



Social media marketing and performance measurement: does it take two to tango?

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Abstract

Social media profoundly influences organizational practices. While being a communication channel in which companies continue to pivot their investments, top managers are still skeptical about their usefulness. Marketers struggle to assess social media marketing effectiveness, as traditional measurement methods lack compatibility with social media dynamic, interactive nature. Understanding the challenges firms encounter in measuring social media marketing performance is essential to streamlining and enhancing this process. However, a comprehensive view into these challenges remain limited, as existing research is fragmented and often adopts narrow, disconnected perspectives. This study conducts a systematic literature review to identify the key challenges in measuring social media marketing performance and to propose solutions. Drawing on the management accounting literature related to the “development” and “use” of performance measurement systems, we provide an integrative framework outlining the core activities in the social media marketing performance measurement process, associated challenges, and potential solutions. By fostering a holistic, interdisciplinary approach, this study seeks to advance both academic understanding and practical applications in the field, while laying the foundations for future research.

Keywords Social media performance · Social media analytics · Big data · Performance measurement · Key performance indicators · Metrics

JEL Classification M3 · M4

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1 Introduction

In the contemporary era of digital connectivity, the spread of social media (SM) has profoundly influenced organizations. SM can be defined as “a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0, and that allow the creation and exchange of User Generated Content” (Kaplan and Haenlein 2010, p. 61). Examples of SM platforms include blogs and microblogs (e.g., Twitter), social networking sites (e.g., Facebook, LinkedIn, Instagram), and content community platforms (e.g., YouTube).

The rapid growth of such platforms has provided firms with unprecedented opportunities to engage with extensive audiences (Luo et al. 2021; Martin-Rojas et al. 2020). With an estimated 4.9 billion global users and younger generations adopting SM as their primary source for information and shopping, these platforms have become critical for marketing (Segel Hilton and Hatami 2023). Social media marketing (SMM) is therefore conceptualized as an “interdisciplinary and cross-functional concept that leverages social media (often in conjunction with other communication channels) to achieve organizational objectives by creating value for stakeholders” (Felix et al. 2017, p. 123). As customers have turned their attention to SM, traditional advertising lost some of its appeal (Moorman et al. 2022). Consequently, marketers have shifted investments away from traditional media channels such as television, radio, newspapers, events, and outdoor advertising, reallocating resources toward SM platforms (Moorman et al. 2022). Notably, advertising spending on SM is expected to show an annual growth rate of 3.86%, resulting in a projected market volume of US\$255.8bn by 2028 (Statista 2024).

Despite substantial investments in SMM, executives remain uncertain about its impact on organizational results (Segel Hilton and Hatami 2023). Hence, measuring SMM performance is essential to ensure that investments in SMM yield desired results (Bartoloni and Ancillai 2023; Cawsey and Rowley 2016). However, traditional media measurement appears almost outdated and existing approaches are not well-suited to the interactive nature of such platforms which are substantially different from traditional media (Hoffman and Fodor 2010). SM platforms are inherently dynamic, interconnected, egalitarian, and interactive, necessitating unique approaches for performance measurement and analysis (Meenaghan et al. 2013; Peters et al. 2013). Moreover, these platforms’ technological infrastructures and algorithms facilitate real-time analytics, which should enhance the measurement process (Meenaghan et al. 2013). Nonetheless, organizations largely face challenges in this effort, as measurement activities often become ends in themselves, with developed indicators rarely informing decision-making (Malthouse et al. 2013; Michaelidou et al. 2011; Silva et al. 2020).

Despite the acknowledged importance of SMM performance measurement, a comprehensive understanding of the challenges of SM performance assessment remains absent, with extant knowledge being highly fragmented. Some studies have focused on the extent to which companies perform SMM performance measurement and which Key Performance Indicators (KPIs) they use (e.g., McCann and Barlow 2015; Michaelidou et al. 2011; Järvinen and Karjaluoto 2015; Töllinen and Karjaluoto 2011), while others suggest methodologies for calculating such indicators,

like brand awareness or customer engagement, or propose novel KPIs (e.g., Azer et al. 2024; Kumar et al. 2013; Li et al. 2021; Shawky et al. 2020; Swaminathan et al. 2022). Although valuable, these contributions adopt very narrow perspectives and remain disconnected from each other's. Extant literature is missing a 'big picture' of the overall phenomenon, thus representing a major roadblock to advancing SMM practice and academic research. Obtaining a clear understanding of the challenges is essential to activating the levers needed to enhance the effectiveness of the measurement process.

Against this backdrop, this study contributes to the lively debate on SMM performance measurement by answering the following research question: which are the main challenges companies face in measuring the performance of SMM and how can they be tackled?

To this end, the present study adopts a Systematic Literature Review (SLR) methodology (Kraus et al. 2022b, 2024; Petticrew and Roberts 2008; Tranfield et al. 2003) to develop a comprehensive framework about the challenges and potential solutions within SMM performance measurement. Since this complex activity spans beyond the organizational boundaries of the marketing department to fall into the domain of management accounting, which is traditionally in charge of Performance Measurement Systems (PMSs) (e.g. Arnaboldi et al. 2017a, b), we draw on the "development" and "use" steps of PMSs (Wouters and Wilderom 2008) identified by management accounting literature to analyse the main challenges related to SMM performance measurement as well as potential solutions to overcome such difficulties.

This article provides a novel and multidisciplinary perspective in analyzing SMM performance measurement, thus addressing a critical need recognized among scholars (cf. Kraus et al. 2015; Roslender and Hart 2010). The review shows that prevailing challenges are largely technical, focusing narrowly on quantitative measurement issues and the development of KPIs. However, the organizational dimensions—often neglected or underexplored—offer opportunities to address these technical challenges more effectively. Consequently, we propose that future research should adopt a holistic approach to this phenomenon. Rather than confining the analysis to the technical aspects of social media metrics, we advocate for greater interdisciplinary collaboration between marketing and management accounting to address both technical and organizational facets of SMM performance comprehensively.

2 Theoretical background

2.1 Social media marketing and performance measurement

The use of SMM has witnessed a remarkable spread in recent years (Hoffman and Fodor 2010; Martin-Rojas et al. 2020; Peters et al. 2013). Through SM, marketers have the potential to connect with billions of customers, serving as pivotal conduits for brand-customer interactions (Hanna et al. 2011; Luo et al. 2021; Wu et al. 2020).

To prove the multifaceted impact of SM tools, contemporary marketing scholarship has increasingly delved into the relationship between their utilization and the consequential effects on business results (Bartoloni and Ancillai 2023). Empirical

investigations within this domain have underscored the pivotal role of such platforms in bolstering various facets of organizational performance. Notably, extant research has revealed that the adoption and use of SM contribute significantly to augmenting brand awareness (Eid et al. 2020), elevating levels of customer satisfaction, retention, and service quality (Garrido-Moreno et al. 2020; Parveen et al. 2016; Qalati et al. 2020, 2021), and fostering innovation performance (Martín-Rojas et al. 2021). Furthermore, a subset of studies has shown how differences in message strategies deployed on SM platforms may affect the levels of customer engagement (de Vries et al. 2012; Dhaoui and Webster 2021; Tafesse and Wien 2018). Interestingly, recent literature also posits a tangible link between SMM endeavors and consequential financial outcomes (Cao et al. 2018; Kim and Jang 2021), highlighting the broader implications of these initiatives on organizational bottom lines.

The variety of potential results stemming from SMM points out the crucial need of performance measurement. Indeed, assessing performance is a cornerstone of firms' strategic SMM efforts (Bartoloni and Ancillai 2023). This encompasses understanding the effectiveness of using SM for marketing purposes and to what extent it contributes to the overall firm's goals.

However, against the frequent pressure of top management wanting to see numbers, assessing the effectiveness of SMM presents a remarkable challenge for many organizations (Malthouse et al. 2013; Michaelidou et al. 2011; Silva et al. 2020). The multifaceted nature of SM interactions, spanning various platforms and behaviors, makes traditional media measurement almost old-fashioned and complicates the process of attributing causality and determining meaningful performance indicators (Michopoulou and Moisa 2019). Consequently, a lack of robust measurement often leads to ambiguity surrounding the true impact of SMM initiatives and fosters skepticism among stakeholders regarding the efficacy of these tools in driving business outcomes (McCann and Barlow 2015). The question naturally arises whether the money and time invested into a SM strategy actually result in a better performance for the whole business (Silva et al. 2020).

In this context, the existing literature has to some extent shed light on the challenges that companies face in SMM performance measurement. Some research has examined the degree to which companies engage in SMM performance measurement and the specific KPIs they employ (e.g., McCann and Barlow 2015; Michaelidou et al. 2011; Järvinen and Karjaluo 2015; Töllinen and Karjaluo 2011). Other studies have focused on methodologies for calculating KPIs, such as brand awareness and customer engagement, or have introduced novel metrics (e.g., Kumar et al. 2013; Li et al. 2021; Shawky et al. 2020; Swaminathan et al. 2022). Yet, this body of research remains somewhat fragmented due to its focus on distinct facets of SMM performance measurement, lacking an integrated view of the phenomenon as a whole. This gap represents a significant barrier to advancing both SMM practice and scholarly research.

Thus, we employ a SLR to build a comprehensive framework addressing the key challenges and potential solutions in SMM performance measurement. Arguably, this intricate task extends beyond the marketing department to intersect with management accounting—traditionally responsible for PMSs (e.g., Arnaboldi et al. 2017a, b). Hence, we draw on the PMSs literature to identify core challenges and propose

solutions for enhancing SMM performance assessment. The following section details the logic behind the development of the integrative framework.

2.2 The management accounting perspective on performance measurement challenges

During last decades, research on performance measurement has gained traction in management accounting literature (Bourne et al. 2000; Ferreira and Otley 2009; Wouters and Wilderom 2008). The renowned aphorism “what gets measured gets managed”, which is considered the milestone of the performance measurement (Behn 2003), has guided the development of several integrated PMSs which appear in the form of tableau, scorecards, dashboards, trees and prism (Kaplan and Norton 1992, 1996, 2007; Neely et al. 2001). Such rich body of literature proposes diverse approaches and guidelines to successfully develop PMSs, that comprise relevant KPIs to measure and manage the performance, offering guidance to two overarching steps, i.e. the “development” and “use” of PMSs (Ferreira and Otley 2009; Otley 1999; Wouters and Wilderom 2008).

The “development process” is a stage encompassing the design and implementation of PMSs, that comprises the following activities (Wouters and Wilderom 2008, p. 490): to shape and improve the best fitting definitions of useful KPIs; to find/create measurement data for determining the actual values of these performance measures; to build information systems for reporting results; to set performance level targets for performance measures; and to periodically review, revise and refine measures. The “use” step, in turn, relates to the application of PMSs and to how they are used within organizations for decision-making and control processes (Bourne et al. 2000; Ferreira and Otley 2009; Neely and Bourne 2000).

Notably, the empirical evidence widely shows that the development and use of PMSs remain a challenge for organizations. Accordingly, scholars have emphasized the organizational and technical levers and barriers to the development and use of the KPIs to include in PMSs (Ezzamel and Burns 2005; Merchant 2006; Jordan and Messner 2012; Goretzki et al. 2018a; Vaivio 1999, 2004). Focusing on such issues is pivotal since the measurement does not activate managers’ actions if indicators are not perceived relevant for decision-making and control processes (Otley 2003; Catasús et al. 2007, 2016).

