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Impact assessment of social media usage in B2B marketing: A review of the literature and a way forward

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ABSTRACT

Although various critical elements, such as media publicity, word of mouth, legislation, and environmental factors, are not under the control of a company, they play a significant role in influencing its brand image. Uncertainty over how different social networking sites can support brands is one of the crucial reasons for the delayed acceptance of social media (SM) in business-to-business (B2B) transactions. SM possesses immense potential in relation to gathering customer data and assisting B2B marketers. Therefore, this study reviewed SM usage in the B2B context, based on 294 selected articles. The methodology included bibliometric analysis to identify the impact of SM usage in the B2B domain and content analysis to perform a thematic assessment. Our analysis found that many B2B firms cannot leverage SM's potential to its fullest compared to business-to-customer (B2C) firms. However, SM can help B2B marketers build their brand presence and trust globally, ultimately helping them find potential customers and build relationships with global supply chain providers.

1. Introduction

Marketing is an ever-evolving field, with various efforts focusing on improving its efficiency and effectiveness in terms of interactions with direct and indirect customers, and the domain is critical for every sector (Pardo, Ivens, & Wilson, 2013). In recent years, digital platforms, mainly social media (SM), have provided businesses with an opportunity to cocreate value for themselves and their various stakeholders through customer engagement, idea sharing, networking, and other methods (Algharabat, Rana, Alalwan, Baabdullah, & Gupta, 2020; Kapoor et al., 2018; Tamilmani, Rana, Alryalat, Alkuwaiter, & Dwivedi, 2018). SM is an unconventional concept, and its extensive adoption is impacting all businesses, irrespective of their size, nature, and characteristics (Kärkkäinen, Jussila, & Väisänen, 2013). Even Business to Business (B2B) firms whose market segments are more stringent than the consumer market in terms of products, transactions, negotiation functionality, and organizational structure are moving towards adopting SM for their different business objectives. The increasing importance of SM to B2B organizations makes this domain more challenging and exciting for researchers and practitioners (Bernard, 2016; Liu, 2019; Manzanaro, Valor, & Paredes-Gázquez, 2018).

The volume of research on implementing SM in the B2B domain and its impact on organizational performance is continuously growing; however, decision-makers and practitioners are still not looking at this area prudently. Several recent studies have stated that B2B enterprises use SM in only a limited way, such as for sales and market research (Iankova, Davies, Archer-Brown, Marder, & Yau, 2019; Mehmet & Clarke, 2016; Sivarajah, Irani, Gupta, & Mahroof, 2020). For example, in the US and European technology industry, 55% of decision-makers engage in SM for non-business purposes, while only 29% use SM for business purposes (Ngai, Tao, & Moon, 2015; Smith & Anderson, 2018). This leads to a gap between the research and firms' struggle to design and implement SM strategies in their organizational functionalities. Therefore, it is crucial to develop improved SM marketing strategies that are relevant to the B2B context.

From looking at the exponential rate of interest and publications, we believe that it is necessary to take stock of the outcomes and findings from the literature and identify how far work in the domain of SM usage

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in the B2B context has progressed. Motivated by this objective, the current study offers an overview of SM research in the B2B context and provides answers to the following questions: 1) To what extent has research on SM usage in the B2B context matured? 2) What themes related to SM usage in B2B businesses have been explored in the literature? 3) What are the challenges and opportunities for researchers in investigating SM usage in B2B businesses? To analyze the research questions, we adopted a review approach based on bibliometric and content analysis. Firstly, we analyzed the research trends. Secondly, a text-mining approach was used to examine the content of the selected literature in the domain of SM usage in B2B organizations. Using this method, we have made the following contributions: 1) for a specific period of time, research themes have been extracted, representing the emerging trends in the selected research domain, and 2) we have summarized the strategies extracted from the literature into five different insights.

The remaining sections of the paper are organized as follows. While Section 2 identifies the need for research on SM usage in B2B businesses and presents a few core concepts related to such research, Section 3 presents the methodology used for this study. Section 4 presents the findings of this study, including the bibliometric results and content analysis. Further, Section 5 discusses the implications and a few crucial insights. Finally, Section 6 presents the conclusion of this study.

2. Literature review

2.1. Need for a review on SM usage in the B2B context

According to the literature, SM is intensively used in the software, electronics, and electricity industries for the purpose of knowledge management. There is a positive correlation between firms' SM adoption and use of innovative tools (Ammirato et al., 2019). Therefore, it is vital for B2B businesses to carefully consider all the differences when planning and performing their SM approaches. In the literature, a few researchers have compared SM usage in B2B and B2C contexts, finding that B2C businesses mainly focus on selling activities on SM platforms, but this is not the case with B2B businesses (Iankova et al., 2019; Swani, Brown, & Milne, 2014).

The literature also explains the use of SM in all stages of customer relationships. For example, comparing B2B companies with business-to-consumer (B2C) and business-to-business-to-consumer (B2B2C) companies, Iankova et al. (2019) investigated various aspects, including channel selection, usage intensity, the stage in the relationship lifecycle, and perceived importance to managers. They confirmed that differences in SM utilization are prevalent at various phases of the customer lifecycle.

Further, in the last two decades, mobile technology has revolutionized the marketing domain, especially as it provides access to information anywhere, anytime (Lee & Park, 2008; Shankar & Balasubramanian, 2009). Looking at this particular feature and broader research related to the utilization of mobile technology, Bolat, Kooli, and Wright (2016) highlighted that a limited number of studies have been undertaken in the context of B2B businesses' usage of mobile technology as business tools. They confirmed that businesses' acceptance of mobile technology is influenced by the accessibility, growth, popularity of SM and, emphasized its usage through the grounded theory approach. Further, Ammirato et al. (2019) identified that Web 2.0 and SM present many opportunities to enhance B2B innovation in small and medium enterprises (SMEs), as they face various challenges due to limited resources.

Bolat et al. (2016) literature review identified minimal research related to SM use in the B2B context. Pettersson, Aramo-Immonen, and Jussila (2014) explored SM utilization in this context and suggested implementing knowledge management (KM) research. Pascucci, Ancillai, and Cardinali (2018) investigated SM adoption in the B2B context to identify the antecedents and consequences of this phenomenon. To do

Table 1Definition of core concept of B2B and Social Media.

Concepts	Definition	Supporting References
Business to Business (B2B)	"Business-to-business (B2B), also called B2B, is a form of transaction	(Chen, 2020)
	between businesses, such as one involving a manufacturer and wholesaler, or a wholesaler and a retailer. Business-to-business refers to business	
	that is conducted between companies, rather than between a company and individual consumer."	
Social Media	"SM employ mobile and web-based technologies to create highly interactive platforms via which individuals and communities share, co-create, discuss, and modify user- generated content."	(Kietzmann, Hermkens, McCarthy, & Silvestre, 2011) (Kaplan & Haenlein, 2010)
	"group of Internet-based applications that build on the ideological and tech. foundations of Web 2.0, and that allow the creation and exchange of User Generated Content."	
Social Media marketing	"Social media marketing is an interdisciplinary and cross-functional concept that uses social media (often in combination with other commutations channels) to achieve organizational goals by creating value for stakeholders."	(Felix et al., 2017)
Word-of-mouth (WOM)	"[] any positive or negative statement made by potential, actual, or former customers about a product or company, which is made available to a multitude of people and	(Li, Xue, Yang, & Li, 2017)
Social networking	institutions via internet" "two or more connected business relationships, where an 'exchange' exists between business partners"	(Michaelidou et al., 2011)
Internet marketing	"The use of the Internet as a virtual storefront where products are sold directly to the customer." the use of internet technologies to achieve marketing objectives.	(Corley et al., 2013) (Shaltoni, 2017)
B2B marketing	"B2B (business-to-business) marketing is the set of steps that a company will follow when selling directly to other companies or organizations, not to the end consumer. These organizations can use these products to produce end products or for resale (sale to distributors)."	(Carrion, 2018)
Business to consumer (B2C)	"An exchange between producers and end consumers of goods, services and explicit knowledge about goods and services (or information about consumers) for available consumption in return for the actual or potential payment of monies." "a term describing the communication between businesses and consumers in the selling of goods and services".	(Jewels & Timbrell, 2001)
B2B advertisement	Business-to-business advertising is marketing efforts directed toward other businesses rather than to individual consumers. Business-to-business advertising, or B2B advertising, may involve the promotion of products such as copier machines, or services such as human resources consulting or logistics, that are primarily designed for businesses.	(Kenton, 2018)

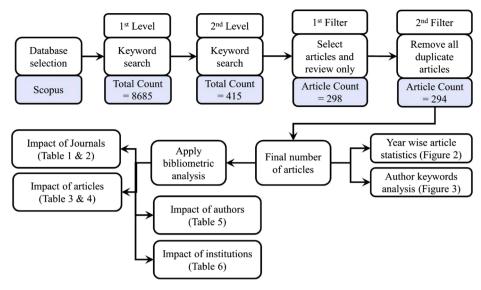


Fig. 1. Framework adopted for this study.

so, they selected 29 studies for their systematic literature review and identified personal, organizational, and external factors as antecedents. Further, Agnihotri, Kothandaraman, Kashyap, and Singh (2012) summarized the SM strategies used by B2B sales organizations by drawing from the literature related to sales service behavior, task–technology fit theory, and relationship marketing. Pandey, Nayal, and Rathore (2020) investigated the research on digital marketing utilization in the B2B context and identified that sales management and digital marketing communication has been explored more than other areas, such as decision support systems (DSSs). Therefore, it can be concluded that no study has fully explored SM utilization or adoption in the B2B context, nor presented a holistic picture of the progress of the research.

