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Exploring antecedents of social media usage in B2B: a systematic review

Antecedents of
social media
usage

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Abstract

Purpose – This paper aims to review the state-of-the-art literature on social media adoption in business-to-business (B2B) contexts to propose an inclusive and theoretical viewpoint to understand the antecedents of this phenomenon.

Design/methodology/approach – This paper presents the results of a systematic literature review. For this purpose, 29 studies published in academic journals, books and conference papers in the field of marketing and management from 2001 to 2017 were analysed.

Findings – The results show that the number of studies has increased in the past five years. Three different groups of antecedents are identified by considering the nature of these factors (personal, organisational and external) and analysed at two different levels of adoption: individual and firm/function. Managerial implications and future research insights are provided.

Research limitations/implications – This research area deserves much more attention, both theoretical and empirical, to analyse the existing classifications and develop new categories of antecedents of social media adoption in B2B. Further studies are needed on the individual level of adoption, on new skills and capabilities required to use social media as well as on the social factors influencing usage.

Practical implications – The literature review allows to understand the role of personal, organisational and social antecedents and suggest ways to improve the level and quality of adoption.

Originality/value – Despite a considerable interest in research on social media, this paper provides the first complete framework in the new field of study concerning social media adoption in B2B.

Keywords Social networks, B2B, Social media adoption, Business-to-business, Systematic literature review, Other management related topics, Social media usage

Paper type Literature review

1. Introduction

Social media has been one of the most relevant topics for scholars and practitioners over the past 10 years (Schultz and Peltier, 2013; Kietzmann *et al.*, 2011; Kaplan and Haenlein, 2010); many top-tier journals have published special issues and encouraged a thorough research. Social media represents a sort of revolution from an economic and social point of view, leading to a growing interest from researchers.

These applications enable users to communicate, create and share content in an easier way than ever before. During the past decade, both the number of social media sites and the number of users all over the world have increased; active social media users reached 2.789 billion, with a penetration rate of 37 per cent in the world population (WeAreSocial, 2017). Indeed, the widespread use of social media opened up new interaction opportunities among different people on an international level (Del Giudice *et al.*, 2013). Furthermore, this massive adoption has determined significant transformations in almost every facets of the society, including the business environment.



Some companies have already started to harness benefits from the use of social media for business and marketing purposes. For instance, Dell computer is often reported as a successful example of both business-to-customer (B2C) and business-to-business (B2B) social media marketing. The company established an online community on Facebook and started to handle customer service issues through social media platforms with a high success rate of 98 per cent, by turning dissatisfied customers from “demoters” to “promoters” (Katona and Sarvary, 2014). In the same vein, Maersk Line, one of the world’s biggest container and bulk shipping companies, started a successful social media presence, showing that these tools allow to gain profits for brands (Minsky and Quesenberry, 2015). Nevertheless, social media, in combination with other resources, is a powerful tool also for small and medium-sized enterprises (SMEs) to increase their visibility and tap into new markets (Boconcelli *et al.*, 2017). Furthermore, social media is strictly linked to knowledge management, as they share the concept of connecting people and sharing knowledge between them (Levy, 2013). By stimulating collaboration with external partners, social media could help SMEs to overcome their typical resource limitations (Brink, 2017; Mälaskä *et al.*, 2011). In this regard, Scutto *et al.* (2017a) show that these platforms provide B2B SMEs a valuable environment for mass collaborative knowledge management, whereby customers and employees interact, exchange existing knowledge and generate new knowledge thanks to a more effective and faster communication. Social media may represent a sort of “laboratories” where SMEs can experiment innovative ideas and enhance their innovation performance (Scutto *et al.*, 2017b).

The literature is widespread across different research fields, but the majority of the studies focus on the consumer perspective in terms of usage and influence of social media on consumer decisions and perceptions (Alves *et al.*, 2016). As regards to the firm perspective, social media applications have been investigated especially in the B2C marketing context (Salo, 2017), whereas the use of social media is spreading beyond the B2C environment and becoming more evident among B2B firms (Rapp *et al.*, 2013).

Yet, B2B companies still lag behind their B2C counterparts in the use of digital tools (Harrison *et al.*, 2017). In B2B contexts, business owners and executives struggle to find reliable ways to turn social interest into bottom-line results (Lollis, 2017) and face problems in exploiting the numerous advantages arising from the use of these tools. As clearly stated by Järvinen *et al.* (2012, p. 102), “a great gap remains between the potential and actual use of social media by B2B firms”. Nevertheless, research on the adoption and use of social media in B2B settings is still in its infancy (Siamagka *et al.*, 2015; Pomirleanu *et al.*, 2013; Michaelidou *et al.*, 2011), and more studies on the use of social media in the B2B context are necessary (Alves *et al.*, 2016), with a particular focus on the factors that could hinder or facilitate its usage. In this regard scholars highlighted the fragmented nature of the empirical research regarding the challenges and possibilities of social media for B2B firms and the subsequent need to gather and organise the current literature (Jussila *et al.*, 2014; Kärkkäinen *et al.*, 2010).

Therefore, the purpose of this study is to provide an inclusive analysis of the factors influencing social media adoption and usage in the B2B context, by conducting a systematic review of the literature, to provide a useful starting point for future studies. Using a transparent and reproducible process, 29 relevant scientific publications were identified and subsequently analysed. In this way, the study aims to contribute to fill the “B2B knowledge gap”, which was pointed out by Lilien (2016).

The remainder of this paper proceeds as follows. First, we present the theoretical background of the study. Then, we describe the methodology of the systematic literature

review and the descriptive analysis of the articles. Subsequently, we present the thematic analysis focusing on the antecedents of social media adoption and usage identified in previous studies. The article ends with future research directions, conclusions and limitations.

2. Theoretical background

Since the emergence of the service-dominant logic (Vargo and Lusch, 2011, 2004), the role of intangibles (in terms of skills, knowledge, and relationships) has become pivotal to stimulate value co-creation between firms and customers. Grönroos (2011) asserts that, within the industrial setting, the value for the customer does not derive from the core product, but it emerges from the supplier–customer interactions that support the use of core resources. Social media is entailing a tremendous change in the way these interactions take place in the B2B context (Marshall *et al.*, 2012).

Positive outcomes of social media use are shown in many studies. Social media platforms allow companies to exploit new business opportunities (Breslauer and Smith, 2009), to reach new buyers and develop long-term relationships with them (Kaplan and Haenlein, 2010). These tools enable to gather helpful indications for decision-making processes (Solima *et al.*, 2016). Furthermore, social media is claimed to be useful to engage in collaboration with customers and partners (Scuotto *et al.*, 2017a; Wang *et al.*, 2016; Jussila *et al.*, 2014; Michaelidou *et al.*, 2011).