At the “development” stage, to design measures that are as accurate and reliable as possible (Merchant 2006), the involvement of organizational actors belonging to different functions is required (Qu and Cooper 2011; Sundin et al. 2010; Vaivio 2004). On the one side, the presence of key actors, such as management accountants and managers, the commitment of the top management, and their sponsorship are acknowledged to be organizational levers to the development process, fostering the comprehension of the reasons behind the introduction of a measurement system as well as the creation of a shared language (Chaminade and Roberts 2003; Chiucchi and Montemari 2016; Qu and Cooper 2011). On the other side, however, it is necessary to balance participants’ multiple and competing goals (Sundin et al. 2010). Episodes of professional competition over data and information (Ezzamel and Burns 2005; Lowe 2001) as well as managers’ unwillingness to share information about their local

performance with management accountants (Burns and Vaivio 2001; Vaivio 2004) represent the major organizational barriers to the development process of indicators. Additionally, from a technical perspective, problems related to data collection and processing (Catasús and Gröjler 2006; Chiucchi 2013), discussions about the different nature of financial and non-financial measures, and the methods of calculating indicators (Chiucchi and Montemari 2016) represent additional barriers.

Although the actual use of indicators relies on managers (the users), management accountants can enable the understanding of the meanings and the relevance of indicators since they have the proper technical accounting competencies and an in-depth knowledge of the organizational processes (Catasús et al. 2016; Chiucchi 2013; Granlund and Lukka 1998; Vaivio 2004). Given that managers often develop certain expectations about the information that an indicator can provide based on their own expertise and knowledge (Chiucchi and Montemari 2016; Giuliani et al. 2016), constructive discussions with management accountants foster their use in decision-making processes (Catasús et al. 2016; Vaivio 2004).

Against this background, we posit that research on SMM performance measurement would benefit from a systematization of extant literature drawing on the “development” and “use” steps of PMSs identified by management accounting literature to build a comprehensive picture about what literature already knows on the development and use of SM KPIs, to disentangle the main challenges related to SMM performance measurement, and to offer guidance to future research. Given the fragmented nature of existing literature, the study adopts a systematic review approach to comprehensively explore the evolution of research regarding SMM performance measurement, to identify the key findings, to synthesize the main contributions and to delineate potential avenues for future inquiry.

3 Methodology

To accomplish the purpose of the study, we conducted a SLR (Petticrew and Roberts 2008; Thorpe et al. 2005; Tranfield et al. 2003; Webster and Watson 2002). The SLR is a review method to identify and scrutinize the relevant research on a given topic by ensuring a transparent, replicable and reliable process (Denyer and Tranfield 2006; Kraus et al. 2024; Tranfield et al. 2003; Thorpe et al. 2005). We followed Tranfield et al.'s (2003) guidelines, consisting of three main research steps: planning the review, conducting the review, and reporting and dissemination, which refer to the analysis of the literature. This approach appears suitable as it follows the standards widely used by management scholars (Atanasiu et al. 2024; Bartoloni and Ancillai 2023; Kraus et al. 2022a; Rojon et al. 2021). Employing these guidelines, indeed, increases the rigor and robustness of review articles, thus enhancing their contributions (Sauer and Seuring 2023).

3.1 Planning the review: the preparation of the literature review protocol

In the first stage, we identified the need for a literature review due to the high degree of fragmentation in the extant knowledge. One of the primary roles of a literature

review article is to synthesize the existing body of knowledge to identify trends, patterns, and gaps which serve as a basis to explore new avenues for research (Kraus et al. 2024). Subsequently, we developed the review protocol (Petticrew and Roberts 2008; Tranfield et al. 2003), which involves defining the inclusion and exclusion criteria of publications, the electronic database, search filters and keywords to guide the review process (Kraus et al. 2022b). We first defined the inclusion and exclusion criteria. Since we focus on the performance measurement of SMM we decided to exclude articles discussing the antecedents of SM adoption by companies, as well as articles aimed at investigating specific business results of SM use or delineating the specific attributes of companies or SM content that drive outcomes. We decided to include only papers adopting the firms' perspective, thus excluding contributions based on users, consumers or influencers' standpoint as well as articles focusing on digital platforms different from SM, such as marketplaces and corporate websites.

We chose Scopus as electronic database to select the relevant literature for our study since it provides a broad coverage of academic peer-reviewed literature and has inherent filters which ensure the transparency and replicability of the search process (Bartoloni and Ancillai 2023; Massaro et al. 2016; Secundo et al. 2020).

According to our research aim, we conducted scoping searches in leading journals to identify the proper keywords for finding relevant studies. Following Massaro et al. (2016), keyword searches are paramount to investigate an emerging research strand for which literature from different fields is published, thus scoping searches represented a fruitful step for our study. For instance, we found that while management accounting literature uses the term "indicator" to refer to performance measures, the marketing literature prefers using the word "metric". In addition, we found that management accounting literature often uses the general term "marketing performance" or "marketing control", also including the SMM performance. Therefore, to avoid missing relevant papers, we decided to include the abovementioned words and to assess the adherence of each publication to our research in a subsequent stage. The final search strings are presented in Fig. 1.

3.2 Conducting the review: literature search and articles selection

The search in Scopus was performed in September 2024. We limited the search process to title, abstract, and keywords of articles written in English, within the "Business, Management, and Accounting" area (Kraus et al. 2022b). From this search, 1566 documents resulted. After removing 49 duplicate articles, we decided to select articles published in journals listed in the Academic Journal Guide (AJG) ranking to ensure the quality of the results (Bartoloni and Ancillai 2023; Kraus et al. 2022b; Vinayavekhin et al. 2023). Hence, 961 articles were selected for further screening. We individually read the title and the abstract of each paper and assessed their relevance according to the inclusion and exclusion criteria, as outlined above. This process led to the exclusion of 846 articles. Whether the information included in the abstract was not sufficient for a decision, the full text was read. As a result of this process, 62 papers were excluded. Excluding a huge number of initially retrieved results is common when applying exclusion-inclusion criteria to abstracts or articles interpretation (Kraus et al. 2022b). Most of the excluded studies adopt a user perspective by exam-

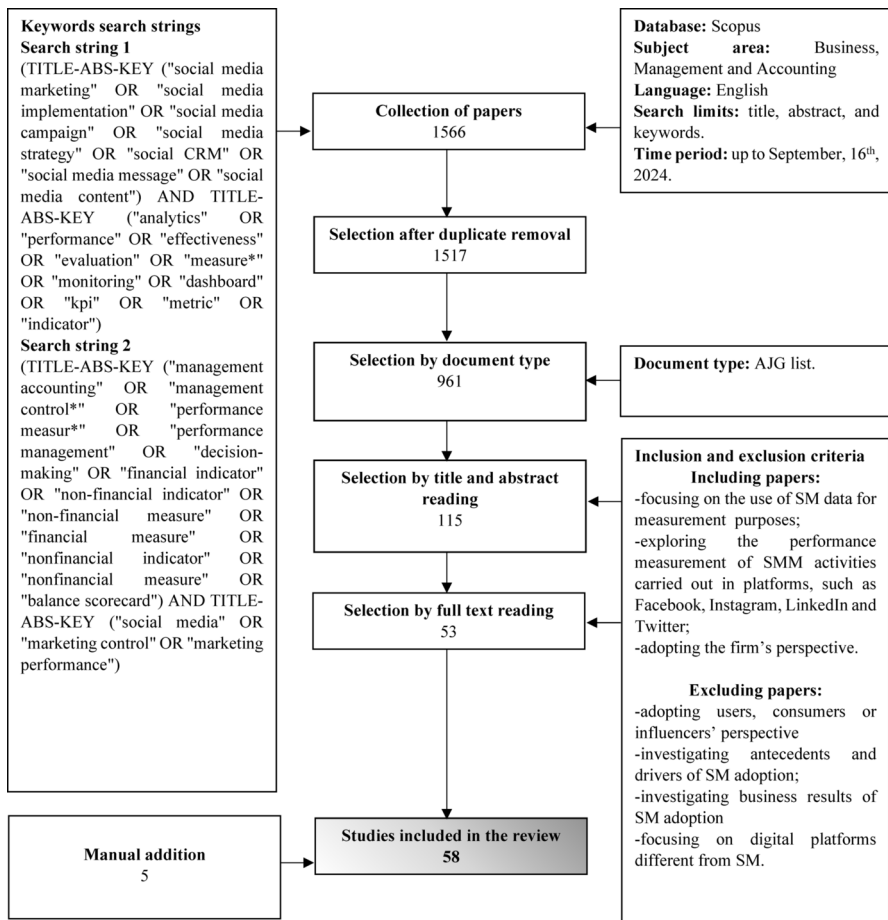


Fig. 1 Database search process

ining the efficacy of these platforms in emergency situations and their utilization by individuals. Other articles delve into the factors motivating users to prefer certain types of SM content types (e.g., pictures, videos, etc.). Articles analyzing online conversations to discern users' opinions on broad topics, such as presidential elections, were also omitted from the sample. Additionally, other excluded papers focused on digital technologies in general or digital content marketing. Finally, some excluded articles focus on the utilization of SM for training purposes or provide descriptions of study courses on SMM and analytics. Furthermore, we conducted a backward search of the references of the selected publications (Webster and Watson 2002) and we added 4 articles that were consistent with our research purpose and inclusion criteria (cf. Conz and Magnani 2020), namely Agostino and Sidorova (2017), Holsapple et al. (2018), McCann and Barlow (2015), and Peters et al. (2013). An additional article by Nowak et al. (2024) was manually included due to its relevance to the topic, despite not being ranked in the AJG. As a result of this process, and in line with SLRs (e.g. Atanasiu et al. 2024; Conz and Magnani 2020), 58 papers were identified for the

review, put in chronological order in an Excel spreadsheet, and downloaded in their PDF format (see Appendix).

3.3 Analysis of the literature

Once articles were selected, we individually analysed them (Tranfield et al. 2003; Thorpe et al. 2005). In order to provide a “descriptive analysis” of the research field, we summarized basic information of the publications, such as year of publication and source title and we also gathered more detailed information such as author, theoretical lens, research method and actors involved in the data collection activity, type of industry, and country of research. Through this information we can make specific considerations beyond a mere description of the distributions of these single results to provide more detailed insights (Sauer and Seuring 2023). Then, we conducted an in-depth thematic analysis (Kraus et al. 2022b; Sauer and Seuring 2023) of the 58 reviewed articles. Such an approach ensures a more elaborate analysis based on topics and content beyond purely descriptive data, thus offering readers valuable insights and a deeper understanding of the state of knowledge in a specific research area (Kraus et al. 2024). After the individual analysis of the articles, we organized several meetings to discuss the main themes and develop a comprehensive understanding of available literature which served as a basis for further analysis. Once we became familiar with the topics at stake, we re-analyzed the articles according to the definition of the “development” and “use” of PMSs provided by Wouters and Wilderom (2008) and we identified the main challenges and solutions to the SMM performance measurement. We found that many papers investigate different interrelated phenomena, hence, we adopted a concept-centric approach wherein articles can fall in more thematic areas in order to provide an exhaustive understanding of extant literature on the research topic (Webster and Watson 2002). Sections 4 and 5, respectively, present the findings derived from the descriptive and the thematic analyses.

