Measuring B2B social selling: Key activities, antecedents and performance outcomes

Harri Terho [a,*], Marta Giovannetti [b], Silvio Cardinali [b]

[a] *Turku School of Economics, University of Turku, Turku, Finland*
[b] *Department of Management, Università Politecnica delle Marche, Ancona, Italy*

ARTICLE INFO	ABSTRACT
	Sales research has widely noted the growing importance of social media in contemporary B2B selling. Yet, scholars have noted that measurement issues represent a challenge for advancing the study of social media use in selling, since research is lacking on high-rigour measures that provide insights into how salespersons are leveraging social media in their work. Accordingly, this study develops and validates activity-based measures for social selling based on two empirical studies. We find support for all three social selling dimensions of insight generation, connecting and engagement. The findings also extend the current knowledge about the outcomes of social selling by showing that salesperson thought leadership and acquisition performance mediate the sales performance relationship. On the antecedents' side, we show novel evidence that management plays a central role in boosting social selling among the sales force through social media strategy, social media sales tools and firm content support. In turn, sales technology orientation and social influence represent the key individual-level drivers.

1. Introduction

Digital and social touchpoints play an increasingly important role in B2B customers' buying (e.g. Diba, Vella, & Abratt, 2019; Itani, Agnihotri, & Dingus, 2017; Itani, Krush, Agnihotri, & Trainor, 2020). Social media has, accordingly, become a central means for B2B salespeople to identify leads, understand buyers, foster relationships, and even build a personal brand through the systematic presence and sharing of engaging content on digital platforms (Agnihotri, Mani, Chaker, Daugherty, & Kothandaraman, 2020; Ancillai, Terho, Cardinali, & Pascucci, 2019; Chaker, Nowlin, Pivonka, Itani, & Agnihotri, 2022). Many sales organizations have recognized social selling as a strategic approach to attain organic visibility among customers, build thought leadership, and drive revenues, especially when applied throughout the salesforce and other customer-facing employees (see Meire, Ballings, & Van den Poel, 2017; Rapp, Beitelspacher, Grewal, & Hughes, 2013). Thus, even traditional industrial firms are investing in social media strategies and supporting technological platforms to increase the effective use of social media among their personnel (e.g. Moncrief, 2017; Trainor, Andzulis, Rapp, & Agnihotri, 2014).

Numerous recent studies have examined the role of social media in

B2B selling from both individual salesperson (Agnihotri, Kothandaraman, Kashyap, & Singh, 2012; Guenzi & Nijssen, 2020; Itani et al., 2017; Ogilvie, Agnihotri, Rapp, & Trainor, 2018) and organizational perspectives (Diba, Vella, & Abratt, 2019; (Guesalaga, 2016; Eid, Abdelmoety, & Agag, 2020), leading to cumulative evidence about antecedents, outcomes, and moderators of using social media in B2B selling (see Ancillai et al., 2019; Schmitt, Casenave, & Pallud, 2021). As the research has started to reach a higher maturity level, scholars are calling for more structured efforts to theorize this area (Agnihotri, 2020). Importantly, recent studies have noted that measurement issues represent a notable challenge for advancing the research on the role of social media in selling (Guenzi & Nijssen, 2020). Current research has relied on numerous diverse measures for studying the role of social media in selling, ranging from single-item measures (e.g. Guesalaga, 2016) to practice-oriented indices that estimate the use of specific social media platforms (e.g. Ogilvie et al., 2018) and to high-rigour reflective scales, adapted from earlier sales technology research (see Agnihotri, Dingus, Hu, & Krush, 2016) that focus on the overall extent to which salespeople use social media in sales work. Yet, current research lacks insights and constructs focusing on *how* salespersons leverage social media in their sales work. Although recent conceptual and qualitative

* Corresponding author.
E-mail addresses: harri.terho@utu.fi (H. Terho), m.giovannetti@pm.univpm.it (M. Giovannetti), s.cardinali@univpm.it (S. Cardinali).

studies have already provided insights into the specific activities of how salespersons actually use social media in their work (Ancillai et al., 2019; Barney-McNamara, Peltier, Chennamaneni, & Tarafdar, 2020; Bocconcelli, Cioppi, & Pagano, 2017; Chaker et al., 2022; Lacoste, 2016), research still lacks valid activity-based measures for 'social selling'. Likewise, extant research still has to confirm whether the reflective overall social media use scales sufficiently capture the various aspects of leveraging social media in selling.

Against this background, the purpose of this study is to advance social media-focused sales research by building and validating activity-based measures for B2B social selling. We conduct two studies to attain this goal. First, building on a recent qualitative conceptualization of B2B social selling (see Ancillai et al., 2019), we propose and validate a higher-order and three-dimensional measure for social selling with data from a B2B salesperson survey ($n = 199$). Second, we confirm the validity of the developed measure by linking it to its central salesperson MOA antecedents (see MacInnis, Moorman, & Jaworski, 1991) and key performance outcomes using data from a second B2B salesperson survey study ($n = 201$).

Our study makes three substantial contributions to social media research in the area of sales. First, this work extends the current research by developing and validating a new three-dimensional and activity-based measure for B2B social selling. Both empirical studies provide empirical support for the adopted qualitative conceptualization work of Ancillai et al. (2019) by demonstrating that all three suggested dimensions of 1) acquiring customer insights, 2) connecting to relevant actors, and 3) engaging customers have a substantial role in the higher-order social selling construct. Additionally, the measurement validation results reveal that the currently most widely used overall 'social media use in sales' scale (Agnihotri et al., 2016) can sufficiently capture the three social selling dimensions in a valid way, making these measures two meaningful alternatives for studies with different purposes.

Second, while many studies have linked social media use to salesperson performance, our study provides new detailed knowledge about the performance relationship. Specifically, we examine three types of performance effects of social selling: the salesperson's thought leadership position, relational performance, and outcome sales performance. Our study empirically demonstrates, for the very first time, that social selling helps salespersons to build thought leadership, which also centrally explains the other performance effects of social selling. Additionally, our results extend current research knowledge by providing initial evidence that social selling is positively connected to acquisition but not retention-related customer relationship performance. These links fully mediate the relationship between salesperson social selling activities and salesperson outcome performance.

Finally, our study also provides new insights into the antecedents of social selling. Our study confirms earlier arguments that management has a substantial role in facilitating social selling among the salesforce. We specify this notion by showing that organizations can effectively boost social selling among salespersons by offering support related to social media strategy, social media selling tools, and firm content support. The support not only drives social selling directly but indirectly though increasing perceived social influence being an antecedent of social selling. Finally, we nuance the extant knowledge concerning required salesperson abilities by showing that sales technology orientation, but not customer orientation, drives social selling. The finding indicates that social selling can be most effectively promoted by technology-related awareness and competencies among salespeople.

This paper is structured as follows. The conceptual background summarizes the current research on social media use in B2B sales and demonstrates the need for a new measure for social selling. The two subsequent sections report the initial measurement development Study 1, followed by Study 2, which validates the scale measure further by studying its key antecedents and outcomes. The article concludes with a discussion section, which summarizes the key theoretical and managerial implications as well as limitations and future research implications.

2. Conceptual background

2.1. Extant research on social media in sales

The use of social media in selling has been referred to as any social interaction-enhancing technology that can be deployed by sales professionals to generate content (e.g. blogs, microblogs, and wikis) and develop networks (e.g. social networks, online communities, etc.) (Agnihotri et al., 2012). Indeed, social media plays an important role in selling, as social media is widely shaping communication between sellers and customers, and contemporary empowered customers' buying processes increasingly involve social touchpoints (Agnihotri, 2020; Ancillai et al., 2019). Despite the relatively new research topic, studies have provided many insights into the antecedents and outcomes of social media use in sales at both the salesperson and organizational levels (see Ancillai et al., 2019; Barney-McNamara et al., 2020).

Extant research indicates that social media offers a multitude of benefits for salespeople. Social media reportedly helps salespersons identify leads, develop insights about customers and competitors (Itani et al., 2020; Lacoste, 2016), build contacts, and foster relationships (Bill, Feurer, & Klarmann, 2020; Trainor et al., 2014). Similarly, it facilitates effective sales behaviours, such as salespeople's communication quality (Agnihotri et al., 2016), adaptive selling (Itani et al., 2017), and service behaviour (Agnihotri et al., 2012; Agnihotri, Trainor, Itani, & Rodriguez, 2017). Overall, the use of social media has been found to improve both salesperson selling performance (Bowen, Lai-Bennejean, Haas, & Rangarajan, 2021; Guenzi & Nijssen, 2020; Itani et al., 2017; Ogilvie et al., 2018; Schultz, Schwepker, & Good, 2012) and customer satisfaction (Agnihotri et al., 2016; Chuang, 2020; Rodriguez, Ajjan, & Peterson, 2016).