In this regard, social media may enhance work-related practices and facilitate the process of knowledge sharing within and across organisations, thus increasing the firm's competitiveness (Razmerita *et al.*, 2016). The adoption of social media needs a paradigm shift in promoting openness and transparency (Mardi *et al.*, 2016). This could foster intra-firm and inter-firm collaborations and contribute to the development of a new “collaborative knowledge” that supports the firm's innovation process (Del Giudice and Della Peruta, 2016). Social media usage may indeed increase social interactions that in turn improve communications between organisations, leading to higher level of social capital (Bharati *et al.*, 2015). Accoto *et al.* (2016) show the benefits deriving from a B2B social community in a large international company, BTicino Legrand, in terms of innovation, development of market connections and customer support, whereas Soto-Acosta *et al.* (2017) find a positive relationship between *social Web knowledge* sharing and innovative performance in a sample of manufacturing SMEs. Moreover, Scuotto *et al.* (2017c) find that social media has facilitated the search for innovation and enabled firms to collect customers ideas and convert them into products or services, thus improving their ROIs. For instance, big data is increasingly accessible with the diffusion of social media, and insights from big data analytics will boost both efficiency and innovation (Mardi *et al.*, 2016). In this regard, Fortunato *et al.* (2017) demonstrate that the use of big data, particularly social media data, could be a relevant external source of knowledge for open innovation activities within the TV industry; interesting insights, useful to better design existing products, can be obtained by analysing Twitter interactions.

According to Bughin *et al.* (2009), the access to knowledge is the biggest advantage deriving from the use of social media in B2B organisations; by encouraging two-way communication, they stimulate virtual co-creation and collaboration, fostering innovation and a better product management. As Jarrahi and Sawyer (2013) pointed out, social networks could be useful in different knowledge practices: from “expert locating” to “horizon broadening”. For instance, LinkedIn allows people to search through profiles and find experts on different topics. Twitter can help in finding the answer to a knowledge problem, in getting advices or suggestions among people who share common professional interests. Both LinkedIn and Facebook offer

advantages also for the infusion of innovative ideas, through horizon-broadening practices, primarily by helping people expanding the number of ties.

Therefore, social media provides an environment whereby employees can connect and benefit from the valuable knowledge exchanges (Razmerita *et al.*, 2016). Also, tacit and experiential knowledge could be shared on social media, although this may not be as rich as it happens in face-to-face interactions, due to the lack of some social cues such as body language, emotional feelings and eye contact (Razmerita *et al.*, 2016; Panahi *et al.*, 2016, 2013; Van den Hooff and de Leeuw van Weenen, 2004). Bolisani and Scarso (2016) show that wikis can help supporting knowledge management processes of small organisations, thanks to their flexibility, user-friendliness and capability to manage both explicit and tacit aspects of knowledge exchange. Yet, although social media seems to be successful, only few organisations have fully implemented it to leverage their knowledge management processes and efforts (Levy, 2013). Social media entails new challenges to organisations that are not used to manage knowledge and information transfer through these channels (Grant, 2016).

Despite the strong general enthusiasm about the potential benefits of social media in B2B, there is still a common perception that social media is more suitable for B2C companies. A great gap exists between the potential and the actual use of social media in B2B settings (Jussila *et al.*, 2015; Järvinen *et al.*, 2012); thus, getting to know which factors drive the use of social media seems to be particularly important.

3. Systematic literature review: methodology and phases

This study uses a systematic literature review to gather and synthesise the extant knowledge on social media adoption in B2B. As shown in recent studies (Savino *et al.*, 2017; Lamb and Roundy, 2016), this methodology appears to be particularly suitable to shed light on a specific phenomenon whereby the literature is fragmented or presents mixed results. It provides a replicable procedure (Tranfield *et al.*, 2003), guaranteeing transparency and clarity (Thorpe *et al.*, 2005) and helping the researcher in overcoming some of the limitations of the narrative review (Briner and Walshe, 2014).

This systematic literature review follows the three stages outlined by Tranfield *et al.* (2003): planning, conducting, reporting and dissemination.

3.1 Planning

The review was carried out from February to May 2017 and includes a number of steps to provide a comprehensive list of articles. We focus the attention on the adoption of social media by B2B firms and particularly on the antecedents of social media usage, as more academic research is needed to fill the gap between perceived social media potential and actual adoption in the B2B context (Jussila *et al.*, 2015).

3.2 Conducting

Four internet-based databases were selected because they are largely comprehensive and their search functions allow for sufficient accuracy during the search process: Scopus, Web of Science, Emerald and EBSCOhost (E-journals). Each database was queried for keywords in the title, abstract and keywords list and the search was also limited to the business and management area. The timeframe embraces 16 years, from 2001 to 2017, to cover the whole period of social media growth. As suggested by Tranfield *et al.* (2003), the search was not limited to journal articles; thus, we also searched for books, book chapters and other academic publications (i.e. articles in the press and conference papers). Moreover, we focused on research publications written in English, as it has become the dominant language in the academic world.

To provide a circumscribed topic under review, a detailed definition in the form of inclusion and exclusion criteria was necessary. One of the major research area concerns technology adoption (e.g. sales force or marketing automation), whereas we focus our attention solely on social media. Thus, all the articles which did not relate to the use of social media were excluded, unless they regarded the more general digital marketing channels but with explicit reference to social media. Furthermore, articles indirectly dealing with the topic were also included to have a more comprehensive view of the antecedents of social media adoption and usage in B2B settings. In addition, as the focus of the research is the B2B environment, all the articles concerning the use of social media only in B2C contexts were removed from consideration, whereas those articles that may relate to both contexts were included. Finally, the objective of the studies is the social media adoption and usage in B2B organisations; thereby, we excluded all the articles investigating other topics such as performance, content strategy and so forth (see more in [Table I](#)).

Subsequently, the review team identified keywords on the subject to construct the following search string[1] to be entered into each database:

- (“social media” OR “social networks” OR “web 2.0”).
- AND (adoption OR usage OR use OR utilisation OR antecedent OR driver OR motivation OR determinant OR barrier).
- AND (“b2b” OR “business-to-business” OR industrial).

In total, this process yielded 338 results within the four databases. Next, inclusion and exclusion criteria were used to narrow the publication list. A content analysis of titles and abstracts was carried out to classify the primary topic for each result. When the abstracts were cryptic, the researchers had a closer look at the introduction or at the entire text, if necessary. After this process, 313 results were excluded because they did not meet the above criteria. Then, 12 results were further excluded because they represented duplications. The final sample encompasses 14 results related to the investigation of the adoption of social media in B2B settings.

At this point, as the final sample was small, we went backwards and forwards ([Webster and Watson, 2002](#)) by respectively screening the reference sections of each paper looking for scientific publications that have previously dealt with the issue and by further examining the cited papers when available[2]. The backward search led to the inclusion of five other articles, and the forward search yielded eight additional results. Three further studies were included because they were already known to the researchers and considered relevant to the topic under review (i.e. the articles by [Hansen and Levin, 2016](#); [Rodriguez et al., 2016](#); [Salo et al., 2013](#)). At the end of this process, a total of 29 studies were selected ([Figure 1](#))[3].

3.3 Reporting and dissemination: the “descriptive” analysis

According to [Tranfield et al. \(2003\)](#), this phase might yield a two-staged report, providing a descriptive and thematic analysis of the results.