4 Findings: descriptive analysis

In this section, we provide a comprehensive overview of the 58 selected publications, serving as the foundation for a thorough thematic analysis. The overview is arranged according to publication year, sources (journals), author type, methodology employed, theoretical underpinnings, type of industry, and country of research (cf. Appendix).

Initially, the articles were analyzed based on their publication years, enabling an assessment of the evolution of research over time. While the SM phenomenon began in the early 2000s, scholarly investigation into the SMM performance measurement started a decade later and has witnessed substantial development particularly since 2013 (Fig. 2). Nevertheless, despite experiencing a peak of 10 publications in 2017, there was a subsequent decline in the number of articles published in this domain per year. This trend likely reflects the inherent complexity associated with the subject matter, which may still pose challenges for researchers. Recently, scholars have

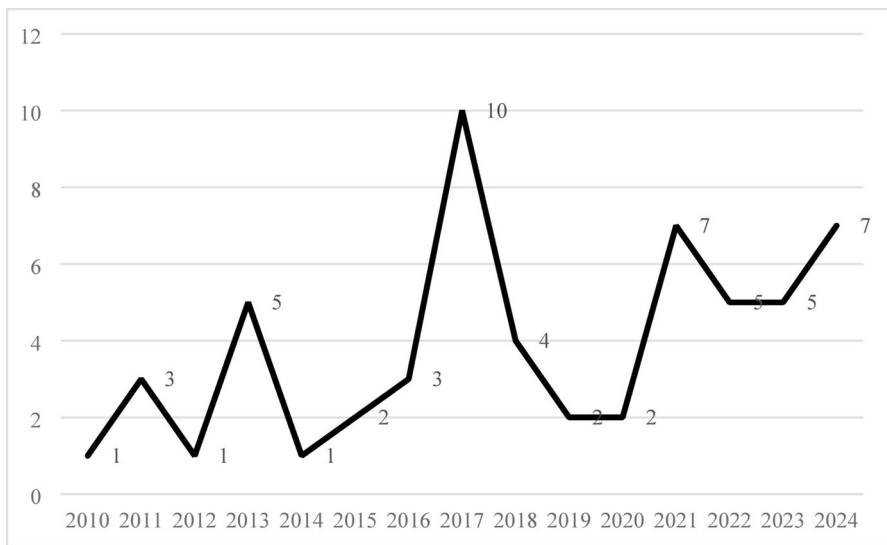


Fig. 2 Publication trend by year

shown a renewed interest in contributing to the debate on measuring the performance of SMM, highlighting the ongoing relevance of this topic.

The selected 58 articles have been published across 47 distinct journals, as shown in Table 1, highlighting a notable fragmentation of research across various fields and disciplines. While marketing-focused journals (e.g., *Journal of Interactive Marketing*, *Industrial Marketing Management*) and accounting journals (e.g., *Accounting, Auditing and Accountability Journal*) published the highest volume of related articles, scholars from areas such as information management, general management, entrepreneurship, organizational studies, and innovation have also contributed significantly to the debate. This heterogeneity of publications highlights the need for a dedicated study to synthesize and clarify the existing body of knowledge.

Assessing the AJG rating provides insights into the quality of the articles analyzed. The majority (41%) are published in journals recognized for their rigorous, original research in line with established standards (AJG rating ≥ 3), with 21% of these achieving high to excellent ratings (AJG rating ≥ 4). In the past four years, a substantial number of articles have appeared in prominent journals, including *Journal of Interactive Marketing*, *Journal of Business Research*, *Management Science*, *European Accounting Review*, *Journal of Service Research*, and *Technological Forecasting and Social Change*. This trend highlights the scholarly commitment to advancing research quality in this field.

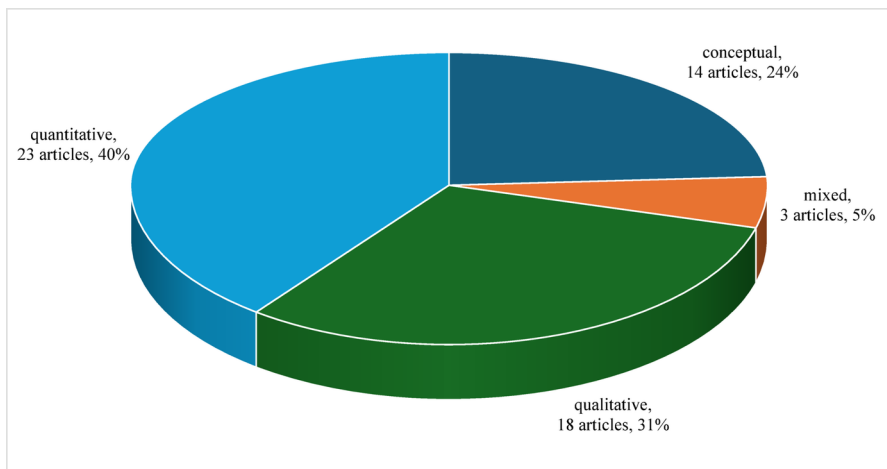
The analysis of the authors who published the 58 articles analyzed reveals that whilst the majority of articles (83%) are authored by academics, 10 papers (17%) are co-authored by academics and practitioners, such as consultants. The level of involvement of practitioners in this research field is valuable considering that the journals included in the data set are leading academic journals and they are primarily oriented to academics rather than to practitioners. Nevertheless, this result underlines

Table 1 Publication outlets

Source Title	AJG ranking	AJG Field	Number of articles
Journal of Interactive Marketing	3	MKT	4
Industrial Marketing Management	3	MKT	3
Journal of Marketing Analytics	1	MKT	3
Accounting, Auditing and Accountability Journal	3	ACCOUNT	3
Journal of Small Business and Enterprise Development	2	ENT-SBM	2
Qualitative Market Research	2	MKT	2
Management Science	4*	OR&MANSCI	1
Journal of Nonprofit and Public Sector Marketing	1	MKT	1
Decision Support Systems	3	INFO MAN	1
Business Horizons	2	ETHICS-CSR-MAN	1
European Accounting Review	3	ACCOUNT	1
Information and Management	3	INFO MAN	1
MIT Sloan Management Review	3	ETHICS-CSR-MAN	1
International Journal of Accounting Information Systems	2	ACCOUNT	1
Journal of Marketing Management	2	MKT	1
International Journal of Advertising	2	MKT	1
Journal of Retailing and Consumer Services	2	MKT	1
International Journal of Contemporary Hospitality Management			1
Journal of the Academy of Marketing Science	4*	MKT	1
International Journal of Engineering Business Management	1	OPS&TECH	1
Marketing Science	4*	MKT	1
International Journal of Hospitality Management	3	SECTOR	1
Foresight	1	STRAT	1
International Journal of Information Management	2	INFO MAN	1
Cogent Business and Management	1	ETHICS-CSR-MAN	1
International Journal of Productivity and Performance Management	1	OPS&TECH	1
Journal of Modelling in Management	1	ORG&MANSCI	1
International Journal of Services Operations and Informatics	1	OPS&TECH	1
Journal of Research in Interactive Marketing	1	MKT	1
International Journal of Technology Marketing	1	MKT	1
Journal of Service Research	4	MKT	1
Journal for Global Business Advancement	1	ETHICS-CSR-MAN	1
Journal of Small Business and Entrepreneurship	1	ENT-SBM	1
Journal of Business and Industrial Marketing	2	MKT	1
Management Decision	2	ETHICS-CSR-MAN	1
Journal of Business Research	3	ETHICS-CSR-MAN	1
Marketing Intelligence and Planning	1	MKT	1
Journal of Digital and Social Media Marketing	-	-	1
Measuring Business Excellence	1	ETHICS-CSR-MAN	1
Journal of Forecasting	2	ORG&MANSCI	1
Psychology and Marketing	3	MKT	1

Table 1 (continued)

Source Title	AJG ranking	AJG Field	Number of articles
Public Administration Review	4*	PUB SEC	1
Technological Forecasting and Social Change	3	INNOV	1
Asia Pacific Journal of Tourism Research	1	SECTOR	1
Tourism Economics	2	SECTOR	1
Journal of Internet Commerce	1	INFO MAN	1
Journal of Knowledge Management	2	ORG STUD	1
Total			58

**Fig. 3** Methodological choices of the selected articles

the goals of these studies to gain insights from the practice, aiming at offering guidance to managers.

Figure 3 illustrates the methodological choices observed in the reviewed articles. The continued interest in this topic is reflected in the predominance of empirical studies, which account for 76% of the articles. Within this group, 40% of studies employed a quantitative approach, 31% used a qualitative approach, and 5% adopted mixed methods.

In terms of research methods, quantitative studies frequently rely on case studies, often using data from social media accounts to conduct regression analyses. Qualitative studies show a balanced use of multiple and single case studies, as well as cross-sectional field studies. When interviews were the primary data collection method, participants were primarily professionals in marketing-related roles, such as marketing managers, digital marketers, and SMM managers. In contrast, roles such as management accountants, controllers, and analysts were represented to a lesser degree.

A detailed examination of the theoretical foundations of the selected articles reveals that 50 out of the 58 articles do not adhere to a specific theoretical framework, which underscores scholars' ongoing efforts to identify pertinent theoretical perspec-

tives to understand this complex topic. The analysis of the remaining articles shows that the theoretical frameworks employed in the research encompass, for instance, the exchange-network theory, the expectation violations theory, the M-O-A paradigm, the interactionist social theory, and the organizational learning theory. Furthermore, upon closer analysis, the majority of articles do not restrict their investigation to a singular industry (19 articles). Among the scrutinized sectors, retail emerges as the most prominently featured, with 7 articles, of which 3 delve specifically into the domain of restaurants. Following closely behind are articles pertaining to entertainment (3), hospitality (3), and public administration and government (2).

Finally, most of the empirical research is conducted in Europe (12 articles) and the USA (10 articles), which is unsurprising given the high penetration rates of SM platforms in these territories. Within Europe, the UK and Italy have the highest number of studies, with 5 and 3 respectively.

In summary, through an examination of publication years, journals, author type, methodologies, theoretical underpinnings, industries, and countries, this section highlights an increasing interest within the academic community to encourage a more profound understanding of the issue at stake.

5 Findings: thematic analysis

5.1 Challenges in the development of social media KPIs

Articles thoroughly explore the development of performance indicators, i.e. their design and implementation, for SMM. Drawing on the literature on PMSs, the development process involves the following activities (e.g. Wouters and Wilderom 2008): (i) identifying and defining KPIs, (ii) data collection for determining the values of performance measures, (iii) building information systems for reporting performance measurement results and setting performance level targets, and (iv) periodic revision of KPIs.

5.1.1 Identifying and defining KPIs

The literature strongly advocates the importance of identifying KPIs that align with SM objectives, supporting both marketing efforts and overall business goals (Hoffman and Fodor 2010; Keegan and Rowley 2017; Malthouse et al. 2013; McCann and Barlow 2015). This represents a crucial step since the identification of KPIs fosters individuals' commitment towards objectives and leads to improved outcomes, to avoid companies measuring only the results they are seeking and SMM performance measurement being a mere procedural exercise (Järvinen and Karjaluoto 2015; Tölinen and Karjaluoto 2011).