On the antecedent side, studies have examined both individual salesperson and sales organization factors. At the individual level, studies have found that salesforce capabilities related to products and customers (Rodriguez et al., 2016), intrinsic and extrinsic motivation (Hansen & Levin, 2016; Levin, Hansen, & Laverie, 2012), and commitment (Guesalaga, 2016), as well as learning goal orientation and positive attitudes towards social media, ease of use, and usefulness (Bill, Feurer, & Klarmann, 2020; Itani et al., 2017), are all positively connected to social media use in selling. At the organizational level, research has provided evidence that management can facilitate social media use through organizational social media commitment and competence (Bill, Feurer, & Klarmann, 2020; Guesalaga, 2016), by offering training and support (Bill, Feurer, & Klarmann, 2020; Guenzi and Nijssen, 2020; Ogilvie et al., 2018), ensuring upper management support (Rodriguez et al., 2016), and providing a social media strategy (Marchand, Hennig-Thurau, & Flemming, 2021). Overall, it seems that in larger firms or in those having a large and structured salesforce, social media use in selling is more present in firms' agendas (Guesalaga, 2016; Itani et al., 2017).

It can be concluded that the current research has reached a maturity level where research efforts should become more structured, aiming at refinement of initial findings towards theory-testing directions (Agnihotri, 2020). However, a closer look at the research in this area indicates that studies have used highly diverse constructs and measures to study salesperson social media-driven sales behaviours, making this research domain fragmented and lacking commonly agreed upon concepts (Agnihotri, 2020; Ancillai et al., 2019). We substantiate the measurement-related shortcomings in the extant research in detail below.

2.2. Existing constructs on social media in selling

While numerous studies have examined the role of social media in selling at the individual salesperson level, extant research has operationalized social selling in diverse ways. We present a review of the key measures in the extant research in Table 1, which summarizes the

Table 1

Review of empirically used measures for social media use in sales and social selling.

Single-item measures:		
Study and construct	Construct measure	Construct definition
Levin et al. (2012) "Behavioural use of blogs in selling"	1. How many blog postings have you made throughout this semester?	"The actual use of the sales- and marketing-related technology"
Schultz et al. (2012) "Social media usage"	7-point Likert scale, "1 = strongly disagree, 7 = strongly agree"	"Social media usage within the sales process"
Guesalaga (2016) "Social media usage in sales"	1. I use social media for selling 1. "On a scale from 0 to 10, please choose the number that best describes the intensity of your company's social media usage in the sales organization"	"The intensity with which social media is used in the company's sales organization"

Indices measuring the use of SM platforms and technologies:		
Study and construct	Construct measure	Construct definition
Trainor et al. (2014) based on Jayachandran, Sharma, Kaufman, and Raman (2005) "SM technology use"	Which of the following functions are the social media technologies used by your organization capable of doing? *Check all that apply:*	"Index to capture technology use, following previous sales technology literature"
	1. Sharing support: 1.1) Photo sharing/storage 1.2) Video hosting/sharing/storage 1.3) Presentation sharing/storage 1.4) News/live feeds (RSS) 2. Conversation support: 2.1) Blogging, 2.2) Instant messaging 2.3) Micro-blogging Online conferencing/webinar 2.4) Live interactive broadcasting 3. Relationship support: 3.1) Social and professional network presence, 3.2) Social analytics 3.3) Social collaboration 4. Groups/community support: 4.1) Moderated web community, 4.2) Unmoderated web community, 4.3) Social support community	
Schuldt and Totten (2015) based on Andzulis et al. (2012) "Salespeople's integration of social media in the various steps or stages of the personal selling/sales process"	5-point Likert scale, "1 = strongly disagree and 5 = strongly agree". Social media usage statements for each selling stage: eight statements for stage 1, six for stage 2, four for stages 3, 4 and 6, and five for stage 5. Statement examples:	"The extent to which salespeople have integrated social media types in the various steps or stages of the personal selling/sales process"
	1. Understanding the customer – our company has established a Twitter presence 2. Approaching the customer – our company runs promotional giveaways or contests on Facebook 3.	

Table 1 (*continued*)

Single-item measures:		
Study and construct	Construct measure	Construct definition
	Needs discovery – our company asked our social media fans to vote on product or logo changes 4. Presentation – YouTube is used to provide information or training to our customers 5. Closing the sale – our company uses blogs or LinkedIn to resolve complaints from unhappy clients 6. Service and follow-up – our company asks for referrals from Facebook and LinkedIn customers	
Moore et al. (2015) + advanced version by Guenzi and Nijssen (2020) "Social media use"	"Social media use" for job-related tasks, referred to each category and specific software applications. *Check all that apply:*	"Use of social media applications in 12 categories of relationship oriented social media that can facilitate real or near real-time communication in a two-way collaborative fashion, described in extant sales literature regarding social CRM"
	1. A personal blog (e.g., Tumblr, LinkedIn Pulse) 2. Microblog (e.g., Twitter) 3. Photo sharing/storage (e.g., Instagram) 4. Video hosting/sharing/storing (e.g., YouTube) 5. RSS feed readers (e.g., Google reader) 6. Social & professional networking (e.g., LinkedIn, Facebook) 7. Live interactive broadcasting (e.g., Facebook Live, Periscope) 8. Online conferencing/webinar (e.g., Adobe Connect) 9. Social bookmarking (e.g., Digg) 10. Moderated web community 11. Unmoderated web community 12. Presentation sharing/storage (e.g., Slide share) 13. Messaging (e.g., WhatsApp, Skype, F-Messenger) + Guenzi and Nijssen (2020) index: time spent (in hours and minutes) using these media during average workday in the past two months	
Niedermeier et al. (2016) "Social media use"	7-point Likert scale, "1 = never, 7 = very often"	"Specific social media activities that are aligned with the three key elements of guanxi"
	1. With regard to the personal selling function, how often do you use these social media tools to communicate with your current customers? 2. With regard to the personal selling function, how often do you use these social media tools to communicate with your potential customers?	

Table 1 (*continued*)

Study and construct	Construct measure	Construct definition
Ogilvie et al. (2018) *"Social media technology use"*	Latent construct with indicators representing frequency and intensity of use: 1. Intensity of social media use (adapted from Trainor et al., 2014). Total aggregate from a list of 15 common SMT tools and were asked to indicate which of the social media tools they used for job related responsibilities 2. Frequency of social media use (adapted from Jelinek, Ahearne, Mathieu, & Schillewaert, 2006). 3 items, *7-point Likert scale, "1 = strongly disagree and 7 = strongly agree"*	"Salesperson's utilization and integration of SMT to perform his or her job"

Reflective scales of SM use in selling:

Study and construct	Construct measure	Construct definition
Agnihotri, Rapp, & Trainor, 2009 + Agnihotri et al. (2016, 2017, 2020); Itani et al. (2017) *"Social media use"*	*5-point Likert scale, "1 = strongly disagree and 5 = strongly agree"* 1. I am using social media to its fullest potential for supporting my own work 2. I am using all capabilities of social media in the best fashion to help me on the job 3. My use of social media is pretty much integrated as part of my normal work routine	"Salesperson's utilization and integration of social media technology to perform his or her job"
Rodriguez et al. (2012) + Rodriguez *et al.* (2014a, 2016) *"Social media use"*	*7-point Likert scale, "1 = strongly disagree and 7 = strongly agree"* 1. Our use of social media has significantly increased as a tool to identify decision makers 2. Our use of social media has significantly increased as a tool to identify new business opportunities 3. The use of social media for business purposes in our organization is encouraged	"Social media tools use as part of a firm's CRM strategy"
Hansen and Levin (2016) adapted from (Davis, Bagozzi, & Warshaw, 1992) *"Behavioural usage of social media"*	*7-point Likert scale, "1 = strongly disagree and 7 = strongly agree"* 1. I intend to spending time each week talking about my company on social media 2. I plan to set aside some time each week to talk about my company on social media 3. I desire to spend some time each week talking	"Behavioural usage, which reflects the specific task of using Facebook on behalf of the business"

Table 1 (*continued*)

Study and construct	Construct measure	Construct definition
	about my company on social media	
Chuang (2020) adapted from Leonard-Barton and Deschamps (1988) *"Levels of social media use"*	*7-point Likert scale, "1 = strongly disagree and 7 = strongly agree"* 1. Social media has been used by many salespersons in our company 2. Social media is widely recognized among our salespersons 3. Social media is used by our salespersons almost every day	"Not given, but scale focuses to the overall degree of social media use among a firm's salesforce"
Rapp et al. (2013) *"Supplier salesperson social media usage"*	*7-point Likert scale, "1 = never and 7 = very often"* 1. My relationship with my accounts is enhanced by social media 2. I enhance my customer relationships through social media 3. I provide my customers information regarding specials and new products using social media 4. I use social media to provide my customers information on events and trends in the sport 5. I use social media to monitor event performance and visibility 6. I am friends with many of my accounts on my personal social media accounts 7. I use social media to monitor competitors 8. I engage in social media co-op pro-motions with suppliers 9. I work with buyers who support social media pro-motions 10. Our cus-tomers use social media to see our current specials and promotions 11. I compare my relationship with my accounts to other relationships they have with other accounts on-line 12. I use social media to keep current on events and trends in the sport 13. I am very conscientious about what is posted on my social media accounts	"Social media usage behaviours capturing the breadth of social media usage in retail"
Bill, Feurer, & Klarmann, 2020 *"Salesperson social media use"*	Three-dimensional reflective higher order construct, *7-point Likert* Adoption 1. Social media are well suited for interacting with customers 2. My attitude towards social media is very positive 3. Social media are very important for effective customer relationship management	"The extent to which salespeople employ social media"