Criteria	Inclusion	Exclusion
Technology	Social media or social networks	Websites, cloud, marketing automation, etc.
Context	B2B	B2C
Objective	Social media adoption and usage	Performance, content strategy, social media monitoring, etc.

Table I.
Inclusion and
exclusion criteria

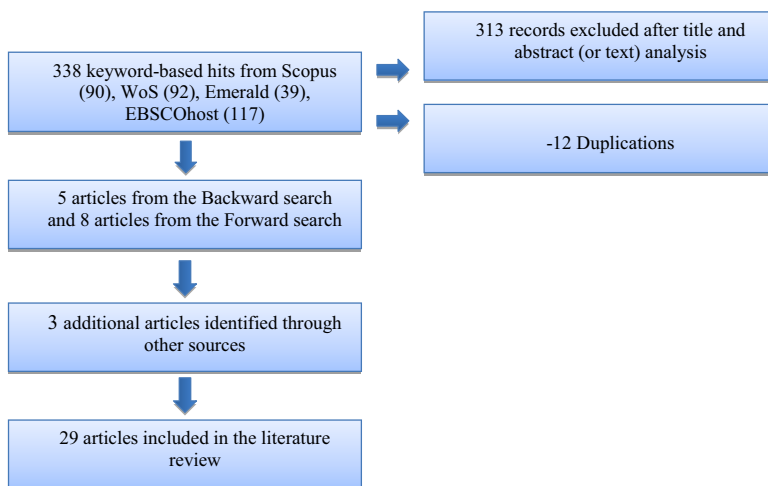


Figure 1.

Keywords database search and selection of studies

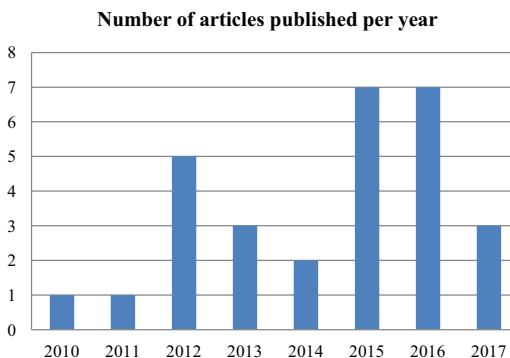
For what concerns the “descriptive” analysis, the following aspects were considered (A detailed overview of the papers that were analysed is given in [Table I](#) in the [Appendix](#)):

- title and author(s);
- publication year;
- source (name of the journal, conference or book);
- typology (conceptual or empirical);
- methodology (qualitative, quantitative or both);
- country of study;
- firm size; and
- participants’ job title.

The topic under review appears to be rather new, as the first article included in this review dates back to 2010. The publication trend has grown almost steadily, reaching a maximum of seven publications in 2015 and 2016 ([Figure 2](#)).

Figure 2.

Publication trend by years



The results of this systematic review are mainly peer-reviewed articles (24), except for four conference papers and one book chapter. Paying attention to the publication outlets of peer-reviewed articles, the most frequent outlets are *Industrial Marketing Management* (five) and *Journal of Business & Industrial Marketing* (two), which is not surprising given the topic under review. However, the majority of the articles (17) have been published in a more sparse range of academic journals, among which five academic journals are related to IT and E-business (Table II).

All the studies are empirical with a vast majority of quantitative research papers (17). Only six articles out of 29 are qualitative, and six articles use both quantitative and qualitative methods (Table III). Quantitative research uses surveys, whereas qualitative studies mainly use single or multiple case studies and semi-structured interviews. Only one article within the qualitative group uses a content analysis of social media materials.

With regards to the countries taken into consideration, the majority of the studies are based in the USA and Europe. In Europe, the most investigated countries are Finland (five studies), Germany and the UK (two studies), whereas three articles out of 29 are cross-national.

Journal	No. of publications
<i>Industrial Marketing Management</i>	5
<i>Journal of Business & Industrial Marketing</i>	2
<i>Journal of Personal Selling & Sales Management</i>	1
<i>Small Business Institute Journal</i>	1
<i>Journal of Marketing Theory and Practice</i>	1
<i>American Journal of Business</i>	1
<i>Journal of Business Research</i>	1
<i>Computers in Human Behavior</i>	1
<i>Journal of Customer Behaviour</i>	1
<i>Electronic Commerce Research and Applications</i>	1
<i>Journal of Organizational and End User Computing</i>	1
<i>European Business Review</i>	1
<i>Journal of Small Business & Enterprise Development</i>	1
<i>Journal of Small Business Management</i>	1
<i>Journal of the Academy of Marketing Science</i>	1
<i>International Journal of Business Communication</i>	1
<i>The Marketing Management Journal</i>	1
<i>International Journal of E-Business Research</i>	1
<i>International Journal of Internet Marketing and Advertising</i>	1
<i>Conference Papers and Proceedings</i>	4
<i>Lecture Notes in Business Information Processing</i> (book chapter)	1
Total	29

Table II.
Publication outlets

Typology	No. of articles
<i>Empirical studies</i>	29
Quantitative	17
Qualitative	6
Qualitative/Quantitative	6
<i>Conceptual studies</i>	0
Total	29

Table III.
Methodology of the
articles

Furthermore, in terms of firm size, the vast majority of the articles consider both SMEs and large firms (11), seven studies focus on SMEs, whereas only three examine large firms; nevertheless, eight articles do not specify the size of companies. We then proceeded with the thematic analysis of the articles, whose results are described in the next paragraph.

4. Thematic analysis

A coding activity of the articles was performed to identify main groups of antecedents. We grouped these factors following two different criteria: the level of adoption and the nature of antecedents.

As far as the *level of adoption* is concerned, we distinguish between the adoption by individuals on the behalf of the business and the adoption from a firm/function perspective. Regarding the *nature of antecedents*, factors supporting or hindering the adoption have been classified into three main groups: personal, organisational and external antecedents. Within each group, further categories have been identified (see more in [Table IV](#)).