2.2. Theoretical background on B2B organizations and SM

Nowadays, researchers are more inclined to investigate customer buying decisions, customer support for brands, customer feedback, and relevant data for market research. In this process, user-generated content (UGC) or SM plays a significant role, as it provides the opportunity to monitor customers' views in real time (Liu, 2019). In addition, in recent years, SM adoption by organizations has increased significantly (Dwivedi, Ismagilova, Rana, & Raman, 2021). SM plays a crucial role in relationship building in the B2B context by attracting potential customers through building customer relationships (Pal, 2019). It has become essential for managers to understand SM technologies and tools, as the increased interaction offered by SM has evolved the relationship between buyer and seller (Lipiäinen, 2015).

SM helps solve the problem of resource limitations through B2B collaboration (Dwivedi, Ismagilova, Rana, & Weerakkody, 2019; Dwivedi, Rana, Jeyaraj, Clement, & Williams, 2019). However, SM usage is still limited in B2B SMEs. In this sector, to achieve innovation and business enhancement, organizations need to employ highly educated experts. Brink (2017) suggested that for B2B SMEs to use SM, managers need to use SM tools in their personal lives to comprehend the IT tools' technicalities. Furthermore, it is essential to tap into all the possible opportunities and benefits presented by SM to ensure effective marketing strategies (Alalwan et al., 2016, 2017; Shareef, Mukerji, Dwivedi, Rana, & Islam, 2019). Particular SM platforms offer the potential for lead generation, which is an important issue for B2B marketers. Brand image can be reinforced over time in various SM contexts, targeting B2B purchase decision-makers.

To explore this area, we first summarized the core concepts related to SM and B2B organizations. Table 1 displays the definitions of nine core

concepts: business to business (B2B), SM, SM marketing, word of mouth (WOM), social networking, internet marketing, B2B marketing, business to consumer (B2C), and B2B advertisement. These concepts help in elaborating the other concepts presented in this paper.

3. Research methodology

This study aimed to explore the maturity and themes of the research domain of implementing SM strategies in the B2B context. Following the methodology adopted by Akter and Wamba (2016), we adopted the framework to select the articles presented in Fig. 1. Initially, a database was selected to search for the keywords and related articles. The Scopus database was selected, as it is the largest abstract and citation database of peer-reviewed literature, scientific journals, books, and conference proceedings. Afterwards, "B2B" OR "business to business" in the abstract, title, and keywords were searched for. In the search process, a total of 8,685 documents were identified. In second level search, we looked for "social media" within 8685 documents.

In this process, a total of 415 documents were found, consisting of articles (72.4%), conference papers (11.4%), book chapters (5.4%), review papers (4.2%), conference reviews (3.3%), books, (1.9%) and others (1.4%, e.g., editorials). These documents were from different subject areas, with the majority from business and management (49.6%) and computer science (15.8%). To ensure the rigor of our study, we excluded all the documents except articles and reviews. Using this elimination process, we ended up with 298 documents and applied bibliometric analysis and content analysis to all of these documents. The database provided the attributes of these articles, such as article title, year of publication, journal title, keywords, citations, references, abstract, and ISSN number.

To conduct literature reviews, researchers have used various methodologies (Akter, Bhattacharyya, Wamba, & Aditya, 2016; Durach, Kembro, & Wieland, 2017; Tranfield, Denyer, & Smart, 2003), such as theory-based reviews (Tolentino, Sedoglavich, Lu, Garcia, & Restubog, 2014), framework-based thematic reviews (Lim, Yap, & Makkar, 2021), theme-based structured reviews (Rosado-Serrano, Paul, & Dikova, 2018), reviews for theory development (Pansari & Kumar, 2017), hybrid reviews (Dabić et al., 2020), meta-analytic reviews (Dwivedi, Ismagilova, et al., 2019; Dwivedi, Rana, et al., 2019; Dwivedi et al., 2020; Ismagilova, Rana, Slade, & Dwivedi, 2020; Mishra, Dwivedi, Rana, & Hassini, 2019; Rana, Dwivedi, & Williams, 2015; Tamilmani, Rana, & Dwivedi, 2020), reviews based on text-mining approaches (Kumar, Sharma, & Salo, 2019, Kumar et al., 2020), and reviews based on

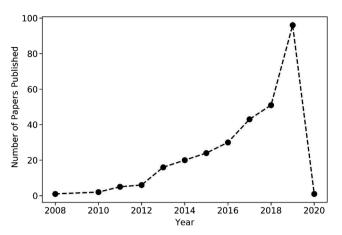


Fig. 2. Year-wise statistics of the number of papers published on searched Keywords.

techno-commercial aspects (Chatterjee, Kumar, & Chatterjee, 2018; Kumar, Das, & Chatterjee, 2016). Following Kumar et al. (2019), we selected bibliometric and content analysis methods, which fall under the category of text-mining approaches and provide the advantages of flexibility and the ability to present statistical and contextual data during the initial phase of research. This literature review approach is more content-oriented and specifies the thematical abstract of approaching critical conclusions in a particular research domain. In addition, content analysis and visualization provide a systematic, quantitative, and objective evaluation of the patterns of words, themes, and concepts present in a text (in this case, article abstracts).

Therefore, a content analysis method (text mining) was used on all 298 articles' abstracts. Before applying this method, different time-frames were selected during which the themes could be extracted to showcase the changes in research. In this context, different researchers have recommended different durations: Leone, Robinson, Bragge, and Somervuori (2012) suggested three years, while Kumar et al. (2019) suggested five years. In our case, the number of articles published had increased exponentially (Fig. 2), which created the sample size issues with five- and three-year timeframe. We thus used an initial five-year duration, and the remaining years were grouped into three sets of two-year durations and one set of one-year duration. The five different time periods were as follows: 2008–2012 (22), 2013–2014 (36), 2015–2016 (54), 2017–2018 (95), and 2019 (91).

4. Findings

Our initial objective was to explore the maturity and themes of the research domain of SM usage in the B2B context. Therefore, we first analyzed the total number of articles published per year. Statistical analysis of the number of articles published per year provides information about the maturity of the domain and its exploration by researchers (Rey-Martí, Ribeiro-Soriano, & Palacios-Marqués, 2016). The number of articles published per year is presented in Fig. 2. Research in this domain grew in popularity from the year 2008 and increased year by year exponentially. Fig. 2 shows that research into SM usage in B2B settings reached a peak in 2019. For the second objective of identifying research trends, we applied network analysis on keywords (the keywords mentioned by authors) because they represent the content of articles and help search engines in indexing the papers. Network analysis helps to "discover the hidden connection between keywords, interests, purchases" (Wang, Ting, & Wu, 2013). It is also valuable for finding keyword expansion ideas for consumer purchase behavior or other factors.

We used the VOSviewer software tool for the network analysis, a tool for constructing and visualizing a bibliometric network (University,

2020). Fig. 3 represents the network analysis of the keywords (a keyword co-occurrence network) for the five different timeframes. Fig. 3 (a) indicates that research on three different themes incorporated the resource-based view and transaction cost theory during their investigations. Next, Fig. 3(b) presents five different themes, with each color representing a theme. For example, green represents marketing strategies that incorporate a variety of nodes, like supply networks and channel management. This refers to the different strategies used by B2B marketers to advertise their products or build relationships. Similarly, Fig. 3(c) shows eight different themes, Fig. 3(d) shows 12 themes, and Fig. 3(e) shows 14 themes. Each of these themes allowed the articles presented in the timeframes to be split into separate categories. In addition, by comparing the subfigures, changes in the thematic categories and research evolution could be made.