Despite the importance of this activity, empirical evidence shows that companies face significant challenges in identifying KPIs (Hoffman and Fodor 2010; McCann and Barlow 2015; Michaelidou et al. 2011; Michopoulou and Moisa 2019; Silva et al. 2020). Specifically, the inability to define and prioritize SM objectives, coupled with a general lack of knowledge regarding relevant metrics, are key reasons why many

companies struggle to properly identify KPIs to evaluate SM performance (Järvinen and Karjaluoto 2015; Mergel 2017; Michaelidou et al. 2011; Silva et al. 2020). Identifying marketing objectives related to SM is especially challenging for companies, particularly small businesses, which often have difficulty in understanding how to use these platforms effectively as marketing channels (Keegan and Rowley 2017; Michaelidou et al. 2011). In this vein, Cawsey and Rowely (2016) show that companies lagging behind in the development of metrics were primarily hindered by the absence of clear objectives and/or senior management buy-in.

Moreover, a key challenge in KPIs identification is the involvement of various organizational actors, such as marketing and communication managers, IT professionals, and management accountants (Arnaboldi et al. 2017a), who may display conflicting goals and interests. Accountants are often skeptical regarding SM and hesitant to be involved in performance measurement as they often perceive SM as a marketing and communication issue, thus considering such platforms of marginal use in terms of measurement (Arnaboldi et al. 2017a). Furthermore, some scholars have emphasized that marketers are often compelled to focus on measuring the financial results of SMM efforts (e.g., by measuring SM ROI), overlooking the interactive nature that defines these platforms (Agostino and Sidorova 2016; Hoffman and Fodor 2010; Huang 2012; Nicolau et al. 2024; Vieira et al. 2022; Yoon et al. 2024). Consequently, they tend to focus on measuring the immediate effect of a particular SM campaign on sales by tracking the revenue generated in relation to the dollars spent, though establishing a direct connection between SM efforts and sales outcomes can be challenging (Hoffman and Fodor 2010; Michopoulou and Moisa 2019; Komodromos et al. 2021). For instance, Dolega et al. (2021) demonstrate that SM campaigns by a retail company are partially effective as they lead to increased web traffic but only marginally increase product orders and sales. In other instances, the pressure to demonstrate tangible results leads marketers to rely on basic metrics, such as reach and awareness (Michopoulou and Moisa 2019; Silva et al. 2020), which, while useful, provide only a partial understanding of performance (Hanna et al. 2011). Consequently, there is a challenge in adopting a balanced perspective and approach that accounts for both brand exposure and engagement, as well as the conversion and financial implications downstream (Hanna et al. 2011; Järvinen and Karjaluoto 2015). Hence, when company professionals with differing perspectives and conflicting interests collaborate on measurement activities, tensions likely arise. Agostino and Sidorova (2017), for instance, highlight a divergence in the understanding of customer identity and difficulties in identifying proper KPIs to measure their value for the company. The digital department advocates for a “fluid” view of customers, whereby the most valuable customers are those who exert the greatest influence on SM, even if they are not directly contributing to the company’s revenue. In contrast, from the perspective of management accountants, the “best customer” is defined by their direct financial contribution, grounded in tangible transactional data. This clash of viewpoints creates challenges in reaching a consensus on how to define the most valuable customers and how SM data should be utilized in both strategic and operational decision-making processes.

5.1.2 Data collection for determining the values of performance measures

The process of gathering SM data to get information for measuring performance is usually referred to as “big data analytics” (He et al. 2017; Miah et al. 2017) or “social media analytics” (Agnihotri et al. 2023). Contrary to historical data provided by traditional systems, scholars emphasize the potential of leveraging real-time data and their use for carrying out forecasts and predictive analyzes (Goebel et al. 2023; Duan et al. 2023; Fehrenbacher et al. 2023; Pamuksuz et al. 2021). Therefore, managers should focus on implementing appropriate SM tools and methods for SM data extraction and analysis (Keegan and Rowley 2017; McCann and Barlow 2015; Sidorova et al. 2016).

In this area, the challenges highlighted in the literature are predominantly related to the need to manage both structured and unstructured data (Agnihotri et al. 2023; Sidorova et al. 2016; Xu et al. 2021). Notably, existing paradigm of managing data may not be capable of dealing with the growing amount of unstructured data (Malthouse et al. 2013). Addressing this issue requires advanced technical expertise and tools for tasks, such as machine learning, text mining, Natural Language Processing (NLP) technologies, sentiment analysis, social network analysis, trend analysis (see Agnihotri et al. 2023 for a comprehensive list of techniques; Agostino and Sidorova 2016; Godinho et al. 2017; Gross and Desveaud 2024; Holsapple et al. 2018). The data collection and analysis directly depends on the type of data: statistical and network approaches are applied to structured and quantitative data, and content analysis to unstructured data (Agostino and Sidorova 2016; Sidorova et al. 2016). Hence, studies delve into the intricacies of information extraction and processing, proposing and testing techniques to harness the wealth of data available on SM platforms (Duan et al. 2023; Goebel et al. 2023; Lamrhari et al. 2022; He et al. 2013; Xu et al. 2021). In general, using the proposed advanced techniques should allow firms to overcome outdated measurements and old-fashioned ways of analyzing customer data (Goebel et al. 2023; Duan et al. 2023; He et al. 2013).

Additionally, while it is widely accepted that KPIs should be supported by relevant metrics able to explaining the performance of the phenomenon to be measured, there is a tendency in practice to rely on SM platform-generated statistics and free tools (Cawsey and Roweley 2016; Keegan and Rowley 2017; Silva et al. 2020). This approach risks focusing solely on surface-level quantitative data, such as follower counts, likes, comments (without considering their sentiment), clicks, and the number of customers acquired through social media (Cawsey and Rowley 2016; Huang 2012; McCann and Barlow 2015; Michaelidou et al. 2011; Töllinen and Karjaluoto 2011), without linking these metrics back to meaningful KPIs and broader objectives (Keegan and Rowley 2017; Michaelidou et al. 2011; Töllinen and Karjaluoto 2011).

However, it is equally important to incorporate qualitative measures, which offer deeper insights into the nature of customer interactions (Agostino and Sidorova 2016; McCann and Barlow 2015). These qualitative assessments, such as analyzing the sentiment of conversations, help in understanding whether the perception of the brand is positive or negative, providing a more comprehensive view of SM performance (Meenehan et al. 2013; Sidorova et al. 2016; Swaminathan et al. 2022).

Measuring customer engagement is a critical component of SMM, as it captures the interactive nature that sets these platforms apart (Arnaboldi et al. 2017b; Michopoulou and Moisa 2019; Sidorova et al. 2016). However, companies often face challenges in accurately measuring this KPI, particularly in identifying metrics that adequately reflect the multidimensionality of the concept (Azer et al. 2024; Hallock et al. 2019; Li et al. 2021; Meeneghan et al. 2013; Shawky et al. 2020). This complexity makes it difficult to develop a comprehensive approach that fully captures the various facets of customer engagement which is often reduced to simple metrics like the number of likes, comments, and shares (Ángeles Oviedo-García et al. 2014; Juhaidi 2024).

The widespread company practice of limiting the analytical view to readily accessible metrics (Järvinen and Karjaluo 2015; Mergel 2017; Michaelidou et al. 2011) may be attributed to the adoption of cost-effective measurement tools utilized by companies, such as SM platform insights and Google Analytics (McCan and Barlow 2015; Michopoulou and Moisa 2019; Silva et al. 2020).

Another challenge relates to the need of a SM metric to be accompanied by counterbalancing metrics that keep it in balance for a consistent continuing interpretation of the performance by managers (Peters et al. 2013). In this regard, scholars suggest the use of hybrid indicators wherein pure SM metrics (such as likes) are correlated with traditional variables (such as revenues or customer satisfaction) (e.g. ratio between sentiment on SM/theatre occupation) (Arnaboldi et al. 2017a). This process involves integrating real-time data from SM with traditional reporting methods, impacting decision-making through personalized timing and enhanced visualization (Agostino and Sidorova 2017; Järvinen and Karjaluo 2015).

5.1.3 Building information systems for reporting performance measurement results and setting performance level target

Data gathered and analyzed should be collected into comprehensive reports and dashboards, which serves as a basis for decision making and control activities (Järvinen and Karjaluo 2015; Keegan and Rowley 2017; Peters et al. 2013; Sidorova et al. 2016). This activity is pivotal since it directly supports managers' decision-making processes and actions (Arnaboldi et al. 2017a).

A challenge companies often face in this activity is becoming overwhelmed by information details or creating numerous categories that are ultimately useless to those relying on these indicators for decision-making, as they may not fully understand them (Arnaboldi et al. 2017a; Järvinen and Karjaluo 2015). Those responsible for developing indicators may fall into the trap of adding simple metrics, such as likes, followers, and views due to their apparent simplicity (Peters et al. 2013). This may lead to metric overload (Keegan and Rowley 2017; Töllinen and Karjaluo 2011). However, dashboarding should function as a minimization techniques where aggregated data are converted in small number of significant metrics (Saxena et al. 2022). Moreover, incorporating many simple metrics into dashboards can mislead marketing efforts, potentially harming the organization's overall prospects (Peters et al. 2013).

Another significant challenge involves the integration of SM data with traditional systems, such as data from Customer Relationship Management (CRM) platforms (Agostino and Sidorova 2017; Arnaboldi et al. 2017a, b; Saxena et al. 2022). It is not solely data from SM that informs customer management; organizations typically engage with customers through multiple touchpoints, such as CRM systems, traditional advertising, direct communication, and call centers, often overseen by distinct departments (Malthouse et al. 2013). Therefore, the development of effective dashboards can facilitate the establishment of guidelines and codes of conduct, promoting consistency in the responses and actions of individuals responsible for managing customer interfaces. However, although Agostino and Sidorova (2017) demonstrate that managers attempt to integrate SM data on customers with more traditional data stored in other organizational systems, such as CRM databases, they found that the two sets of customer data did not overlap, highlighting a disconnect between the two sources of information. The challenge of aligning the customer profile derived from SM with that visualized through traditional data sources created tensions between organizational units confidently utilizing SM data (e.g., digital marketers) and those more skeptical of its value (e.g., management accountants). This tension resulted in varied usage of the SM reports prepared by the digital department, with more skeptical units often dismissing these reports altogether.

Additionally, given the variety of organizations and SM, there is no such thing as “the” dashboard or metric for SM (Peters et al. 2013). Every organization needs to choose the appropriate KPIs for its specific dashboard tied to its organizational goals, structure, social media selection, etc. This variability makes it difficult to develop a standardized system that accommodates all business needs without extensive customization.

