Three Studies of B2B Salespeople as Collectors of Competitive Intelligence

by

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Thesis submitted in fulfillment of
the requirements for the degree of
PHILOSOPHIAE DOCTOR
(PhD)

PhD Programme in Social Sciences
The Norwegian School of Hotel Management
2023

"[The concept of] buyer first to me just simply means that the salesperson or the sales team engaging with the client needs to have done so much research and become such a student of their client that they're essentially a better knowledge source or a better expert about the client than the client themselves."

—Jesse Rothstein, LinkedIn (2021)

Acknowledgments

Although finishing this thesis required more time than initially planned, it has truly been a challenging and rewarding journey. During these years, several people provided motivation and helped me overcome hurdles in writing this thesis.

First and foremost, a special thanks to my thesis supervisor Professor Håvard Hansen, who has stood by my side all these years, mentoring and pushing me forward. Without you this thesis would probably not have been realized.

Several people provided valuable help in the early phases of this thesis. Special thanks go to Eirik Haus for his valuable feedback and discussions during this phase. Thanks also go to Professor Lars Erling Olsen, my co-supervisor and my department head in the earlier years.

During the later phases, several people gave valuable feedback not only on the thesis as a whole but also the different articles in this thesis. Special thanks go to Jakob Utgård for his willingness to help and provide constructive feedback, which impacted the overall quality of this thesis and its articles. I also thank Professor Jöel Le Bon, my co-author on one of the articles in this thesis. I learned a lot from working with you.

I would also like to thank Professor Anne Haugen Gausdal, who acted as a mentor to me and a group of colleagues who were all in the final stages of our PhD journeys. Your mentorship and motivating words helped engage me in the final phase of this work.

Finally, this thesis would never have been realized without the support of my family. I would like to express my love and gratitude to my wife, Helene, for your support. Your wisdom and compassion have held our family together through all the ups and downs during these years.

Summary

B2B salespeople's ability to collect competitive intelligence from the marketplace affects organizational and individual competitive advantage and, in turn, firm and salesperson performance. The collection, sharing and use of this information are of potential strategic interest, and individual information collection is an important part of market orientation. The complexity and rate of change of industrial markets are increasing due to factors such as rapid technological development, and firms need to adapt to shifting market conditions faster than ever before, heightening the need for CI collection. Boundary spanners like salespeople spend a large part of their time outside their organizations meeting customers and competitors and thus are in a unique position to collect information from the market.

The overall objective of this thesis is to increase the understanding of different aspects of salesperson information collection. This is addressed through three subobjectives: one, investigating what motivates salespeople to collect information beyond factors with a direct effect; two, determining how information collection leads to salesperson learning in a digital setting; and three, identifying the types of information collected by salespeople and strategies for motivating salespeople to collect information needed by the organization.

The main contribution of subobjective one is the finding that the effects of known drivers of motivation for collecting information may vary with the salesperson's personality characteristics, which are represented here by the personality trait locus of control. This variation might explain, at least in part, why only a few salespeople consistently collect information, despite attempts to include all salespeople.

The main contribution of subobjective two is the development of a theoretical framework for listening in a digital setting before meeting customers physically. A model of how social media affects salesperson learning and knowledge building is presented, thus adding to the growing effort to understand how salespeople can use social media to increase their knowledge from the information they collect.

The main contribution of subobjective three is the finding that the information salespeople collect is tactical, for their own interest, and of little value to customers and the sales organization. To increase the value of the type of information salespeople collect, this thesis argues for a stronger focus on the relationship between sales managers and their salespeople. The use of sales managers as a motivational factor for collecting more specific information through the sales force has received scarce treatment in the literature on the motivation of salespeople to collect information.

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1 Introduction

Grounded in the theoretical construct of market orientation (Kohli & Jaworski, 1990; Narver & Slater, 1990), this thesis focuses on competitive intelligence (CI) and the role that B2B salespeople (henceforth "salespeople") play in its collection. Accumulating evidence confirms the importance of the sales force in collecting information (Ahearne et al., 2013; Kalra et al., 2020; Le Meunier-FitzHugh & Piercy, 2006). The gains arising from the collection, sharing and use of market information are of potential strategic interest at the organizational level (Said et al., 2015) and an essential part of market orientation (Schlosser & McNaughton, 2007). Furthermore, information collection has positive effects on individual salesperson performance (Mariadoss et al., 2014), firm performance (Ahearne et al., 2013), and innovation performance in new product development (Kuester & Rauch, 2016). However, three key knowledge gaps remain to be addressed: how to motivate more salespeople to collect intelligence, how they learn from this collection and how to motivate them to collect relevant intelligence.". These gaps prompt the main research question that this thesis seeks to address: How do B2B salespeople contribute to CI collection from the perspective of individual market orientation?

The complexity of today's B2B markets (Itani et al., 2022), their growing uncertainty and turbulence (Cavallo et al., 2020), increasing technological change (Iansiti & Euchner, 2018), and expanding boundaries of competition (Iansiti & Euchner, 2018) have all increased the importance for B2B organizations of understanding their environment, thus driving greater interest in CI. Several authors have also argued that collecting and using CI leads to positive outcomes, such as improved firm performance (Bag et al., 2020) and the development of competitive advantage (Calof & Wright, 2008; Cavallo et al., 2020).

Many definitions of CI exist (Cavallo et al., 2020). As this thesis focuses on the individual collection of CI, the definition of CI presented by Le Bon and Merunka (2006) is used: "a set of procedures and sources used to obtain everyday information about pertinent developments in the marketing environment" (Le Bon & Merunka, 2006, p. 395).

Two seminal works laid the foundation for market orientation research. First, Kohli and Jaworski (1990) define market orientation as "the organizationwide generation of market intelligence pertaining to current and future customer needs, dissemination of the intelligence across departments, and organizationwide responsiveness to it" (Kohli & Jaworski, 1990, p. 6). This definition represents a behavioral concept focusing on how the organization processes information and achieves competitive advantages. Second, Narver and Slater (1990) define market orientation as "the organization culture that most effectively and efficiently

creates the necessary behaviors for the creation of superior value for buyers and, thus, continuous superior performance for the business" (Narver & Slater, 1990, p. 21) and operationalize market orientation through "three behavioral components – customer orientation, competitor orientation, and interfunctional coordination" (Narver & Slater, 1990, p. 21). According to this definition, customer and competitor orientations focus on intelligence acquisition and dissemination to increase knowledge about both customers and competitors (Siguaw et al., 1994).

The extensive body of research on market orientation largely focuses on the organizational level and the consequences of market orientation (Kirca et al., 2005; Liao et al., 2011; Powers et al., 2020). Less attention has been devoted to the individual-level and how individual actors in the organization contribute to the generation of market intelligence (Hamzah et al., 2020; Lam et al., 2010; Schlosser & McNaughton, 2007). Several papers argue for a positive relationship between organizational-level market orientation and salespeople's behavior. In addition, firm market orientation has been linked positively to salespeople's customer orientation (Langerak, 2001; Siguaw et al., 1994) and job attitudes (Siguaw et al., 1994). A strong firm market orientation has been found to positively moderate the relationship between salespeople's innovativeness and new product sales performance (Chen et al., 2015) and directly increase salesperson creativity (Wang & Miao, 2015).

From a theoretical standpoint, the knowledge-based theory of the firm (Conner & Prahalad, 1996), organizational learning theory (Fiol & Lyles, 1985), and Nonaka's (1994) theory of knowledge all focus on the individual as the foundation of organizational knowledge (Flaherty & Pappas, 2012). As market orientation focuses on the creation of knowledge and learning (Slater & Narver, 1995), Jaworski and Kohli (1993) argued that individual factors such as personality and attitude may affect market orientation. Maltz and Kohli (1996) also include individual-level variables as antecedents of the use of market intelligence. Furthermore, Schlosser and McNaughton (2007) concluded that "Unless companies encourage employees in all areas to understand their customers through frequent interaction, they cannot pursue a market-oriented strategy" (Schlosser & McNaughton, 2007, p. 444). In 2009, Schlosser and McNaughton developed the individual market orientation scale (I-MARKOR) based on three dimensions: information acquisition, information dissemination and strategic response (Schlosser & McNaughton, 2009). Schlosser and McNaughton (2009) argued that employees, such as salespeople, collect a variety of intelligence that can influence the creation of competitive advantages for the company. This body of work has driven interest in an individual-level focus of market orientation, which has

been defined as “an organizational member´s practice of integrating customer preferences, competitor intelligence, and product knowledge into the process of creating and delivering superior value to customers” (Lam et al., 2010, p. 62). Based on this individual perspective, Chen et al. (2018) found that salesperson market orientation behavior (SMOB) has positive effects on both sales planning behavior and adaptive selling behavior. Individual market orientation has also been found to increase salespeople’s customer orientation (Baber et al., 2020). In summary, there are both theoretical and empirical arguments for the importance of individual market orientation and thus the collection of CI by individuals, e.g., salespeople, which is the focus of this thesis.

Salespeople are boundary spanners (Burt, 2004; Kalra et al., 2020), and it has been argued that people in boundary positions hold a strategic position for gathering external information (Thietart & Vivas, 1981). Salespeople spend much of their time outside of their organization, which brings them close to customers and competitors and makes them uniquely qualified to collect information from the market(s) they operate in (Woo & Myers, 2020). As discussed above, information collected by salespeople has multiple benefits, such as increased individual salesperson performance (Mariadoss et al., 2014), firm performance (Ahearne et al., 2013), and innovation performance in new product development (Kuester & Rauch, 2016). Kalra et al. (2020) argued that greater customer demands increase the need for FLEs (frontline employees, including salespeople) to collect CI and that an increased focus on CI helps FLEs to “adapt and respond effectively to customers’ needs and wants” (Kalra et al., 2020, p. 4). They found that bridging social capital (the formation of associations with dissimilar individuals (Kalra et al., 2020, p. 4)) has a positive impact on CI collection (Kalra et al., 2020). The use of social media by salespeople has also been shown to increase their collection of market knowledge (Itani et al., 2017, 2020). With respect to specific knowledge, Groza and Groza (2018) found that salespeople’s collection of regulatory knowledge (knowledge of an industry´s regulatory environment) increases sales performance. The utilization of online sales forums by “inside” salespeople also increases their knowledge to improve sales activities (Conde et al., 2020). Furthermore, collecting private information about their customers (motives, needs, and behavior) increases salespeople’s ability to make loan decisions compared with the use of observable variables (such as credit rating) alone (Kim et al., 2019). However, the collection of private information may present a moral hazard if salespeople use this information to maximize their own payoffs (Kim et al., 2019).

The collection of CI grants the sales force access to hard-to-come-by (Arditto et al., 2019) and sensitive (Evans & Schlacter, 1985) information about customers and competitors,

which could create important competitive advantages for an organization. It also potentially allows salespeople to observe the market's reception of their firm's offerings (Evans & Schlacter, 1985) and changes in customers' requirements (Gordon et al., 1998; Lambert et al., 1990) and competitors' actions (Le Meunier-FitzHugh & Piercy, 2006). Several authors have argued that an essential feature of the information salespeople collect is its subjective nature and that this collection of gossip from the market is vital to develop a general and more holistic picture of the firm's market and its evolution (Evans & Schlacter, 1985; Helm et al., 2014; Le Bon & Merunka, 2006). Therefore, this information should be viewed as a complement to rather than a replacement for other important forms of information, such as market research data (Kuester et al., 2017), as the former is more up-to-date since it is collected on a daily basis (Helm et al., 2014; Hughes et al., 2013). By contrast, market research collects and analyzes data linked to specific research questions (Deshpande & Zaltman, 1982).

An emerging and increasingly important means of collecting CI from the market is technologies such as AI (Davenport et al., 2019). As noted above, accelerating technological change (Iansiti & Euchner, 2018) is one of several factors driving B2B organizations to better understand their environment through the collection of CI, particularly using technologies such as sentiment analysis, AI and Big Data analysis (Paschen, 2020; Xu et al., 2011). This shift raises the question of whether this new technology will challenge the role of salespeople as information providers, but it has also been argued that this digital information should be blended with salespeople's tacit customer knowledge (Marcos Cuevas, 2018). Data-driven insights are a critical source of competitive advantage in both innovative and traditional industries, and companies that manage to take advantage of this new technology can increase the availability of both internal and external information. However, many companies struggle to manage these insights (Bag et al., 2020; Zaitsava et al., 2022). According to Syam and Sharma (Syam & Sharma, 2018, p. 145), "So far, the greatest impact of automation and technology in sales has been, and continues to be, on all routine, standard and repeatable activities".