5. Research profiling

Research profiling shows the impact of journals, authors and, institutions in a research domain. Starting with the exploration of journals, we looked at which journals had published the most papers on the searched keywords "B2B" or "business to business" and "social media." Table 2 presents the top 15 journals by searched keywords in ascending order. This will help researchers or practitioners choose the most suitable journal of their interest on SM usage in B2B settings.

From the results shown in Table 2, we identified that *Industrial Marketing Management* had published the most papers on the searched keywords, followed by the *Journal of Business and Industrial Marketing*. When considering the impact of journals, it is also important to know how journals perform in the domain of interest. We thus considered which journals had the highest number of average citations per article to identify the journal's performance. Table 3 presents the top 15 journals by the average number of citations per document. Here, the average number of citations per document was calculated by using the ratio of total citations to the total article count. In this category, the top three journals were the *Journal of Marketing Research*, the *European Management Journal*, and *Computers in Human Behavior*.

We also considered articles' impact in terms of the number of citations, and the top 15 articles based on the number of citations are presented in Table 4. According to the results shown in Table 4, the article published by Michaelidou, Siamagka, and Christodoulides (2011) with the title "Usage, barriers, and measurement of SM marketing: An exploratory investigation of small and medium B2B brands" in the journal *Industrial Marketing Management* had the highest number of citations.

Further, we reviewed the impact of authors and institutions. The top 15 authors (Table 5) and institutions (Table 6), based on the total number of documents published and the total number of citations, are shown below.

5.1. Content analysis and visualization

For the content analysis, we used the Leximancer software tool. Leximancer automatically analyzes text documents to identify the high-level concepts and key ideas, providing actionable insights with interactive visualizations and data exports (Leximancer, 2020). Leximancer uses a Bayesian learning algorithm and provides concepts or themes as the output. The text data (abstract) is processed to generate concept seeds using the words' proximity values. Next, a concept thesaurus is extracted from the source document, based on unsupervised or supervised learning. The extracted thesaurus helps in building a topical network or social network.

During the analysis, we utilized a fixed theme size of 40% (the theme size needs to be assigned for Leximancer to operate). Further, we used VOSviewer to extract the keyword co-occurrence network, as keywords are more focused on the article's context. The abstract line of an article typically has lots of stopwords and unwanted words that do not add

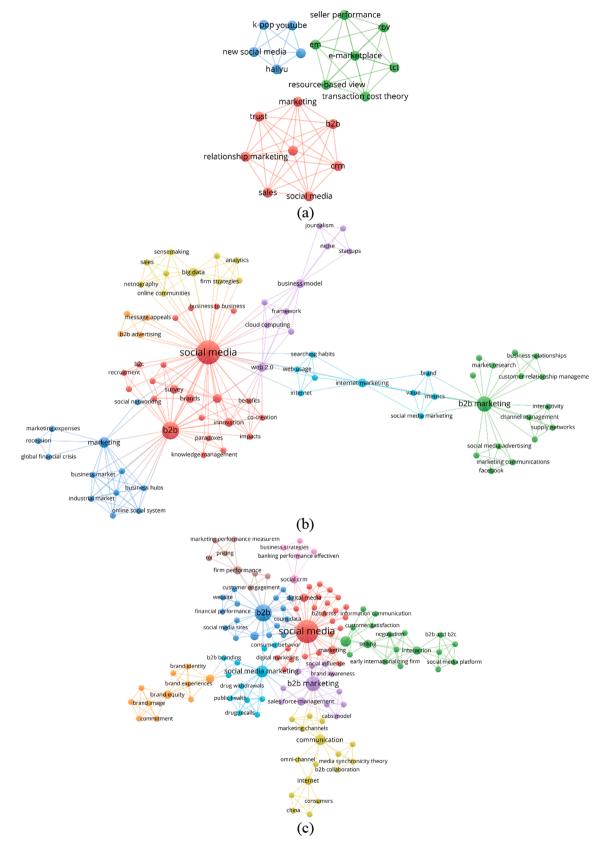


Fig. 3. Co-occurrence of keywords in the selected articles from the period (a) 2008–2012 (b) 2013–2014 (c) 2015–2016 (d) 2017–2018 (e) 2019.

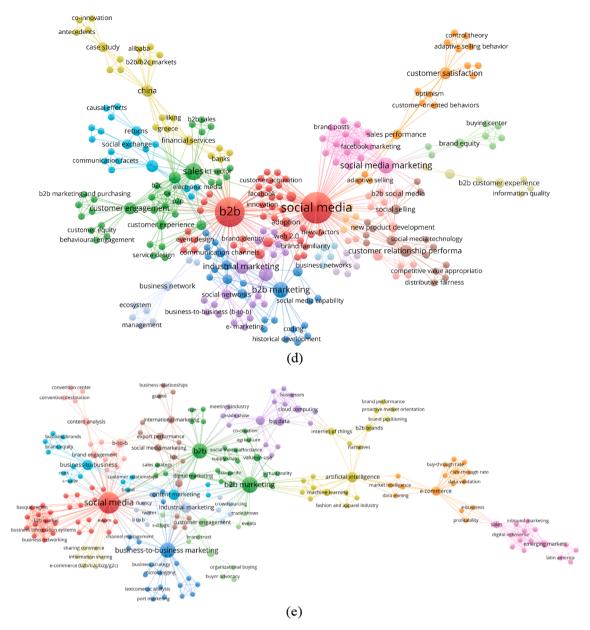


Fig. 3. (continued).

much value to the network. Through Leximancer, these unwanted stopwords were removed during the processing stage, allowing themes more related to the context to emerge.

In the following subsections, we present the contextual and theoretical aspects for each timeframe. We considered journals from all of the different categories to explain the contextual aspects but considered only journals ranked B and above (ABDC rankings) for the theoretical aspects.

5.1.1. Theme visualization for the years 2008-2012

Contextual aspects: The discussions in these years were primarily focused on themes that fell under the cluster names "social," "performance," "branding," "rights," "customers," "company," "clients," "revenue," and "Korean." These clusters were formulated because the topics of interest were fragmented across music companies, online performance, social networking site (SNS) use, UK SNSs, internet advertising, advertising effectiveness, online rights, and Korean B2C companies and were used by the authors in their articles extensively. SM usage in the B2B sector is majorly influenced by early-stage technology acceptance,

productivity, privacy, content ownership, and security (Kho, 2008). Initially, firms utilized SM networks to exchange information with their consumers and vendors to enhance corporate credibility. Dyck (2010) suggested that B2B Facebook account posts can be effective and beneficial if they use the corporate brand name and avoid statements that are explicitly commercial ("hard sell").

Further, social networks' availability and immediacy improve relationships that may otherwise be slower to connect, as new connections are easy to develop. So, social networks lessen the screening that often leads to transitional relationships (Steyn, Salehi-Sangari, Pitt, Parent, & Berthon, 2010). Web follows a pull marketing or inbound marketing strategy to capture customers' interest. Hamlin (2011) discussed digital content marketing in the B2B domain and offered a deep understanding of digital content marketing's role, as well as a solution to improve on conventional marketing strategies. B2B content marketing is considered a useful tool for brand trust. Content marketing creates valuable content that focuses on helping rather than selling, so it is imperative for organizations to align their marketing strategies. Salespersons have widely used technology, but its excessive use can harm the social skills of

Table 2
Impacts of journals.

Rank	Journal	Number of Documents	Rank	Journal	Citations
1	Industrial Marketing	73	1	Industrial Marketing	1365
2	Management Journal of Business and Industrial Marketing	37	2	Management Journal of Business and Industrial Marketing	229
3	Journal of Business-to- Business Marketing	8	3	Journal of Personal Selling and Sales Management	219
3	Journal of Business Research	8	4	Journal of Research in Interactive Marketing	163
4	Journal of Research in Interactive Marketing	6	5	Journal of Marketing Research	151
5	Marketing Intelligence and Planning	5	6	European Management Journal	148
5	Journal of Personal Selling and Sales Management	5	7	European Business Review	81
6	Journal of the Academy of Marketing Science	4	8	Computers in Human Behavior	77
7	European Journal of Marketing	3	9	Journal of Business Research	49
7	Journal of Brand Strategy	3	10	Korea Observer	46
7	Information Technology and People	3	11	Journal of Service Management	38
7	Journal of Marketing Communications	3	12	Marketing Intelligence and Planning	36
7	Business Horizons	3	13	Journal of International Business Studies	31
8	Journal of International	2	13	Public Relations	31
8	Entrepreneurship Journal of Systems and Information Technology	2	14	Review Journal of Internet Commerce	30

salespersons. In their research, Agnihotri et al. (2012) emphasized the impact of SM utilization on an organization's sales performance.