4.1 Social media adoption at the individual level

Few studies investigate the adoption of social media channels for business purposes from an individual perspective. In this regard, [Schultz et al. \(2012\)](#) find that both *personal characteristics* (age), *organisational factors* and *external factors* (social media norms) influence social media usage by B2B salespeople. There is a negative relationship between age and social media use, whereas a positive connection exists between the environment (customers, competitors, peers and supervisors) and social media adoption. Hence, customers who use these platforms encourage salespeople to communicate through the same channel. Similarly, the successful use of social media by competitors could be seen as a threat of losing sales or as an opportunity to succeed; thus, it influences the adoption of these technologies. The internal environment is equally important, as the peers and supervisors' willingness (resistance) to use social media encourages (discourages) salespeople's usage. Among the personal antecedents, motivational factors also appear to impact on social media adoption and usage. Intrinsic, extrinsic and apathetic motivations are found to be significant antecedents of social media use ([Hansen and Levin, 2016](#); [Levin et al., 2012](#)). Performing an activity to gain a reward or avoid a punishment (i.e. extrinsic motivation) or for the inherent enjoyment and satisfaction (i.e. intrinsic motivation) positively affects behavioural intention to use social media platforms. On the contrary, the lack of interest in performing a specific task (i.e. apathetic motivation) has a negative impact on behavioural intention to use. Moreover, [Hansen and Levin \(2016\)](#) find that apathetic motivation negatively affects the relationship between both extrinsic and intrinsic motivation and behavioural intention to use social media for business purposes. In addition, employee role appears to influence these dynamics ([Hansen and Levin, 2016](#)). In particular, the positive effect between behavioural intention and behavioural use of social media is intensified for employees who fulfil marketing/sales job roles. In the same vein, employee role affects the apathetic-extrinsic moderation effect: when both motivations increase, extrinsic motivation seems to overcome apathetic motivation for marketing/sales job roles, whereas for other job roles, apathetic motivation overwhelms extrinsic motivation ([Hansen and Levin, 2016](#)). Indeed, marketing/sales employees report higher behavioural intention to use social media for business purposes than non-marketing/non-sales employees.

4.2 Social media adoption at the firm/function level

4.2.1 Personal factors. Most of the articles deal with the topic by investigating the adoption at a firm level and only one study at the sales function level ([Guesalaga, 2016](#)). As far as the

Level of adoption	Individual level	Personal	Organisational	Nature of antecedents	External
		Age (Schultz <i>et al.</i> , 2012) <i>Motivations</i> (Hansen and Levin, 2016; Levin <i>et al.</i> , 2012) Intrinsic motivation Extrinsic motivation Apathetic motivation <i>Personal characteristics:</i> Managers' age (Bocconcelli <i>et al.</i> , 2017; Wamba and Carter, 2014) Individual commitment (Guesalaga, 2016) Staff is not familiar with SM (Michaelidou <i>et al.</i> , 2011) Sales personnel's capability (Rodriguez <i>et al.</i> , 2016) <i>Perceptions on social media:</i> Perceived ease of use (Lacka and Chong, 2016; Paluch <i>et al.</i> , 2015) Perceived usefulness (Lacka and Chong, 2016; Paluch <i>et al.</i> , 2015) Perceived utility (Lacka and Chong, 2016) Anxiety (Paluch <i>et al.</i> , 2015)	<i>Social media norms</i> (Schultz <i>et al.</i> , 2012): influence from intra-organisational salespeople, peers and supervisors <i>Organisational characteristics:</i> Organizational competence/knowledge (Guesalaga, 2016; Broekemier <i>et al.</i> , 2015; Taiminen and Karjaluoto, 2015; Järvinen <i>et al.</i> , 2012; Michaelidou <i>et al.</i> , 2011) Organizational innovativeness (Eggers <i>et al.</i> , 2017; Siamagka <i>et al.</i> , 2015; Veldeman <i>et al.</i> , 2015; Wamba and Carter, 2014) Corporate culture (Veldeman <i>et al.</i> , 2015; Jussila <i>et al.</i> , 2014; Meske and Stieglitz, 2013; Salo <i>et al.</i> , 2013; Brennan and Croft, 2012; Kärkkäinen <i>et al.</i> , 2010) Management support and vision (Bocconcelli <i>et al.</i> , 2017; Choi and Thoeni, 2016; Guesalaga, 2016; Martins <i>et al.</i> , 2016; Rodriguez <i>et al.</i> , 2016; Taiminen and Karjaluoto, 2015; Jussila <i>et al.</i> , 2014; Meske and Stieglitz, 2013) Alignment between SM and marketing strategy or business plan (Choi and Thoeni, 2016; Martins <i>et al.</i> , 2016) Business model and strategy (Brink, 2017) <i>Resources:</i> Personnel resources (Taiminen and Karjaluoto, 2015; Järvinen <i>et al.</i> , 2012; Kärkkäinen <i>et al.</i> , 2010) Time resources (Broekemier <i>et al.</i> , 2015; Taiminen and Karjaluoto, 2015; Järvinen <i>et al.</i> , 2012; Michaelidou <i>et al.</i> , 2011) Financial resources (Järvinen <i>et al.</i> , 2012; Kärkkäinen <i>et al.</i> , 2010)	<i>Social media norms</i> (Schultz <i>et al.</i> , 2012): influence from customers and competitors <i>Influence/Pressure from customers</i> (Guesalaga, 2016; Siamagka <i>et al.</i> , 2015; Veldeman <i>et al.</i> , 2015; Pentina <i>et al.</i> , 2012) <i>Influence from suppliers</i> (Rapp <i>et al.</i> , 2013) <i>Influence/Pressure from competitors</i> (Martins <i>et al.</i> , 2016; Siamagka <i>et al.</i> , 2015; Pentina <i>et al.</i> , 2012; Michaelidou <i>et al.</i> , 2011) <i>Expert-related factors:</i> Social influence (Pentina <i>et al.</i> , 2012); influence from experts Supported company-specific consulting and information about SM consulting companies (Jussila <i>et al.</i> , 2015) <i>Availability of external information about social media:</i> Information about tools and vendors (Jussila <i>et al.</i> , 2015) Events and secondary data	

(continued)

Antecedents of social media usage

Table IV.
Antecedents of social media usage and adoption

Table IV.

Personal	Organisational	Nature of antecedents	External
Emotional conviction (Paluch <i>et al.</i> , 2015)	<p><i>Perceptions on social media:</i> Perceived risk (Beier and Wagner, 2016) Perceived usefulness (Beier and Wagner, 2016; Broekemier <i>et al.</i>, 2015; Siamagka <i>et al.</i>, 2015; Veldeman <i>et al.</i>, 2015; Jussila <i>et al.</i>, 2014; Järvinen <i>et al.</i>, 2012; Pentina <i>et al.</i>, 2012; Michaelidou <i>et al.</i>, 2011; Kärkkäinen <i>et al.</i>, 2010) Inability to assess the benefits (Jussila <i>et al.</i>, 2015; Järvinen <i>et al.</i>, 2012; Kärkkäinen <i>et al.</i>, 2010) Not important within the industry (Michaelidou <i>et al.</i>, 2011)</p>	(Jussila <i>et al.</i> , 2015; Kärkkäinen <i>et al.</i> , 2010)	
	<p>Technological affinity (Veldeman <i>et al.</i>, 2015) <i>Security-related factors:</i> The norm of confidentiality and security issues (Karjaluoto <i>et al.</i>, 2015; Jussila <i>et al.</i>, 2014; Kärkkäinen <i>et al.</i>, 2010) Fear of losing information to competitors (Salo <i>et al.</i>, 2013) Corporate reputation (Veldeman <i>et al.</i>, 2015) Firms' size (Wamba and Carter, 2014; Brennan and Croft, 2012; Järvinen <i>et al.</i>, 2012)</p>		

personal factors are concerned, we grouped the antecedents into two further categories: personal characteristics and perception on social media. Among the *personal characteristics*, the manager's age may support or hinder the adoption of social media within organisations. The presence of young managers increases the likelihood of social media adoption and usage (Bocconcelli *et al.*, 2017; Wamba and Carter, 2014). For instance, "traditional" industries are usually made up of small family businesses that display a lower propensity toward internet-based technologies in general. In this context, Bocconcelli *et al.* (2017) show how the introduction of social media within a small firm occurred after hiring a young sales manager. In the same vein, sales managers' commitment to social media, as the extent to which an individual actively engages in using these platforms, represents a predictor of social media usage (Guesalaga, 2016). Another personal characteristic that appears to be related to social media use is the employees' familiarity with these tools (Michaelidou *et al.*, 2011), meaning that the necessary experience is oftentimes lacking within firms. Moreover, Rodriguez *et al.* (2016) find that sales personnel's capability positively influences social media use.