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Table 1 (*continued*)

Single-item measures:		
Study and construct	Construct measure	Construct definition
	4. The use of social media for interacting with customers has many benefits	
	Extent of use	
	1. I use professional networks very extensively for interacting with customers 2. I use personal networks very extensively for interacting with customers 3. I use professional forums and blogs very extensively for interacting with customers	
	Time investment (salesperson)	
	1. How much time do you spend for social media on average per week (work-related)? (in hours)	

existing social media-focused constructs and measures. The review confirms that existing measures assess the *extent* to which salespersons use social media in selling, and no theoretically rooted activity-based measures exist for social selling. Specifically, studies to date have relied on three types of measures: single-item measures of using social media in selling, formative indices of using specific social media platforms and technologies, and reflective scales focusing on the overall degree of using social media in selling (see Table 1).

First, some empirical studies have relied on single-item measures such as frequency of using a certain social media platform based on the number of posts made using specific media tools (Levin et al., 2012). Other single-item measures focus on the salesperson's self-assessed degree of using social media in sales (Guesalaga, 2016; Schultz et al., 2012). Although these measures have the advantage of assessing social media use behaviours just with a single question, this view is not a strong approach for capturing the complex phenomenon in a valid way.

Second, many studies have focused on the theme of social media use at the individual salesperson level from a practice-oriented point of view. These studies use formative indices of using specific social media channels and tools, with exhaustive lists of platforms and their functions (Moore, Hopkins, & Raymond, 2013; Moore, Raymond, & Hopkins, 2015; Niedermeier, Wang, & Zhang, 2016; Ogilvie et al., 2018; Schuldt & Totten, 2015). While the indices offer detailed insights about the use of specific social media technologies and can cover many types of actual tools and platforms, the measures are tied to specific commercial platforms or technologies and may become easily outdated in the fast-changing social media landscape. Importantly, these indices do not capture how salespersons use these technologies, for example to facilitate dialogue with their customers.

The third group of measures are reflective scales on social media use in selling. These measures stem from the earlier sales technology literature and focus on assessing the overall level of social media usage intensity (Bill, Feurer, & Klarmann, 2020; Chuang, 2020; Hansen & Levin, 2016; Levin et al., 2012; Rodriguez, Ajjan, & Peterson, 2014; Rodriguez et al., 2016; Rodriguez, Peterson, & Krishnan, 2012) or the degree to which a salesperson integrates social media into the sales process (Agnihotri et al., 2012; Agnihotri et al., 2016; Agnihotri et al., 2020; Rapp et al., 2013). By relying on adapted prior sales technology and technology adoption research, these measures offer high conceptual rigour and are suited for theory-testing purposes for understanding the antecedents and outcomes of social media use in selling. Yet, these

measures offer little insights into *how* salespeople leverage social media in selling or into understanding the effectiveness of specific social selling activities in different contexts. From a managerial perspective, these measures do not help in understanding what behaviours an organization should encourage, support, and reward. Finally, while being theoretically rooted, it remains uncertain whether these scales provide a valid perspective for sufficiently capturing the complex and multifaceted domain of using social media in selling.

In sum, while numerous diverse indices and scales exist on social media use in selling, current research still lacks high-rigour measures that cover the specific key activities of *how* salespersons actually leverage social media in their work, referred to here as '*social selling*', which has to date been subject to only qualitative and conceptual studies (see Ancillai et al., 2019; Barney-McNamara et al., 2020). This is a major shortcoming in advancing research in this area (see Agnihotri, 2020; Guenzi & Nijssen, 2020). Our research makes a step to overcome this deficiency by developing and validating an activity-based measure for social selling. The next section summarizes the development of a social selling measure.

3. Study 1: social selling measure development

3.1. Definition and key dimensions of social selling

This study adopts the recent qualitative conceptualization study by Ancillai et al. (2019) as a basis for developing an activity-based measure for social selling measurement development. We build on this conceptualization study as it defined social selling and its key dimensions based on a systematic literature review and an extensive qualitative study among social media thought leaders in the area of selling, offering rich insights into the salesperson-level manifestations of key social selling dimensions. Aligned with the Ancillai et al. (2019) study, we define social selling as a salesperson selling approach 'which leverages social channels for understanding, connecting with, and engaging influencers, prospects, and existing customers at relevant customer journey touch-points for building valuable business relationships'. Specifically, social selling is a three-dimensional construct with three formative dimensions of i) insight acquisition, ii) connecting, and iii) engagement, which together determine the construct. In other words, although the dimensions may correlate, they do not need to occur simultaneously, as a salesperson can score highly in the intelligence generation dimension but not in engagement. Instead, it is logical to consider that the overall level of social selling is determined by the contributions of its key dimensions (see Jarvis, MacKenzie, & Podsakoff, 2003, p. 203).

The first dimension of social selling refers to the *acquisition of insights* into prospects, existing customers, and other relevant actors through social channels (Ancillai et al., 2019). The dimension highlights the versatile opportunities of 'social listening' to monitor customers' conversations to develop a better understanding of the customers' specific situations and up-to-date business needs in a non-intrusive way and, thereby, help in needs discovery (Agnihotri et al., 2012; Andzulis, Panagopoulos, & Rapp, 2012; Lacoste, 2016; Trainor, 2012), as well as to identify sales opportunities from existing customers (see Moore et al., 2015; Üstüner & Godes, 2006).

The second dimension of social selling refers to *connecting* to prospects, existing customers, and other relevant actors through networking and consistent dialogue at relevant customer purchasing journey touchpoints (Ancillai et al., 2019). This dimension emphasizes the role of social media in building and maintaining a network of personal contacts (see Hennig-Thurau et al., 2010; Kaplan & Haenlein, 2010) through consistent dialogue, such as chatting, commenting, questioning, or answering relevant questions with customers and other relevant actors (see Andzulis et al., 2012; Bocconcelli et al., 2017; Trainor, 2012), with active two-directional information exchange (Agnihotri et al., 2016; Barney-McNamara et al., 2020).

The third dimension of social selling refers to the *engagement* of

customers and other relevant actors through valuable content (Ancillai et al., 2019). Specifically, by systematically sharing valuable content, salespersons can influence customers' dispositions to invest resources, such as time and attention, in their interactions with the seller and offerings, creating common ground for a future relationship. Since contemporary customers and buyers are highly informed and empowered, salespeople must earn their attention by providing relevant, timely, and compelling content (see Holliman & Rowley, 2014) that addresses substantial customer business problems or drives conversation (see Agnihotri et al., 2012; Bocconcelli et al., 2017).

3.2. Qualitative measurement development process

We followed the established standards for developing the social selling measure (Churchill, 1979; MacKenzie, Podsakoff, & Podsakoff, 2011). In the first phase, we built an initial indicator pool, building on the above presented theoretically rooted and empirically based definitions of social selling and its three dimensions of i) insight generation, ii) connecting to relevant actors, and iii) engaging through valuable content. We received access to the qualitative data and results of the Ancillai et al. (2019) conceptualization study for the purpose of developing relevant indicators for the three social selling dimensions. The indicator pool had a total of 18 indicators, consisting of six indicators per dimension, designed to capture the domain of each social selling dimension on the basis of the construct definitions and qualitative insights from the study by Ancillai et al. (2019). We sought to portray the range of activities carried out within every specific facet of social selling in broad terms, and the content specification was carefully linked with indicator specification to design the latent variable with adequate accuracy and completeness to avoid the failure to consider all facets of the construct or excluding relevant indicators and, thus, part of the construct itself (Nunnally & Bernstein, 1994, p. 484). In developing the items, we followed the established guidelines for clarity, length, and directionality, avoiding ambiguity and jargon (e.g. DeVellis, 1991; Spector, 1992). All three social selling dimensions were specified as reflective, and a seven-point Likert format was used as the scale anchor.

Lastly, we conducted a qualitative measure assessment with the help of an item sort test, suggested by Anderson and Gerbing (1991), to ensure the content validity of the measures. We asked 12 experienced academic experts to assess the scale indicators in relation to the provided definitions and assign each scale item to a suitable dimension definition or to the option 'other' if the indicator has a poor fit to the given definitions. The calculated psa (>.50) and csv (>.70) indices indicated validity problems in three items: connect 1, connect 6, and engage 6. Thus, these indicators were dropped due to potential content validity issues, after which scale quality criteria were met (see Appendix 1). Since the simulation study by Becker, Klein, and Wetzels (2012) showed that second-order Type II constructs are best modelled with equal numbers of indicators in lower-order constructs in partial least squares (PLS) modelling, we chose to keep four items per dimension in the final model. We made a decision to select the final $4 + 4 + 4$ items based on empirical and conceptual judgement to maximize both the item variety and predictive validity of the construct.