Potential explanations for this struggle include the cost of building advanced analytical abilities (Cavallo et al., 2020), an inability to handle data and an excessive focus on a technology-oriented view (Wengler et al., 2020). Human factors have been found to have a greater impact than technical factors on the success of using AI (Oesterreich et al., 2022), and the cost and lack of competent employees prevents companies from making the most of advanced data analytics through AI (Klee et al., 2021). These limitations have been linked to

a lack of structure and governance to exploit AI-generated knowledge (Petrescu et al., 2022). Combined, all of these factors might explain why the willingness of organizations to invest in Big Data over the next years has fallen by 6 percent (Ranjan & Foropon, 2021) and why company size (and their revenue) may be an important factor underlying the successful exploitation of AI-generated insights (Petrescu et al., 2022; Ranjan & Foropon, 2021).

Most countries are primarily home to small and medium enterprises (SMEs) (Hassani & Mosconi, 2022) and therefore may lack the resources or skills to take advantage of AI analytics (Moradi & Dass, 2022), which might explain why only 37% of surveyed companies utilize AI (Moradi & Dass, 2022). For many companies, using salespeople to collect CI might be a cheaper and easier solution to implement than using AI.

For companies with the ability to generate data-driven insights through AI, an important group of recipients is salespeople (Grewal et al., 2021; Nelson et al., 2020). This presupposes that salespeople use the feedback provided by AI (Chen & Zhou, 2022; Hall et al., 2021). Trust in information is important (Grewal et al., 2021), and it can be argued that if salespeople collect CI, they might be more willing to use AI-generated feedback when that feedback coincides with their own CI, that is, has greater perceived accuracy (Hall et al., 2021).

Lastly, the impact of AI may vary depending on the industry; AI may be better suited to industries with large numbers of customers that produce vast amounts of data (Davenport et al., 2019). Many B2B companies have a relatively small number of customers, resulting in less data generation (Moradi & Dass, 2022). Therefore, in less data-rich industries, salespeople may be one of the only ways of collecting CI from the market.

In summary, the above discussion indicates that although technological developments are positively impacting the collection of CI, the role of the salesperson as an information collector remains important. The information collected by salespeople can be viewed as an important supplement that paints a broader picture of the market and customers and validates information collected from other sources.

Increasing technological changes (Iansiti & Euchner, 2018) have also affected B2B customers by expanding their knowledge and buying power (Ahearne et al., 2021; Lee, 2011), thus empowering them to move further through the buying process before making contact with a potential seller (Adamson et al., 2012). These changes heighten the pressure on salespeople to bring value to their relationships with customers: "… if the seller cannot bring added-value to the relationship by identifying new opportunities for the buyer to gain competitive advantage in the end-use marketplace, then the seller is no more than a

commodity supplier …" (Piercy, 2010, p. 353). To bring value, the salesperson must have a better understanding of their customers and the market(s) in which their customers operate.

In response to customers' increased power and expectations, sales organizations are looking for ways to avoid commoditizing and to position themselves as valued partners. Powered by the move from transactional to relationship selling practices (Marshall et al., 2003), sellers are increasingly using more advanced selling approaches (Marshall et al., 2003), such as solution-based (Tuli et al., 2007) and value-based selling (Alamäki & Korpela, 2021; Ulaga & Kohli, 2018). These trends further increase the pressure on salespeople to collect more CI to better meet customers' expectations.

Therefore, collecting CI from the marketplace can be argued to be critical for creating superior competitive advantages for the individual salesperson, the selling company, and the customer (Hughes et al., 2013). Accordingly, *the overall objective of this thesis is to, through the concept of individual market orientation, increase the understanding of how salespeople affect the organization's generation of competitive intelligence*.

1.1 Objective and research approach

As stated above, the overall objective of this thesis is to increase the understanding of how salespeople, through the concept of individual market orientation, affect the organization's generation of competitive intelligence.

This overall objective is further divided into three subobjectives:

1) Increase the understanding of what motivates salespeople to collect information. Most research has focused on motivational (Le Bon & Merunka, 2006) and organizational (Kuester & Rauch, 2016) factors to understand what motivates salespeople to collect information. Nevertheless, despite being exposed to similar stimuli, salespeople differ in their willingness to gather information (Le Bon & Merunka, 2006). Moderating effects may explain how the same stimuli result in different outcomes and are the focus of the first article.

2) Increase the understanding of how salespeople collect (sense) and learn in a digital world and the outcomes of this collection. Several authors have focused on the outcomes of information collection and use. For example, information collection and use have been shown to increase salesperson performance (Mariadoss et al., 2014), customer loyalty (Kalra et al., 2020), and the adaptive selling ability of salespeople (Itani et al., 2017; Park et al., 2010; Rapp, Agnihotri, et al., 2014). However, few studies have examined how information collection affects salesperson learning. The second article focuses on how salespeople evaluate and learn from the information they collect through digital channels.

3) Deepen the understanding of the types of information that salespeople collect. Most research on information collection by salespeople has focused on the amount of information collected and not on which type of information is most important to collect. The most widely used scale for measuring salesperson information collection is the one developed by Le Bon and Merunka (2006). This scale measures the amount of information collected on customers and competitors. Due to customers' increased buying power and the advent of new and more complex sales approaches, the type of information collected by salespeople is becoming more important and is the focus of the third article.

Different research strategies are applied to address the main objectives of this thesis and its articles according to the research questions developed. Inductive, deductive, and abductive strategies are used, all grounded in the ontological assumption of a realistic perspective. The first article uses a deductive strategy and a descriptive approach, and the second article uses an abductive strategy through an exploratory approach. Finally, the third article uses an inductive strategy and an explanatory approach.

1.2 Clarification of key concepts

The current section introduces the fundamental concepts of this thesis, and several distinctions between competitive intelligence and related concepts are addressed. First, associated concepts are discussed, followed by the level of intelligence and alternative concepts. Finally, the section ends with some essential delimitations.

The central concept, competitive intelligence, has previously been defined as "a set of procedures and sources used to obtain everyday information about pertinent developments in the marketing environment" (Le Bon & Merunka, 2006, p. 395). In the study of information seeking, several *associated concepts* are used. Data, information, and knowledge have all been used together with intelligence. In the above definition, intelligence consists of both procedures and information. The relationship among data, information, and knowledge has been viewed as hierarchical, with data at the bottom and knowledge at the top (Machlup & Mansfield, 1983). However, the distinctions between these concepts have been argued to be of little value in information-seeking studies "because they are usually not clearly delineated in studies of information behavior" (Case, 2012, p. 73). Therefore, in this thesis, data, information, and intelligence are treated as interchangeable concepts. Treating intelligence as synonymous with both data and information is also in line with how the concept of intelligence has been treated in most of the literature discussing salesperson information

collection (Itani et al., 2017; Le Bon & Merunka, 2006; Mariadoss et al., 2014). The collection of such information is the focus of research articles one and two.

By contrast, knowledge is the understanding reached by the human brain based on data and information (Case, 2012). This means that knowledge results from collecting information. It has been argued that a steady stream of information is a critical prerequisite for knowledge development (Flaherty & Pappas, 2012), which is partly the focus of research article three.

Next, the *level of intelligence* is addressed. This thesis adopts an individual-level perspective that focuses on how the individual salesperson, not the organization, handles information collection, which is in line with most articles discussing salesperson information collection (Le Bon & Merunka, 2006; Liu & Comer, 2007). As mentioned in the introduction, research has shown that collecting, sharing, and using market information have positive effects on several organizational and individual factors (Ahearne et al., 2013; Kalra et al., 2020; Le Meunier-FitzHugh & Piercy, 2006).This evidence suggests that individual salesperson information collection impacts the organization.

Another line of research has focused on the impact of salesperson information collection at the individual-level, that is, how information collection affects salesperson results. Information collection positively affects individual salesperson performance (Mariadoss et al., 2014). This individual perspective on the outcome of information collection has been defined as "Individual-level knowledge about competitors and the competitive environment that can be used tactically to aid in enhancing salesperson performance" (Rapp et al., 2011, p. 142). This concept of salesperson competitive intelligence (SCI) argues for an individual value of information collection. According to this perspective, individual salespeople collect tactical and short-term information that is important for reaching their short-term goals. By contrast, the organizational level focuses on more strategic and long-term information. The debate between individual- and organizational-level information is not addressed in this thesis. However, as both lines of research agree that information collection starts with the individual, collection is treated according to the individual perspective in line with Rapp et al. (2011).

Another critical clarification in examining salesperson information collection is the use of *alternative concepts*. Competitive intelligence is used in this thesis, as this is the most frequently used concept when discussing salesperson information collection (Agnihotri & Rapp, 2011; Ahearne et al., 2013; Ali Köseoglu et al., 2015; Hughes et al., 2013; Itani et al., 2017; Kalra et al., 2020; Mariadoss et al., 2014; Rapp, Bachrach, et al., 2014; Rapp et al.,

2011). Other concepts used are market information (Bonfrer et al., 1992; F. Chen, 2005; Harmancioglu et al., 2010; Lambert et al., 1990; Troy et al., 2001; Webster Jr., 1965), customer information (Darmon, 2002), market intelligence (Z. R. Hall et al., 2017; Kuester & Rauch, 2016), and marketing intelligence (Helm et al., 2014; Le Bon & Merunka, 2006; Le Meunier-FitzHugh & Piercy, 2006). In the literature on strategy, market scanning (Alam et al., 2013), strategic intelligence (Thietart & Vivas, 1981), and environmental scanning (Auster & Choo, 1993) have often been used. These concepts are largely interchangeable and are treated as such in this thesis but may differ in the type of intelligence they focus on, e.g., customers, competitors, or the market in general. In this thesis, the first research article uses market information, and research articles two and three use competitive intelligence.

Finally, some clarifications are needed regarding *delimitations*. Whereas much of information-seeking research focuses on how individuals collect information for their own interests (Case, 2012), this thesis focuses on professional information collection, that is, the collection of information by salespeople as part of their role in the organization and not for their personal interests. The variables used to explain information collection in a professional setting differ from those used to explain private information collection (Case, 2012). Organizational control systems (Le Bon & Merunka, 2006) have an important impact on the motivation for collecting information in the professional setting but are not relevant in the private setting.

1.3 The structure of this thesis

The rest of this thesis is structured as follows. Chapter two presents the background for the overall objective of this thesis and describes different aspects of information collection by salespeople, including theoretical aspects. Chapter three presents an overview of the three articles included in this thesis, a summary of the findings of each of the articles, and each article's current publication status, supplemented by a figure that illustrates how the three articles are connected. Chapter four offers reflections on the methodologies applied in each article and addresses possible weaknesses in each article. Chapter five provides an overall discussion of the main conclusions and contributions and suggests some fruitful paths for future research, both related to the use of emerging technologies, such as AI, and divided according to the three subobjectives the thesis addresses. Chapter six presents some concluding remarks, and, finally, the thesis ends with chapter seven, which includes the full versions of each of the three research articles.

2 Background

The increasing significance of collecting CI and the relevance of using the sales force to collect CI, despite the development of Big Data or AI, were established in the Introduction. Research on salesperson information collection has largely focused on how to motivate salespeople to collect information (Kalra et al., 2020; Le Bon & Merunka, 2006), as it has been argued that salespeople are underutilized as information collectors (Liu & Comer, 2007).

Management perceptions of bias and accuracy may be partly responsible for the failure to use salespeople as information collectors or for salespeople's reluctance to collect information (Fouss & Solomon, 1980; Grace & Pointon, 1980; Sharma & Lambert, 1994). In addition, salespeople may view collecting information as just another organizational, time-consuming process that offers them little or no value (Agnihotri & Rapp, 2011; Darmon, 2002; Helm et al., 2014). The reluctance of salespeople to share information may reflect the internal competitive value of the information (Helm et al., 2014) or the personal characteristics of the salesperson, lack of time, lack of rewards, lack of competence, organizational barriers, and the belief that the information is already known (Agnihotri & Rapp, 2011; G. L. Gordon & Schoenbachler, 1997; Rapp et al., 2011). Consequently, research has focused on both individual and organizational factors for motivating salespeople to collect information.