With regard to the *perceptions on social media*, some studies draw on the technology acceptance model (TAM), often in combination with other models or theories, such as Nielsen's model of attributes of system acceptability (see Lacka and Chong, 2016), to shed some light on factors that determine social media adoption by B2B organisations. Within the framework of TAM, both perceived usefulness and perceived ease of use are found to be significant drivers of social media use in B2B contexts (Lacka and Chong, 2016; Paluch *et al.*, 2015). Furthermore, another factor leading to social media adoption is the perceived utility, which assesses the suitability of a certain technology to achieve specific goals (Lacka and Chong, 2016). Besides, Paluch *et al.* (2015) show that anxiety regarding the downside of these tools and emotional conviction of the superiority of social media in customer-seller relationships compared to other channels impact on behavioural intention to adopt these tools.

4.2.2 Organisational factors. On the organisational side, various antecedents have been identified by previous scholars. We further grouped these factors into four categories: organisational characteristics, resources, perceptions on social media and security-related factors.

Among the *organisational characteristics*, organisational competence appears to be a significant predictor of social media usage. In this regard, knowledge (Broekemier *et al.*, 2015; Taiminen and Karjaluoto, 2015) and technical skills (Michaelidou *et al.*, 2011) or know-how (Järvinen *et al.*, 2012) were found to influence the decision to adopt and use social media. Hence, the more advanced the company's knowledge and capability about social media, the higher the sales organisation's usage, because the sales department can access the company's technology experiences (Guesalaga, 2016).

Organisational innovativeness, in terms of openness towards new technologies, new ideas and new ways of doing business, is positively related to social media adoption and usage (Siamagka *et al.*, 2015; Veldeman *et al.*, 2015; Wamba and Carter, 2014). In this regard, Eggers *et al.* (2017) find that SMEs' entrepreneurial orientation improves their social network usage: proactiveness, innovativeness and a risk-taking approach are all necessary to adopt and use social media.

Furthermore, corporate culture may influence the adoption and use of social media (Meske and Stieglitz, 2013; Salo *et al.*, 2013). The way of doing business affects social media usage and the firm's attitude towards it (Salo *et al.*, 2013). Traditional mindsets (Veldeman *et al.*, 2015; Jussila *et al.*, 2014; Kärkkäinen *et al.*, 2010) and traditional approaches to information control (Brennan and Croft, 2012) may deter the adoption of social media.

Among the cultural factors, difficulties in integrating social media into existing information systems are found to be a potential barrier, although not so relevant (Kärkkäinen *et al.*, 2010).

Various factors bolstering the adoption of social media are related to the management support and vision. Top management commitment, in terms of management vision and long-term orientation (Bocconcelli *et al.*, 2017; Choi and Thoeni, 2016), and management support with sufficient resources, training, guidelines and strategy communication (Choi and Thoeni, 2016; Guesalaga, 2016; Martins *et al.*, 2016; Razmerita *et al.*, 2016; Taiminen and Karjaluoto, 2015; Meske and Stieglitz, 2013) may expedite the acceptance and usage of social media across the organisation. The priority of other projects within the firms has been found to be a relevant barrier hindering the adoption of social media within the organisation (Jussila *et al.*, 2014). According to Martins *et al.* (2016, p. 22), top managers should create a perception that business initiatives on social networking sites “are very important for the firms’ business and that those directly associated with it must perform at the best of their abilities and with a sense of ethics and professionalism”. This is especially true for SMEs, where a successful adoption of social media depends on the support of the CEO and a well-structured implementation process (Meske and Stieglitz, 2013). However, Järvinen *et al.* (2012) find that management resistance and lack of technical support are not relevant barriers, although management resistance is a more important obstacle for medium-sized firms than for others.

The organisation’s acceptance and use of social media also requires an integration of the social media strategy within the overall marketing strategy (Choi and Thoeni, 2016) or the firm’s business plan (Martins *et al.*, 2016). Top management should define desired outcomes that are measurable and designed to align the firm’s social media marketing objectives with the firm’s marketing objectives. Furthermore, social media usage at the firm/function level appears to be tied to the firm’s business model. Open business model innovation, in terms of collaboration with customers, suppliers and partners for knowledge creation, and the combination of central and distributed leadership for social media application are found to be important antecedents (Brink, 2017). At least in the short run, the second aspect represents a problem for managers, who usually tend to have a central controlling approach to leadership (Brink, 2017).

Moreover, the inadequacy of *resources* appears to hinder the utilisation of social media (Jussila *et al.*, 2014; Meske and Stieglitz, 2013). In this regard, the lack of personnel involved in social media management could deter the adoption and use of social media (Taiminen and Karjaluoto, 2015; Järvinen *et al.*, 2012; Kärkkäinen *et al.*, 2010). Particularly, uncertainty on how to use these tools and difficulties in finding the right person to be in charge of digital marketing are specified as the main obstacles (Taiminen and Karjaluoto, 2015). In the same vein, time resources (Broekemier *et al.*, 2015; Taiminen and Karjaluoto, 2015; Järvinen *et al.*, 2012; Michaelidou *et al.*, 2011) may hinder the adoption of social media channels. Nevertheless, financial resources are considered less important barriers to social media usage (Järvinen *et al.*, 2012; Kärkkäinen *et al.*, 2010).