3.3. Data collection and sample in Study 1

To validate the social selling measure, we conducted a survey among B2B salespersons. We contacted one of the most important Italian sales professional trade organizations, which represents over 50,000 salespeople and sales reps in Italy, to obtain a large and varied sample of salespersons. The national committee agreed to send our email survey to their local offices, who then spread it through their contact databases. Data were collected through the email survey in May 2020. The initial data comprised 205 salesperson responses. After dropping incomplete responses, the final sample included 199 B2B salespeople from various industry sectors (see Table 2). Following established procedures for non-

Table 2
Summary of empirical studies sample characteristics.

Characteristics	Study 1		Study 2	
Industry (ISIC sectors classification)				
Manufacturing	49	24%	21	10%
Construction	17	8%	4	2%
Wholesale and retail trade; repair of motor vehicles	31	15%	53	26%
Transportation and storage	1	0%	4	2%
Information and communication	6	3%	12	6%
Financial and insurance activities	2	1%	17	8%
Real estate activities	–	–	4	2%
Professional, scientific and technical activities	7	3%	6	3%
Human health and social work activities	6	3%	0	0%
Other service activities	6	3%	28	14%
Other	74	37%	29	14%
	199	100%	201	100%
Gender				
Male	191	96%	114	57%
Female	8	4%	84	42%
Other	0	0%	3	1%
	199	100%	201	100%
Age				
<30	2	1%	24	12%
30–40	2	1%	26	13%
40–50	42	23%	42	21%
50–60	95	52%	77	38%
>60	40	22%	32	16%
	181	100%	201	100%
Sales experience				
<10	9	5%	67	33%
10–20	35	19%	43	21%
20–30	59	33%	42	21%
30–40	69	38%	39	19%
>40	27	15%	10	5%
	199	100%	201	100%
Role				
Sales agent	159	80%	–	–
Sales representative	14	7%	78	39%
Area manager	6	3%	–	–
Sales manager	12	6%	–	–
Enterprise sales executive	–	–	12	6%
Account executive	–	–	10	5%
Sales development representative	–	–	17	8%
Business development representative	–	–	32	16%
Other	8	4%	52	25%
	199	100%	201	100%

response bias assessment (Armstrong & Overton, 1977), we compared early and late respondents. No differences emerged between the first and last quartiles of respondents, indicating the insignificance of non-response bias. Due to the nature of the data collection procedure, we cannot estimate the effective response rate or closer response biases in the survey, but we believe that the data are still suited for technical validation purposes for testing the dimensionality, goodness, and convergent validity of the measure.

3.4. Assessing non-response bias and common method bias

We conducted the procedures for the non-response bias assessment by comparing the early and late respondents: no differences emerged between the first and last quartiles of respondents, indicating the insignificance of non-response bias (Armstrong & Overton, 1977). Since the first study is based on single respondent data, we took into account the issue of common method variance by implementing the recommended procedures for minimizing CMV problems (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). First, respondents were ensured full confidentiality and anonymity during the data collection and analysis. Second, we applied a measured latent marker variable (MLMV) approach, which has been shown to detect and correct CMV in PLS

analysis (Chin, Thatcher, Wright, & Steel, 2013). The approach requires a CMV control measure that has no nomological relationship with the particular study in question while using the same survey format and scale to reflect the common method effects (see Chin et al., 2013; Lindell & Whitney, 2001). For this purpose, we included the 'consumer orientation towards sporting events' scale by Pons, Mourali, and Nyeck (2006), which is unconnected from the sales constructs and has the required four indicators that have been shown to detect and reduce CMV by more than 70% (Chin et al., 2013). In practice, the approach requires creating as many measured latent marker variables (MLMV) as there are constructs in the research model (using the same set of indicators), where each MLMV is deployed to control for common method variance effects on each construct in the research model. The inclusion of the MLMV approach for the model had no influence on the results, since all path coefficients and their significances remained identical. We report the results from the CMV-corrected model.

3.5. Empirical validation of the social selling construct

We used PLS modelling for assessing the validity of the new social selling measure, following the guidelines established by Hair, Sarstedt, Ringle, and Mena (2012) and using SmartPLS3.0 software. PLS modelling is well suited for studies that include formative constructs and complex models with higher-order constructs. The statistical significance of the PLS parameter estimates was tested with a bootstrapping procedure based on 5000 subsamples (Hair et al., 2012).

The insights from the theory and qualitative field study suggest that social selling is best modelled as a first-order reflective, second-order formative (Type II) construct. Specifically, this decision was supported by the assessment of (1) the causality between the construct and its dimensions, (2) the interchangeability of the dimensions, (3) the covariation among the dimensions, and (4) whether all dimensions have the same antecedents and consequences (cf. Jarvis et al., 2003, p. 203). The second-order construct was modelled with a repeated indicator approach, path weighting scheme, and Mode B measurement, as suggested by the PLS guidelines (Becker et al., 2012; Cadogan & Lee, 2013; Diamantopoulos & Winklhofer, 2001).

Guidelines for validating formative measures recommend studying the validity of formative constructs by testing whether the formative construct is highly correlated with a reflective measure of the same domain, i.e. conducting redundancy analysis (Hair, Hult, Ringle, & Sarstedt, 2017). The strength of the path coefficient linking the two constructs is indicative of the validity of the designated set of formative indicators in tapping the construct of interest. Ideally, a magnitude of .80, but a minimum of .70 or above, is desired for the path between the formative and reflective constructs. Based on this logic, we link the formative higher-order social selling construct to the most used reflective 'global' social media use in selling scale by Agnihotri et al. (2016), for 1) assessing whether all formative dimensions contribute to the higher-order construct to a sufficient degree when predicting reflective measures within the same domain, 2) confirming the convergent validity of the formative social selling measure.

The measurement model results support the validity of the measures (see Table 3). The psychometric properties of all latent variables were satisfactory, as the construct reliabilities and Cronbach's alpha values were higher than .70. The average variance extracted (AVE) values exceeded .50 for all constructs, and the squared AVE values of each construct exceeded correlations with other constructs, providing support for discriminant validity (Fornell & Larcker, 1981). All indicator loadings were also higher than the recommended .70, and they were statistically significant at the $p < .01$ level (see Appendix 1). A separate cross-loading analysis further confirmed that each item loaded highest on the construct they were intended to measure. The VIF values of the formative first-order dimensions were lower than the suggested threshold of 5 (Hair et al., 2012).

The structural model results provided further support for the second-

Table 3
Social selling construct correlations and scale properties.

Construct	1.	2.	3.	4.	5.	6.
1. Social selling – insight	.92					
2. Social selling – connect	.82	.88				
3. Social selling – engage	.75	.86	.90			
4. 2nd order social selling	.94	.95	.93	–		
5. Salesperson social media use	.77	.77	.74	.82	.94	
6. CMV market variable	.15	.23	.23	.20	.14	.95
Cronbach's alpha	.94	.90	.93	–	.94	.96
CR	.95	.93	.95	–	.96	.97
Average variance extracted	.84	.77	.82	–	.89	.89

Note: √AVE are bolded in diagonal. Alpha, CR, AVE and √AVE are indicated only for reflective constructs.

order social selling conceptualization (see Fig. 1). All three first-order dimensions of the construct had a significant effect on the higher-order social selling construct: insight (.46**, $p < .01$), connect (.37**, $p < .01$), and engage (.24*, $p < .05$). The first-order path coefficients to the second-order constructs can be interpreted similarly to the formative indicator weights. In other words, they indicate the relative contribution of the lower-order construct to the higher-order construct when predicting an outcome (Becker et al., 2012). Further, the social selling construct had good convergent validity with the social media use in selling construct (.82, $p < .01$), explaining almost 70% of its variance. Interestingly, while all social selling dimensions were significant, the insight generation aspects seems to dominate the "social media use in selling scale" to some degree. Overall, the empirical results provide support for the validity of the new measure and its dimensions.

4. Study 2: key antecedents and outcomes of social selling

4.1. Hypothesized MOA determinants and outcomes of social selling

The second study further validates the developed measure with new data and focuses on the nomological and predictive validity of the social selling construct. We use a Motivation–Opportunity–Ability (MOA) framework to study central antecedents for social selling and examine its central performance outcomes, building on earlier research notions. The MOA framework explains behaviour as a function of the individual's MOA (MacInnis et al., 1991). Specifically, we propose that social selling activities are a function of individual salespersons' motivation and ability to engage in social selling initiatives, as well as on specific opportunities in the organizational environment. Consistent with extant research (e.g. Terho, Eggert, Ulaga, Haas, & Böhm, 2017), we use the model to identify a relevant set of antecedents based on earlier social media research rather than explicitly studying MOA. To select MOA variables for our integrative framework, we build on insights from previous theoretical and empirical works on social selling (see Ancillai et al., 2019; Guenzi & Nijssen, 2020; Schmitt et al. 2021). We select both antecedents that have been already found to drive social media use in selling and novel unstudied antecedents for building a model suited to validation and novelty. See Fig. 2 for antecedents.