5.2 Challenges in the use of social media KPIs

The use step refers to the application of developed KPIs for decision-making and control processes, i.e. the practical utilization of the information produced during the development process of KPIs. In this regard, research emphasizes the importance of learning from SM data, as no universal methodology exists for translating such data into actionable business decisions (e.g., Agnihotri et al. 2023; Fehrenbacher et al. 2023; Holsapple et al. 2018; Parson and Lepkowska-White 2018). This process enables organizations to shift from a focus on the technical aspects of measurement to more operational and strategic considerations (Agnihotri et al. 2023; Holsapple et al. 2018). The studies addressing this topic align with a body of research that views SM as a valuable data source capable of generating new knowledge and support decision-making across several domains, including sales, customer management, and marketing-finance activities (Agnihotri et al. 2023; Fehrenbacher et al. 2023; Saxena et al. 2022). For instance, the use of SM indicators allows to assess the impact of different plans and to check their coherence with the company’s objectives and strategies through constant benchmarking with competitors, identification of market or sector trends on SM, and simulation of acceptance of products or services through SM channels (Sidorova et al. 2016).

The utilization of KPIs in decision-making processes can vary substantially. At a basic level, KPIs may be employed for ad hoc and short-term decisions, such as promptly responding to negative feedback (Agnihotri et al. 2023; Saxena et al. 2022), thereby accelerating the revision of actions (Järvinen and Karjaluo 2015; Sidorova et al. 2016). Aggregated customer data from SM is often used by marketers as an early warning system, enabling immediate corrective action in response to emerging issues. At a more advanced level, KPIs can inform action-oriented operational decisions, such as adjusting services based on customer feedback (Agnihotri et al. 2023; Saxena et al. 2022).

Furthermore, empirical evidence suggests that KPIs can be used to assess and act upon business results such as brand awareness, brand positioning, brand personality, and sales (Goebel et al. 2023; He et al. 2017; Nowak et al. 2024; Pamuksuz et al. 2021; Swaminathan et al. 2022). Therefore, firms can identify key themes and topics related to products and brands, which can be analyzed and compared through sentiment analysis (He et al. 2017; Lamrhari et al. 2022; Swaminathan et al. 2022). Analyzing brand-related conversations indeed can provide valuable insights for decisions regarding product and service improvements, as well as for customer segmentation, selection of optimal sales channels and selection of partners for strategic initiatives (Duan et al. 2023; Malthouse et al. 2013; Saxena et al. 2022; Swaminathan et al. 2022).

However, this process remains complex, and utilizing SM data and KPIs as a cornerstone for strategic decision-making is still an aspirational goal. One challenge that can be identified is the lack of trust in indicators generated from SM data. This stems from two key concerns. First, managers may be hesitant and cautious on the nature of SM data. They emphasize that SM data lacks stability (Keegan and Rowley 2017) and is not the exclusive property of the company (Agostino and Sidorova 2017; Malthouse et al. 2013). This can weaken the value of knowledge accumulation within the enterprise (Arnaboldi et al. 2017b). Likewise, there is an issue of data representativeness, as SM platforms are used by only a subset of the population, potentially leading to biased or incomplete insights (Malthouse et al. 2013). Furthermore, while SM providers, like Facebook and Twitter, offer public interfaces for data retrieval (referred to as Application Public Interface), there is no assurance that the entirety of the data is accessible (Arnaboldi et al. 2017b). Therefore, when the measurement suggests a change in course from past or current practices, organizations tend to disregard these insights and focus on traditional metrics. Conversely, they are more likely to act on SM KPIs if they recommend maintaining the status quo, reflecting a more cautious, risk-averse approach (Fehrenbacher et al. 2023). Moreover, the seniority of individuals in the workplace seems to influence perceptions, as experienced managers may still view predictive analytics using SM data as uncharted territory (Fehrenbacher et al. 2023).

Marketing managers may not only lack confidence in these indicators themselves but also face challenges in persuading other managers of their value (Arnaboldi et al. 2017b; Saxena et al. 2022). Each manager tends to form expectations regarding the insights that an indicator can offer, shaped by their own expertise and functional focus. Therefore, it is essential for these expectations to be discussed collaboratively across departments to ensure that the indicators are effectively integrated into deci-

sion-making processes. Marketing managers, in particular, must translate customer voice metrics into financial narratives that resonate with financial managers and demonstrate the relevance of these metrics (Saxena et al. 2022). However, establishing a clear and direct link between customer satisfaction metrics and financial outcomes can be both complex and time-consuming.

Additional challenges associated with the use phase pertain to the skill sets of the individuals responsible for understanding and utilizing the KPIs derived from SM. Specifically, those tasked with applying the indicators often lack the expertise required to translate the information into actionable marketing strategies (Keegan and Rowley 2017; Malthouse et al. 2013). As long as this skills gap remains unaddressed, the full potential of the insights derived from SM data cannot be realized.

5.3 Potential solutions

The literature suggests solutions to address and ultimately overcome the identified challenges. First, new competencies are needed at the intersection of established organizational functions (Arnaboldi et al. 2017a, b). In the case of SM, a wide range of professionals are involved in the field, including those in marketing and communications, information technology, and management accounting. Consequently, beginning with recruitment and continuing through employee training and retention, companies must identify, attract, and develop individuals with skill sets aligned to the SM landscape, with its heavy reliance on data collection and analysis (Agnihotri 2023; Malthouse et al. 2013). In this regard, compared to traditional skills, a complementary array of competencies is essential, including those in SM data collection, organization, aggregation, and storage. More importantly, it becomes pivotal to develop analytical skills and knowledge of the business to formulate the right questions, set up hypotheses, and analyze scenarios to derive business-relevant insights from data-driven information. This will ensure that no data is left unprocessed due to the lack of qualified professional involved and misinterpretation is averted (Malthouse et al. 2013).

Companies often employ specialists in digital roles, such as digital or SMM managers, who oversee SMM performance measurement (Silva et al. 2020). The literature suggests, however, that challenges in this area can be addressed through hybridization processes, which engage multiple actors from different departments in both the identification of KPIs and the enhancement of visual dashboards used within measurement systems (Arnaboldi et al. 2017a). Member-checking, team coding, and peer debriefing are suggested as approaches to ensure data collection and analysis credibility (Morgan et al. 2024). This collaborative approach, particularly between marketers and management accountants, ensures that visual dashboards incorporate insights from various departmental reports and ideas contributed by relevant managers (Agostino and Sidorova 2017). Such functional hybridization is aimed at creating more sophisticated and responsive performance control on SM, fostering the development of new skills and organizational methodologies.

Moreover, the literature encourages collaboration between internal employees and external consultants who are mostly valuable to assist firms with with the customization process of visualization dashboard (Arnaboldi et al. 2017a; Keegan and Rowley

2017). These consultants can act as mediators, helping to reconcile the conflicting interests of the departments involved in the measurement process. Their role is to identify each department's specific needs and determine what knowledge must be translated to meet the measurement requirements.

6 Discussion

6.1 Towards an integrative framework of SMM performance measurement

This SLR aimed to develop a comprehensive understanding of the contemporary challenges in SMM performance measurement by offering an integrative framework (Fig. 4). The proposed framework addresses the fragmentation characterizing the existing literature, which largely focuses on the general use of measurement systems, evaluations of SM performance based on isolated platform-provided KPIs, or methods for KPIs development (e.g., Kumar et al. 2013; Li et al. 2021; McCann and Barlow 2015; Michaelidou et al. 2011; Järvinen and Karjaluo 2015; Töllinen and Karjaluo 2011). By offering a holistic perspective, this framework provides a deeper understanding of the key activities underpinning the SMM performance measurement process, as well as the associated challenges and solutions identified in current research. This facilitates a more nuanced knowledge of this multifaceted and complex phenomenon.

Drawing on Wouters and Wilderom's (2008) "development" and "use" steps of PMSs, the framework illustrates that, as regards the SMM performance measurement process, the first step involves the development of KPIs for SMM (i.e. their design and implementation), while the second regards the use of the developed indicators to generate actionable insights for decision-making and control processes within the organization. A thematic analysis of the reviewed articles revealed a series of chal-

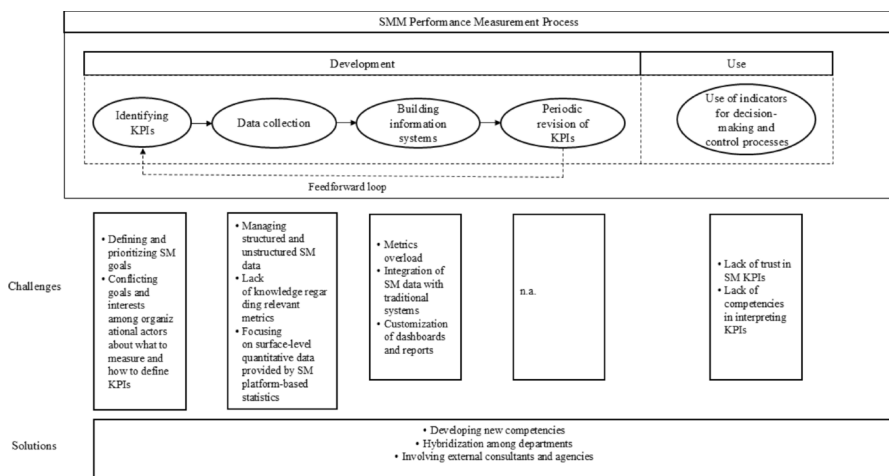


Fig. 4 Integrative framework of SMM performance measurement

allenges associated with each phase, which can be grouped into technical and organizational challenges (e.g., Chiucchi 2013; Ezzamel and Burns 2005; Vaivio 2004).

In the development phase, technical challenges include defining and prioritizing the objectives of SMM activities to which the KPIs should be linked, selecting appropriate metrics, and managing the vast amount of structured and unstructured data generated by SM, which ultimately informs the metrics. Additionally, there is a tendency to rely on simplistic approaches, often using surface-level, pre-existing and quantitative platform metrics rather than developing bespoke indicators tailored to specific organizational needs. This leads those involved in measuring SMM performance in experiencing metric overload and the difficulty to identify only the most relevant indicators for explaining the performance when dealing with the activity of building information systems for reporting.

These technical difficulties are compounded by significant organizational challenges, such as the involvement of multiple stakeholders in the measurement process, each with varying and frequently conflicting objectives as regards what to measure and how to measure it. Furthermore, those involved in the measurement process struggle to integrate SM data with more traditional data (e.g. CRM data) and customize visual dashboards and reports to be used to communicate the performance of SMM across the organization. This organizational tension results in the underutilization of SM reports, as individuals who are more doubtful about the value of SM data frequently overlook KPIs and reports prepared by digital professionals.

Interestingly, existing literature appears to omit the periodic revision of KPIs and the associated challenges. Although the revision of KPIs can be understood as an operational and technical exercise strongly tied to the specific business context in which it occurs, this step should not be overlooked since it represents a pivotal moment in which organizations wonder themselves whether existing KPIs are still representative of their performance or new ones are required.

The difficulties in developing reliable KPIs directly influence their practical use in decision-making processes since this information is proven to be seldomly used to make decisions. Substantial challenges hinder the full integration of SM KPIs into decision-making processes, including limited trust in SM-derived indicators due to concerns about data instability, representativeness, and access restrictions. Companies may disregard insights that diverge from established practices, instead favoring conventional metrics. Finally, a skills gap in translating SM insights into actionable strategies further restricts the effective use of these KPIs. Overall, the SLR and related framework shows that the challenges identified in the literature are predominantly of a technical nature, specifically concerning the measurement process and the methods for obtaining accurate data. Technical challenges seems to hinder data collection and processing as well as the construction of adequate KPIs. Conversely, although the organizational aspects are addressed to a much lesser extent, existing evidence suggests that they also prevent the development and use of KPIs across the organization.