Theoretical aspects: Much of the research in this timeframe was carried out from a technology adoption point of view. For example, the technology acceptance model (TAM) was used to describe the variables that influence B2B organizations to use SM, including ease of use and perception of usefulness (Steyn et al., 2010). Social networking theory (SNT) was used to describe how small B2B firms compete with larger firms by building networks through social networking practices, such as using SM as a marketing tool to bridge the perceived barrier, usage, and effectiveness (Leek & Christodoulides, 2011; Michaelidou et al., 2011).

5.1.2. Theme visualization for the years 2013-2014

Contextual aspects: During the years 2013–2014, authors extensively researched concepts related to SM use, including sales management, implications for building customer relationships, digital content, WOM, community insights, managerial relationships, online communications, and sales satisfaction (Fig. 5). Based on these concepts, the

 Table 3

 Influence of journals based on average citation per document.

Rank	Journal	Number of Documents	Citations	Citations per Document
1	Journal of Marketing Research	1	151	151
2	European Management Journal	1	148	148
3	Computers in Human Behavior	1	77	77
4	Korea Observer	1	46	46
5	Journal of Personal Selling and Sales Management	5	219	43.8
6	European Business Review	2	81	40.5
7	Public Relations Review	1	31	31
7	Journal of International Business Studies	1	31	31
8	Journal of Internet Commerce	1	30	30
9	Journal of Research in Interactive Marketing	6	163	27.2
10	Journal of Marketing	1	25	25
11	Journal of Theoretical and Applied Electronic Commerce Research	1	24	24
12	Business Ethics	1	22	22
13	Journal of Service Management	2	38	19
13	Journal of Media Business Studies	1	19	19

 Table 4

 Influence of articles based on total number of citations.

Rank	Source	Citations	Journal
1	Michaelidou, Siamagka, &	331	Industrial Marketing
	Christodoulides (2011)		Management
2	Kumar & Pansari (2016)	151	Journal of Marketing
			Research
3	Leeflang, Verhoef, Dahlström,	148	European Management
	& Freundt (2014)		Journal
4	Agnihotri, Dingus, Hu, & Krush	113	Industrial Marketing
	(2016)		Management
5	Agnihotri, Kothandaraman,	93	Journal of Personal Sellin
	Kashyap, & Singh (2012)		and Sales Management
6	Rodriguez, Peterson, &	92	Journal of Personal Sellin
	Krishnan (2012)		and Sales Management
7	Swani, Brown, & Milne (2014)	85	Industrial Marketing
			Management
8	Swani, Milne, & Brown (2013)	81	Journal of Research in
			Interactive Marketing
9	Jussila, Kärkkäinen, & Aramo-	77	Computers in Human
	Immonen (2014)		Behavior
10	Siamagka, Christodoulides,	74	Industrial Marketing
	Michaelidou, & Valvi (2015)		Management
11	Roser, DeFillippi, & Samson	67	European Business Review
	(2013)		
12	Bruhn, Schnebelen, & Schäfer	58	Industrial Marketing
	(2014)		Management
13	Guesalaga (2016)	53	Industrial Marketing
			Management
14	Holliman & Rowley (2014)	50	Journal of Research in
			Interactive Marketing
15	Lacka & Chong (2016)	47	Industrial Marketing
			Management

themes that emerged were "marketing," "B2B," "case," "information," "satisfaction," "approach," and "global." The most dominant theme of all was "marketing," which was frequently paired with terms such as "sales" and "insights" in the articles.

For example, Heath, Singh, Ganesh, and Taube (2013) explored the use of SM for customer engagement. Swani, Milne, and Brown (2013) contrasted the use of Facebook by marketers to promote brands through emotional sentiment rather than hard selling. Furthermore, Swani et al.

Table 5
Influence of authors

Rank	Author	Number of Documents	Rank	Author	Citations
1	KÃrkkÃinen H.	13	1	Christodoulides G.	442
2	Karjaluoto H.	12	2	Michaelidou N.	408
3	Jussila J.J.	11	3	Siamagka N.T.	332
4	Agnihotri R.	9	4	Agnihotri R.	281
4	Christodoulides G.	9	5	Brown B.P.	207
5	Aramo- Immonen H.	7	6	Swani K.	202
6	Johnston W.J.	6	7	Dingus R.	140
7	Brown B.P.	5	7	Krush M.T.	140
7	Swani K.	5	8	Milne G.R.	120
7	Power D.	5	9	Rodriguez M.	110
7	Michaelidou N.	5	10	Karjaluoto H.	105
8	Pitt L.	4	10	Kärkkäinen H.	105
8	Ammirato S.	4	11	Jussila J.J.	101
8	Kietzmann J.	4	12	Peterson R.M.	95
9	Baker T.	3	13	Aramo- Immonen H.	85

Table 6Influence of institutions.

Rank	Institution/ University	Number of Documents	Rank	Institution/ University	Citations
1	Georgia State University	9	1	University of Birmingham	361
2	The Royal Institute of Technology KTH	8	2	Georgia State University	239
3	University of Texas at Arlington	7	3	University of Texas at Arlington	181
3	University of Jyvaskyla	7	4	Aston Business School	180
4	Virginia Commonwealth University	6	5	University of Groningen	155
4	Luleå tekniska Universitet	6	6	Central Michigan University	140
4	Tampere University of Technology	6	7	North Dakota State University	139
4	Ohio University	6	8	Ohio University	131
4	Oulun Yliopisto	6	9	Virginia Commonwealth University	127
5	University of Massachusetts Amherst	5	10	Wright State University	121
5	University of London	5	11	Tampere University of Technology	108
6	University of Manchester	4	12	Elon University	95
6	Iowa State University	4	12	Northern Illinois University	95
6	Newcastle University, United Kingdom	4	13	University of London	91
6	Birkbeck University of London	4	13	Birkbeck University of London	91

(2014) concluded that B2B marketers use emotional appeals and WOM in their tweets. The dynamic capability of SM has a significant influence on customer relationships and consumer behavior in B2B and B2C transactions (Kim, 2014).



Fig. 4. Content analysis and visualization – period 2008–2012.



 $\textbf{Fig. 5.} \ \ \text{Content analysis and visualization} - period \ 2013-2014.$

If market conditions are dynamic, organizations must develop new business units. These units are part of the pre-existing organization and are highly interdependent. Firms reacted differently in the Great Recession than in other recessions. In this context, Pardo et al. (2013) suggested that firms should have aligned their marketing units with their other units. Rollins, Nickell, and Ennis (2014) suggested that firms should have reduced their marketing budgets; however, in previous recessions, organizations focused on customers and increased their marketing efforts. Using expectancy–value theory, Chompis, Bons, van den Hooff, Feldberg, and Horn (2014) assessed users' satisfaction with a virtual community in terms of three aspects: content, technology, and social ties. They highlighted that user satisfaction is driven by these three factors, considering that individuals act on behalf of their companies, not based on their own interests.

Digital content is a significant part of the marketing of B2B firms. Katona and Sarvary (2014) explored how container-shipping enterprises use SM platforms to publish content informally. Digital content marketing is an inbound marketing technique that is essential in sustaining

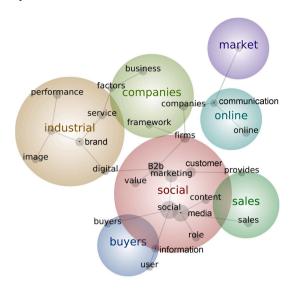


Fig. 6. Content analysis and visualization - period 2015-2016.

and achieving trusted brand status. Creating valuable text is important, and it must be relevant, useful, compelling, and timely (Holliman & Rowley, 2014). Marketers use interactive marketing tools in sales and operations planning for supply chain partners (Plank & Hooker, 2014). The internet has introduced many avenues for B2B and B2C marketing and a few challenges around the globe. Filling talent gaps, implementing actionable metrics, and adjusting the organizational design are important (Leeflang, Verhoef, Dahlström, & Freundt, 2014).

Theoretical aspects: In this timeframe, research focused on service communication / advertising theories in the SM context. For example, SNT was used to describe message propagation through the antecedent of WOM (Swani et al., 2013) and salesperson behavior in utilizing SM tools during the process of sales management (Moore, Hopkins, & Raymond, 2013) in B2B organizations. Similarly, social ties and expectancy-value theory were used to explore user satisfaction with a virtual community (Chompis et al., 2014), while Heath et al. (2013) argued that implementing a five-step framework consisting of sensing. seizing, developing, deploying, and evaluating is essential to build managerial strategies for SM engagement. The alignment concept and structural contingency theory were used to investigate the adaptation behavior of new organizational units in relation to SM management (Pardo et al., 2013). Further, the concept of content/information quality, with the five facets of importance, accuracy, goodness, usefulness, and currency, was used to describe digital marketing strategies (Holliman & Rowley, 2014) and to differentiate B2B marketers' SM strategies from those of B2C marketers (Jussila, Kärkkäinen, & Aramo-Immonen, 2014; Swani et al., 2014).

