 21 article, 46 quoted, total link strength 930, purple cluster – England with 25 articles quoted 488, total link strength 3864, Germany (purple) – 11 documents 155 quoted, total link strength –1086 , from yellow cluster – China with 22 articles quoted 452, total link strength 3134, and leading countries from the last green cluster are France (green) – 10 articles quoted 69, total link strength 3686, India 15 articles, citations 41 and total link strength 328, and Canada with 9 articles, 92 citations and total link strength of 791. Other countries in clusters are less significant because their number of articles is small and their total link strength is relatively smaller.

Figure 6 presents visualization of 84 most common keywords related to marketing effectiveness measurement. A bibliometric map of co-occurrence of all keywords is provided, consisting of 6 clusters, links 1083, and total links strength of 1818.

The data from the WoS Core Collection Clarivate Analytics database was analyzed with VOS viewer software. VOS viewer report with type of analysis: co-occurrence; counting method: full counting; unit of analysis: all keywords, offer the 480 main keywords from selected articles, classified by 8 major clusters interconnected with 11643 links and total link strength of 19096.

Based on significance and importance represented by the size of the circles and the strength of the relationship represented by lines, the most common keywords by clusters are:

- green cluster: “impact”, “performance”, “management”, “productivity”, “marketing metrics”, “information”, “performance”, “firm”, “shareholder value”, “customer”;
- red cluster: “model”, “marketing analytics”, “satisfaction”, “marketing effectiveness”, advertising effec-

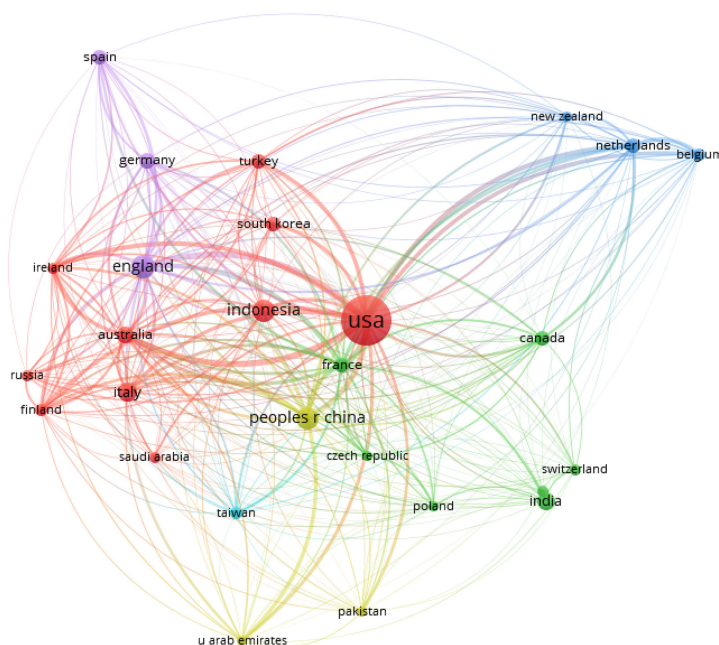


Figure 5. Countries with highest number of bibliographic links for articles related to the marketing effectiveness measurement (created by author with VOSviewer software based on WoS Clarivate analytics data)



journals, and following the countries' research representatives and their activities in the field of marketing effectiveness evaluation.

## Discussion

To investigate the research field more deeply, identify the measurement methods and how they can be calculated, the scientific sources with different approaches to evaluation of marketing effectiveness are discussed. Reviewing the main articles is possible to determine authors and their research focus to the specific field. Setiawan and Ferdinand (2021), Afriyie et al. (2019), Nuryakin and Ardyan (2018) focused on marketing performance and ecoinnovation, O'Sullivan et al. (2009) investigated the marketing performance ability and firm performance, Cao and Tian (2020), Cao et al. (2021) analyzing the marketing analytics and its impact on small medium enterprises, Dekimpe and Hanssens (2018) discuss the impact of marketing effectiveness and marketing metrics, Alabdulkader et al. (2017) defines the marketing efficiency effect. Other dominant authors at Marketing Effectiveness research area are Del Vecchio et al. (2018), Hausmann & Poellmann (2016), Munnukka et al. (2016), Leung et al. (2017) with concentration on Social Media Data analysis; Frösén et al. (2016) investigating marketing effectiveness and marketing performance, as well marketing evaluation and marketing impact to businesses, Cao and Tian (2020) on marketing analytics and marketing data, Frösén et al. (2016) research the marketing performance. Most significant journals are identified following – Journal of Business Research, Industrial Marketing Management, Marketing Science, European Journal of Marketing, Journal of Marketing Quality, Access to Success, International journal of Research in Marketing, Journal of Interactive Marketing and Journal of Marketing Analytics. It is important to follow the journals and stay up-to-date with the latest publications on the area of marketing effectiveness research. The leading countries in the marketing effectiveness evaluation topic are the United States, Australia, Ireland, Finland, Italy, and many others. It is important to get a view from different countries perspectives and compare the situation with the target markets. Identifying compelling keywords will help to navigate and focus on the most valuable studies for the current work.

Summarizing the main challenge for businesses is how to select the right approach and evaluation criteria for complex marketing strategies. How to apply the comprehensive measurement system for marketing effectiveness measurement is not answered and future investigations are needed. This bibliometric analysis will put the research to the concentrated direction of marketing effectiveness evaluation field and will help to answer important questions.

## Conclusions

In the scientific literature, there are different discussions around marketing effectiveness evaluation. To identify

the important criteria for the search of information, a bibliometric analysis was performed. The main findings of the bibliometric analysis are as follows: Leading authors working on the marketing effectiveness evaluation research area were identified, dominant countries that contributed to the research field determined, main journals with important publications listed, significant keywords related to marketing effectiveness measurement studies were defined. After bibliometric analysis, a review of the scientific literature of most of the contributing articles was performed. Different approaches to marketing effectiveness measurement are presented, as well as the most compelling methods and metrics for evaluation are found for future examination. Marketing effectiveness measurement process is an important but difficult process for companies, which depends on different influencing factors. Marketing effectiveness is measured by financial (sales, profit growth, conversions) and non-financial (brand awareness, views, comments, feedback, marketing research factors) metrics. Businesses set applicable targets for expected long- and short-term results and measure appropriate metrics, such as sales revenue and brand awareness. Marketing effectiveness measurement can be evaluated with internal and external, controllable and non-controllable, financial and non-financial metrics. Evaluation measures can be selected accordingly company size. Important is to measure and marketing activities execution stages, such as information, planning, marketing mix, and results evaluation. After reviewing the academic literature, the lack of a systematic and comprehensive approach to measuring marketing effectiveness is identified, companies face the challenge of selecting the appropriate methods and metrics to evaluate marketing effectiveness.

## Disclosure statement

Author declare they have not any competing financial, professional, or personal interests from other parties.

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