The literature, however, also hints at possible solutions to these challenges, offering somewhat insights into how organizations might overcome the difficulties of SMM performance measurement to enhance the efficacy of this process. Interestingly, a key solution is to hire and develop new competencies that span established organizational functions, as SM performance measurement requires collaboration

among marketing, management accounting, and IT. Organizations are also encouraged to adopt hybridized roles and developing cross-functional teamworks, particularly between marketing and management accounting departments. The literature suggests that these teams should also incorporate external consultants or agencies, which can function as intermediaries between business functions involved in measurement activities to align diverse requirements and translate specialized knowledge into practical metrics.

However, existing studies tend to insist primarily on collaboration during the building of information systems for reporting performance measurement results and setting performance level targets, particularly in the customization of visual dashboards and reports. In contrast, the proposed framework indicates that this cooperation should extend throughout the entire process of SM performance measurement—from identifying relevant KPIs and data collection to report generation and periodic reviews—and be especially important during the interpretation and use of these insights. Such interdisciplinary know-how and collaboration can help prevent misinterpretation and guarantee thorough SM data processing and usage.

6.2 Future research agenda

Bearing in mind the results of the thematic analysis, the paper identifies many unexplored research opportunities and outlines several avenues for future research. In this regard, we strongly encourage future research to be carried out together by management accounting and marketing researchers. Hence, the following future research agenda should be tackled by adopting an interdisciplinary approach (Table 2).

6.2.1 Development of social media marketing KPIs

The literature review illustrates that measuring the effectiveness of SMM and to what extent it contributes to the overall firm's business strategy is paramount for organizations, but still remains a challenge. More in detail, the development of SMM KPIs is often a random task (Sidorova et al. 2016) carried out by marketing and digital managers, with little involvement of management accountants. The fact that SMM performance measurement is an activity predominantly performed within marketing departments does not represent a new finding per se given that management accounting literature offers wide evidence that operational managers undertake traditional management accounting activities which leads to the enlargement of their skills towards the management accounting realm (Burns and Vaivio 2001; Caglio 2003; Ezzamel and Burns 2005; Lambert and Sponem 2012). Although these mentioned contributions suggest that non-accountants' interventions on management accountants' domain of expertise can be a reason for professional competition and tensions within organizations (Burns and Vaivio 2001; Ezzamel and Burns 2005), the present study highlights that in the case of SM, management accountants themselves are hesitant to be involved in the development of performance measures (Arnaboldi et al. 2017a, b; Sidorova et al. 2016). Thus, future studies might investigate the reasons behind this hesitancy given that management accountants can play an important role in enabling the development of SM KPIs.

In this regard, the development of SMM KPIs would benefit from the interplay between SM marketers and management accountants (Arnaboldi et al. 2017a) given that companies face significant challenges in identifying KPIs due to managers' inability to define and prioritize SM objectives and identify proper KPIs (Hoffman and Fodor 2010; McCann and Barlow 2015; Michaelidou et al. 2011; Michopoulou and Moisa 2019; Silva et al. 2020). On the one hand, marketing and digital managers possess skills in SM use and knowledge about customers and markets; on the other hand, management accountants have technical competencies in measurement, a deep knowledge of the organizational processes as well as the business in which the company operates. Therefore, it would be valuable to investigate organizational levers that foster mutual interactions between managers and management accountants that today is still very limited. Related to this point, in those contexts in which there is already cooperation between these different functions, research might further explore the phenomenon of hybridization of professional positions and competencies of managers and management accountants in the use of SM platforms.

Findings also underline that organizations still demonstrate several difficulties in the identification of adequate metrics to measure SMM performance. Although there is a plethora of indicators to be adopted, organizations strongly rely on quantitative metrics provided by SM platforms and Google Analytics, devoting scant attention to the development and use of different metrics, such as qualitative indicators. Notably, some studies point out the need of SM metrics to be accompanied by qualitative measures for a consistent continuing interpretation of the performance by managers (Peters et al. 2013). This finding is in line with prior literature which shows that the development of non-financial measures to be added to the traditional financial measurement can be pivotal to cast light into marketing-specific activities since they "open new visibility and problematize deeply rooted local practices", thus playing an "active role in processes of learning" (Vaivio 2004, p. 40). However, the non-financial measurement is often perceived as "provocative" and "intrusive" by marketing managers since it requires a stronger involvement of management accountants into operational activities (Vaivio 1999, 2004). Therefore, future research might investigate what barriers prevent the identification of qualitative measures and, more broadly, of metrics different from that provided by SM platforms.

From a technical perspective, studies deeply show the application of several techniques, such as generative artificial intelligence techniques, text mining, sentiment analysis, social network analysis and trend analysis. Focusing on SM datasets, these papers are quantitative in nature. This leads to a limited attention to the organizational aspects linked to the process of gathering and analyzing SM data. In this regard, in addition to further investigating the technical barriers to the construction of SMM KPIs, a fruitful research avenue would be to shed light on which actors are involved in this process, e.g. digital and marketing managers, consultants, data scientists, IT managers, management accountants, as well as on what competencies are needed, and which organizational and professional challenges can arise. Furthermore, the review points out the possibility of enlisting the support of external consultants for data analysis and interpretation activities (Arnaboldi et al. 2017a). Considering the important role that consulting firms can play in this context, their involvement represents a topic which deserves future attention.

Overall, we encourage empirical research based on qualitative methods, such as case studies and cross sectional field studies, which can be instrumental for identifying levers and barriers that organizations face when measuring SM performance, both from an organizational and a technical perspective. As regards the case study methodology, we observed a general lack of longitudinal case studies. Instead, research would benefit from the adoption of longitudinal case studies as they allow to obtain an in-depth exploration of the phenomenon over time.

6.2.2 Use of social media marketing KPIs

Findings reveal that SMM indicators are seldomly integrated either with existing systems used within the marketing department or with corporate integrated performance measurement systems (Agostino and Sidorova 2017; Arnaboldi et al. 2017a, b; Saxena et al. 2022). Therefore, it would be important to investigate the reasons behind the “isolation” of SMM indicators. In this concern, this recalls the way of acting of Vernacular Accounting Systems (VASs) (Carlsson-Wall et al. 2019; Goretzki et al. 2018b; Kilfoyle et al. 2013), which are self-developed accounting and control systems used by local actors within each department to self-monitor their performances. On the one side, the development of VASs permits to obtain deep information on specific activities since they contain the expertise and the knowledge of those local actors who work on these activities. On the other side, such important knowledge included into VASs often only remains at a functional level, without being incorporated within formal global control systems. This causes functional departments to construct their own information, thus avoiding management accountants’ “surveillance” and “escaping” from corporate controls (e.g. Lambert and Sponem 2012; Mack and Goretzki 2017; Pierce and O’Dea 2003). Therefore, future research might explore in depth whether and how SM information serve the role of VASs and how the knowledge VASs contain is eventually included into global accounting information systems.

An important challenge posed by SM is the use of SMM related information in decision-making processes. The review highlights that organizations mainly use this type of data for operational decision-making processes whereas using it for strategic decision-making remains an aspiration. In this regard, future research might investigate what factors prevent the use of SMM KPIs in strategic decision-making processes as well as if and how their use can be fostered. Along these lines, it would be valuable also shedding light on the role played by SM indicators in the process of learning and knowledge creation (Chiucchi 2013; Chiucchi and Montemari 2016; Vaivio 2004).

Besides, although the review highlights that there is a greater use of this information for forecasts and predictive analyses (Goebel et al. 2023; Duan et al. 2023; Fehrenbacher et al. 2023; Pamuksuz et al. 2021), empirical evidence shows that managers do not trust so much information derived from SM data and prefer not to

Table 2 Future research directions on SMM performance measurement

Development of social media KPIs	<ul style="list-style-type: none"> • Factors that prevent the identification of metrics different from that provided by SM platforms; • Levers and barriers to the use of qualitative indicators to measure SMM performance; • The hybridization of professional positions in the development of SMM KPIs; • The reasons behind management accountants' hesitancy to be involved in the development of SMM KPIs; • The organizational levers that foster mutual interactions between managers and management accountants in the development of SMM KPIs; • The role of external consultants and agencies in the development of SMM KPIs.
Use of social media KPIs	<ul style="list-style-type: none"> • Reasons for the 'isolation' of SMM indicators; • Whether and how SMM information serve the role of Vernacular Accounting Systems; • Generation of trust in SM information within organizations; • Competencies and skills for the interpretation of SMM information and how to solve misinterpretation issues; • Factors that prevent the use of SMM KPIs in strategic decision-making processes; • Role played by SMM indicators in the process of learning and knowledge creation.

include it in their decision-making (Fehrenbacher et al. 2023). Therefore, an interesting line of research would investigate what SM data is relevant for decision-making and how to generate trust in the related information.

In this regard, the synergy between SM marketers and management accountants can be fruitful also in supporting managerial decision making, since within organizations management accountants are those who possess the proper skills for “demarcating what questions to ask” (Bhimani and Willcocks 2014, p. 479) and to contextualize the data deriving from SM. According to Moll and Yigitbasioglu (2019), management accountants could tell the story “behind Big Data to reduce the likelihood of misinterpretation” (p. 6) and add value to decision-making processes. SM data per se does not provide answers, but needs to be “tortured enough” (Al-Htaybat and von Alberti-Alhtaybat 2017, p. 856), i.e. interpreted and contextualized, to enable informed decision-making processes that guide actions. Therefore, the contribution that management accountants can provide would undoubtedly foster a “refined” use of SM information (Sidorova et al. 2016, p. 154), employing it as part of an integrated process of control (Sidorova et al. 2016).

Finally, we suggest that involving management accountants in data collection activities to a larger extent can offer a broad overview about the issue at stake and would allow to make comparisons among firms of different sizes and belonging to different sectors.

6.3 Limitations

The study is not without limitations, primarily associated with the SLR process. Firstly, we acknowledge the limitation of relying on a single database selection. While Scopus encompasses a substantial array of peer-reviewed international journals, the exclusion of publications not included within this database may inadvertently lead to omissions of some contributions. Secondly, despite the careful crafting of search strings, informed by pertinent literature and including alternative keywords to encompass a wide spectrum of relevant articles, studies utilizing different, yet related, keywords to explore the same subject matter were inevitably excluded. Additionally, we excluded publications written in languages other than English which might have provided additional insights. Yet, nowadays, English is widely acknowledged as the “academic lingua franca” (Kraus et al. 2022b, p. 2585).

Finally, limitations of the study may arise from the thematic analysis and the resulting framework. Specifically, we did not categorize the papers exclusively within the distinct research areas that emerged, but the thematic analysis was conducted drawing on concepts developed in the management accounting literature on PMSs. While this may be considered a limitation, this approach enabled us to be exhaustive when interpreting studies’ findings and to provide an integrative view of the challenges of SMM performance measurement and potential solutions.

Despite these limitations, we believe that the paper presents opportunities for interesting future research, and the proposed framework can serve as a valuable tool for both academia and practice.