5.1.3. Theme visualization for the years 2015–2016

Contextual aspects: The discussion in the years 2015–2016 focused on the themes of "social," "business," "performance," "companies," "information," "sales," and "market." In this timeframe, the concepts that emerged related to brand image, the customer's role, the buyer's importance, values service, communication between companies, business factors, and the value of communication (Fig. 6). A few themes, such as "social," "performance," and "companies," were seen in both the 2011–2012 and 2015–2016 year groups (see Figs. 4 and 6), and the theme "information" emerged consistently across all of the year groups.

For example, Wang, Hsiao, Yang, and Hajli (2016) used media synchronicity theory (MST) to describe SM applications' capabilities. Moncrief, Marshall, and Rudd (2015) analyzed SM's impact on sales management systems, and Siamagka, Christodoulides, Michaelidou, and Valvi (2015) established that innovation and perceived usefulness impact SM adoption. Its adoption by B2B organizations depends on its

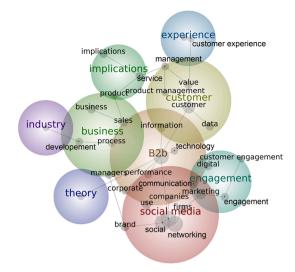


Fig. 7. Content analysis and visualization – period 2017–2018.

usefulness for conducting marketing activities (Lacka & Chong, 2016). In addition, SM is a vital tool to strengthen trust and connections with consumers in a competitive market (Niedermeier, Wang, & Zhang, 2016). Wang et al. (2016) examined social identity and social comparison in relation to B2B brand awareness in online communities. Their findings suggested that social comparison and sellers' social identities influenced the co-creation of innovation with customers, boosting brand awareness among them.

Further research demonstrated the "brand attributes performance" on implementing various strategies. For example, Kumar and Pansari (2016) concluded that customer engagement and employee engagement substantially and positively affect a firm's performance, and these findings were more robust in the case of B2B firms than B2C firms. Simões, Singh, and Perin (2015) suggested that corporate websites are important for communication and corporate branding (CB) in emerging markets. CB values, sustainability in the CB, CB personality, CB heritage, the firm's demographics, and other CB expressions improve financial performance especially for B2B small businesses which face many challenges such as financial (Kaushik, Kumar, Datta, Kumar, & Kumar, 2020), motivational (Kumar, Kaushik, Shivani, & Kumar, 2020b). Online discussion forums are allowing various industries to connect with one another. Rooderkerk and Pauwels (2016) identified that post characteristics, timing characteristics, and content characteristics together determine the number of comments on a post. This is also determined by the post's readability and controversiality.

Theoretical aspects: In this timeframe, much research focused on SM presence and richness in SM content. The TAM and resource-based view were used in this timeframe to extract the factors behind the adoption of SM (e.g., perceived usefulness) (Siamagka et al., 2015). Besides, the social semiotic multimodal framework was explored using expansion theory; meta-function theory was used to evaluate B2B marketers' post-conversation ability (Mehmet & Clarke, 2016); media richness theory and task-technology fit (TTF) were used to examined uses of SNSs in the B2B market (Leek, Canning, & Houghton, 2016; Rooderkerk & Pauwels, 2016); and interactional psychology theory was used to draw up a model to examine SM usage in relation to organizational and customer-related factors (Guesalaga, 2016). Further, social influence theory was used with the concept of brand equity (Wang et al., 2016) and the resource-based view was used with the concept of consumer culture (Singaraju, Nguyen, Niininen, & Sullivan-Mort, 2016) to examine co-creation activities and brand awareness among stakeholders. However, the approach used differed: the first authors examined the influencer effect, while the second ones provided a framework for optimal resource (SM) interaction.

5.1.4. Theme visualization for the years 2017-2018

Contextual aspects: During these years, the themes focused on "customer," "brand," "development," "implications," "social," "industry," "digital," "B2B," and "role" (Fig. 7). These themes came into existence due to concepts such as brand managers, the sales process, the customer experience, value or performance, relationships, digital services, customer information, communication marketing, and experience management. Authors extensively used terms related to these concepts during the period 2017-2018. The most significant themes that constituted customer-related factors were customer management and the customer experience. For example, Zolkiewski et al. (2017) concluded that the customer experience in B2B organizations is different from that in B2C organizations: B2C organizations use input- and output-based measurements, while B2B organizations follow a more strategic approach. Gordini and Veglio (2017) found that technology has transformed marketing and the customer experience in the context of ecommerce and has also increased the risk of churn. Organizations use data-driven approaches for churn prediction, along with retention strategies. Both salespersons and customers use SM technology (SMT). It affects the salesperson's product knowledge, product information communication, adaptability, and diligence. Organizations must allocate the resources to successfully implement SMT strategies to ensure effective buyer-seller interactions (Ogilvie, Agnihotri, Rapp, & Trainor, 2018).

Additionally, one theme focused on brand-specific factors, such as brand engagement and brand managers. For example, Nyadzayo, Matanda, and Rajaguru (2018) argued that brand loyalty is not widely investigated in the global franchising domain. The franchisors' information sharing and competency promote valuable relationships and emotional brand attachment, which improve brand loyalty. The development of new B2B ventures and the development of corporate brand identities are closely related. A brand identity is built over a period through strong interactions between external stakeholders and the organization, not just on reputational capital (Törmälä & Gyrd-Jones, 2017). Many reserachers identified two key factors of brand engagement through SM: "commonality" and "optimism." Top-rated and -ranked firms' employees scored high on these factors in their employers' reviews on SM networks, and vice versa. This observation could help managers to develop constructs to improve brand engagement among employees (Pitt, Botha, Ferreira, & Kietzmann, 2018).

During this time period, the research on SM strategy implementation in B2B settings matured further. Swani, Milne, Brown, Assaf, and Donthu (2017) specified the significant differences in the SM message strategies used by B2C and B2B organizations. Brink (2017) analyzed how B2B SMEs need to adopt crucial antecedents before applying SM, and Nunan, Sibai, Schivinski, and Christodoulides (2018) found that SM platforms are a significant factor in generating value in the sales process. Meire, Ballings, and den Poel (2017) suggested that Facebook is an important source for improving performance predictions and acquiring B2B customers. In contrast, Itani, Agnihotri, and Dingus (2017) suggested that the utilization of SM can help salespersons to focus on their active roles in other marketing functions of the organization. Twitter and Facebook affect the interactions between entrepreneurial enterprises and their customers (Drummond, McGrath, & O'Toole, 2018).

Theoretical aspects: In this timeframe, researchers focused on adopting behavioral theories from either an organizational or individual perspective. For example, psychological motivation theory was used to investigate the differences in the SM strategies used by B2B and B2C organizations (Swani et al., 2017); information processing theory, the theory of reasoned action, the theory of planned behavior, and adaptive selling theory were incorporated to analyze B2B salespersons' attitudes towards SM usage (Itani et al., 2017). Salo (2017), in a review on SM research in industrial marketing management, indicated that the TAM, the resource-based view, and MST were a few of the theories that had been utilized in the B2B context. Further, TTF was adopted to describe customer relationship management (CRM) technology services and



Fig. 8. Content analysis and visualization – period 2019.

salespersons' behavior (Agnihotri, Trainor, Itani, & Rodriguez, 2017). The theory of reasoned action and the theory of planned behavior were used to examine B2B firms' management commitment in cross-cultural environments (Thakur & Alsaleh, 2018). SNT, reciprocal action theory, and organizational behavioral theories were adopted to examine the SM adoption of B2B firms for marketing purposes, especially the integration of traditional and SM-based marketing strategies (Gruner & Power, 2018)

5.1.5. Theme visualization for the year 2019

Contextual aspects: During the year, the themes that emerged were associated with "implications," "use," "social," "engagement," "influence," "online," "model," and "sales" (Fig. 8). These themes were associated with the concepts of brand content, social influence, online products, business relationships, technology firms, digital content, relationship influence, knowledge information, technology management, and service companies. For example, national brands were found to have a spillover effect on private-label brands on SM, which influences sales (Hsiao, Wang, Wang, & Kao, 2019). Mora Cortez et al. (2020) concluded that there had been critical changes in marketing communication in the B2B context. Digital transformation has profited the operations and marketing functions of sustainable B2B organizations (Sivarajah et al., 2020). B2B SM usage is perceived as less useful for relationship-oriented organizations (Iankova et al., 2019). Virtual reality can impact B2B buyers' post-purchase behaviors. Along with buyer-seller relationships, knowledge, social, and task complexity factors affect value-in-use perceptions. However, this field has not been much explored yet (Boyd & Koles, 2019).