Factors shown to have strong positive effects on salesperson information collection include individual factors such as motivation toward market intelligence and desire for upward mobility (Le Bon & Merunka, 2006) and organizational factors such as behavioral control systems (Le Bon & Merunka, 2006), assigned MIA (market intelligence activities) goals (Kuester & Rauch, 2016), and supervisory practices (Liu & Comer, 2007). Figure 1 provides an overview of empirical, mostly cross-sectional, research on salesperson information collection. Figure 1 shows how antecedents, moderators, mediators, and outcome variables are connected to information collection and thus is an important backdrop for highlighting the contributions made by this thesis. These connections are further elaborated in figure 3.

Figure 1 Overview of antecedents, moderators, mediators, and outcomes related to salesperson information collection. Empirical papers.

Studies of the main variable (collection behavior) in figure 1 are divided into two groups. The first group contains articles using the Le Bon and Merunka (2006) scale, which is the dominant scale for measuring information collection. The second group uses different scales and measures of information collection, raising questions about validity and comparability across studies (Bergkvist & Eisend, 2021). In other words, the first group in figure 1 represents consistent use of a single scale, while the second group does not.

Next, section 2.1 will address some theoretical considerations related to CI collection, and sections 2.2, 2.3, and 2.4 briefly outline the focus of each of the three articles on CI collection.

2.1 Theory in CI collection

Section 1.2 presented brief arguments for an individual-level approach to CI collection and a focus on professional information collection (Case, 2012). Both perspectives are important because they bear implications for what kinds of theories are used—and not used. In this section, the theoretical arguments for this thesis and a more thorough argument for an individual-level approach will be presented.

Research on information seeking has adopted theories from several disciplines, and no single theory stands out as dominant due to the diversity of approaches in the field (Case, 2012). Zweizig (1977) observed that theoretical inspiration came mainly from sociology, mass communication, and psychology. Examples of research on information seeking that have drawn on sociology include Chatman (1990), who built on Durkheim's concept of alienation (Kanungo, 1979) in examining the use of information among janitors and discussed their responses in light of indicators of alienators. Chatman (1991) also used the mass communication theory of gratification to explore how janitors used mass media. However, most research on information seeking has employed some kind of psychological theory (Case, 2012), with a clear origin: “Indeed, much of information-seeking research could be said to relate to, if not descend directly from, a single psychologist: Sigmund Freud” (Case, 2012, p. 173).

The theoretical diversity observed in the broader body of information-seeking research also applies to the literature on CI collection by salespeople. The research cited in figure 1 uses several different theories to explain various factors related to salespeople’s CI collection. Table 1 below provides an overview of these theories and their application.

Article	Theory used	Description
Itani et al. (2017)	Theory of Reasoned Action (TRA) (Ajzen & Fishbein, 1975) to discuss the attitude-behavior relationship (Ajzen & Fishbein, 1977) Social information processing theory (Salancik & Pfeffer, 1978) and learning orientation (Sujan et al., 1994)	TRA was used to show how social media affected information collection. Furthermore, they argued that the relationship between attitude towards social media and the use thereof is supported by social information processing theory. They also included learning orientation as a moderator of the link between this attitude and use.
Itani et al. (2020)	Social exchange theory (Blau, 1986) and task-technology fit theory (Goodhue & Thompson, 1995)	These theories were used when testing a model examining how salespeople use CRM and social media technology in information collection.
Kuester and Rauch (2016)	Job demands-resources theory (Bakker & Demerouti, 2007)	The theory was used when arguing for the positive effect of R&D`s use of sales` marketing intelligence on innovative performance.
Le Bon and Merunka (2006)	Expectancy theory (Churchill Jr. et al., 1985; Matsui et al., 1977)	This motivational theory was used to test a model of motivational drivers of salespeople's information collection.
(Rapp, Agnihotri, et al., 2014)	Social identity theory (Brown, 2000)	The theory was used to investigate how organizational identification and role conflict impact the collection and use of individual competitive intelligence (ICI) and how the collection and use of ICI impact individual performance.
(Mariadoss et al., 2014)	Used a specific rather than overarching paradigm: the cognitive selling paradigm (Sujan et al., 1994; Weitz et al., 1986)	It was argued that this paradigm theorizes that a salesperson's knowledge impacts their information-based capabilities and behaviors, which in turn influence the salesperson's performance.
(Chen & Hung, 2010)	Did not have any overarching theoretical focus but used social cognitive theory (Bandura, 2001)	No theory was connected to knowledge collection behavior, but social cognitive theory was used to discuss knowledge sharing.
(Woisetschläger et al., 2016)	Different theories used in different arguments for different hypotheses: resource-dependence theory (Hillman et al., 2009) and social exchange theory (Blau, 1986)	
(Harmancioglu et al., 2010)	Upper echelons theory (Hambrick & Mason, 1984)	The theory was used to discuss the role of the top management team (TMT) in information collection.
(Ahearne et al., 2013)	No specific theory was used, but different types of functional-level social networks and informal social networks (Mintzberg, 1973) were discussed.	These network perspectives were used to discuss CI quality.
The following papers do not address any explicit theory – argumentation with empirical evidence only:		
(Troy et al., 2001)	No specific theory mentioned	Discussed market information's role in generating new product ideas.
(Park et al., 2010)	No specific theory mentioned	Discussed sales force automation (SFA) technologies and their relationship with relationship quality and performance.
(Liu & Comer, 2007)	No specific theory mentioned	Examined managerial factors influencing the collection of information by salespeople.

Table 1 Theories used in salespeople CI collection research.

Some of the theories mentioned in table 1 have also been used in other research on information seeking. TRA (Ajzen & Fishbein, 1975) has been used to examine individuals' use of social media (Wise et al., 2010), individuals' predisposition to seek out health information (Griffin et al., 1999), and individual factors affecting the proliferation of misinformation online (Khan & Idris, 2019).

In a bibliometric analysis of 189 publications on information overload, a more narrow concept within information seeking, Roetzel (2019) identified a myriad of theories. The most dominant theory was human information processing (Schroder et al., 1967), which was used by 14 percent of the publications, although 35 percent of the publications did not present any explicit theory.

As shown in table 1, research on salespeople's CI collection follows the same trend as information-seeking research in general. Although there are some overlapping theories, in general, the theories used are diverse. All of the theories in table 1 are grounded in the discipline of psychology, which is also the case in the general information-seeking literature. Moreover, with the exception of Troy (2001), all are based on an individual-level analysis, including when organizational factors are discussed (Le Bon & Merunka, 2006; Liu & Comer, 2007).

Like most research on information seeking, this thesis does not use a specific theoretical perspective but is grounded in the discipline of psychology and therefore focuses on an individual-level perspective. This thesis focuses on professional information collection in the form of CI collected from the marketplace. Compared with private individual information collection, in which individuals collect information for their own interest, the motivational factors for CI collection will differ. The most important consequence of this difference is that in a professional setting, both individual and organizational factors affect information collection (Le Bon & Merunka, 2006; Liu & Comer, 2007).

Another discipline that sometimes informs information-seeking research is economic theory, especially the subfield of agency theory (Eisenhardt, 1988, 1989). Agency theory has been used as a theoretical foundation for discussing differences in information technology performance related to top management characteristics, firm ownership, and firm control structures (Karake, 1995). A review of how family firms use management control systems (MCS) also adopted an agency theory perspective (Helsen et al., 2017). However, this thesis focuses on theories from psychology, the most dominant discipline in information-seeking research (Case, 2012), and omits other theoretical perspectives.

The first article of this thesis uses several psychological theories to develop hypotheses, but the main contribution of the article is the identification of personality as a moderator of factors affecting salespeople's CI collection. Personality is an overarching concept based on trait theory (Judge et al., 2013). One of the most commonly used concepts within trait theory (Judge et al., 2013) is that of the Big Five traits, which are an important source of performance motivation (Judge & Ilies, 2002). Traits can be arranged in a hierarchy with the Big Five at the top and a myriad of lower-level traits based on these five (DeYoung et al., 2007). Judge et al. (2013) argued in their meta-analysis that although the Big Five traits have high predictive power for overall performance, lower-level traits have greater predictive power for task performance. As article one focuses on information collection, one of many tasks conducted by salespeople, it argues that lower-level traits should be used as moderators. One such lower-level trait is locus of control (LOC), which is based on social learning theory (Rotter, 1975). Social learning theory has also been used previously in information-seeking research (Case, 2012). LOC has been confirmed to affect information collection (Noe & Steffy, 1987; Renn & Fedor, 2001; Srinivasan & Tikoo, 1992; Thornton, 1978), supporting its use as a relevant moderator.

The second article in this thesis proposes a theoretical framework of digital sales listening and learning (DSLL). This framework builds upon the application of the listening concept (Drollinger et al., 2006) to salespeople's information collection. Traditional listening mainly focuses on physical meetings between salespeople and customer representatives (Drollinger et al., 2006). However, the complexity of today's B2B markets (Itani et al., 2022), their growing uncertainty and turbulence (Cavallo et al., 2020) and, in particular, increased technological change (Iansiti & Euchner, 2018; Singh et al., 2019) have reduced physical contact between the seller and the buyer (Adamson et al., 2012). This decrease in physical contact also reduces opportunities to listen to the customer physically. The second article therefore argues that salesperson listening should move to a digital platform.

As the second article adopts the listening concept (Drollinger et al., 2006) as the base framework, a dominant theoretical framework in traditional listening is used (Worthington & Bodie, 2018): the theory of supportive message outcomes (Burleson, 2009). This theory explains why a message affects the receiver on specific occasions (Bodie, 2009; Burleson, 2009). This theory has been used to evaluate listening by salespeople in both physical (Goad, 2014) and online settings (Figl & Bauer, 2008; C. Park et al., 2015) and is therefore relevant when discussing listening in a digital setting. In addition, as the framework addresses listening *and* learning, two learning theories are proposed. First, connectivism, a learning

theory for the digital age (Siemens, 2005), is used to explain *how* salespeople learn. Second, to explain *why* salespeople engage in information collection, regulatory focus theory is used (Higgins, 1997). People with a promotion-oriented regulatory focus emphasize hopes and aspirations (such as new ideas), whereas those who are more prevention oriented prioritize avoidance and safety (such as support for the current way of doing things) (Wu et al. 2019). Regulatory focus theory has been argued to be useful in all stages of decision-making processes, including information searching (Wu et al., 2019). Accordingly, these theories are relevant to salespeople's digital information collection and learning.

The third article in this thesis does not use any specific theories but focuses on theory building through a grounded theory approach (Creswell, 2014; Glaser & Strauss, 1967). Such an approach is necessary due to the lack of studies of what motivates salespeople to collect specific market information. A review of the previous literature reveals that only nine articles spanning a period of 51 years have assessed the types of intelligence collected by different organizational actors, such as CEOs (Agnihotri & Rapp, 2011; Ali Köseoglu et al., 2015; Chonko et al., 1991; Evans & Schlacter, 1985; Gordon & Schoenbachler, 1997; Grove et al., 1992; Keegan, 1974; Pass et al., 2004; Webster Jr., 1965). In general, the intelligence collected by these actors is short-term oriented and not very organized (Evans & Schlacter, 1985; Keegan, 1974; Pass et al., 2004). However, none of these articles considered what motivates the collection of specific information. Therefore, a grounded theoretical approach is relevant when researching what motivates salespeople to collect specific information.

Next, sections 2.2, 2.3, and 2.4 briefly outline the focus of each of the three articles on CI collection.