Various *perceptions regarding social media* have been considered in literature to be potential inhibitors or supporting factors. Beier and Wagner (2016) find that the decision not to adopt social media is mainly influenced by the expectancy of low returns of social media as well as high perceived risk. Basically, practitioners feel that the perceived benefits of social media do not offset the perceived risks. In the same vein, Broekemier *et al.* (2015) find that small B2B firms do not fully acknowledge the benefits of social media in increasing brand awareness. Traditional channels are considered more effective and firms are still uncertain regarding profit-related improvement through these platforms. Perceived

usefulness is, indeed, largely considered to be an important predictor of social media adoption (Beier and Wagner, 2016; Broekemier *et al.*, 2015; Siamagka *et al.*, 2015; Veldeman *et al.*, 2015; Jussila *et al.*, 2014; Järvinen *et al.*, 2012; Pentina *et al.*, 2012; Michaelidou *et al.*, 2011; Kärkkäinen *et al.*, 2010). Among non-adopters, lack of understanding about the possibilities (Jussila *et al.*, 2014; Kärkkäinen *et al.*, 2010), lack of need (Jussila *et al.*, 2014), uncertainty of helpfulness (Michaelidou *et al.*, 2011) and lack of usefulness in supporting the objective of the business (Järvinen *et al.*, 2012) are mentioned as main reasons. Instead, adopters of social media for business purposes identify advantages in using these platforms such as quick information sharing opportunities, improved dialogue with current and prospective clients (Veldeman *et al.*, 2015), enhanced competitiveness, cost-effectiveness, customer engagement, relationship building potential and real-time feedback (Siamagka *et al.*, 2015). Furthermore, Pentina *et al.* (2012) find that perceived usefulness is only significant in the decision to adopt social media and not in continuing to use these tools. Moreover, the inability to assess the benefits of social media (Jussila *et al.*, 2015), also in terms of ROI (Järvinen *et al.*, 2012; Kärkkäinen *et al.*, 2010), represents a potential factor hindering the adoption. Part of the literature finds that social networks are perceived as not relevant in some industries (Michaelidou *et al.*, 2011). In this regard, Veldeman *et al.* (2015) show that industrial firms are less motivated to use social media than IT enterprises, because they do not perceive social media to be essential. They evaluate social media's usefulness lower than IT companies and lack technological affinity.

Finally, *security issues* in social media usage have been highlighted as a potential obstacle (Karjaluoto *et al.*, 2015; Jussila *et al.*, 2014; Kärkkäinen *et al.*, 2010). The norm of confidentiality, which characterises relationships in the B2B setting, is perceived as a barrier in the adoption of social media; hence, engaging in public discussion with customers in these virtual environments could break the rules of communication (Karjaluoto *et al.*, 2015). Open interaction within these platforms is oftentimes perceived as a threat, and companies fear losing information to competitors (Salo *et al.*, 2013). In this regard, according to Veldeman *et al.* (2015), inappropriate or wrong social media messages by employees are perceived as the greatest threat and source of damage to corporate reputation. As a result, B2B organisations tend to use social media more internally than externally (Jussila *et al.*, 2014, 2015).

The *size of the company* could also represent another factor influencing social media adoption in B2B companies (Wamba and Carter, 2014; Brennan and Croft, 2012). According to Wamba and Carter (2014), larger SMEs are more willing to use social media because they have resources to invest (more employees, larger budgets, etc.). Moreover, large-sized B2B firms may consider social media more important in their strategies (Järvinen *et al.*, 2012).

4.2.3 External factors. Five different categories have been identified among the external factors: customer, supplier, competitors, expert-related factors and availability of external information on social media.

According to Guesalaga (2016), the extent to which the most important *customers* use social media is a significant antecedent of social media use. Pentina *et al.* (2012), consistently with TAM2, find that social influence, as the user's perception that important people (*experts, customers and competitors*) think he or she should adopt the technology, is particularly important in affecting the company's decision to continue to use this social media. In the same vein, other studies identified pressure or influence from buyers (Siamagka *et al.*, 2015; Veldeman *et al.*, 2015) and competitors (Martins *et al.*, 2016; Siamagka *et al.*, 2015; Michaelidou *et al.*, 2011) as important external antecedents of social media adoption. In this regard, Michaelidou *et al.* (2011) find that competitors' negative behaviour towards these technologies is a possible barrier to social media adoption, but less important

than others. Across the supply chain, [Rapp et al. \(2013\)](#) investigate a contagion effect of social media usage and find that the increasing use of social media by the supplier leads to an increasing use of social media by the retailer, that in turn influences consumers' usage. Moreover, information given by consulting companies as well as supported company-specific consulting services matter as factors bolstering the adoption of social media ([Jussila et al., 2015](#)). Besides, general information about tools and vendors ([Jussila et al., 2015](#)), seminars, events and secondary data (such as reports) could be useful in supporting the adoption of such platforms ([Jussila et al., 2015](#); [Kärkkäinen et al., 2010](#)).

5. Research implications and potential research direction

This systematic review provides an inclusive analysis of the antecedents of social media adoption and usage in the B2B contexts and highlights future research opportunities. Future research directions are as follows:

- (1) Further research on the individual perspective:
 - the link between the antecedents of social media adoption for private purposes and professional purposes; and
 - the relationship between the antecedents at the individual level and at the firm/function level.
- (2) Further research on non-technical skills and capabilities required by social media tools, such as:
 - concise communication;
 - copywriting skills;
 - storytelling skills; and
 - relational skills.
- (3) Further research on the social influence:
 - the influence of inter-organisational peers.

5.1 *The lack of knowledge in individual perspective*

The current research on antecedents of social media adoption and usage in B2B settings is mainly focused on the *firm/function perspective* and only few studies consider the *individual perspective*. This area needs deeper consideration and should be addressed in future research. Notably in the B2B context, a new role of the salesperson as a value creator within the firm emerges ([Weitz and Bradford, 1999](#)). In this case, conducting further studies from the individual perspective dealing with personal, organisational and external factors appears to be relevant. Furthermore, investigating whether and how the antecedents of social media usage for business purposes at the individual level are tied to the antecedents of social media adoption for private purposes would be useful.

It should also be noted that the extant literature does not investigate the relationship between the individual perspective and the firm/function perspective. Future research should deal with this topic, as the connections between some job roles or functions, such as the salespeople and the entire organisation ([Storbacka et al., 2009](#)), are becoming more evident than ever before.

5.2 *New or old skills in social media usage*

Some scholars still consider technological skills to be significant barriers to social media adoption in B2B contexts ([Veldeman et al., 2015](#)). Other studies investigated the role of non-

technology-related skills and capabilities, such as customer-oriented selling (Schultz *et al.*, 2012). Although these “new” skills have only been found significant by Rodriguez *et al.* (2016), in terms of sales personnel capability, a deeper investigation on this aspect would be useful. In this regard, according to Meske and Stieglitz (2013), social media adoption depends on non-technical barriers and challenges. The perceived ease of use that was found to be a relevant factor in technology adoption appears to be less significant in social media adoption, which does not require high efforts in overcoming technological barriers (Siamagka *et al.*, 2015; Veldeman *et al.*, 2015). According to Pentina *et al.* (2012), low values of perceived ease of use in either adopters and non-adopters of social media might depend on additional skills and efforts required to manage these tools. Indeed, whereas social media is considered easy to set up and execute, a meaningful usage is still challenging.

5.3 Internal and external social environment

Although organisational factors appear to be widely investigated, the external factors are less explored in the extant literature. Further research on this area would be beneficial.

This study highlights the role of “internal social influence” and “external social influence”. In this regard, the literature shows that influence from managers, customers, competitors and experts is an important antecedent of social media adoption in B2B contexts. Yet, practitioners of different firms are constantly in touch and frequently exchange their professional experiences. Further studies may investigate the extent to which relationships between inter-organisational peers influence the adoption and use of social media in B2B environments.

6. Conclusion

The purpose of this study was to gather and synthesise the extant knowledge concerning the antecedents of social media adoption and usage in the B2B context and contribute to the literature outlining the research patterns in this area.