Researchers in this period found the theme of "engagement," also referring to "customer engagement," to be necessary for any business's long-term success. For example, business customer engagement contributes to quality customer relationships and supplier performance (Hollebeek, 2019). Employee brand engagement differs according to brands' rankings and ratings (Pitt, Plangger, Botha, Kietzmann, & Pitt, 2019). Designing and monitoring service contracts are essential in B2B organizations to enhance performance. The contracting process, contract structure, and service complexity are the contract dimensions that enhance buyer-perceived supplier performance (Zou, Brax, Vuori, & Rajala, 2019).

Another theme that emerged in the year 2019 was "online" due to the diffusion of information and business channelization through the online medium. For example, it was concluded that B2B marketers are often unaware that market-initiated and firm-initiated digital communication impacts customer acquisition and sales. Digital inbound media and

Findings

Author, Year

(continued on next page)

 Table 7

 Summary and comparison of selected research related to social media implementation in B2B context.

Theory/model

Role of social media

Sampling

Analysis type

Methods

Variables

Focus of investigation

Michaelidou, Siamagka, & Christodoulides, (2011)	Use of SNS by the B2B SMEs for brand objectives.	Social network theory	Use of Social networking sites to achieve brand objectives and to attract new customers	FAME database from various industrial sectors	Quantitative	Chi-square and T-test	Social networking practices, usage, perceived barriers, and the measurement of effectiveness of social networking sites (SNS) as a marketing tool.	Use of SNS to support the brand and customer relationship management. Also, to increase brand awareness online.
Fisher et al., (2014)	Use of social media to recruit global supply chain managers	Best practice model	Social media used by the organisations to manage and promote business.		Qualitative	Conceptual paper	mancang tool	The use of web-based technology and social media for recruiting global supply chain managers.
Swani et al. (2014)	Adoption of distinctive twitter message strategies for B2B marketers	Social media communication model	Use of social media as a marketing tool by B2B	More than 7000 tweets by Fortune 500 companies	Quantitative	Longitudinal content analysis and logistic regression	Corporate brand name, product brand name, functional appeals, emotional appeals, direct calls to purchase, links, cues for information search, and hashtags	B2B marketers are using emotional appeal in their tweets rather than functional appeal.
Siamagka et al. (2015)	Factors responsible for the adoption of social media by the B2B organisation for the marketing activities	Technology acceptance model (TAM) and resource- based theory	As the marketing tool for B2B organisations	5000 organizations in the UK	Quantitative	Bivariate correlation analysis	Result demonstrability, image perceived barriers, perceived ease of use, perceived usefulness, organizational innovativeness	Perceived usefulness and organisational Innovativeness affect adoption of social media.
Agnihotri, Dingus, Hu, & Krush (2016)	Social media impact on customer satisfaction in B2B domain	Model relating salespeople's social media use for customer satisfaction.	In information communication to customers	Database of sales professionals in B2B	Quantitative	Structural equation modelling	Social media, information communication, responsiveness, and customer satisfaction	Social media is an antecedent to enhance salespersons' behaviour to enhance customer satisfaction.
Järvinen & Taiminen (2016)	Combine content and marketing automation in B2B context	Marketing and sales funnel of the case company	To lead the potential buyers to interact with the organisation	Extreme case sampling strategy	Qualitative	Case study approach		Content personalization and behavioural targeting are helpful in creating high quality sales leads with the use of marketing automation.
Guesalaga (2016)	Interactional psychology theory to propose and test a model, customer- related, individual, and organisational factors.	Model of social media usage in sales	To assist sales management and personal selling	Surveying 220 sales executives in the United States.	Quantitative	Multiple regression analysis	SM usage, Individual competency, organizational competency, individual commitment, organisational commitment, size of the organization, Size of the company, age of the sales manager, Size of the Salesforce, and customer engagement	Social media usage by the sales organization is explained by the interaction of personal factors and situational factors.
Itani et al. (2017)	Use of social media by the sales force in the job functions	Adaptive selling theory	To assist in Salesforce functions	Salespeople from large manufacturing and service industry In India	Quantitative	Correlation	Attitude towards social media usefulness, social media use, Learning goal orientation, Adaptive selling behaviour, competitive Intelligence collection and sales performance	Attitude assists in Sales performance, adapting to customers and collecting knowledge about competitors.
Swani, Milne, Brown, Assaf, & Donthu (2017)	Examines key factors that contribute to facebook brand content popularity metrics on brand posts of B2B vs B2C	Psychological motivation theory and Bayesian models,	To assist in social media messaging strategies	Fortune 500 companies	Quantitative	Content analysis and regression	Communication type, company brand name, product brand name, functional appeal, emotional appeal, direct calls to purchase and Information search	Corporate brand names, information search emotional and functional appeals favours B2B messages as compared to B2C.
Agnihotri et al. (2017)	To assess the impact of sales-based CRM technology on sales service behaviour		To assess higher level of sales service behaviour of salespeople	B2B sales organisation in India	Quantitative	correlation	Social media use, sales-based CRM, Diligence, information communication, inducements, empathy, and sportsmanship	Salespeople using social media along with CRM technology depicts higher levels of sales service behaviour.
Ogilvie et al. (2018)					Quantitative			

Table 7 (continued)

Author, Year	Focus of investigation	Theory/model	Role of social media	Sampling	Analysis type	Methods	Variables	Findings
	Examines salespeople social media technology impact on service behaviours of salesperson and customer relationship of arms		To benefit customer relationship activities	Survey of 200 B2B firms located in the United States		Structural equation modelling	Social media technology use, user training, product information communication, diligence, product knowledge, adaptability and customer relationship performance	Integration of social media technology in buyer-seller interaction.
Pitt et al. (2019)	Employee engagement on social media with B2B brand		Brand engagement in B2B domain	Ranking of B2B brands by brandwatch and glassdoor	Qualitative	Content analysis	Activity, optimism, certainty, realism, commonality, insistence, embellishment, variety, and complexity	Impact is higher between high vs. low review rating as compared to high vs low brand ranking of B2B.
Iankova et al. (2019)	Social media marketing perceived effectiveness, usage, and importance across various business models.	Customer engagement cycle	Social media marketing use in various stages of customer life cycle	Database of university of US and UK	Quantitative	Structural equation modelling	Acquisition Orientation, Relationship Orientation and Perceived Effectiveness of SMM	Social media usage is different in B2B and B2C firms in context of customer relationship management.
Vieira et al. (2019)	Analysing the impact of various digital media platforms on customer acquisition and new sales in business market, Brazil	Model of digital environment	B2B sales enhancement and customer acquisition	Empirical data of the forms dealing in digital contacts in Brazil	Quantitative	Unit root tests	New B2B Sales, B2B customer acquisition, Owned media, Earned social media, Digital Inbound marketing, Paid media, and Organic Search	Digital inbound marketing and own media influences customer acquisition.
Juntunen, Ismagilova, & Oikarinen (2019)	Use of Twitter to understand content objectives, tactics, and strategies in B2B firms	Hierarchy-of-effects theory	User engagement in social media content	Top 20 B2B brands, listed in the brand in 2017	Quantitative and qualitative	ANOVA	likes, comments, and retweets	Knowledge, trust, awareness, interest and liking were used in most and least engaging tweets rather than purchase aspect, reference, and conviction.
Mora Cortez et al. (2020)	Advancement in B2B advertising tools in last 20 years	GJ model	It is an evolving tool in B2B marketing	Survey in B2B marketing seminar and literature review	Qualitative and Quantitative	ANOVA		Creativity, social media, emotional appeal, brand equity, national culture, competing message, ad experience social context and credibility are included in the revised model of B2B effect.

owned media are important for customer acquisition, as they generate impressions (Vieira, de Almeida, Agnihotri, da Silva, & Arunachalam, 2019). UGC has been widely studied in the context of B2C firms but not B2B firms. Liu (2019) found that UGC plays a crucial role in stock performance, which is impacted by customers' positive and negative sentiments and WOM, using big data and machine learning algorithms (Kumar, Chatterjee, Shah, Saha, & Chatterjee, 2017) such as genetic algorithms. Critical microblogging and negative WOM through Twitter can reduce the number of tourists who visit destinations that are facing crises, subsequently destroying the destinations' value (Gkritzali, Mavragani, & Gritzalis, 2019).

Theoretical aspects: Relationship marketing theory was used to differentiate the SM marketing strategies of B2B, B2C, and B2B2C organizations concerning factors like acquisition orientation and perceived effectiveness (Iankova et al., 2019). The theory of planned behavior was used with the concept of users' acceptance of technology to analyze B2B marketers' intentions to use SM applications (Kooli, Tzempelikos, Foroudi, & Mazahreh, 2019), while information processing theory was used to investigate brand engagement (McShane, Pancer, & Poole, 2019).