7 Appendix

Table 3 Descriptive analysis

N.	Authors	Title	Year	Source title	AJG ranking	AJG field	Author type	Theory	Methodology (conceptual, quali/ quanti)	Research method (survey, case study,...)	Data collection	Key informants in data collection	Industry	Social media platform	Country	
1	Agnihotri R.; Afshar Bakeshloo K.; Mami S.	Social media analytics for business-to-business marketing	2023	Industrial Marketing Management	3	MKT	Academics	Organizational learning theory	Conceptual	-	-	-	-	-	-	
2	Agostino D.; Sidorova Y.	How social media reshapes action on distant customers: some empirical evidence	2017	Accounting, Auditing and Accountability Journal	3	ACCOUNT	Academics	Concept of centre of calculation and "action at a distance" (Latour, 1987)	Qualitative	Single case study	Semi-structured interviews, participant observation, internal documents, corporate website, social media	People in charge of managing and using social media data and people in accounting when they played a significant role in the process of using social media	Telecommunication	Various (e.g. Facebook, Twitter, Instagram, LinkedIn, etc.)	Italy	
3	Agostino D.; Sidorova Y.	A performance measurement system to quantify the contribution of social media: new requirements for metrics and methods	2016	Measuring Business Excellence	1	ETHICS-CSR-MAN	Academics	-	Conceptual	-	-	-	-	-	-	-

Table 3 (continued)

N.	Authors	Title	Year	Source title	AJG ranking	AJG field	Author type	Theory	Methodology (conceptual, quali/quant)	Research method (survey, case study,...)	Data collection	Key informants in data collection	Industry	Social media platform	Country
4	Ángeles Oviedo-García M.; Muñoz-Expósito M.; Castellanos-Verdugo M.; Sancho-Mejías M.	Metric proposal for customer engagement in Facebook	2014	Journal of Research in Interactive Marketing	1	MKT	Academics	-	Conceptual	-	-	-	-	Facebook	-
5	Arnaboldi M.; Azzone G.; Sidorova Y.	Governing social media: the emergence of hybridised boundary objects	2017	Accounting, Auditing and Accountability Journal	3	ACCOUNT	Academics	Notion of boundary objects (see Star, 1989, 2010; Star and Griesemer, AQ1989; Bowker and Star, AQ1999)	Qualitative	Multiple case study	Semi-structured interviews, company reports and communications, public policies and codes of conduct, social media	Social media managers, department managers, analysts and financial controllers and senior executives	Art & Utility	Various (e.g. Facebook, Twitter, Instagram, LinkedIn, etc.)	Italy
6	Arnaboldi M.; Busco C.; Cuganesan S.	Accounting, ability, social media and big data: revolution or hype?	2017	Accounting, Auditing and Accountability Journal	3	ACCOUNT	Academics	-	Conceptual	-	-	-	-	-	-
7	Azer J.; Blasco-Arcas L.; Alexander M.	Visual Modality of Engagement: Conceptualization, Typology of Forms, and Outcomes	2024	Journal of Service Research	4	MKT	Academics	-	Mixed	Netnography and experiments	Social media data	-	-	Facebook, Instagram	-

Table 3 (continued)

N.	Authors	Title	Year	Source title	AJG ranking	AJG field	Author type	Theory	Methodology (conceptual, quali/quant)	Research method (survey, case study,...)	Data collection	Key informants in data collection	Industry	Social media platform	Country
8	Cawsey T.; Rowley J.	Social media brand building strategies in B2B companies	2016	Marketing Intelligence and Planning	1	MKT	Academics	-	Qualitative	Semi-structured interviews	-	Marketing manager, social media manager, digital marketing manager, consultants	Various	-	UK, Ireland, France
9	da Silva Wegner R.; da Silva D.J.C.; da Veiga C.P.; de Fátima Barros Estivalete V.; Rossato V.P.; Malheiros M.B.	Performance analysis of social media platforms: evidence of digital marketing	2023	Journal of Marketing Analytics	1	MKT	Academics and practitioner	-	Quantitative	Survey	-	Digital marketing professionals	-	Various (e.g. Facebook, book, Twitter, Instagram, LinkedIn, etc.)	-
10	Dolega L.; Rowe F.; Branagan E.	Going digital? The impact of social media marketing on retail website traffic, orders and sales	2021	Journal of Retailing and Consumer Services	2	MKT	Academics	-	Quantitative	Single case study	Social media data	-	Retail	Facebook, Instagram	UK

Table 3 (continued)

N.	Authors	Title	Year	Source title	AJG ranking	AJG field	Author type	Theory	Methodology (conceptual, qualitative/quantitative)	Research method (survey, case study,...)	Data collection	Key informants in data collection	Industry	Social media platform	Country
11	Duan H.K.; Visarhe-lyi M.A.; Codesso M.; Alzamil Z.	Enhancing the government accounting information systems using social media information: An application of text mining and machine learning	2023	International Journal of Accounting Information Systems	2	ACCOUNT	Academics	-	Quantitative	Content analysis/sentiment analysis	Social media data	-	Public administration (Municipalities)	Twitter, Facebook	USA
12	Fehrenbacher D.D.; Ghio A.; Weisner M.	Advice Utilization From Predictive Analytics Tools: The Trend is Your Friend	2023	European Accounting Review	3	ACCOUNT	Academics	Expectancy violations theory	Quantitative	Experiment	-	Managers	-	-	-
13	Gelper S.; van der Lans R.; van Bruggen G.	Competition for attention in online social networks: Implications for seeding strategies	2021	Management Science	4*	OR&MANSCI	Academics	Exchange-network theory	Quantitative	Network game and empirical validation	-	-	Entertainment	-	-
14	Godinho P.; Moutinho L.; Pagani M.	A memetic algorithm for maximizing earned attention in social media	2017	Journal of Modelling in Management	1	OR&MANSCI	-	-	Quantitative	-	Simulated data	-	-	-	-

Table 3 (continued)

N.	Authors	Title	Year	Source title	AJG ranking	AJG field	Author type	Theory	Methodology (conceptual, qualitative/quantitative)	Research method (survey, case study,...)	Data collection	Key informants in data collection	Industry	Social media platform	Country
15	Goebel R.; Schmalz A.; Brackett B.A.; Wood S.A.; Noguchi K.	Modeling and forecasting percent changes in national park visitation using social media	2023	Journal of Forecasting	2	OR&MANSCI	Academics	-	Quantitative	-	Social media data	-	Entertainment	Flickr	USA
16	Gross J.; Desveaud K.	Navigating computational linguistic practices: The barriers of natural language processing in social media marketing and a path to future research	2024	Journal of Marketing Analytics	1	MKT	-	-	Qualitative	Semi-structured interviews	-	Industry experts involved in NLP, analytics, marketing, and social media marketing	-	-	-
17	Guba S.; Harrigan P.; Soutar G.	Linking social media to customer relationship management (CRM): a qualitative study on SMEs	2018	Journal of Small Business and Entrepreneurship	1	ENT-SBM	-	Dynamic capabilities	Qualitative	Semi-structured interviews	-	SMEs owners	Various	-	Australia

Table 3 (continued)

N.	Authors	Title	Year	Source title	AJG ranking	AJG field	Author type	Theory	Methodology (conceptual, quali/quant)	Research method (survey, case study,...)	Data collection	Key informants in data collection	Industry	Social media platform	Country
18	Hallock W.; Roggeveen A.L.; Crittenden V.	Firm-level perspectives on social media engagement: an exploratory study	2019	Qualitative Market Research	2	MKT	Academics	-	Qualitative	Semi-structured interviews	-	Marketing managers, digital marketing, human resource analytics, data collection and management, corporate strategy, digital marketing metrics	Various	-	USA
19	Hama R.; Rohm A.; Crittenden V.L.	We're all connected: The power of the social media ecosystem	2011	Business Horizons	2	ETHICS-CSR-MAN	Academics	-	Conceptual	Case history	-	-	Music recording industry	-	USA
20	He W.; Wang F.-K.; Akula V.	Managing extracted knowledge from big social media data for business decision making	2017	Journal of Knowledge Management	2	ORG STUD	Academics and practitioners	-	Quantitative	Single case study	Social media data	-	Retail	Twitter	Global

Table 3 (continued)

N.	Authors	Title	Year	Source title	AJG ranking	AJG field	Author type	Theory	Methodology (conceptual, quali/quant)	Research method (survey, case study,...)	Data collection	Key informants in data collection	Industry	Social media platform	Country
21	He W.; Zha S.; Li L.	Social media competitive analysis and text mining: A case study in the pizza industry	2013	International Journal of Information Management in the pizza industry	2	INFO MAN	Academics	-	Quantitative	Single case study	Social media data	-	Retail (pizza chains)	Facebook, Twitter	USA
22	Hoffman D.L.; Fodor M.	Can you measure the ROI of your social media marketing?	2010	MIT Sloan Management Review	3	ETHICS-CSR-MAN	Academics and practitioners	-	Conceptual	-	-	-	-	-	-
23	Holsapple C.W.; Hsiaob S-H.; Pakathe R.	Business social media analytics: Characterization and conceptual framework	2018	Decision Support Systems	3	INFO MAN	Academics	-	Conceptual	-	-	-	-	-	-
24	Huang L.	Social Media as a New Play in a Marketing Channel Strategy: Evidence from Taiwan Travel Agencies' Blogs	2012	Asia Pacific Journal of Tourism Research	1	SECTOR	Academics	-	Mixed	Delphi research and survey	-	Experts	Travel	Blog	Taiwan

Table 3 (continued)

N.	Authors	Title	Year	Source title	AJG ranking	AJG field	Author type	Theory	Methodology (conceptual, quali/quant)	Research method (survey, case study,...)	Data collection	Key informants in data collection	Industry	Social media platform	Country
25	Jami Pour M.; Hosseinzadeh M.; Amoozad Mahdiraji H.	Exploring and evaluating success factors of social media marketing strategy: a multi-dimensional-multi-criteria framework	2021	Foresight	1	STRAT	Academics	-	Qualitative	Focus group	-	Experts	-	-	-
26	Järvinen J.; Karjaluoto H.	The use of Web analytics for digital marketing performance measurement	2015	Industrial Marketing Management	3	MKT	Academics	-	Qualitative	Multiple case study	Semi-structured interviews and workshops	Digital marketers	Various (e.g. Facebook, Twitter, LinkedIn, etc.)	Various	Finland
27	Juhaidi A.	Social media marketing of Islamic higher education institution in Indonesia: a marketing mix perspective	2024	Cogent Business and Management	1	ETHICS-CSR-MAN	Academics	-	Qualitative	Content analysis	Social media data	-	Education	Facebook, Instagram	Indonesia
28	Keegan B.J.; Rowley J.	Evaluation and decision making in social media marketing	2017	Management Decision	2	ETHICS-CSR-MAN	Academics	-	Qualitative	Semi-structured interviews	-	Specialists in SMM agencies	Consultancy services	-	UK

Table 3 (continued)