2.2 Personality as a moderator

The first article in this thesis empirically tests personality as a moderator to further broaden the understanding of what motivates salespeople to collect information from the market. As outlined in figure 1, several variables have been used to explain how to motivate salespeople to collect information. The individual variables (Itani et al., 2017; Kuester & Rauch, 2016; Le Bon & Merunka, 2006) and organizational variables (Kuester & Rauch, 2016; Le Bon & Merunka, 2006; Liu & Comer, 2007) mentioned above are all significantly directly related to salespeople’s motivation for collecting information. Some moderator variables have also been suggested, such as job autonomy (Kalra et al., 2020), which positively moderates the relationship between bridging social capital and competitive intelligence collection. Sales force automation use (SFA) has been shown to moderate the

relationship between salesperson product knowledge and salesperson competitive intelligence behavior such that the relationship is weaker when SFA is high (Mariadoss et al., 2014). Nonetheless, regardless of the motivational stimuli used, information collected is largely performed by the same few salespeople (Le Bon & Merunka, 2006). This led Le Bon and Merunka to ask "What other factors may influence salespeople's motivation and behavior towards marketing intelligence activities?" (2006, p. 406). They proposed factors such as personality traits, work experience, attitude toward the task, etc.

In response to Le Bon and Merunka's (2006) call for more information on what motivates salespeople to collect information, the first article in this thesis focuses on the effect of personality on information collection. Personality can be defined as "those inner psychological characteristics that both determine and reflect how a person responds to his or her environment" (Schiffman et al., 2012, p. 126). A meta-study concluded that the Big Five personality traits are an important predictor of performance motivation (Judge et al., 2002). Personality has also been argued to act as a moderator in several work settings (Ghorpade et al., 2011; Harvey et al., 2006). Based on the above definition, which focuses on inner psychological characteristics, and previous research on personality as a moderator in work settings, the first article argues that people who differ in personality might respond differently to the same stimuli. Understanding salespeople's personality profiles and how these profiles interact with different motivational stimuli would provide sales managers with a tool for matching a salesperson's personality traits with the right stimuli to enhance information collection. By examining the effect of personality on motivational factors driving salespeople to collect information, the first article addresses a gap in the literature and demonstrates that the effects of known drivers of motivation for collecting information may vary with the salesperson's personality characteristics.

2.3 Salesperson information collection and learning in a digital world

The second article in the thesis conceptually discusses how salespeople collect information in a digital world and how the information collected affects salesperson learning, building on the construct of salesperson listening (Comer & Drollinger, 1999; Ramsey & Sohi, 1997). Collecting information is closely connected to the concept of salesperson listening (Marshall et al., 2003), which comprises three phases: sensing, processing, and responding (Castleberry & Shepherd, 1993; Drollinger, 2018). The first phase, sensing, represents the collection of information. Previous research has primarily addressed listening as a physical (mainly face-to-face) meeting between the seller and the customer (Itani et al.,

2019), where active listening emphasizes nonverbal cues such as eye contact and facial expressions (Drollinger, 2018).

Digitalization has affected salesperson listening because customers are increasingly traveling further through the customer journey before contacting a seller (Adamson et al., 2012). This reduces the amount of physical contact between the seller and buyer (Ahearne et al., 2021) and, in turn, opportunities for the salesperson to listen to the customer, thereby limiting the value of the listening construct.

On the other hand, it has been argued that social media technology can be an important tool for salespeople to collect information (Itani et al., 2017, 2020) and a critical component of social B2B selling (Ancillai et al., 2019; Terho et al., 2022). The use of online forums increases inhouse sales agents' knowledge (Conde et al., 2020), and internal social networks positively affect salesperson performance (Ahearne et al., 2013). E-listening is also positively related to service quality and utilitarian values (Park et al., 2015), and leaders who listen to employees on internal digital platforms have a better understanding of the collective voice of their employees (Cardon et al., 2019). These observations show that online listening is important and helps increase the understanding of several important groups of people. However, not enough is known about how digitalization can enhance salespeople's collection of information online and the effect of this information collection on salesperson learning.

As summarized in figure 1, several studies have argued for either direct relationships between information collection and different outcome variables, e.g., performance (Mariadoss et al., 2014), or a relationship that is either moderated by, e.g., autonomy (Rapp, Agnihotri, et al., 2014) or mediated by, e.g., information communication (Kalra et al., 2020). According to a meta-analysis by Itani (2019), the link between listening and performance is not complete due to variations in effect sizes. To address these gaps in understanding, the second article presents a conceptual model for how salespeople collect information through digital channels and how this collection affects salespeople's selling-related knowledge, a strong predictor of sales performance (Verbeke et al., 2011), mediated by salespeople's learning. In so doing, it contributes to research on online listening by developing a theoretical framework for listening in a digital setting before meeting customers physically.

2.4 Types of information collected by salespeople

The third article in this thesis uses a qualitative approach to investigate the types of information that salespeople collect. Several arguments support the importance of focusing on information type. First, there is an increasing focus on the sales center and its need for diverse information (Moncrief, 2017). Salespeople should focus on collecting different and relevant information from the different actors in the sales center to better serve these actors' interests. Second, the expanding use of information collected through digital sources should lead to more focused collection by salespeople, either through digital or non-digital channels, so that the information collected through these channels is complementary (Fischer et al., 2022). Third, there is growing interest in customer learning and what information should be collected by salespeople to generate both basic and reflective learning among their customers (Bonney et al., 2022).

In regard to the types of information collected, previous studies have shown that information collected from the market includes customers' reactions to the company's prices and marketing, competitors' actions, or how customers learned about the company (Ali Köseoglu et al., 2015; Chonko et al., 1991; Evans & Schlacter, 1985; GGordon & Schoenbachler, 1997; Grove et al., 1992). Other types of information include competitors, their prices and types of products and services provided, and changes in these products and services (Ali Köseoglu et al., 2015; G. L. Gordon & Schoenbachler, 1997; Grove et al., 1992; Pass et al., 2004). Information about government regulations and rulings, access to resources, and economic climate has also been examined (Keegan, 1974). However, the respondents in these studies were mainly managers, and the studies focused on the information that these managers collected directly or through salespeople (e.g., Pass et al., 2004). As previously argued, many organizations consider information from the sales force the single best internal source of information (Rapp et al., 2011), and it is therefore surprising that few studies have used salespeople as respondents. Consequently, knowledge of what information salespeople prefer to collect without being asked to do so is limited. The few relevant studies have mainly concluded that the information collected by salespeople is primarily tactical and focuses on how to close the current deal (Agnihotri & Rapp, 2011) or is mainly short-term oriented and relatively disorganized (Evans & Schlacter, 1985; Keegan, 1974; Pass et al., 2004). This short-term focus is worrisome because the growing knowledge and power of customers due to greater access to information with increased digitalization (Lee, 2011) are driving them to demand more of sellers when they finally approach them (Piercy, 2010). At the same time, sellers are incorporating more advanced sales approaches, which require a deeper

understanding of their customers at a higher strategic level (Tuli et al., 2007; Ulaga & Kohli, 2018). The increased use of buying centers on the customer side (Paesbrugghe et al., 2016) places further pressure on salespeople to collect more detailed information about customers' internal lines of power and influences on the purchase decision (Ingram, 2004).

In summary, there is a growing need to understand how to motivate salespeople to collect more specific information from the market with a focus on adding value to the customer interaction. Addressing this gap is the objective of the third article in this thesis, which focuses on types of collected information and possible motivators for inspiring salespeople to collect more specific information.

Next, the articles and their results are presented, and a graphical representation of their relationships is provided.

3 The articles in this thesis and their results

This thesis investigates information collection by B2B salespeople, and the three accompanying research articles address the three subobjectives. These articles cover different parts of the relationship between salespeople and information collection to contribute to filling the gaps presented in sections 2.1, 2.2, and 2.3. Each article is independent of the others, but all have the same common denominator, the collection variable, although the conceptualizations of this variable differ. The first article uses the dominant scale for measuring salesperson information collection, the Le Bon and Merunka scale (2006). The second article builds on the concept of sensing, which is part of the salesperson listening construct (Castleberry & Shepherd, 1993; Ramsey & Sohi, 1997), and the third addresses the types of information that salespeople collect. The differences in the collection variable between the three studies are highlighted with different colors in figure 2. The colors used in figure 2 represent the variables included in each of the three articles and the connections between them. The objective, hypotheses, and main findings of each research article are summarized in table 2 at the end of the chapter.

3.1 Article one

Article 1 is entitled "The effect of personality on salespeople's information gathering" and is illustrated in figure 2 by the color orange. The main objective of the article is to test how personality moderates the relationships of intrinsic motivation, perceived information value, activity perception, perceived organizational support, and adaptive selling with the propensity to collect market information. Building on trait theory, a view that "sees the

essence of human nature in individual differences" (McCrae & John, 1992, p. 199), this article argues that individuals can be characterized according to specific enduring personality traits, which can be measured and explain differences in human behavior. The five-factor model (FFM) of personality (Judge et al., 2013) is one of the best-known constructs based on trait theory (McCrae & Costa, 1987) and the dominant framework for assessing personality with regard to human behavior (Pervin, 1994). Nonetheless, it has been argued that these five traits are too broad to assess specific work criteria and that more finely grained traits would better predict specific behaviors (Judge et al., 2013). One such lower-level personality trait is locus of control (LOC) (Chung & Ding, 2002), which is based on social learning theory (Rotter, 1975). LOC has also been argued to influence information collection (Noe & Steffy, 1987; Renn & Fedor, 2001; Srinivasan & Tikoo, 1992) and is therefore used as a moderator of the direct relationships in the article.

The model hypothesizes that all direct effects positively affect the propensity to collect market information but are moderated by the locus of control (LOC) personality trait, which is used as a dichotomous variable: external and internal LOC (Iacobucci et al., 2015a, 2015b). It is hypothesized that internal LOC positively moderates the relationships between intrinsic motivation/adaptive selling and collection, while external LOC positively moderates the relationships between perceived information value/activity perception/perceived organizational support and collection. The article applies a cross-sectional design with a sample of 255 B2B salespeople.

Results: Most of the direct hypotheses are supported (see table 2 for the hypotheses). H1 argues that intrinsic motivation has a positive effect on the propensity to collect market information. Intrinsic motivation has not previously been tested as a variable affecting information collection. One notable exception is self-set marketing intelligence activity (MIA) goals, conceptualized as personal objectives for MIA (Kuester & Rauch, 2016). The positive effect of intrinsic motivation is supported, in line with self-set MIA goals.

H2, which posits that the perceived value of information increases the propensity to collect information, is supported, in line with the Johnson model of information gathering (Johnson & Meischke, 1993) and with goal-setting theory, which specifies that a salesperson will focus on those goal-relevant activities with the highest value (Locke & Latham, 2002).

One of the most significant positive relationships is between viewing collecting as an in-role activity and the propensity to collect (H3). This relationship is in line with previous research on similar concepts, such as behavioral control systems (Le Bon & Merunka, 2006), assigned MIA goals (Kuester & Rauch, 2016), and supervisory practices (Liu & Comer,

2007). In all these concepts, the salesperson perceives collecting information as something the organization demands.

Last, adaptive selling positively affects the propensity to collect information, supporting H5.

However, the relationship between perceived organizational support and information collection posited by H4 is not supported. This finding is in line with Stamper and Johlke (2003), who found no connection between perceived organizational support and specific task performance. However, it is contrary to Liu and Comer (2007), who found that perceived upper management support is positively related to information gathering, and Wortruba and Mangone (1979), who found that managerial recognition is positively related to information-reporting effectiveness. A potential reason for the mixed results of previous studies is that some focused on managerial support (Liu & Comer, 2007), while others studied organizational support in general (Le Bon & Merunka, 2006).

Locus of control (LOC) is then introduced as a moderator in the model. LOC is an essential construct in the field of personality (Rotter, 1990) and was previously used in sales research (Chung & Ding, 2002). LOC is based on social learning theory (Rotter, 1966) and refers to a generalized expectancy concerning the control of one's life that is related to the connections between personal characteristics and actions and their outcomes (Chung & Ding, 2002). Regarding the moderating effects of external and internal LOC, support is found for H6 and H7 (see table 2).

H6 posits that LOC moderates the relationship between intrinsic motivation and collection. Internal LOC strengthens this relationship, whereas no moderating effect of external LOC is observed. Salespeople with an internal LOC view the results of their work as contingent upon their own behavior, consistent with the autonomy component of intrinsic motivation. Consequently, increasing the autonomy of market information gathering will have a more significant effect when the salesperson has an internal LOC.