4.1.1. Motivational drivers

Earlier research indicates that social influence is a central motivational driver for salesperson social media use in selling (Schmitt et al. 2021). Specifically, several studies have provided empirical support that salespersons' perceptions of sales manager and peers' adoption of social media affect the adoption of social media use in selling (see Bill, Feurer, & Klarmann, 2020; Bowen et al., 2021; Guenzi & Nijssen, 2020; Keinänen & Kuivalainen, 2015). This effect can be justified based on social learning theory, which emphasizes that individuals learn by imitating from significant actors around them (Bandura, 1977), as well as the theory of planned behaviour (Ajzen, 1991), which notes that perceived subjective norms in an individual's reference groups exert
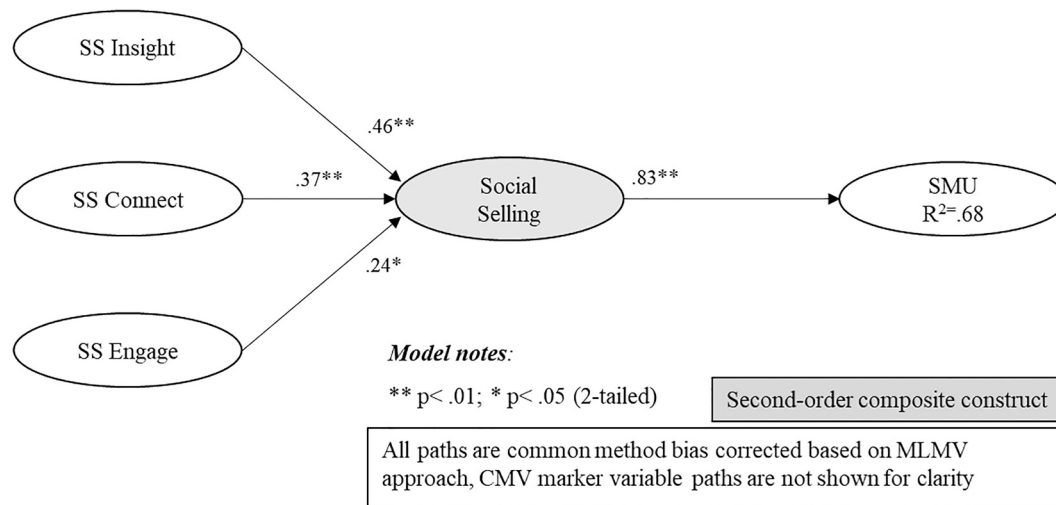
Fig. 1. Construct validation.

notable influence on their behaviours, providing meaningful justification for why peers' social selling usage drives social selling.

H₁. *Perceived social influence has a positive relationship with social selling.*

4.1.2. Ability drivers

We focus on two salesperson orientations as ability drivers, namely the salespeople's customer orientation, CO (Schultz et al., 2012), and sales technology orientation, STO (Barney-McNamara et al., 2020). Since these two orientations are relatively stable and difficult to change, we consider them to represent ability factors that are needed to facilitate the adoption of social selling from a managerial perspective. The constructs represent two different potential mechanisms that can drive social selling. Customer orientation means that a salesperson focuses on the customer's best interests and promotes offerings that address their needs (Saxe & Weitz, 1982). Thus, customer orientation should drive customer-centric behaviours that are beneficial and helpful from the customer perspective, such as social selling (see Barney-McNamara et al., 2020). In turn, a salesperson sales technology orientation refers to the salesperson's propensity and analytical skills for using a portfolio of firm-provided information technologies to perform tasks relevant to the sales role (Hunter & Perreault Jr, 2006), which should logically help a salesperson leverage social media in selling.

H₂. *Customer orientation has a positive relationship with social selling.*

H₃. *Sales technology orientation has a positive relationship with social selling.*

4.1.3. Opportunity drivers

Aligned with earlier research, we expect that organizational social media support represents a central opportunity in the organizational environment that drives social selling. Specifically, recent studies have found that organizations can drive salespersons' use of social media through offering training and support (Bill, Feurer, & Klarmann, 2020; Guenzi and Nijssen, 2020), ensuring upper management support (Rodriguez et al., 2016), or providing a social media strategy (Marchand et al., 2021). While the empirical results unanimously indicate the positive effects of firm support, the findings about the nature of this support remain rather general. To extend the extant knowledge about organizational support, we distinguish three central organizational opportunity drivers. First, a social media strategy sets social media-specific goals and describes how the company and its employees should use social media to achieve these goals, thus providing direction to salespeople (Marchand et al., 2021). Second, recent conceptual studies have noted that supportive technologies and social media sales tools can help

salespeople leverage social media in sales more easily and effectively (Ancillai et al., 2019; Marshall, Moncrief, Rudd, & Lee, 2012). Third, organizational social media marketing research has noted the key importance of content in social media applications (see Salo, 2017). Both sales enablement (Peterson, Malshe, Friend, & Dover, 2021) and social selling research have suggested that organizational content support should assist salespersons to effectively engage with customers in social media (Ancillai et al., 2019). Finally, we expect that these organizational opportunities affect social selling, not only directly but also indirectly, by driving the perceived social influence on using social media in sales.

H₄. *Social media strategy has a positive relationship with social selling.*

H₅. *Social media sales tools support has a positive relationship with social selling.*

H₆. *Firm content support has a positive relationship with social selling.*

H₇. *Organizational opportunities drive social selling indirectly by driving social influence.*

4.1.4. Performance outcomes of social selling

Finally, to study the predictive validity of social selling, we examine its relationship to salesperson performance. To date, research has provided evidence that salesperson social media use is positively connected to salesperson selling performance (e.g. Bowen et al., 2021; Guenzi & Nijssen, 2020; Itani et al., 2017) and relational performance (Bowen et al., 2021; Ogilvie et al., 2018; Rodriguez et al., 2012; Trainor et al., 2014). We propose a more nuanced model for clarifying the performance relationship by suggesting a chain of mediated performance effects building on recent qualitative and conceptual research (Ancillai et al., 2019; Barney-McNamara et al., 2020). First, recent qualitative studies suggest that social media engagement can help a salesperson to build a recognizable and consistent 'personal brand' (Barney-McNamara et al., 2020) or 'thought leadership' (Magno & Cassia, 2019). Arguably, if a salesperson can build thought leadership and attain the position of a trusted advisor among customers, this should also facilitate other areas of the salesperson's performance. Second, aligned with the results on relational performance, we argue that social selling can drive both customer acquisition and retention performance (see Nijssen, Guenzi, & Van der Borgh, 2017). Finally, we expect that social selling can drive salesperson outcome performance through the mediating effects of thought leadership and relational performance. See Fig. 2 for a summary of outcomes.

H₈. *Social selling has a positive relationship with salesperson thought*

leadership.

H₉. *Social selling has a positive relationship with customer acquisition performance, mediated through salesperson thought leadership.*

H₁₀. *Social selling has a positive relationship with customer retention performance, mediated through salesperson thought leadership.*

H₁₁. *Social selling has a positive relationship with salesperson selling outcome performance, performance, mediated through salesperson thought leadership, and acquisition and retention performance.*

4.2. Data collection and sample in Study 2

To test the social selling measure within the MOA framework, we conducted a second data collection among B2B salespeople. The data collection was administered by a leading global panel data provider, Qualtrics Panel service. The survey was targeted at B2B salespeople from the UK panel. Data collection was conducted in July 2021. The final sample comprises $n = 201$ salespersons' responses covering salespeople from various industries. The respondents' details can be found in Table 3.

4.3. Measures of the study

We measured social selling with the newly developed measure and used established measures for other constructs of the research model whenever possible: peer influence (Schillewaert, Ahearne, Frambach, & Moenaert, 2005), sales technology orientation (Hunter & Perreault Jr, 2006), customer orientation (Plouffe, Hulland, & Wachner, 2009), social media strategy (Marchand et al., 2021), outcome performance (Miao, Evans, & Shaoming, 2007), and the CMV marker variable: consumer orientation towards sporting events (Pons et al., 2006). When no salesperson-level measures existed for study constructs, we adapted existing scales: social media sales tools (adapted from Hunter & Perreault Jr, 2006), firm content support (adapted from Taiminen & Ranaweera, 2019), thought leadership (adapted from Magno & Cassia, 2019), and acquisition and retention performance (adapted from Nijssen et al., 2017). Appendix 1 presents all measures and their indicators.

4.4. Assessing non-response bias and common method bias

We followed the same procedures for estimating the non-response and common method bias as in Study 1. A comparison of early and late respondents revealed no differences between the first and last quartiles of respondents, indicating that non-response bias is not a problem (Armstrong & Overton, 1977).