6. Discussion

This study aimed to explore three research questions. The first question focused on exploring the maturity of research on SM usage in the B2B context. To address this research question, the statistics of published articles and keyword co-occurrence within five timeframes were analyzed. This study further examined journals', authors', and institutions' impacts based on article counts and citations. The second question was about exploring themes related to SM usage, which was investigated by using a text-mining procedure on articles' abstracts within five different timeframes. The third and last research question focused on investigating the challenges and opportunities in the research domain of SM usage in B2B firms. Further, we found that researchers have extensively used a few theories for different research problems. Theories like SNT, the theory of planned behavior, TTF, and information processing theory have gained lots of attention in investigating the impact of the usage of SM in B2B firms.

Given our objective of exploring how researchers have studied the various SM strategies in B2B settings and how they implement them to gain advantages, we selected only those papers that specifically talked about SM in B2B firms. We further refined our search and included only those papers that mentioned SM and B2B in their abstracts and titles. In this process, we found a total of 39 articles. We categorized these articles into five groups based on the broad topics and used a high level of abstraction to access these articles' insights. Table 7 presents a summary of a few selected articles, including their findings, theories, methods, and topics of interest.

Insight 1. Branding through SM

When managing brand-related factors such as brand identity, brand personality, and corporate branding through SM, firms can face barriers and measurement issues, especially SMEs or micro, small, and medium enterprises (MSMEs), as many of them have limited resources and subject expertise (Leek & Christodoulides, 2011). In this context, Michaelidou et al. (2011) identified that building and managing customer relationships and attracting new customers are the most popular usages of SM; a lack of perceived relevance is the most significant barrier; and the non-adoption of metrics to assess SM effectiveness causes measurement issues for particular sectors. Further, SM usage enhances sales organizations' results by improving salespersons' information communication behavior, which improves their responsiveness and thus customer satisfaction (Agnihotri, Dingus, Hu, & Krush, 2016).

Although brand engagement is associated mainly with customers, employees also need to be monitored, as they frequently engage with customers on SM. In this context, Pitt et al. (2019) developed a framework to analyze engagement observation based on verbal tone and word choice. Müller, Pommeranz, Weisser, and Voigt (2018) highlighted the need for German suppliers to segment consumers in their mobile, digital, and SM marketing. Their analysis underscored the impact of buying frequency, country of origin, and industry sector on customer segmentation strategies.

Insight 2. SM for B2B marketing: is it a myth for B2B enterprises or a way to interact with customers?

For B2B enterprises, SM is considered a platform or tool for marketing purposes and allows firms to share content and expertise and to collaborate. While some internal stakeholders might think that SM might be risky for their businesses, others might think that it may provide a few opportunities (Pardo et al., 2013). Many people think that SM has the potential to improve brand equity. Consequently, they encode tweets differently while messaging on B2B pages, unlike their B2C counterparts (Swani et al., 2014). Moreover, digital platforms provide an opportunity for customers to interact with marketers. Automation in marketing ensures high-quality sales through personalized content and behavioral targeting (Järvinen & Taiminen, 2016). A few researchers have a more explicit view of the role of SM in the B2B domain. For instance, Singaraju et al. (2016) presented SM as a "system resource integrator" that provides a technological platform to access hidden resources, with the active participation of intermediaries.

B2B marketers are often unaware of the impacts of market-initiated and firm-initiated digital communication on customer acquisition and sales. Digital inbound media and owned media are essential for customer acquisition, as they generate impressions (Vieira et al., 2019). Further, Itani et al. (2017) investigated the use of SM by B2B salespersons to improve their job functioning. They also proposed that a salesperson's attitude towards SM's learning orientation and usefulness will impact their SM usage in their day-to-day tasks. Salesperson service behaviors (SSBs) could be improved in the post-sales phase by using sales-based CRM systems (Ogilvie et al., 2018). The use of SM alongside the CRM systems increases this improvement in SSBs, including diligence, information communication, inducement, empathy, and sportsmanship (Agnihotri et al., 2017).

Insight 3. Using SM to access global resources

Using SM provides easy access to global resources. Consequently, many researchers have been interested in finding out the extent to which companies use SM in their supplier recruitment processes. For example, Fisher, McPhail, You, and Ash (2014) investigated SM's effect on managers' recruitment processes for their global supply chains. Similarly, SM provides opportunities to foster relationships by building a global online community and an environment for co-creation. Mehmet and Clarke (2016) explored how mutual benefits and a co-creation environment could be formed by considering B2B SM communication. They found that such communication allows people to exchange messages and objectives.

Further, social selling is an important application of digital marketing, including utilizing social and digital platforms to build valuable business relationships with potential and existing customers (Ancillai, Terho, Cardinali, & Pascucci, 2019). Web 2.0 and SM present many opportunities to enhance B2B innovation. The challenge of limited resources can be overcome through online B2B collaborations with outsiders (Swani et al., 2013). However, B2B SMEs still only use SM in a limited way. For innovation and business enhancement, they typically focus on employing highly educated experts. Facebook is an important source for improving performance predictions and acquiring B2B customers (Drummond et al., 2018; Meire et al., 2017).

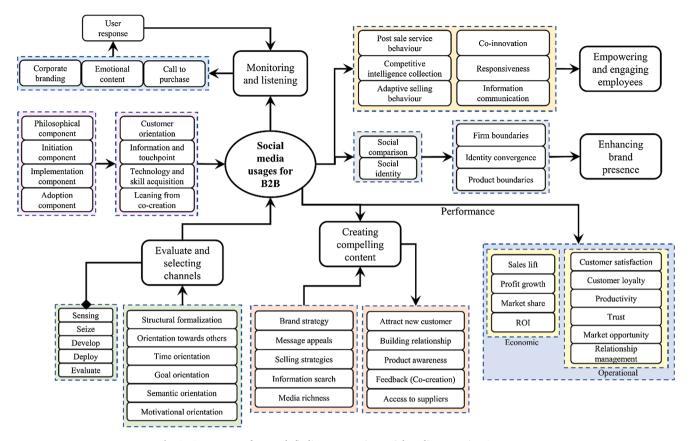


Fig. 9. A summary of research findings concerning social media usages in B2B context.

Insight 4. Adoption of SM by B2B enterprises: determinants and associated factors

Many researchers have used the resource-based view and the TAM to examine SM implementation in B2B settings, including the key determinants. Siamagka et al. (2015) mentioned organizational innovativeness and perceived obstacles as crucial determinants of SM adoption by B2B enterprises. Guesalaga (2016) suggested that the crucial factors for SM utilization are organizational commitments and competencies.

SM improves task—media fit by using followers' responses to the messages tweeted by business marketers. Leek et al. (2016) results highlighted that the responses do not vary according to the purpose of the tweets but according to the embedded link types. A few researchers have investigated the antecedents of B2B firms' SM utilization, which has been found to improve organizations' efficiency. Further, effective marketing and research and development (R&D) are essential for industrial marketing, mainly for new product development and competitiveness. SM is highly responsible for effective marketing and R&D in the B2B context. Businesses must have competitive SM engagement strategies (Chirumalla, Oghazi, & Parida, 2018).

Insight 5. What makes SM implementation in the B2B context different from that in the B2C context?

SM usage as part of the marketing mix is more limited in B2B firms than in B2C firms. However, there are differences in the types of channels implemented and the relevance of various customer engagement aspects. SM engagement in B2C and B2B firms is relatively different, especially for CRM. Therefore, B2B firms' SM strategies should differ from those of B2C firms (Iankova et al., 2019). For example, Hollebeek (2019) developed an integrative model for business customer engagement (BCE) based on SM and S-D logic in B2B settings. The model considers the factors of business client asset mix, business client asset

variability, and reconciliation effectiveness as supporting BCE. This ultimately improves the efficiency of business client relationships.

There has been extensive research on SM usage in industrial marketing, addressing sales and marketing topics. However, subjects like pricing and ethics have been seldom discussed (Salo, 2017). Organizations have used the concept of crowdsourcing ideas through online forums for new product development. Insights gathered from internal crowds are helpful at the fuzzy front end, and ideas from external crowds help in the commercialization stage of development, which is more feasible in B2B firms in comparison to B2C firms. However, these products may be line extensions and not specifically new products (Zahay, Hajli, & Sihi, 2018).

Incorporating these insights, we present a summary of the research findings concerning SM usage in the B2B context in Fig. 9.