In the past few years (2001-2017), there has been a growth in the number of articles that have been published. The most influential journals in this area are *Industrial Marketing Management* and *Journal of Business & Industrial Marketing*. This review shows that all the 29 articles are empirical in nature. Quantitative studies are more widespread, occurring 17 times and mainly using questionnaire-based surveys. Most of the research have been carried out in the USA and Europe, whereby the most investigated countries are Finland, the UK and Germany.

From the academic perspective, the contribution of this study is to offer an inclusive analysis of the antecedents of social media adoption and usage in the B2B context. In general, taking into consideration the studying perspective, future research should be more explicit regarding the unit of analysis. A considerable number of articles do not specify in a clear way whether they are investigating the adoption at the individual level or at the firm/function level. However, the firm/function perspective appears to be extensively investigated, whereas the individual perspective is far less explored. Further studies on this area would be useful, as well as investigating the relationship between factors driving social media usage for private purposes and antecedents of social media adoption on the behalf of the business. Moreover, social media seems to require skills and abilities different from those related to technical aspects; thus, future research may provide further insights on this topic. Besides, within the external environment, the influence of inter-organisational peers would be another potential antecedent of social media adoption and usage to be examined in future studies.

This article offers practitioners a starting point to make their decisions on how to improve the level of social media usage at both the individual and the firm/function level. At the individual level, managers may influence employees' extrinsic motivations in using social media and may provide support with resources and training to encourage social media use, but they have only indirect influence on other factors such as the intrinsic motivation. At a firm/function level, managers may directly influence all the organisational antecedents and they can also indirectly affect personal antecedents. Yet, they have little or no control on the external factors, both at the individual and firm/function level, such as the influence from customers and competitors.

Training could clearly influence different antecedents, hence supporting social media adoption; it could affect individual competencies and the company's knowledge as well as the firm's culture and the perceptions of social media at both the individual and firm/function level. Furthermore, the evolution of training in those companies that are more interested in the e-learning approach and in new methods like "collaborative learning" could support employees and managers to develop a different mindset.

In addition, the study shows that salespeople hold a pivotal role, which is more strategic and inter-functional than ever before (Storbacka *et al.*, 2009). Salespeople could be easily influenced by customers and competitors and they may in turn influence motivations and perceptions among their intra-organisational peers. In this vein, high levels of social media adoption in the sales force could have a relevant impact on the overall company adoption.

To conclude, considering the relevance of the top management commitment, it is important that especially SMEs and their associations become aware of the impact of the entrepreneur's knowledge, motivations and perceptions. Without an adequate entrepreneurial environment, it could be difficult to face the social media challenge and the "generational divide" could increase even more.

Although this study offers an organised picture of the antecedents of social media adoption and usage in the B2B context, there are some limitations that should be considered. First, the electronic databases used to conduct the systematic review are largely comprehensive, but not exhaustive. Future reviews could cover additional bibliographic sources. Second, we have only analysed English papers, excluding articles written in other languages. Third, although the search string tries to encompass all the relevant keywords, it is likely that some articles studying the same issue were not included because they use a different terminology.

Moreover, even though the literature has highlighted various types of antecedents, the final set of articles encompasses a quite high number of quantitative studies displaying only descriptive results from survey data (10 studies out of 17, among which three are mixed-method studies). Thereby, a recommendation for future quantitative research is to provide more significant results showing causal relationships between variables in predicting social media usage among B2B professionals, as more recent articles did.

This research area has drawn increasing attention in the timeframe under review and especially during the past five years; it is expected that a good amount of research will increase in the near future.

Notes

1. The search string was modified, adding quotation marks, question marks and parentheses when necessary according to the characteristics of each database.
2. The forward search was performed within the database that yielded the original article. Whenever this was not possible (i.e. EbscoHost search), we used the other databases or Google Scholar.

3. If a conference paper and a peer-reviewed article concerned the same topic, only the latter has been included in the review, as it is presumed that the article provides an improved study. Yet, the article of Kärkkäinen *et al.* (2013) was not available; thus, the previous conference paper (2010) was taken as a reference point.

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Table A1.
Descriptive analysis

No.	Title/Author(s)	Year	Source	Typology	Methodology	Country of study	Firm size	Participants' job title
1	Social media as a resource in SMEs' sales process R. Boccoconcelli M. Cioppi A. Pagano	2017	<i>Journal of Business & Industrial Marketing</i>	Empirical	Qualitative (longitudinal case study)	Italy	SME	Entrepreneur and sales manager
2	B2B SME management of antecedents to the application of social media T. Brink	2017	<i>Industrial Marketing Management</i>	Empirical	Qualitative (multiple case study and action research)	Denmark	SMEs	Managers
3	Technologies that support marketing and market development in SMEs: Evidence from social networks F. Eggers I. Hatak S. Kraus T. Niemand	2017	<i>Journal of Small Business Management</i>	Empirical	Quantitative (survey-SEM) $N = 411$	Austria, Germany, Liechtenstein and German-speaking part of Switzerland	SMEs and large firms	Business executives
4	Social media adoption: barriers to the strategic use of social media M. Beier K. Wagner	2016	24th European Conference on Information Systems (ECIS)	Empirical	Both methods (16 interviews; survey-factor analysis and regression) $N = 278$	Switzerland	SMEs	Chief executive officer
5	Social media: Is this the new organizational stepchild? Y. Choi A. Thoenig	2016	<i>European Business Review</i>	Empirical	Qualitative (17 in-depth semi-structured interviews)	–	SMEs and large firms	Managers, executives or owners who were responsible for their firm's social media strategies

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No.	Title/Author(s)	Year	Source	Typology	Methodology	Country of study	Firm size	Participants' job title
6	The use of social media in sales: individual and organizational antecedents, and the role of customer engagement in social media R. Guesalaga	2016	<i>Industrial Marketing Management</i>	Empirical	Quantitative (survey-OLS multiple regression and Sobel test) N = 220	USA	SMEs and large firms	Sales executives
7	The effect of apathetic motivation on employees' intentions to use social media for business J.M. Hansen M.A. Levin	2016	<i>Journal of Business Research</i>	Empirical	Quantitative (survey-PLS SEM) N = 210	USA	–	Marketing/NPD/sales employees and non-marketing/non-sales department employees
8	Usability perspective on social media sites' adoption in the B2B context E. Lacka	2016	<i>Industrial Marketing Management</i>	Empirical	Quantitative (survey-SEM) N = 181	China	–	B2B marketing professionals
9	Understanding determinants of social network sites adoption at firm level: a mixed methodology approach J. Martins R. Goncalves T. Oliveira M. Cota F. Branco	2016	<i>Electronic Commerce Research and Applications</i>	Empirical	Both methods (Delphi study with experts; survey-PLS SEM) N = 247	Portugal	–	Firms' collaborators with experience in SNS

(continued)

Antecedents of social media usage

Table AI.

Table AI.