We again implemented the same procedures for minimizing CMV problems as in the first study (Podsakoff et al., 2003). Respondents were ensured full confidentiality and anonymity during the data collection and analysis, and we used different scale anchors for IVs and DVs. We further used a measured latent marker variable (MLMV) approach for detecting and correcting CMV in PLS analysis (Chin et al., 2013) and again used the 'consumer orientation towards sporting events' scale (Pons et al., 2006) as a CMV marker variable. Full details of the approach are summarized in Section 3.4. The data analysis indicated that the collected panel data suffered from common method bias. First, construct correlations are high, and the CMV marker variable has substantial correlations to other constructs that are theoretically unrelated to it. Second, the inclusion of the MLMV approach in the PLS research model testing confirmed that CMV is an issue, as the included marker variables had significant relations to other study constructs. While the presence of CMV in Study 2 is not an optimal case, we believe that the study results are valid, as the MLMV approach is able not only to detect but also to correct CMV (Chin et al., 2013). Indeed, the MLMV correction procedure had a notable impact on the model results, as the total effects of social selling on performance changed notably: thought leadership from .42**

to .23** ($p < .01$), acquisition performance from .40** to .26** ($p < .01$), retention performance from .26** ($p < .01$) to .09n.s. and outcome performance from .36** ($p < .01$) to .16* ($p < .05$). Thus, we report the CMV-corrected results. The full non-controlled results can be found in online Appendix 2.

4.5. Empirical results of Study 2: antecedents and outcomes of social selling

We tested the hypotheses of Study 2 with PLS modelling, following the guidelines established by Hair et al. (2012) and using Smart PLS3.0 software. The second-order formative constructs were again modelled with a repeated indicator approach and Mode B measurement, as suggested by the PLS guidelines (Becker et al., 2012; Cadogan & Lee, 2013; Diamantopoulos & Winklhofer, 2001). We used the factor weighting scheme, as recommended by Hair, Sarstedt, Ringle, and Gudergan (2017), p. 50), for estimating formative higher-order constructs, as we encountered convergence problems when using the path weighing scheme, probably due to CMV issues. The antecedent relationships to the second-order reflective-formative social selling construct were modelled through its lower-order dimensions, which represents a conceptually superior way to estimate antecedent relations for formative constructs (Cadogan & Lee, 2013).

The measurement model results provided support for the validity of the measures (see Table 4). The psychometric properties of all latent variables were satisfactory, as the construct reliabilities and Cronbach's alpha values were higher than .70. The average variance extracted (AVE) values exceeded .50 for all constructs, and the squared AVE values of each construct exceeded correlations with other constructs, providing support for discriminant validity (Fornell & Larcker, 1981). All indicator loadings were also higher than the recommended .70, and they were statistically significant at the $p < .01$ level (see Appendix 1). A separate cross-loading analysis further confirmed that each item loaded highest on the construct they were intended to measure (see online Appendix 2). While the construct correlations were generally high, this is likely to be due to the common method variance. Therefore, we control for common method bias when testing the model using the MLMV approach and report the CMV-corrected results – see Section 4.3 for details of this approach (see Chin et al., 2013).

First, the structural model results again provided support for the validity of the second-order social selling conceptualization (see Fig. 2). All three first-order dimensions of the construct had a significant effect on the higher-order social selling construct when predicting the hypothesized outcomes: insight (.29**, $p < .01$), connect (.37**, $p < .01$), and engage (.36**, $p < .01$). The first-order path coefficients to the second-order constructs can be interpreted similarly to the formative indicator weights. In other words, they indicate the relative contribution of the lower-order construct to the higher-order construct when predicting an outcome (Becker et al., 2012). Further, the antecedents explained a total of 67% of the variance in the social selling construct. To calculate the effects of antecedents for second-order social selling, the explained variance in each dimension was multiplied by its weight, and the individual contributions of each dimension were added together (see Becker et al., 2012).

Second, on the antecedent side, most MOA antecedent relationships were supported. At the motivation level, social influence had positive and significant links with all social selling dimensiootential collinearity issues ns (.23**, .30**, .20**, $p < .01$), supporting H1 (see Fig. 2). In turn, the analysis of the ability level antecedents supported the relationships between sales technology orientation and all dimensions of social selling, supporting H2 (.16**, .15**, .15**, $p < .01$), but the relationships between customer orientation and social selling were nonsignificant (.03n.s.; .04n.s.; .02n.s.); hence, H3 is not supported. Finally, as the organizational opportunity constructs were closely correlated and conceptually related, we made a decision to model them as a higher-order reflective-formative (Type II) construct. This choice

Table 4

Constructs correlations and scale properties of Study 2.

Construct	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.
1. Social influence	**.93**															
2. Sales tech orientation	.52	**.88**														
3. Customer orientation	.03	.26	**.92**													
4. SM tool support	.60	.57	.10	**.96**												
5. SM strategy	.63	.56	.15	.82	**.94**											
6. Firm content support	.43	.50	.35	.67	.7	**.94**										
7. 2nd order org. SM support	.63	.60	.17	.94	.93	.82	–									
8. Social selling – insight	.64	.61	.19	.72	.71	.59	.76	**.94**								
9. Social selling – connect	.66	.61	.17	.68	.69	.55	.73	.89	**.93**							
10. Social selling – engage	.63	.62	.17	.76	.70	.59	.78	.89	.87	**.94**						
11. 2nd order social selling	.66	.64	.19	.75	.72	.60	.78	.95	.96	.96	–					
12. Retention performance	.09	.29	.60	.09	.17	.35	.18	.22	.23	.23	.26	**.93**				
13. Acquisition performance	.15	.42	.54	.23	.28	.41	.31	.37	.36	.36	.40	.81	**.91**			
14. Thought leadership	.21	.36	.46	.34	.30	.43	.37	.35	.40	.39	.42	.64	.62	**.88**		
15. Outcome performance	.12	.44	.52	.23	.26	.41	.29	.34	.31	.30	.35	.77	.82	.70	**.88**	
16. CMV market variable	.23	.42	.32	.36	.27	.36	.35	.38	.43	.43	.45	.41	.43	.53	.50	**.95**
Cronbach's alpha	.92	.91	.94	.95	.93	.93	–	.95	.95	.95	–	.92	.89	.91	.93	.97
Composite reliability	.95	.93	.96	.97	.96	.96	–	.97	.96	.97	–	.95	.93	.94	.94	.97
Average variance extracted	.86	.78	.85	.92	.88	.88	–	.88	.87	.88	–	.87	.82	.78	.77	.91

Note: √AVE are bolded in diagonal. Alpha, CR, AVE and √AVE are indicated only for reflective constructs.
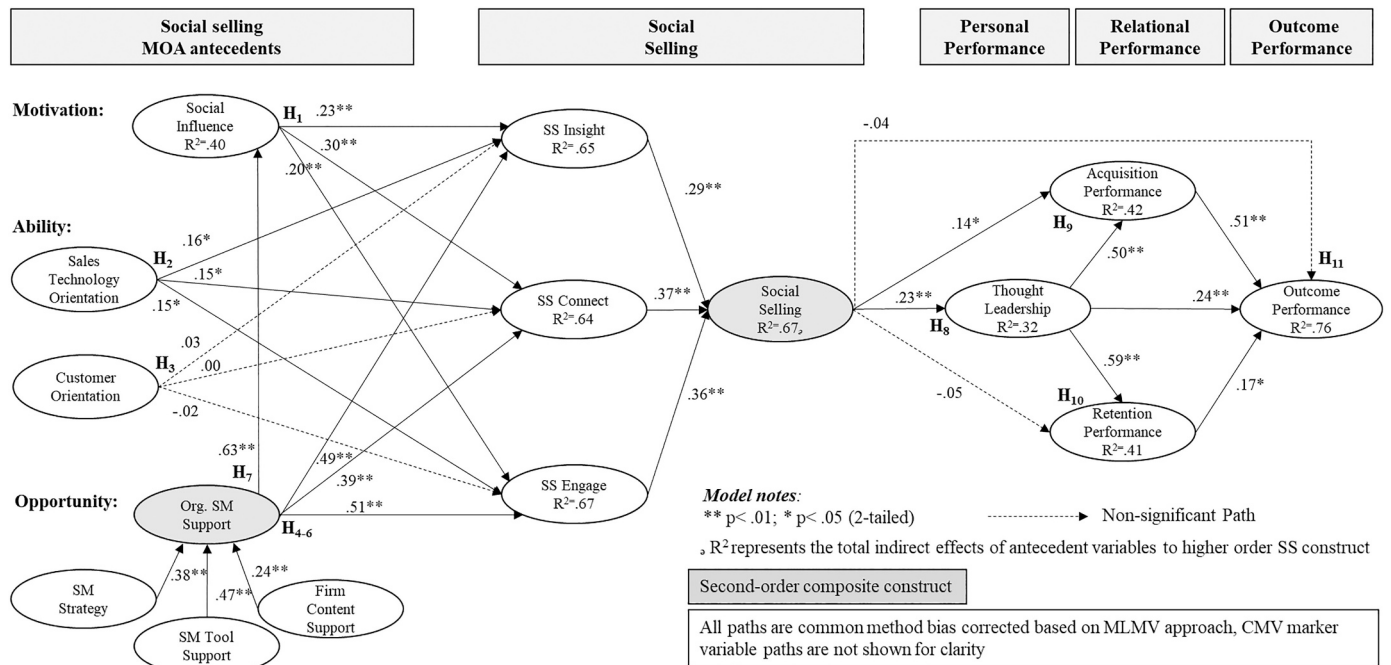
Fig. 2. Empirical results.