6.1. Theoretical contributions

Firstly, this study segregated and explored the fundamental concepts that emerged over a ten-year span into five different themes, which could help researchers to classify their problems and choose appropriate theories. Secondly, through Table 7, we have presented the vital concepts and theories that have been used to tackle the identified research problems. We hope this table will help researchers to identify theories and methodologies to answer their research questions. Thirdly, this study undertook a content analysis to provide an integrated view of the research on the adoption of SM in B2B settings and captured five insights (Insights 1–5) that can anchor the fundamental premises in this domain. These five insights also surmise five different theoretical aspects of considering SM's implications in the B2B domain. For example, the diffusion of information and communication is a core factor among the employees and customers of B2B enterprises, especially when enterprises are thinking of implementing SM in their businesses. Incorporating the concepts of word choice and verbal tone (Hart, 1984), which

highlight the importance of selecting appropriate words and tones for message propagation (strategy phenomena, marketing research), insight 1 of this paper explains the extension of product branding and customer engagement on SM through selecting appropriate brand engagement messages and ensuring the politeness of employees.

Besides, insight 2 of this paper contributes to increasing the information on SM's shareability and propagability features. As the cognitive selling paradigm (Porter & Inks, 2000) suggests, knowledge influences employees' behaviors and capabilities, and gaining factual information about customers can increase the market opportunities for B2B firms. Further, insight 3 contributes to the literature by considering B2B firms' co-creation approaches by implementing SM in their resource search endeavors. However, explanations of the factors associated with the adoption of SM in B2B firms remain tenuous. Therefore, insight 4 contributes towards signifying these factors. Lastly, insight 5 differentiates the theoretical nature of implementing SM strategies between B2B marketers and B2C marketers. Through this literature review, we have confirmed that B2B businesses do use SM.

Moreover, B2B businesses may not achieve SM's full amount of perceived usefulness by merely implementing it without understanding its perceived importance. Target-oriented planning and efficient execution of an SM strategy are necessary, like using SM for collecting competitive intelligence data and adaptive selling. When building a strategic model for SM implementation, the antecedents of business innovation and leadership need to be considered. Furthermore, we have also elaborated on how salespeople use SM to sell and to engage in content marketing, advertising, and job exploration, which are frequently discussed in the literature.

6.2. Managerial implications

SM influences how knowledge is accumulated about competitors, sales performance, and the adaptations needed to meet customers' requirements—all considered vital parameters for B2B managers. The higher-order resource formation analogy builds the foundation for the discussion. Managers need to understand SM resources' qualities to facilitate the efficient renewal, creation, and transformation of resources (Singaraju et al., 2016). In many places, B2B managers use social CRM only in the context of handling complaints (Moore, Raymond, & Hopkins, 2015). As per the results of this literature review, the managers' challenge is within the management with a precedent leadership approach and the integration of precedent business models with the local processes. It is difficult for managers to overcome this challenge, as centralized control does not provide the necessary time to support distributed leadership. They also do not have the skills needed to effectively apply SM in B2B SMEs (Brink, 2017).

Poor management can lead to negative customer sentiments, ultimately impacting a brand's reputation and financial performance. Therefore, for managers to directly involve customers with the brand's message to enhance customer relationships, only posting messages is not enough. Facebook posts, tweets, and blogs provide ample opportunities for managers to understand customer behavior. Managers need to access UGC (big data) from SM to gain detailed knowledge about the customer experience and the brand's reputation (Liu, 2019). The brand is now not only in the hands of the company; rather, it is co-authored with customers. As the B2B industry has increased its level of interaction with customers, this has created new challenges for B2B communication. Thus, managers require a thorough understanding of the many interactive and puzzling components that impact B2B advertising (Mora Cortez et al., 2020).

Furthermore, by using big data analytics in participatory SM environments, B2B entities can make a profit and ensure their survival by way of different tactical functions and business activities related to marketing. Based on such analytics, managers can distribute information and engage with stakeholders almost instantaneously (Sivarajah et al., 2019). The constant engagement of consumers in the SM space

Table 8
Suggested future research.

Theme	Research questions	References
Social media use by SMEs	What is the attitude of B2B SMEs towards social networking sites? What is the link between intention to adopt and attitude towards technology?	Michaelidou, Siamagka, & Christodoulides (2011)
Adoption of twitter message strategies for B2B marketers	How social media effectiveness impacts on firm or brand performance in B2B contexts?	Swani, Brown, & Milne (2014)
	2. What are the other messages strategies for in tweets and other social media communication? 3. What are the intricate classifications of emotional and functional appeals of social media in B2B context?	
Social media impact on customer satisfaction in B2B domain	What are the ways to maximize social media usage and assess which activities are best under	Agnihotri, Dingus, Hu, & Krush (2016)
	which social medium? 2. How social media can be used for networking, prospecting, and lead	
	generation. 3. What are the consequences of using social media by the B2B salespeople?	
Combine content and Marketing automation in B2B context	How marketing mechanisms can be harnessed to create and share content for other key objectives of content marketing in B2B context?	Järvinen & Taiminen (2016)
	2. What is role of digital marketing channels and tactics in B2B customer purchasing processes?	
Adoption of social media sites for B2B marketing purpose	How social acceptability of technology and impact of culture encourages social media in context of B2B marketing? What is the relationship between efficiency and the adoption of social media sites for B2B	Lacka & Chong (2016)
impact of social comparison and social Identification	marketing? 1. How other social behaviour theories or the role of intrinsic and extrinsic motivational factors in the context of online communities affects co-innovation per-	Wang, Hsiao, Yang, & Hajli (2016)
Use of social media by the sales force in the job functions	formance in B2B context? 1. How social media would affect customer-oriented and service behaviors in B2B enterprises? 2. What is the role of other goal orientations in driving the use of social	Itani, Agnihotri, & Dingus (2017); Agnihotri, Trainor, Itan & Rodriguez (2017)
	media? 3. What is chain of events from social media use to	
		(continued on next page

Table 8 (continued)

Theme	Research questions	References
	behavioral relations of the B2B salesperson? 4. What are the other specific social media tools to study the complimentary effects of CRM?	
	5. What are the strategic initiatives that can aid in more seamless integration of social media into the customer relationship management processes?	
Key factors that contribute to Facebook brand content popularity metrics on brand	How brand engagement options other than likes and comments affect brand content popularity in B2B context?	Swani, Milne, Brown, Assaf, & Donthu (2017); Thakur & AlSaleh (2018)
posts of B2B vs. B2C	What are other types of content that can be used by the managers to improve their brand post popularity on social media?	
	3. How does liking messages/content help in improving branding outcomes and financial outcome in the B2B context?	
	4. What are the psychological motivations that drive WOM among viewers of social media content for the B2B marketers?	
Employee engagement on social media with B2B brand	What are the reasons for the motivations for B2B employees' engagement with brands?	Zahay, Hajli, & Sihi (2018)

requires firms to develop and maintain a robust SM presence (Tsimonis & Dimitriadis, 2014). Managers need to acknowledge the importance of SM because it allows firms to stay consistent in the ever-expanding digital business landscape (Singaraju et al., 2016).

6.3. Limitations and future research

In this review, we only considered the keyword "social media" to find SM-related articles, while some article authors instead used the keywords "Facebook," "Twitter," "blogs," and "reviews". Thus, those articles were not considered in this review. Another limiting factor was the choice of database. We only considered Scopus as the database for the keyword search, while some reviewers have considered other databases, such as Web of Science and Google Scholar. Moreover, for review purposes, researchers have adopted different methodologies, such as *meta*-analyses, critical reviews, etc., which could also be adopted to explore the research area further. Hence, due to the similarities in SM adoption constructs in B2B articles, other literature review methodologies could be applied to provide further critical analysis.

In this literature review article, we have presented a few critical insights. We have also identified a few research questions that require exploration in the future in the domain of SM implementation in the B2B context (see Table 8). These questions were identified based on the unexplored research gaps in the selected articles. We think and believe that this literature review provides significant insights for researchers, practitioners, and managers alike.

7. Conclusion

The purpose of this literature review was to identify the gaps in academic research and to recommend how to conduct viable research related to SM implementation in B2B settings. In the last ten years, the research domain of SM implementation in the B2B context has gained lots of attention. Researchers have identified various practical challenges with SM implementation and different factors that it can impact, such as customer journeys, marketing-finance interfaces, harnessing technology, revenue growth, the ecosystem or industry context, and data analytics. We found that, despite widespread technology adoption, many B2B businesses still only use SM in a limited way. Those B2B businesses that are considering implementing SM strategies may be in a dilemma if SM is the only way that they can communicate with their potential customers. However, many researchers have suggested that B2B businesses can use SM to improve their brand value, customer segmentation, and employee selection process. We also found that SM can provide opportunities, like enabling MSMEs to access global resources, as they otherwise have minimal capabilities to access resources due to various constraints.

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