H7 proposes that LOC moderates the relationship between perceived information value and information collection. External LOC strengthens this relationship, whereas no effect of internal LOC is observed. Feedback about how information is used could increase the perceived value of information for the salesperson. People with an external LOC have a stronger feeling that success is obtained through consulting others (Boone et al., 2005). By contrast, those with an internal LOC are less dependent on the opinions of others, which could explain why individuals with an external LOC increase their information collection when they perceive the information as valuable. Several authors have highlighted the value of feedback

in encouraging salespeople to gather information (Grove et al., 1992; Mellow, 1989; Pass et al., 2004).

The effect of activity perception (H8), which has the most prominent direct effect in our baseline model, is significant in both the internal and external LOC groups, with a slightly greater effect in the internal LOC group. A t-test (Levin et al., 2002) does not support the significance of this difference between the internal and external LOC groups, and thus H8 is not supported (see table 2). The remaining two moderation hypotheses, H9 and H10, are also not supported.

The main contribution of subobjective one (investigating what motivates salespeople to collect information beyond factors with a direct effect) is the finding that the effects of known drivers of motivation for collecting information may vary with the salesperson's personality characteristics, which are represented here by the personality trait locus of control. This variation might explain, at least in part, why only a few salespeople consistently collect information, despite attempts to utilize all salespeople.

This article was published in *Baltic Journal of Management* in August 2017 (Mehl and Hansen, 2017).

3.2 Article two

Article 2 is entitled "Social listening & learning in digital sales: Adapting customer and competitive intelligence and knowledge to the digital era" and is illustrated in figure 2 with the color blue. The objective of this article is to establish a theoretical framework of Digital Sales Listening and Learning (DSLL) and present related research propositions. The theoretical framework is based on three main theoretical perspectives on listening and learning. The first, the theory of supportive messages (Bodie et al., 2011; Burleson, 2009), is frequently used in listening research and aims to explain why a message affects the receiver on specific occasions (Burleson, 2009). Second, the theoretical framework builds on connectivism, a learning theory for the digital age (Siemens, 2005) that is "characterized as a network theory of knowledge and learning with an emphasis on the use of digital technology" (Downes, 2019, p. 112). Connectivism explains how salespeople learn in a digital age, while the third theoretical perspective, regulatory focus theory (Higgins, 1997), explains why they engage in this learning by collecting digital information and the form of such learning. At its core, regulatory focus theory examines approach-avoidance motivation (Higgins, 1997).

Based on these theoretical perspectives, the article offers several contributions to understanding how salespeople collect information and how this collection affects learning

and knowledge. First, this model is the first to present antecedents, mediators, and outcomes of online information collection by salespeople; by contrast, the traditional listening model examines listening in face-to-face (Gearhart & Bodie, 2011) or phone (de Ruyter & Wetzels, 2000) interactions between seller and buyer.

Second, while most studies of the outcome of salesperson information collection have argued for a direct relationship between information collection and outcomes, e.g., performance (Kuester & Rauch, 2016; Mariadoss et al., 2014; Rapp, Agnihotri, et al., 2014), this article argues that online listening affects salespeople's knowledge. This again might affect outcomes such as performance, as selling-related knowledge has been argued to have a strong significant effect on salesperson performance (Verbeke et al., 2011). The article also argues for a mediating effect of exploitative or exploratory learning (Levinthal & March, 1993). Finally, several propositions based on the proposed model are presented (see table 2).

Results: Article two represents a conceptual contribution and does not include empirical results. The theoretical results based on the theory of supportive messages (listening theory) (Burleson, 2009), connectivism theory (Siemens, 2005), which explains *how* salespeople learn in the digital age, and regulatory focus theory (Higgins, 1997), which explains *what* they learn, provide a model of how salespeople collect information in a digital world and what this information collection leads to.

More specifically, the model indicates that the composition of the network a salesperson builds online can be an essential factor influencing the types of information that the salesperson collects. A salesperson's network strength builds on the strength-of-weak-ties theory (Granovetter, 1973). Salespeople with weaker ties (more diverse networks) will have access to more novel information, whereas salespeople with stronger ties will have more similar information (Granovetter, 1973). Together with the need for cognition (Cacioppo & Petty, 1982), which positively influences individual innovativeness, network strength influences salesperson information collection. More sensing (collecting) of information will affect the knowledge of salespeople, in this model conceptualized as selling-related knowledge (Verbeke et al., 2011). This relationship is mediated by the evaluation phase, which involves cognitive processes that allow the salesperson to assign meaning to the message and determine its importance (Ramsey & Sohi, 1997, p. 128). This is where learning occurs. According to regulatory focus theory (Higgins, 1997), learning depends on whether the salesperson is promotion oriented or prevention oriented, which respectively lead to exploitative learning (Levinthal & March, 1993), i.e., focusing on what is already known, or explorative learning (Gupta et al., 2006), i.e., focusing on pursuing new information. This

mediating effect will therefore affect selling-related knowledge: salespeople who are prevention oriented will strengthen their existing knowledge, whereas salespeople who are promotion oriented will challenge what they already know by collecting new and novel information. Finally, reflection (Dewey, 1933) is proposed as a feedback loop in the model by arguing that reflecting on what he/she has learned will impact the salesperson's evaluating and sensing through the collection of more information and reflecting on what is learned.

The main contribution of this article is the development of a theoretical framework for listening in a digital setting before meeting customers physically. A model of how social media affects salesperson learning and knowledge building is presented, thus adding to the growing effort to understand how salespeople can use social media to increase their knowledge from the information they collect.

The article was submitted to *AMS Review* in 2022 (Mehl and Le Bon).

3.3 Article three

Article 3 is entitled "Is more always better? Motivators and obstacles for the collection of specific types of information by B2B salespeople" and is illustrated in figure 2 with the color green. The objective of the article is to increase the understanding of the types of information that B2B salespeople collect and to identify motivators and obstacles for the collection of certain types of information. Based on grounded theory (Glaser & Strauss, 1967), a qualitative study is adopted as the research methodology. Through theoretical sampling (Johnson, 2015), 17 B2B salespeople from nine different organizations participated in the study. It can be argued that since few organizations use any clear incentives for collecting specific information, salespeople collect information based on their own interests regarding the case they are working on (Rapp et al., 2011). To increase salespeople's willingness to collect more specific information, organizations must tell salespeople what kinds of information are valued. This could be done using contractual demands through an organization's formal MIS (marketing intelligence system) (Gounaris et al., 2007). It could also be achieved through sales directors and/or managers who, with their knowledge of their industry, could focus salespeople's information collection on what matters to the organization.

The findings regarding motivators and obstacles are addressed through the MOA framework (MacInnis & Jaworski, 1989), mainly focusing on motivation (M) and opportunity (O). In the MOA framework, motivation (M) refers to an individual's desire to engage in a behavior (MacInnis et al., 1991). Surprisingly, even though most of the salespeople

interviewed (more than 80%) agreed on the importance of collecting intelligence, their motivation for doing so was quite low.

The O in the framework represents opportunity (Maclnnis et al., 1991). Sales directors and/or managers have a responsibility to reduce the perceived work overload felt by salespeople who consider time the main obstacle to collecting information. The last letter, A, represents ability and indicates that the salesperson's experience with the solution sold and the market places him or her in a better position to understand what kind of information is most relevant to collect.

Results: The findings reveal that 1) most information collected is collected for the salesperson's own immediate interest; 2) role overload increases this egocentric focus on information collection; and 3) organizations do little to increase information collection. The findings also indicate a relationship between the sales manager's focus on collecting information and a more profound interest of the salesperson in collecting more diverse information using more channels. Overall, salespeople's interest in collecting information is low, although they understand the importance of doing so, and the main reason for not collecting information is time. The motivation to collect information has been studied extensively, as illustrated in figure 1, but with a focus on getting salespeople to collect more information from the market in general. With respect to the collection of specific information, article 3 finds that a focus on sales managers' engagement and specific demands is needed to guide the collection of information by salespeople.

Salespeople need an opportunity to collect information. From the interviews, it is clear that the main obstacle to collecting information is time. One possible solution is to reduce the task or work overload of the salesperson to let them focus more on what they are measured to do, namely selling, and less on other administrative tasks, such as internal meetings and updating systems. As discussed later under methodological reflections, a second set of data was collected to include female salespeople, as it has been argued that female salespeople differ from their male counterparts in several aspects, including information collection. However, the results for the female group did not differ significantly from those for their male counterparts.

In conclusion, to motivate salespeople to collect relevant information from the market, salespeople need to know what information is valued by the organization, and management has a responsibility to reduce the perceived overload many salespeople feel regarding the time needed to collect information.

The article was submitted to *Information and Organization* in 2022. (Mehl).

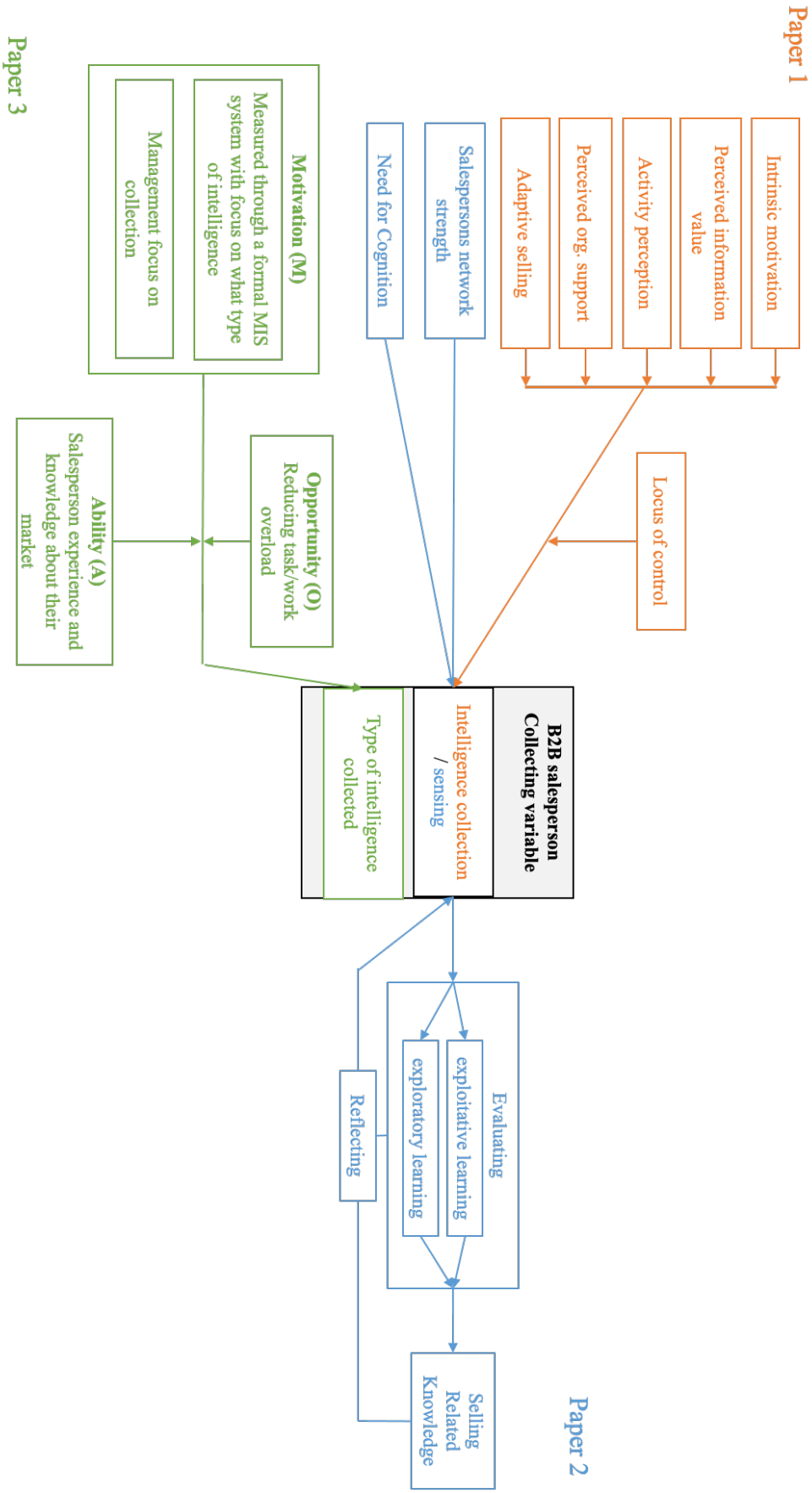

Figure 2 The relationships between the different research articles.