can be additionally justified based on technical reasons, as the use of the second-order approach increases model parsimony by reducing complexity and as a higher-order structure can also lessen potential collinearity issues (Hair, Hult, Ringle and Sarstedt, 2017 p. 281). The second-order social media infrastructure construct showed positive and significant relationships with all social selling dimensions (.49**, .39**, .51**). Additionally, all its formative components contributed significantly to the higher-order construct, social media strategy (.38**, *p* < .01), social selling tools (.47**, *p* < .01), and firm content support (.24**, *p* < .01), supporting H4, H5, and H6. As hypothesized in H7, organizational social media support had an indirect effect on social selling by boosting the motivational antecedent of perceived social influence (.63**, *p* < .01).

Third, the structural model results on the outcomes side show that social selling has positive direct effects on thought leadership (.23**, *p* < .01) and acquisition performance (.14*, *p* < .05) but non-significant

relationships to retention performance (−.05) and salesperson outcome performance (−.04). However, since we hypothesized mediated performance effects, we conducted a closer post hoc analysis of the indirect and total effects of social selling to different areas of performance, as illustrated in Table 5.

The analysis supports mediation, as social selling had significant indirect and total effects on customer acquisition performance (.26**, *p* < .01) and outcome performance (.16*, *p* < .05). While social selling had a significant indirect effect on customer retention performance (.14**, *p* < .01), the total effect remains non-significant (.09n.s.). Thus, we conclude that the empirical results support performance hypotheses H8 (thought leadership), H9 (acquisition performance), and H11 (outcome performance), but not H10 (retention performance).

Table 5

Summary of direct, indirect and total effects of SS construct on performance measures.

Social selling	Direct effect		Indirect effect		Total effect	
Performance relationships	Effect	95% CI	Effect	95% CI	Effect	95% CI
Soc. Sel. → Thought leadership	.23**	[.10–.37]	–	–	.23**	[.10–.37]
Soc. Sel. → Acquisition performance	.14*	[.02–.29]	.12**	[.05–.20]	.26**	[.12–.42]
Soc. Sel. → Retention performance	−.05	[−.16–.07]	.14**	[.06–.23]	.09	[−.05–.25]
Soc. Sel. → Outcome performance	−.04	[−.12–.05]	.21**	[.09–.34]	.16*	[.02–.32]

Note: **$p < .01$;* $p < .05$ (2-tailed).

5. Discussion

5.1. Theoretical implications

This study has built activity-based measures for B2B social selling and validated the construct within a nomological network, based on the MOA framework and earlier social media use-focused sales research. The findings offer three substantial new contributions to the extant research.

First, this study contributes by developing activity-based measures for B2B social selling. We build on recent qualitative conceptualization research (Ancillai et al., 2019) and develop a salesperson social selling measure including three dimensions of i) insight generation, ii) connecting to relevant actors, and iii) engaging customers. The measurement validation provides evidence that all three dimensions contribute significantly to the higher-order social selling construct. This novel measure can be seen as a substantial contribution to extant sales research for two reasons. To begin with, scholars have recognized that measurement issues represent a challenge for advancing research on the role of social media in selling (Guenzi & Nijssen, 2020). Thus far, all high-rigour scales have focused on measuring the extent to which salespersons use social media in sales work (see Agnihotri et al., 2016). Extant research has lacked high-rigour measures that specify *how* salespersons actually leverage social media in their work. The developed measure overcomes this challenge by offering a conceptually rooted and activity-based approach for measuring social selling. In addition to providing a new measure, our study also provides insights into the validity of the extant 'social media use in sales' scale (Agnihotri et al., 2016). Specifically, our results indicate that this extant overall usage scale sufficiently captures the whole domain of social selling in a valid way (see Fig. 1). The developed formative social selling measure has high convergent validity with the reflective overall scale, although the reflective scale seems to emphasize the insight generation dimension in relation to two other dimensions. As a result, our study pinpoints two valid social media measures for future sales research. The short reflective overall 'social media use' scale remains a valid choice when research is interested in the antecedents or outcomes of social selling at a general level or wants to study social selling as a moderator. In turn, the new activity-based social selling measure is a superior alternative when research wants to examine closer the role and impact of specific activities on how salespersons leverage social media in B2B selling.

Second, some earlier studies have already connected social media use to salesperson selling performance (e.g. Bowen et al., 2021; Guenzi & Nijssen, 2020; Ogilvie et al., 2018). Our findings offer new, more nuanced insights into how social selling affects salesperson performance. The study confirms three types of performance effects of social selling: salesperson thought leadership, relational performance, and sales outcome performance. In doing so, our study shows empirically, for the first time, that thought leadership can also be established at the individual salesperson and not only on the organizational level (see Magno & Cassia, 2019). Thought leadership is a central performance outcome of social selling, as it represents a key mediator for the other performance relationships of social selling. Furthermore, our findings extend research by showing that social selling drives customer acquisition but not retention performance, indicating that social selling is

particularly important when selling to new customers. While logical, this finding is novel, as studies to date have emphasized the role of social media for relationship performance in relation to customer satisfaction and loyalty among existing customers (see Agnihotri et al., 2016; Bill, Feurer, & Klarmann, 2020). Finally, we find that social selling is positively connected to salesperson outcome sales performance, but this link is fully mediated by thought leadership and relational performance.

Third, our research advances current knowledge about the antecedents of social selling. By adopting an MOA perspective, we provide interesting new insights into the various individual and organizational drivers of social selling (Barney-McNamara et al., 2020; Guenzi & Nijssen, 2020). The opportunity side results align with earlier research notions that management has a key role to play in supporting social selling among the salesforce (Bill, Feurer, & Klarmann, 2020; Guenzi & Nijssen, 2020; Guesalaga, 2016). Yet, our results nuance and clarify the role of effective firm support, as we show that firm management has a key role in 'enabling' social selling by offering combined social media strategy, social selling tools, and firm content support for salespersons (see Peterson et al., 2021). Interestingly, this organizational support affects social selling, not only directly but also indirectly, by increasing the perceived social influence of using social media in sales. Considering the ability side, we examined two relatively stable salesperson orientations. Our results show that salesperson customer orientation does not drive social selling, whereas sales technology orientation represents its central antecedent (Barney-McNamara et al., 2020). Thus, social selling should be effectively boosted by emphasizing technology-related awareness and competencies in the selection and training of salespeople (Ogilvie et al., 2018).

5.2. Managerial implications

This study provides several insights for sales managers. First, the developed conceptualization of social selling provides detailed insights into *how* salespeople can strategically leverage social media for selling. Our findings highlight that in order to implement social selling, salespeople should systematically invest in three key activities: insight generation, connecting to relevant actors, and engaging customers. The insight generation activities refer to social listening-related aspects of using social media in identifying and qualifying prospects and sales opportunities as well as understanding customer organizations, central stakeholders, and customer needs. In turn, connecting to relevant actors refers to efforts for creating professional connections and networking with relevant stakeholders, as well as maintaining the created relationships with active dialogue in social media. Finally, the engagement of relevant audiences refers to efforts to systematically share helpful and valuable content rather than seller-centric communication. From a managerial perspective, these activities help benchmark the training and reward systems related to social media. The developed measure can also be effectively used to assess the level of social selling among the salesforce.

Second, our findings demonstrate that salesperson social selling has a positive relationship to selling performance. Thus, we encourage managers to promote social selling among the salesforce. Interestingly, our findings indicate that social selling drives salesperson outcome performance, particularly by helping salespersons attain the position of trusted

advisor or 'thought leadership' as well as by helping in customer acquisition rather than customer retention. Thus, our data indicate that social selling is a particularly relevant topic for salespersons with 'hunter' job profiles.

Third, our results offer concrete guidance for managers wanting to boost social selling among their salesforce. Specifically, our findings show that managers can effectively drive salespersons' social selling by investing in a *social media strategy* that explicates social media goals and determines the desired social media activities for salespersons. Additionally, management should ensure that salespeople have access to relevant *social media sales tools*, that is, technologies that facilitate the use of social media for sales, such as technologies that help to build insights on prospects and customers; to access, package, and share content; or to schedule and handle social media activities across various channels. Organizations can further boost adoption by ensuring *content support* for their salespersons, as a relevant portfolio of valuable content facilitates social selling. Interestingly, we find evidence that these investments drive social selling, not only directly but also indirectly, through boosting social influence among salespeople. Finally, the results reveal that the salesperson's customer orientation is not driving for social selling. Instead, sales technology orientation represents the primary orientation behind social selling activities. Organizations should, therefore, invest in developing and maximizing a positive relationship with technology among their salespeople.