N.	Authors	Title	Year	Source title	AJG ranking	AJG field	Author type	Theory	Methodology (conceptual, quali/quant)	Research method (survey, case study,...)	Data collection	Key informants in data collection	Industry	Social media platform	Country
29	Komodromos M.; Masouras A.; Nicolli N.	A qualitative study and a measurement and evaluation of public relations social media campaigns in Cyprus	2021	Journal for Global Business Advancement	1	ETHICS-CSR-MAN	Academics	-	Qualitative	Semi-structured interviews	-	Public relation practitioners	-	-	Cyprus
30	Kumar V.; Bhaskaran V.; Mirehmandani R.; Shah M.	Creating a measurable social media marketing strategy: Increasing the value and ROI of intangibles and tangibles for Hockey Pokey	2013	Marketing Science	4*	MKT	Academics and practitioners	-	Quantitative	Single case study	Social media data	-	Retail (ice cream)	Facebook, Twitter	India
31	Kumar V.; Choi J.W.B.; Greene M.	Synergistic effects of social media and traditional marketing on brand sales: capturing the time-varying effects	2017	Journal of the Academy of Marketing Science	4*	MKT	Academics and practitioners	-	Quantitative	Single case study	Social media data	-	Retail	Facebook	USA

Table 3 (continued)

N.	Authors	Title	Year	Source title	AJG ranking	AJG field	Author type	Theory	Methodology (conceptual, quali/quant)	Research method (survey, case study,...)	Data collection	Key informants in data collection	Industry	Social media platform	Country
32	Kumar V.; Nanda P.	Approaching Porter's five forces through social media analytics	2022	International Journal of Services Operations and Informatics	1	OPS&TECH	Academics	-	Conceptual	-	-	-	-	-	-
33	Lamrhar S.; Ghazi H.E.; Oubrich M.; Faker A.E.	A social CRM analytic framework for improving customer retention, acquisition, and conversion	2022	Technological Forecasting and Social Change	3	INNOV	Academics and practitioners	-	Quantitative	Experiment	Social media data	-	-	-	-
34	Li J.; Kim W.G.; Choi H.M.	Effectiveness of social media marketing on enhancing performance: Evidence from a casual-dining restaurant setting	2021	Tourism Economics	2	SECTOR	Academics	-	Quantitative	Single case study	-	-	Retail (dining restaurant)	Various (e.g. Facebook, Twitter, Instagram, LinkedIn, etc.)	USA

Table 3 (continued)

N.	Authors	Title	Year	Source title	AJG ranking	AJG field	Author type	Theory	Methodology (conceptual, quali/quant)	Research method (survey, case study,...)	Data collection	Key informants in data collection	Industry	Social media platform	Country
35	Malthouse E.C.; Haenlein M.; Skiera B.; Wege E.; Zhang M.	Managing customer relationships in the social media era: Introducing the social CRM house	2013	Journal of Interactive Marketing	3	MKT	Academics and practitioners	-	Conceptual	-	-	-	-	-	-
36	McCann M.; Barlow A.	Use and measurement of social media for SMEs	2015	Journal of Small Business and Enterprise Development	2	ENT-SBM	Academics	-	Quantitative	Survey	-	-	Various	Various (e.g. Facebook, Twitter, Blogs, etc.)	Scotland
37	Meenaghan T.; McLoughlin D.; McCormack A.	New Challenges in Sponsorship Evaluation Actors, New Media, and the Context of Praxis	2013	Psychology and Marketing	3	MKT	Academics	-	Conceptual	Case history	-	-	-	-	USA and Europe
38	Mergel I.	Building Holistic Evidence for Social Media Impact	2017	Public Administration Review	4*	PUB SEC	Academics	-	Conceptual	-	-	-	Public administration	-	-
39	Miah S.J.; Vu H.Q.; Gammack J.; McGrath M.	A Big Data Analytics Method for Tourist Behaviour Analysis	2017	Information and Management	3	INFO MAN	Academics	-	Quantitative	Experiment	Social media data	-	Tourism	Flickr	Australia

Table 3 (continued)

N.	Authors	Title	Year	Source title	AJG ranking	AJG field	Author type	Theory	Methodology (conceptual, quali/quant)	Research method (survey, case study,...)	Data collection	Key informants in data collection	Industry	Social media platform	Country
40	Michaelidou N.; Siamagka N.T.; Christodoulides G.	Usage, barriers and measurement of social media marketing: An exploratory investigation of small and medium B2B brands	2011	Industrial Marketing Management	3	MKT	Academics	-	Quantitative	Survey	-	-	Various	-	UK
41	Michopoulou E.; Moisa D.G.	Hotel social media metrics: The ROI dilemma	2019	International Journal of Hospitality Management	3	SECTOR	Academics	-	Qualitative	Semi-structured interviews	-	Managers	Hospitality	-	UK
42	Morgan K.; DeMasters C.; Wiley K.	Nonprofits, Social Media, and Mission	2024	Journal of Nonprofit and Public Sector Marketing	1	MKT	Academics	-	Qualitative	Semi-structured interviews	-	Social media coordinators	Non-profit	TikTok	USA
43	Nicolau J.L.; Xiang Z.; Wang D.	Daily online review sentiment and hotel performance	2024	International Journal of Contemporary Hospitality Management	3	SECTOR	Academics	-	Quantitative	Sentiment analysis	Social media data	-	Hospitality	-	China

Table 3 (continued)

N.	Authors	Title	Year	Source title	AJG ranking	AJG field	Author type	Theory	Methodology (conceptual, quali/quant)	Research method (survey, case study,...)	Data collection	Key informants in data collection	Industry	Social media platform	Country
44	Nowak R.; Rudeloff C.; Sedlmayer-Gansinger B.; Oppermann M.	The status quo of social media management as a professional field: An empirical investigation of challenges, objectives and measurement strategies of social media managers	2024	Journal of Digital and Social Media Marketing	-	-	Academics and practitioners	-	Quantitative	Survey	-	Social media manager	-	-	-
45	Pamuksuz U.; Yun J.T.; Humphreys A.	A Brand-New Look at You: Predicting Brand Personality in Social Media Networks with Machine Learning	2021	Journal of Interactive Marketing	3	MKT	Academics	-	Quantitative	-	Social media data	-	-	-	-
46	Parsons A.L.; Lepkowska-White E.	Social Media Marketing Management: A Conceptual Framework	2018	Journal of Internet Commerce	1	INFO MAN	Academics	-	Conceptual	-	-	-	-	-	-

Table 3 (continued)

N.	Authors	Title	Year	Source title	AJG ranking	AJG field	Author type	Theory	Methodology (conceptual, quali/quant)	Research method (survey, case study,...)	Data collection	Key informants in data collection	Industry	Social media platform	Country
47	Peters K; Chen Y; Kaplan A. M.; Ognibeni B.; Pauwels K	Social Media Metrics—A Framework and Guidelines for Managing Social Media	2013	Journal of Interactive Marketing	3	MKT	Academics and practitioners	Learning theory; Interactionist social theory; Network theory; Attribution theory; M-O-A paradigm	Conceptual	-	-	-	-	-	-
48	Saxena D.; Brady M.; Lamest M.; Fellenz M.	Bridging the marketing-finance divide: use of customer voice in managerial decision-making	2022	Qualitative Market Research	2	MKT	Academics	-	Qualitative	Multiple case study	Semi-structured interviews and workspace shadowing	Marketing general managers and finance managers	Hospitality	Various (e.g. Facebook, Twitter, etc.)	Ireland
49	Shawky S.; Kubaeki K.; Dietrich T.; Weaven S.	A dynamic framework for managing customer engagement on social media	2020	Journal of Business Research	3	ETHICS-CSR-MAN	Academics	-	Qualitative	Semi-structured interviews	-	Social media marketing practitioners and users	-	Various (e.g. Facebook, Twitter, Instagram, LinkedIn, etc.)	-

Table 3 (continued)

N.	Authors	Title	Year	Source title	AJG ranking	AJG field	Author type	Theory	Methodology (conceptual, qualitative)	Research method (survey, case study,...)	Data collection	Key informants in data collection	Industry	Social media platform	Country
50	Sidorova Y., Amaboldi M, Radaelli J.	Social media and performance measurement systems: towards a new model	2016	International Journal of Productivity and Performance Management	1	OPS&TECH	Academics	PMS component and use framework (Franco-Santos et al., AQ2012)	Qualitative	Multiple case study	Semi-structured interviews, document, web, internal reports	People from marketing, information technology and management	Various	Various (e.g. Facebook, Twitter, Instagram, LinkedIn, etc.)	Italy and Russia
51	Silva S.C.; Duarte P.A.O.; Almeida S.R.	How companies evaluate the ROI of social media marketing programmes: insights from B2B and B2 C	2020	Journal of Business and Industrial Marketing	2	MKT	Academics	-	Mixed	Multiple case study and survey	Semi-structured interviews	Marketing managers	Various	-	-
52	Swaminathan V.; Schwartz H.A.; Meneses R.; Hill S.	The Language of Brands in Social Media: Using Topic Modeling on Social Media Conversations to Drive Brand Strategy	2022	Journal of Interactive Marketing	3	MKT	Academics	-	Quantitative	-	Social media data	-	-	Twitter	-

Table 3 (continued)

N.	Authors	Title	Year	Source title	AJG ranking	AJG field	Author type	Theory	Methodology (conceptual, quali/quant)	Research method (survey, case study,...)	Data collection	Key informants in data collection	Industry	Social media platform	Country
53	Töllinen A.; Karjaluoto H.	Marketing communication metrics for social media	2011	International Journal of Technology Marketing	1	MKT	Academics	-	Conceptual	-	-	-	-	-	-
54	Troisi O.; D'Arco M.; Loia F.; Maione G.	Big data management: The case of Mulino Bianco's engagement platform for value co-creation	2018	International Journal of Engineering Business Management	1	OPS&TECH	Academics	-	Qualitative	Case history	-	-	Food	-	Italy
55	Vieira V.A.; Severo de Almeida M.I.; Gabler C.B.; Limongi R.; Costa M.; Pires da Costa M.	Optimising digital marketing and social media strategy: from push to pull to performance	2022	Journal of Marketing Management	2	MKT	Academics	-	Quantitative	-	Social media data and app data	-	Retail	Instagram	Brazil
56	Virtanen H.; Björk P.; Sjöström E.	Follow for follow: marketing of a start-up company on Instagram	2017	Journal of Small Business and Enterprise Development	2	ENT-SBM	Academics	-	Qualitative	Single case study (action research)	Social media data	-	-	Instagram	Switzerland

Table 3 (continued)

N.	Authors	Title	Year	Source title	AJG ranking	AJG field	Author type	Theory	Methodology (conceptual, quali/quant)	Research method (survey, case study,...)	Data collection	Key informants in data collection	Industry	Social media platform	Country
57	Xu Z.; Vail C.; Kohli A.S.; Tajdini S.	Understanding changes in a brand's core positioning and customer engagement: a sentiment analysis of a brand-owned Facebook site	2021	Journal of Marketing Analytics	1	MKT	Academics and practitioners	-	Quantitative	Sentiment analysis	Social media data	-	-	Facebook	USA
58	Yoon G.; Li C.; Liu J.; North M.; Ji Y.; Hong C.	Facebook likes and corporate revenue: testing the consistency between attitude and behavior	2024	International Journal of Advertising	2	MKT	Academics	-	Quantitative	-	Social media data	-	Various	Facebook	USA

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Declarations

Competing interests The author declares that she has no competing interests.

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