Article	Title	Main objective	Hypothesis/Propositions	Design and sample	Main findings
1	The effect of personality on salespeople's information gathering	Testing the direct effects of intrinsic motivation, perceived information value, activity perception, perceived organizational support, and adaptive selling on the propensity to collect market information and how locus of control (LOC) moderates these effects.	H1. There is a positive relationship between intrinsic motivation and the propensity to collect market information. H2. There is a positive relationship between perceived information value and the propensity to collect market information. H3. The more collecting market information is viewed as an in-role activity, the higher the propensity to collect market information. H4. The higher the perceived organizational support, the higher the propensity to collect market information. H5. The higher the level of adaptive selling, the higher the propensity to collect market information. H6. The more internal the LOC, the stronger the relationship between intrinsic motivation and the propensity to collect market information. H7. The more external the LOC, the stronger the relationship between perceived information value and the propensity to collect market information. H8. The more external the LOC, the stronger the relationship between activity perception and the propensity to collect market information. H9. The more external the LOC, the stronger the relationship between perceived organizational support and the propensity to collect market information. H10. The more internal the LOC, the stronger the relationship between adaptive selling and the propensity to collect market information.	Descriptive Cross-sectional survey (n= 255)	Support was found for most direct effects, and LOC moderated several of the supported direct effects. Thus, adding LOC as a moderator will increase the understanding of what motivates salespeople to gather information.

2	Social listening & learning in digital sales: Adapting customer and competitive intelligence and knowledge to the digital era	Presenting a theoretical framework of Digital Sales Listening and Learning (DSLL) and related research propositions.	P1. A higher degree of weak (strong) networks increases (decreases) the impact of the level of sensing. P2. Increased need for cognition leads to a need for more sensing. P3a: Exploitative learning mediates the relationship between sensing and selling-related knowledge focused on proven methods of selling. P3b: Exploratory learning mediates the relationship between sensing and selling-related knowledge focused on more novel methods of selling. P4a: Selling-related knowledge increases evaluating/learning when mediated by reflection. P4b: Selling-related knowledge increases sensing when mediated by reflection.	Exploratory Conceptual	The main contribution is a proposed extension of salesperson listening and learning by including how salespeople listen to their customers online before they meet to increase their customer learning and knowledge, thereby expanding the concept of salesperson listening beyond face-to-face or phone interactions between seller and buyer.
3	Is more always better? Motivators and obstacles for the collection of specific types of information by B2B salespeople	Discussing the types of competitive intelligence (CI) that business-to-business (B2B) salespeople collect, motivators for the collection of specific types of intelligence, and how role overload and the salesperson's ability affect this collection	No hypothesis or propositions provided	Explanatory Grounded theory (n=17)	The findings reveal that 1) most intelligence collected is collected for the salesperson's own, immediate interest; 2) role overload increases this egocentric focus on intelligence collection; and 3) organizations do little to increase intelligence collection.

Table 2 Research agendas and contributions of the three research articles.

Next, methodological reflections and the weaknesses of each article are discussed.

4 Methodological reflections

The three articles in this thesis apply different research methods to address the main objective, which is to increase the understanding of different aspects of salesperson information collection. This chapter presents the methods used in each article in more detail.

Different research strategies covering inductive, deductive, and abductive approaches are used in this thesis. In each article, the choice of design was driven by the research question and previous knowledge in the field. An overview of the data sets and sampling methods of each article is presented in table 3 at the end of this chapter.

4.1 Methodological reflections on article one

The literature on what motivates salespeople to collect information from the market is well developed, as shown in figure 1, and mainly comprises cross-sectional studies. The first article in the thesis is built on this knowledge and answered the call from Le Bon and Merunka (2006) to include personality in research on motivation for collecting information. This article is a cross-sectional study that builds on trait theory (Judge et al., 2013) and introduces locus of control (Rotter, 1966) as a moderator.

The benefit of a cross-sectional design is that studies can be conducted in real-life settings with probability samples, which increases the external validity of the findings (Spector, 2019). Moreover, as mentioned above, empirical and, in particular, cross-sectional study designs are prevalent in sales research (Johnson, 2015). The major limitations of cross-sectional studies are common method variance (Podsakoff et al., 2003) and the inability to draw causal conclusions (Spector, 2019). The first might inflate the effects observed in the study, and the second makes it difficult to state that the independent variable in the study affects the dependent variable. These limitations remain an issue due to the lack of validated experimental designs in research on what motivates salespeople to collect information.

Sample size is another important element of cross-sectional studies (Pett et al., 2003). A larger sample size is desirable, especially when performing factor analysis, but there is no consensus on the required number of respondents (Pett et al., 2003). One suggested rule of thumb to reduce sampling error is to include at least ten subjects per variable/item. Alternatively, a sample of 100 is considered insufficient, 200 fair, and 300 good (Pett et al., 2003). Others argue for a methodology to calculate sample sizes, such as specifying the desired width of a confidence interval and determining the sample size that achieves that goal (Lenth, 2001; MacCallum et al., 1996).

The response rate of a study is associated with sample size. Many consider a low response rate a signal of lower overall quality of the study (Schmidt et al., 2005), and discussing the number of respondents and the response rate is critical when conducting sales and sales management research (Carter et al., 2008). Carter et al. (2008) report that samples in both sales and marketing research are declining over time, with a greater decline in sales samples. They conclude that the degree of difficulty of conducting sales and sales management studies increased between 1990 and 2005. They observe an annual response rate below 35 percent and a declining trend. As shown in table 3, the response rate in article one was 76.8 percent, with 252 respondents, which is acceptable compared with the findings of Carter et al. (2008) and considering the number of items used in the online survey. All

variables in the study and their items were adapted from previous research to the topic at hand. All questions were then translated into Norwegian, as the respondents were Norwegian salespeople.

4.1.1 Weaknesses of article one

As noted above, article one is a cross-sectional study, and a major weakness of such studies is common method bias (CMB) (Podsakoff et al., 2003), which might inflate the effects observed. Several measures were taken to limit the effect of CMB in this study. First, all items were randomized to prevent the respondents from understanding the reason for the choice of constructs. Second, the questionnaire was tested on sales managers/directors with experience in different industries to ensure that the items were understandable in their industrial setting, thus matching the difficulty of the task to the respondents' ability to answer correctly. Finally, Harman's single-factor test (Podsakoff et al., 2003) was used to check the possibility of CMB, and the total variance explained was 26.6%. Since this first component accounted for less than 50% of the variables in the model, there was no significant CMB effect in the data.

Another possible weakness of cross-sectional studies is low factor loading scores; some authors argue that factors with loadings of less than 0.5 should be omitted (Field, 2013). In article one, four items had factor scores below 0.5. One of the four items in the dependent variable "Propensity to collect market info" had a factor loading of 0.474, and three items in the personality trait LOC had factor loadings of 0.387, 0.496, and 0.370. According to Stevens (1986), for a sample size of 200 (the sample size in article one was 255), factor loadings should be greater than 0.36. In addition, Hair et al. (2006) indicate that factor loadings above 0.3 meet the minimum level, and according to a meta-analysis by Peterson (2000), 0.32 is the average factor loading. Therefore, all four items were retained in the analysis. The full list of factor information can be found in table II of the first article.

Another possible weakness and a potentially controversial decision in article one is the splitting of the continuous LOC variable into internal and external LOC. The splitting of continuous variables has been debated (Iacobucci et al., 2015a, 2015b), with some arguing that median splits are as good as a continuous variable. However, the use of median splits in models with high multicollinearity remains a concern. A test of whether the data met the assumption of collinearity indicated that multicollinearity was not a concern (tolerance > 0.4, and VIF < 2.5). There are also conceptual arguments for treating continuous variables like LOC as dichotomous variables (Iacobucci et al., 2015b). In their meta-analysis of LOC at

work, Ng et al. (2006) showed that most research using LOC classified the variable into "internals" or "externals".

4.2 Methodological reflections on article two

Article two aims to increase the understanding of how salespeople collect information, learn, and build knowledge in a digital world and uses a conceptual design with the purpose of advancing the development of theory on the listening process. Conceptual articles are "academic articles devoted purely to thought-based conceptions that are devoid of data" (MacInnis, 2011, p. 141) and are important for moving a discipline forward and building common ground. Despite their importance, the publication of conceptual articles is clearly declining, especially in major marketing journals (Yadav, 2010). Based on the categorization scheme of MacInnis (2011), article two provides a revision of how salespeople listen to their customers and the market by presenting an individual theoretical model of DSLL (Digital Sales Listening and Learning), including proposed antecedents, consequences, and mediators.

According to MacInnis (2011), revision involves "reconfiguring or taking a novel perspective on something that has already been identified" (2011, p. 143). Article two does this by building on the active listening construct (Castleberry & Shepherd, 1993; Ramsey & Sohi, 1997) to present how salespeople listen in a digital world. This is important because the active listening construct focuses on listening to potential and active customers mainly through face-to-face interactions (Gearhart & Bodie, 2011). Digitalization gives customers access to a vast body of information (Singh et al., 2019), which reduces their need to contact a salesperson during the buying process and the importance of the traditional listening concept.

Although there are several definitions of listening, there is a consensus that listening is a multidimensional construct that includes 1) cognitive, 2) affective, and 3) behavioral processes (Bergkvist & Eisend, 2021). It can therefore be argued that the construct of listening is a stable construct, as consensus has been reached regarding its major elements (Bergkvist & Eisend, 2021). The definition and model of the DSLL construct are built on the first two elements of the listening construct and include antecedents, mediators, moderators, and outcome variables. Several propositions based on this model are then addressed. This degree of development puts article two in the emergence stage (stage 1) of the four-stage model of construct evolution developed by Bergkvist and Eisend (2021).

4.2.1 Weaknesses of article two

MacInnis (2011) describes different types of conceptual contributions: envisioning (identifying and revising), explicating (delineating and summarizing), relating (differentiating and integrating), and debating (advocating and refuting). Article two argues for a conceptual contribution built on revising the existing construct of active listening (Castleberry & Shepherd, 1993; Ramsey & Sohi, 1997). A potential weakness is the lack of arguments for this type of conceptual contribution, which resembles delineating. According to MacInnis (2011), delineation "entails the goal of detailing, articulating, charting, describing, or depicting an entity" (2011, p. 144) and would involve presenting a new model of online listening that is related to but does not build on the active listening construct. Article two argues that the DSLL model is a revision of the original active listening construct, as salespeople go through the same phases found in active listening: sensing, evaluating and, finally, responding to the information that is collected.

Another possible weakness is the lack of arguments on why a revision is needed (MacInnis, 2011). If the active listening construct appropriately explains online listening, there would be no need for a new model. As argued in the article, there is a need for a revised listening concept, mainly due to digitalization (Marshall et al., 2012), as buyers now have more information and wait longer before making contact with salespeople (Singh et al., 2019). Moreover, the focus of the original listening concept is listening to the customer face-to-face or over the phone.

A third possible weakness is the theoretical foundation of the revised model of listening. Instead of building the learning part of the DSLL model on established theories of learning, the article presents a more recent theory of learning to explain how learning evolves through an online environment. Connectivism, a learning theory for the digital age, is "characterized as a network theory of knowledge and learning with an emphasis on the use of digital technology" (Downes, 2019, p. 112). The reason for this choice is the focus on digital technology, which is the basis of connectivism, but this theory is of recent origin and therefore not widely used (Siemens, 2005).

Most of the potential weaknesses outlined above could be addressed through extensive empirical testing of the model and its underlying assumptions.

4.3 Methodological reflections on article three

The third article aims to expand the understanding of the types of information salespeople collect, what motivates them to collect more specific information, and what prevents them from doing so. These objectives are in contrast to most of the articles in figure 1, which focus on the amount of information collected. The few articles focusing on types of information mainly use managers as their respondents and not salespeople (e.g., Harmancioglu et al., 2010). Studies of what drives salespeople to collect specific information are therefore limited. Article three builds on previous research and uses a qualitative design based on grounded theory, as this method is appropriate for studying processes and social interactions (Glaser & Strauss, 1967). Grounded theory is also well established in the B2B selling domain (Johnson, 2015) and can be defined as a "qualitative research design in which the inquirer generates a general explanation (a theory) of a process, action, or interaction shaped by the views of a larger number of participants" (Creswell, 2007, p. 63). Because it can be used to build a general explanation of a process or action, the grounded theory approach is appropriate for addressing the identified gap in the literature and the objectives of the article.