5.3. Limitations and further research

This study developed and validated new measures for B2B social selling based on two empirical survey studies. As with all research, the study at hand also has some limitations. We note that the scale validation was done based on single respondent data in both conducted studies. Also, since we relied on panel provider data in the second study, the generalizability of the found antecedent and outcome relationships should be confirmed with new industry samples. Additionally, the second study suffered from common method variance. This is a clear limitation for this study, although we relied on a measured latent marker variable (MLMV) approach in empirical analysis, which is able not only to detect but also to correct CMV in PLS analysis. Still, CMV meant very high correlations for the three dimensions of social selling, indicating discriminant validity issues among the lower-order dimensions. We note that the high correlations are conceptually meaningful for the second-order construct, the measure passed technical validity tests, and that the structural model results were similar and highly stable when compared to an alternative reflective-reflective second-order model.

Still, we conclude that future research should revalidate the new measure and replicate the results concerning the nomological network of social selling to confirm the accuracy of the found antecedent and outcome relationships. Future research should further study the performance links, preferably using objective or management-assessed dependent variables.

We call for new studies that examine the antecedents, outcomes, and contingencies of the social selling construct. The developed measures now enable testing the ideas put forward by recent conceptual and qualitative studies that provide systematic and comprehensive conceptual frameworks for guiding activity-based social selling research (see Ancillai et al., 2019; Barney-McNamara et al., 2020). One interesting area for research could be the combination of the developed activity-based social selling scale and practice-focused indices focusing on the usage of specific social media platforms (see Guenzi & Nijssen, 2020) for assessing how salespeople leverage social media in their work. On the antecedent side, we call for closer attention to the various aspects of organizational social selling investments to enable a systemic salesforce-wide social selling culture (c.f. Peterson et al., 2021). Research should also look closer at the roles of marketing and sales organizations in supporting salesperson social selling efforts. The studies focusing on these issues would benefit from using multilevel research designs to better understand the organization-wide implementation issues as well as address whether a large-scale implementation of social selling among employees contributes to organizational goals and performance, such as the attainment of organic visibility, thought leadership position, lead generation and customer acquisition, or sales revenues. In addition, research could explore the role of social selling in different phases of the selling process or customers' purchasing journeys.

On the outcome side, we call for new research on confirming the performance outcomes of social selling. When studying the outcomes, activity-based conceptualization enables a deeper study of the role of different social selling activities for performance, as well as the contingent effectiveness of the different activities. Finally, we encourage future research to study the possible dark side of the social selling phenomenon (see Guenzi & Nijssen, 2020).

Acknowledgements

Appendix 1. Measures and Indicator Loadings.

Construct	Items	Factor loadings	
		Study 1	Study 2
Social selling: acquisition of market insights (new scale)[a]	1. I systematically leverage social media to build timely market knowledge	–	–
	2. I use social media to understand customers' pain points and business challenges	–	–
	3. I consistently use social media to better understand what my customers truly need	.90**	.94**
	4. I actively scout for new sales opportunities using social media	.92**	.93**
	5. I systematically use social media to gather insights about companies and relevant individuals before reaching out [R]	.92**	.93**
	6. I leverage social media to identify people and companies that fit the ideal client profile [R]	.93**	.94**
Social selling: connecting to relevant industry actors (new scale)[a]	1. I actively use social media to build a strong professional network [R]	–	–
	2. I systematically leverage social media to establish connections with various industry influencers	.85**	.95**
	3. I have a consistent dialogue with my connections to maintain my professional network	.92**	.91**
	4. When I meet people, I always try to create a connection with them in social media platforms, such as LinkedIn	.84**	.92**
	5. I leverage relevant social media channels to gather a core audience of clients, industry peers, and prospects in order to lay a foundation of trust	.90**	.95**

(*continued on next page*)

(*continued*)

Construct	Items	Factor loadings Study 1	Factor loadings Study 2
Social selling: engaging relevant audiences through valuable content (new scale)[a]	6. I always strive to broaden my professional network with companies or people in my industry [R]	–	–
	1. I systematically share content that demonstrates my expertise on some subject matter	.88**	.90**
	2. I put a great deal of effort into sharing relevant, compelling, and timely content for my target audiences in social media	.89**	.95**
	3. I engage potential customers with helpful content in social media to attain the position of a trusted advisor	.92**	.96**
	4. I actively share references, successful case histories, and experiences in social media to demonstrate how my firm can support customers' businesses	.93**	.94**
	5. I actively share content in social media to keep my target audiences updated [R]	–	–
	6. I consistently share valuable content in social media so that potential customers will find me when they are searching for information [R]	–	–
Social media use in selling (Agnihotri et al., 2016)[a]	1. I am using social media to its fullest potential for supporting my own work	.96**	
	2. I am using all capabilities of social media in the best fashion to help me on the job	.95**	
	3. My use of social media is pretty much integrated as part of my normal work routine	.92**	
Social peer influence (Schillewaert et al., 2005)[a]	1. The majority of my sales colleagues use social media for business purposes		.92**
	2. In my organization, social media is heavily employed by salespersons		.95**
	3. A lot of my sales colleagues rely on social media for business purposes		.95**
Sales technology orientation (Hunter & Perreault Jr, 2006)[a]	1. I have always been fascinated by advances in technology		.89**
	2. I try to link different sales technologies so that they work together well		.89**
	3. Compared to others in sales, I am technology oriented		.89**
	4. I extensively use information technologies to perform my job		.87**
Customer orientation (Plouffe et al., 2009)[a]	1. A good employee has to have the customer's best interest in mind		.89**
	2. I try to bring a customer with a problem together with a product/service that helps solve that problem		.93**
	3. I offer the product/service that is best suited to the customer's problem		.94**
	4. I try to find out what kind of products/services will be most helpful to a customer		.94**
Social media strategy (Marchand et al., 2021)[a]	1. Our company has an explicitly defined and documented social media strategy		.93**
	2. Our social media goals are described precisely and comprehensible for all participants		.94**
	3. Our company has a social media strategy that determines the desired social media activities		.95**
Social media sales tools support (Hunter & Perreault Jr, 2006)[a]	Social media focused "sales tools" represent various technologies centred on facilitating the use of social media for sales (e.g. to provide insights on prospects and customers; help to access, package and share content; help to schedule and handle social media activities across various channels). To what degree you agree with below statements:		.96**
	1. My company adequately equips me with social media sales tools		
	2. My company supplies all social media sales tools needed to perform my job well		.96**
	3. My company adequately supports me on the use of social media sales tools		.96**
Firm content support (based on Taiminen & Ranaweera, 2019)[a]	My company frequently provides me useful content that		.93**
	1. …introduces relevant topics for my customers		
	2. …approaches significant customer business issues with a problem-solving mentality		.94**
	3. …offers timely information on relevant topics for my customers		.94**
Thought leadership (adapted from Magno & Cassia, 2019)[a]	1. I'm widely recognized as a top-of-mind trusted voice among my target customers…		.89**
	2. I'm widely recognized as a prime authority on certain industry issues among my target customers…		.89**
	3. I'm widely recognized as a go-to resource in my field of expertise among my target customers…		.89**
	4. I have a clearly distinguishable expert profile in the minds of my target customers		.87**
Acquisition performance (adapted from Nijssen et al., 2017)[b]	1. Generating attractive new sales leads		.90**
	2. Making time for acquiring new customers		.83**
	3. Closing sales with new customers		.89**
Retention performance (adapted from Nijssen et al., 2017)[b]	1. Building customer relationships		.94**
	2. Maintaining customer relationships		.94**
	3. Closing sales with existing customers		.92**
	1. Contributing to my firm's market share		.85**
	2. Generating a high level of euro/dollar sales		.90**
	3. Quickly generating sales of new products		.87**
	4. Selling to major accounts		.87**
Outcome performance (Miao et al., 2007)[b]	5. Exceeding annual sales targets and objectives		.89**
	1. For me, attending sporting events is a real pleasure	.95**	.94**
	2. I am always excited when I am going to a sporting event	.95**	.97**
CMV marker variable: consumer orientation towards sporting events (Pons et al., 2006)[a]	3. I am always enthusiastic when I think about attending a sporting event	.97**	.93**
	4. When I attend a sporting event, I sometimes feel like I am part of the event	.92**	.93**

Note: **p < .01;* p < .05 (2-tailed).

[R] = Removed Indicator.

[a] = 7-point Likert scale, "1 = strongly disagree and 7 = strongly agree".

[b] = "−3 = much worse; 0 = average; +3 much better".

Appendix 2. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.indmarman.2021.12.016.

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