No.	Title/Author(s)	Year	Source	Typology	Methodology	Country of study	Firm size	Participants' job title
10	Social media in large sales forces an empirical study of the impact of sales process capability and relationship performance M. Rodriguez H. Aijian R.M. Peterson	2016	<i>Journal of Marketing Theory and Practice</i>	Empirical	Quantitative (survey-PLS SEM) N = 184	-	Large firms	Sales professionals
11	Social media practices among small business-to-business enterprises G. Broeckemier N.N. Chau S. Seshadri	2015	<i>Small Business Institute Journal</i>	Empirical	Quantitative (survey-descriptive study) N = 81	USA	SMEs	Owners/co-owners, managers, upper-level marketing related titles
12	Social media application in external B2B transactions: an empirical analysis of the Finnish technology industry J. Jussila H. Kärkkäinen H. Aramo-Immonen <i>et al.</i>	2015	10th International Forum on Knowledge Asset Dynamics (IFKAD)	Empirical	Quantitative (survey-descriptive study) N = 125	Finland	SMEs and large firms	Managing directors, business development, product development and communication managers
13	The role of digital channels in industrial marketing communications H. Karjaluoto N. Mustonen P. Ulkumemi	2015	<i>Journal of Business & Industrial Marketing</i>	Empirical	Qualitative (multiple case study) 6 firms	-	SMEs and large firms	Managers, directors, marketing staff, business unit VP

(continued)

No.	Title/Author(s)	Year	Source	Typology	Methodology	Country of study	Firm size	Participants' job title
14	Acceptance of social media by organizational users-Testing the impact of system design features S. Paluch D. Egbert M. Blut	2015	36th International Conference on Information Systems (ICIS)	Empirical	Both methods (46 interviews; survey-SEM) N = 134	Germany	–	General managers, directors, IT-team managers, sales-, marketing- and project managers, support staff and purchasing agents
15	Determinants of social media adoption by B2B organizations N.-T. Siamagka G. Christodoulides N. Michaelidou A. Valvi	2015	<i>Industrial Marketing Management</i>	Empirical	Both methods (survey-SEM; 9 interviews) N = 105	UK	SMEs and large firms	Senior marketing executives (directors or managers)
16	The usage of digital marketing channels in SMEs H.M. Taiminen H. Karjaluoto	2015	<i>Journal of Small Business & Enterprise Development</i>	Empirical	Both methods (survey-descriptive; 16 interviews) N = 421	Finland	SMEs	CEO, Sales manager, KAM, Marketing manager, Export producer, Business controller
17	Social media adoption in business-to-business: IT and industrial companies compared C. Veldeman E. Van Praet P. Mechant	2015	<i>International Journal of Business Communication</i>	Empirical	Both methods (survey-descriptive study; 11 interviews) N = 92	Belgium	SMEs and large firms	General management, people responsible for marketing, for communication, and for sales

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Antecedents of social media usage

Table AI.

Table A1.

No.	Title/Author(s)	Year	Source	Typology	Methodology	Country of study	Firm size	Participants' job title
18	Social media utilization in business-to-business relationships of technology industry firms J.J. Jussila H. Kärrkäinen H. Aramo-Immonen	2014	<i>Computers in Human Behavior</i>	Empirical	Quantitative (survey-descriptive study) N = 125	Finland	SMEs and large firms	Managing directors, business development, and product development and communication managers
19	Social media tools adoption and use by SMEs; an empirical study S.F. Wamba L. Carter	2014	<i>Journal of Organizational and End User Computing</i>	Empirical	Quantitative (survey-hierarchical logistic regression) N = 453	Australia, USA, UK, India	SMEs	Members of the B2B small business
20	Adoption and use of social media in small and medium-sized enterprises C. Meske S. Stieglitz	2013	<i>Lecture Notes in Business Information Processing</i> (book chapter)	Empirical	Quantitative (survey-descriptive study) N = 190	Germany	SMEs and large firms	Managers
21	Understanding social media effects across sellers, retailer and consumer interactions A. Rapp L.S. Beitelspacher D. Grewal D.E. Hughes	2013	<i>Journal of the Academy of Marketing Science</i>	Empirical	Quantitative (survey-HLM) N = 28 N = 144 N = 445	USA	–	Supplier salespeople, retail managers, and consumers

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No.	Title/Author(s)	Year	Source	Typology	Methodology	Country of study	Firm size	Participants' job title
22	Social media marketing in Scandinavian industrial markets J. Salo T. Lehtimäki H. Simula M. Mäntymäki	2013	<i>International Journal of E-Business Research</i>	Empirical	Qualitative (multiple case study) 6 firms 8 interviews with experts	Scandinavia	Large firms	Marketing communications manager, product marketing managers, vice president, external communication managers, marketing managers, consultants, researcher, digital marketing experts
23	The use of social media in b2B marketing and branding: an exploratory study R. Brennan R. Croft	2012	<i>Journal of Customer Behaviour</i>	Empirical	Qualitative (semi-structured content analysis of social media material) 10 firms	USA, Switzerland, Germany, Korea, Japan	Large firms	–
24	Digital and social media marketing usage in B2B industrial section J. Järvinen A. Töllinen H. Karjaluoto C. Jayawardhena	2012	<i>The Marketing Management Journal</i>	Empirical	Quantitative (survey-descriptive study) N = 145	Finland	SMEs and large firms	General Managers and marketing directors
25	Toward Understanding New Sales Employees' Participation in Marketing-Related Technology M.A. Levin J.M. Hansen D.A. Laverie	2012	<i>Journal of Personal Selling & Sales Management</i>	Empirical	Quantitative (survey-PLS regression) N = 194	Texas	–	Business students

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Antecedents of social media usage

Table AI.

Table AI.

No.	Title/Author(s)	Year	Source	Typology	Methodology	Country of study	Firm size	Participants' job title
26	Adoption of social network marketing by SMEs exploring the role of social influences and experience in technology acceptance I. Penttinen A.C. Koh T.T. Le	2012	<i>International Journal of Internet Marketing and Advertising</i>	Empirical	Quantitative (survey-correlations and regressions) N = 65	Midwest	SMEs and large firms	Owner, upper- or middle manager from marketing and IT
27	Social media usage and investigation of B2B salespeople R.J. Schultz C.H. Schwepker D.J. Good	2012	<i>American Journal of Business</i>	Empirical	Quantitative (survey-SEM) N = 273	USA	–	B2B salespeople
28	Usage, barriers and measurement of social media marketing: an exploratory investigation of small and medium B2B brands N. Michaelidou N.-T. Siamagka G. Christodoulides	2011	<i>Industrial Marketing Management</i>	Empirical	Quantitative (survey-descriptive study) N = 102	UK	SMEs	Marketing directors or general directors
29	Social media use and potential in business-to-business companies' innovation H. Kärlkkäinen J. Jussila J. Väisänen	2010	14th International Academic MindTrek Conference (ACM)	Empirical	Quantitative (survey-descriptive study) N = 122	Finland	SMEs and large firms	Product development personnel, management, IT personnel, HR personnel, sales personnel and marketing personnel