To increase the reliability of the research, field data were collected using semi-structured interviews (Beverland & Lindgreen, 2010). The interview guide was developed by the author based on the literature review and was used as loosely as possible so that the respondent could determine the course of the interview. The interview guide was also evaluated by other researchers knowledgeable in the research area and qualitative research in general and was pre-tested on the first three respondents. As no major issues were found, these three initial respondents were included in the total sample. The respondents, B2B salespeople, were collected using theoretical sampling, which involves using respondents with extensive knowledge of the process (Johnson, 2015). The respondents were recruited from several national and international organizations located in Norway. This process yielded only male respondents, and therefore, a LinkedIn post was used to invite female B2B salespeople to participate. The inclusion of female respondents was important because the population of B2B salespeople consists of both men and women and because research has argued that male and female salespeople differ in customer orientation, which is linked to information collection (Hughes et al., 2013). Personal interviews are more time-consuming for respondents, and thus it is difficult to recruit professional salespeople to participate in a qualitative study. The total sample consisted of 17 salespeople, all Norwegian, from nine different organizations (see table 3). The literature provides support for the acceptability of

this sample size. Specifically, Marshall et al. (2013) conclude that 15–30 interviews are appropriate and show that qualitative researchers in the US tend to adopt larger sample sizes than qualitative researchers in other countries. A meta-study found that 10 in-depth interviews are commonly used (Mason, 2010), and an investigation of actual theoretical saturation found that saturation becomes evident after six in-depth interviews and definitely evident after 12 in-depth interviews (Guest et al., 2006). In the present research, theoretical saturation was evident after nine interviews, despite the level of variation among the salespeople and their organizations.

4.3.1 Weaknesses of article three

Article three uses grounded theory, which is well established but subject to many of the same weaknesses as qualitative studies. The main weakness is the lack of generalizability of the findings due to the use of small groups of respondents. Seventeen respondents could be argued to be a relatively small group (Tracy, 2010). Nonetheless, previous research supports the acceptability of this number of interviews, as discussed under the methodological reflections above (Marshall et al., 2013). Another weakness is that all respondents came from the same country. Geographic and culturally specific samples can be problematic in terms of offering a larger, more generalizable contribution. Although all of the respondents were native Norwegians, five of the nine organizations had another country of origin. This might have some impact on the culture of the company and how it does business, which could in turn influence the respondent's opinion.

Biases arising from the double hermeneutic and the Hawthorn effect (Jones & Alony, 2011) cannot be ruled out. The double hermeneutic argues that respondents are influenced by both the researcher and the research itself. During interviews, respondents learn more about the topic and can therefore modify their behavior. The Hawthorn effect suggests that respondents may answer questions in a way they think will please the interviewer (Jones & Alony, 2011). Both biases can result in artificial effects. All respondents were informed that they could cancel the interview at any time and that all responses would be treated in confidence and not shared with their organizations. However, the majority of the respondents were recruited through their sales managers, and therefore biases cannot be ruled out.

Article	Sample size	Sample characteristics	Sampling method
1	255	Professional B2B salespeople. Mean age 47.2 years Mean sales experience 18.6 years Females 46.8%	Online survey with 58 items. Letter from manager promoting the survey Two reminders Response rate: 76.8
2	NR*	NR*	Conceptual
3	17	Professional B2B salespeople. Mean age 42 years Mean sales experience 16 years Females 29.4%	Face-to-face (one video) semi-structured interviews lasting from 40 minutes to one hour and 30 minutes.
	* Not relevant		

Table 3. Data sets and sampling methods.

Next, a general discussion of the findings, including contributions, is provided, and avenues for further research are offered.

5 Discussion

As previously noted, the overall objective of this thesis is to increase the understanding of different aspects of salesperson CI collection. This objective is divided into three subobjectives, which guided each of the research articles in this thesis: 1) increasing the understanding of what motivates salespeople to collect information by examining the moderating effect of personality; 2) presenting a theoretical framework of how salespeople collect, learn, and build knowledge in a digital workplace; and 3) deepening the understanding of motivators and obstacles in the collection of specific information. This chapter is arranged according to these three subobjectives and provides overall reflections, contributions, and suggestions for future research for each one.

The business world is becoming increasingly complex and driven by data (Davenport et al., 2012; Rangarajan et al., 2021), increasing the importance of CI collected by the sales force, as combining data from several different sources can increase the quality of information that an organization acquires (McAfee & Brynjolfsson, 2012). From an organizational perspective, information is essential to meet new customer demands, which are increasing as customers become more empowered and informed than ever before (Singh et al., 2019).

Empowered and informed customers move further through the buying process without contacting a potential seller and impose higher requirements on the sellers they choose to collaborate with (Adamson et al., 2012). Customers will treat sellers that do not provide value above selling a product or a solution as commodity providers (Piercy, 2010) or replace them with sellers that provide such added value. At the same time, sellers are trying to connect to customers through increasingly complex sales strategies or approaches, which demand a high level of knowledge of the sales organization to execute (Tuli et al., 2007; Ulaga & Kohli, 2018).

The complexity and increased access to data-driven insights (Davenport et al., 2012; Rangarajan et al., 2021) have paved the way for using emergent technologies such as sentiment analysis, AI, and Big Data analysis (Paschen, 2020; Xu et al., 2011) to collect CI. It has been proposed that the marketing discipline has the most to gain from AI (Davenport et al., 2019), and Paschen et al. (2019) argued for the use of AI to build B2B market knowledge, external marketing knowledge, and customer knowledge (Bag et al., 2020; Paschen et al., 2019).

Despite the increase in data-generated CI, the shifts in the business world outlined above increase the need for salespeople to have comprehensive knowledge about their customers, their customers' marketplaces, and their competitors (Burt, 2004; Kalra et al., 2020). Understanding how to better motivate salespeople to collect information, how changes imposed by digitalization affect this collection, and what type of information is collected is therefore important. Effective tools for addressing these factors will help managers increase both the amount and relevance of collected information. In addition, digital solutions might make the collection of such information more effective and less time consuming. Therefore, the rest of this chapter discusses each of the three subobjectives and ends with future research possibilities related to emerging technologies.

5.1 Subobjective one – motivating salespeople to collect information

The main contribution of this thesis in addressing subobjective one is the finding that the effects of known drivers of information collection may vary with the personality characteristics of the salesperson. This variation might explain, at least in part, why only a few salespeople consistently collect information, despite attempts to include all salespeople (Le Bon and Merunka, 2006). This is an important result because although organizational factors have a significant and strong effect on salespeople's motivation for collecting information (Kuester & Rauch, 2016; Le Bon & Merunka, 2006; Liu & Comer, 2007), using

organizational power to get salespeople to collect information is not without its problems. First, most companies do not measure or have a clear directive for the collection of information by salespeople, which indicates that organizational factors are used less frequently than individual factors. Second, according to self-determination theory, organizational factors invoke extrinsic motivation, which leads to less motivation and more short-term motivation than intrinsic motivation (Deci & Ryan, 2000; Gagné & Deci, 2005). Extrinsic motivation ranges from external regulation, which has a low degree of self-determination, to integrated regulation, which has a high degree of self-determination (Gagné & Deci, 2005). Requiring salespeople to collect information through direct orders (written or oral) can be defined as external regulation (Gagné & Deci, 2005) and therefore induces less motivation. When participation in an activity like information collection occurs under integrated regulation, the activity is more closely integrated with the participant's self, which is connected to the participant's personality and increases the motivation toward the activity (Gagné & Deci, 2005). Therefore, using personality (LOC) as a moderator when examining drivers of information collection provides a better understanding of what motivates salespeople to collect information. When the personality of the salesperson is aligned with the driver used, the salesperson's motivation for collecting information will increase.

This finding has practical implications for sales managers seeking to determine which kinds of motivational tools will work best for their salespeople. Many sales managers have access to personality profiles of their salespeople through their HR systems, and they could select different motivational tools according to these profiles. Moreover, such changes can be accomplished without increasing the cost of monitoring, a common feature of behavior-based control systems, thus addressing the desire of top management to reduce selling costs while increasing productivity.

5.1.1 Future research on subobjective one

Future research on what motivates salespeople to collect information could further aid sales managers by extending the focus to the moderating effects of personality differences. This thesis presents the effects of one personality trait, LOC, but other personality differences could also influence information collection. One example is the need for cognition, defined as "individuals' dispositional tendency to engage in and enjoy thinking" (Cacioppo & Petty, 1982, p. 116). Those high in need for cognition tend to seek out more information (Verplanken et al., 1992) and collect more novel information than those low in need for cognition (Lins de Holanda Coelho et al., 2018). Although previous research has shown that

cardinal traits such as the Big Five are less predictive than more situation-specific traits (Barrick & Mount, 1991), many personality tests are based on cardinal traits. It could therefore be of interest to test the impact of such traits on information collection by salespeople.

5.2 Subobjective two – Salesperson information collection in a digital setting

The main contribution of this thesis in addressing subobjective two is the development of a theoretical framework focused on listening in a digital setting before meeting customers physically. Digitalization has affected the way business is done for the last decade. For sales organizations, one of the most important changes is the shift in information asymmetry between sellers and customers. The information advantage of sellers has decreased in most selling situations (Ahearne et al., 2021) due to the rise of more empowered and informed customers (Singh et al., 2019), which is largely the result of easy access to information through online resources. Another change arising from digitalization and increased information symmetry is that customers can evaluate solutions without contacting a salesperson and therefore move further through the purchasing process before interacting with a salesperson (Adamson et al., 2012), leading to fewer touchpoints between the salesperson and the customer. Such touchpoints are opportunities for salespeople to collect information from potential and current customers but are reduced when physical meeting points disappear or are limited. Therefore, it is important for salespeople to use other channels to collect information. A natural solution is to use the same channels that customers use to reduce information asymmetry. Social media use by salespeople has been shown to increase information collection (Itani et al., 2017, 2020), but no structural model for the impact of social media on salespeople has been presented.

A second contribution is an examination of how salespeople learn through online listening and how this affects their knowledge building, which has implications for what is emphasized in the salesperson hiring process. By presenting a model of how social media affects salesperson learning and knowledge building, this thesis contributes to addressing the growing need to understand how salespeople can use social media to increase their knowledge. Regarding social media, the model builds on the strength-of-weak-ties theory (Granovetter, 1973) by arguing that salespeople with weak ties will collect different information than salespeople with strong ties. In strong-tie networks, people tend to know each other and therefore have more of the same information. In weak-tie networks, relationships are distant and infrequent and therefore provide access to more novel

information (X.-H. (Frank) Wang et al., 2015). These differences in tie strength might have practical implications for hiring salespeople. Hiring salespeople with broad experience in different industries and broad networks of weak ties could enhance novel learning and input. Hiring salespeople with extensive experience in one industry and therefore potentially stronger ties could lead to a focus on established ways of doing business.

5.2.1 Future research on subobjective two

Salespeople with weaker ties might have broader experience in different markets, leading to more diverse social networks. By contrast, salespeople who have been in the same industry for a long time might be connected to more like-minded people, such as customers and other sellers in the same industry. Many companies prefer to hire people with relevant industry experience and therefore might ultimately employ salespeople with stronger ties. Future research could examine how differences in tie strength affect salesperson effectiveness, especially in turbulent markets.

The concept of tie strength could also be related to internal networks. Access to internal networks has been shown to positively impact both intelligence collection and sharing (Woisetschläger et al., 2016). More research is needed to understand how the strength-of-weak-ties theory (Granovetter, 1973) can help explain both the collection and sharing of information inside a company.

Another interesting perspective worth considering is the effect of gender on online listening. Castleberry et al. (2004) and Román et al. (2005) found that women are more effective listeners than men in traditional listening and face-to-face settings, but the effects of gender may differ for online listening.

5.3 Subobjective three – The collection of specific information

In addressing subobjective three regarding the collection of specific information by B2B salespeople, this thesis makes several contributions. First, the type of information collected by salespeople has received sparse treatment in the literature. This thesis adds knowledge by examining the types of information that salespeople collect and the organizational factors that help or hinder the collection of specific information. Previous research has mainly examined the types of information that managers collect from the sales force or how to motivate salespeople to collect more information in general. Changes in the sales environment alter the kinds of information that are relevant. The move from transactional to relationship selling practices (G. W. Marshall et al., 2003) has led to an

increase in product complexity offered by the sales organization (E. Jones et al., 2005) and more complex selling approaches (Töytäri & Rajala, 2015). The success of many of these selling approaches depends on specific information about the customer.

Second, the findings deepen our understanding of how and when salespeople collect different types of information and can be used to motivate salespeople to collect different types of information. Lastly, this thesis presents a model of motivators and obstacles in specific information collection by B2B salespeople. This is important, as inadequate information to accommodate more knowledgeable customers (Lee, 2011), more advanced sales strategies (Tuli et al., 2007; Ulaga & Kohli, 2018), and non-routine sales processes could lead to errors in salesperson interactions with customers and decreased sales performance (Hunter, 2004). Inadequate information collection might also lead to a failure to focus on top priorities and determine the customer's needs (Virtanen et al., 2015).

These findings have several practical implications for sales organizations. First, sales leaders should operationalize strategies to help salespeople understand how information collection impacts sales activities, which is important for improving sales effectiveness (Cespedes, 2014). A deeper understanding of their company's business strategy can help salespeople recognize the types of information that are important to collect. Second, it is important for management to understand that helping salespeople structure their time, either by reducing task overload or work overload in general, can facilitate information collection.

5.3.1 Future research on subobjective three

Research regarding the types of information salespeople collect in general is lacking but important. Few empirical articles have focused on types of information, and further empirical validation is therefore needed. How organizational systems and selling strategies affect the information that salespeople collect is also of interest. One such system is sales enablement, which was described above (R. M. Peterson et al., 2020; Rangarajan et al., 2020). How can sales enablement through onboarding and training of salespeople affect their ability to collect specific and relevant information? Another potential research avenue is the dependence of the collection of specific information on culture and experience. It has been argued that the development of sales management systems should consider cultural differences (Murphy & Li, 2012), which could also have an impact on how sales enablement systems work and how they affect information collection. Salesperson experience could also be argued to affect the types of information collected. More experienced salespeople with greater knowledge of the industry might collect more relevant information than inexperienced

salespeople. On the other hand, inexperienced salespeople might be younger and have better critical thinking skills developed through higher education. Such skills might impact their capability to collect relevant information.

Finally, existing scales used to measure market information collection, such as the widely used scale developed by Le Bon and Merunka (2006), do not specify the types of information collected. Therefore, a more fine-grained scale needs to be developed and adapted to the type of information collected.

5.4 Future research possibilities related to emerging technologies and B2B sales

Although it has been argued that AI technology will greatly influence the B2B selling process (Paschen et al., 2019), how exactly this influence will manifest remains unclear. There is a general consensus that AI-driven technology will enhance efficiency in B2B companies (Grewal et al., 2021; Moradi & Dass, 2022). AI-driven technology will likely impact sales training and coaching (Luo et al., 2021), and under certain circumstances, chatbot technology may replace salespeople (Luo et al., 2019). AI technology could also be used to assist salespeople during sales calls (Bharadwaj & Shipley, 2020).

Based on a bibliometric analysis of 221 journal articles published between 1990 and 2021, Han et al. (2021) proposed five potential avenues by which AI implementation can increase innovation in B2B marketing: 1) implementation in CRM to help companies better understand current and potential customers (Nelson et al., 2020); 2) improved sales forecasting; 3) utilization to exchange knowledge, information and resources; 4) implementation to enhance decision support systems; and 5) as an enabler of innovation (Han et al., 2021). However, several knowledge gaps regarding how AI will increase efficiency remain. A major question is whether AI technology will increase efficiency through a downsizing of the sales force or replace sales professionals completely (Moradi & Dass, 2022).

When discussing AI and efficiency, it is relevant to consider the impact of AI on concepts such as sales enablement (R. M. Peterson et al., 2020; Rangarajan et al., 2020). Research on sales enablement is in its infancy (Lauzi et al., 2023), and the effects of AI and Big Data on sales enablement areas such as training, onboarding, coaching, and content production are important topics for future research. Content creation is a central part of sales enablement (R. M. Peterson & Dover, 2020), and several AI-based writing programs are available (Moradi & Dass, 2022). How can these programs be used to increase content production, and how do customers react to such AI-generated content?

As discussed in the Introduction, many companies struggle to take advantage of AI-generated knowledge creation (Bag et al., 2020; Zaitsava et al., 2022). This is especially true for small and medium (SMB) companies, which need a well-developed organizational structure and formal approach to take full advantage of these technologies (Petrescu et al., 2022; Ranjan & Foropon, 2021). Consequently, the impact of AI on SMB companies is an important research opportunity. How can SMB companies utilize AI technology despite fewer resources such as funding and experienced employees? Another element is the inability to generate sufficient data for Big Data analytics. Could the proposed shift from Big Data to "small and wide data" and the development of less data "hungry" models (Oesterreich et al., 2022) increase the availability of such analytics for SMBs?

How emergent technology increases firm performance and the interplay between technology and humans are also important. Oesterreich et al. (2022) found a significant effect of Big Data analysis on firm performance in a metanalysis of 107 individual studies. Adopting a sociotechnical lens, they found that social factors, especially human factors, have a greater impact than technical factors (Oesterreich et al., 2022), which argues for an interplay between technology and humans. How should this interplay or collaboration be organized? In a recent empirical study, Ghasemaghaei and Turel (2022) found that using Big Data analytics without allocating enough resources leads to job stress and a decrease in decision-making quality. For salespeople, this digital transformation increases job stress through increased job-related demands (Guenzi & Nijssen, 2020). Thus, how salespeople use and interact with AI-generated insights is an important future research opportunity.

The idea of using technologies such as AI to help salespeople make better decisions is not new. In 1984, Collins (1984) reviewed a program designed to help salespeople meet customers and concluded that salesperson trust in the solution is important to ensure a high degree of implementation (Collins, 1984). Trust is also an important condition for salespeople to use AI-generated feedback (Chen & Zhou, 2022; Hall et al., 2021). Consequently, an important research question is how to motivate salespeople to use the feedback they receive from AI-generated insights. Some research exists; for example, perceived ease of use (Chen & Zhou, 2022) and perceived accuracy of AI-generated feedback (Hall et al., 2021) have been proposed as important reasons why salespeople are willing to use AI-generated feedback. Another is the consequence of using such feedback (Davenport et al., 2019). For salespeople, the consequences of using input from other sources, like AI, are great, which directly affects their decision to pursue AI-generated leads or act on information about a customer derived from Big Data analytics. Such decisions can impact the earnings of individual salespeople.

Therefore, more research on how to increase salespeople's trust in AI-generated insights is needed. In fact, such research may be more important than evaluating whether AI-generated insights will replace the insights collected by salespeople themselves.

Finally, the contributions of this thesis related to previous research are graphically presented in figure 3. Figure 3 builds on figure 1, which presented an overview of previous research on salesperson information collection. In figure 3, previous research is presented in black, and the three articles in this thesis are presented in different colors corresponding to those introduced in figure 2.

6 Concluding remarks

The main objective of this thesis was to increase the understanding of B2B salespeople and their collection of competitive intelligence. This was addressed through three subobjectives: one, investigating what motivates salespeople to collect information beyond factors with a direct effect; two, determining how information collection leads to salesperson learning in a digital setting; and three, identifying the types of information collected by salespeople and strategies for motivating salespeople to collect information needed by the organization. Subobjective one contributed to the understanding of salesperson motivation by showing that the effects of known drivers of motivation for collecting information may vary with the salesperson's personality characteristics, which were represented here by the personality trait locus of control. In subobjective two, a theoretical framework for listening in a digital setting before meeting customers physically was developed that includes how salespeople learn when collecting information online. Subobjective three revealed that the information that salespeople collect is tactical, for their own interest, and of little value to customers and the sales organization. To increase the value of the type of information salespeople collect, this thesis argues for a stronger focus on the relationship between sales managers and their salespeople. The use of sales managers as a motivational factor for collecting more specific information through the sales force has received scarce treatment in the literature on the motivation of salespeople to collect information.

Finally, as interest in new and emerging technologies has exploded during the development of this thesis, the relevance of continuing to focus on salespeople's information collection and further research opportunities related to these technologies were discussed. The next chapter presents the three articles covering the different subobjectives in their entirety.

Figure 3 Overall proposed contributions of the three research articles. The colors correspond to the colors used in figure 2 to represent each article; text in black refers to previous research.

7 Articles in this thesis

Article 1: “The effect of personality on salespeople’s information gathering.” *Baltic Journal of Management* (Mehl and Hansen, 2017)

Article 2: “Social Listening & Learning in Digital Sales: Adapting Customer and Competitive Intelligence and Knowledge to the Digital Era.” Submitted to AMS Review (Mehl and Le Bon)

Article 3: “Is more always better? Motivators and obstacles for the collection of specific types of information by B2B salespeople.” Submitted to Information and Organization (Mehl)

Article 1: "The effect of personality on salespeople's information gathering."

Mehl, E., & Hansen, H. (2017). The effect of personality on salespeople's information gathering. Baltic Journal of Management, 12(4), 464–484. https://doi.org/10.1108/BJM-01-2017-0017

The effect of personality on salespeople's information gathering

Abstract

Purpose – The purpose of this paper is to test the direct effects of intrinsic motivation, perceived information value, activity perception, perceived organizational support, and adaptive selling on the propensity to collect market information and how locus of control (LOC) moderates these effects.

Design/methodology/approach – Data were collected using a cross-sectional design with a web-based survey. The respondents were business-to-business salespeople. All relationships were tested by regression modeling.

Findings – Support was found for most direct effects, and LOC moderated all supported direct effects. Thus, adding LOC as a moderator will increase the understanding of what motivates salespeople to gather information.

Research limitations/implications – This study shows that using the theoretical construct of personality as a moderator increases the understanding of what motivates salespeople to collect information. Practical implications – Sales leaders use different motivational tools to ensure that their sales forces focus on important tasks, but the responses to a specific motivational tool may differ among salespeople. The most prominent managerial contribution of the present study is a possible explanation of why salespeople differ in information collection even when the same motivational tools are used.

Originality/value – Several researchers have focused on what drives salespeople to collect, share, and use market information at the individual-level perspective, but despite the long history of studies of the relationship between motivation and personality, focus on the effects of individual differences is lacking. This paper addresses this gap and shows how personality differences have a moderating effect on the propensity of salespeople to collect market information.

Keywords Personality, Salespeople, Locus of control, Market information

Paper type Research paper

Introduction

Escalating and unpredictable changes toward highly turbulent and competitive business environments in recent decades have increased the importance of business intelligence (Işık et al., 2013). A firm's employees are crucial for collecting information because they regularly interact with the market's various parts and hence possess 90% of needed market information (Caudron, 1994). Accordingly, research has increasingly identified the importance of the sales force in collecting market information (Ahearne et al., 2013) and argued that the sales force, through its boundary-spanning role, is uniquely positioned to collect information about customers and competitors (Aldrich & Herker, 1977). The sharing and use of this information have positive effects on performance (Ahearne et al., 2013; Mariadoss et al., 2014).

Although there is general agreement that salespeople play an important role in collecting market information, a recurring problem is how to motivate salespeople to collect information (Festervand et al., 1988). Weak motivation might result from a lack of incentives for collecting information (Day, 1994) or the perception among salespeople that collecting information reduces time available for actual selling (Cotteleer et al., 2006).

Theoretical research has included control systems, rewards, relationship to organization, training, and feedback as drivers of information collection (Festervand et al., 1988; Grove et al., 1992; Mellow, 1989). Empirical research on drivers of information collection has examined the relationship to the organization, role conflict, motivation, control systems, training, feedback, involvement, automation, and product knowledge (Evans & Schlacter, 1985; Le Bon & Merunka, 2006; Liu & Comer, 2007; Mariadoss et al., 2014; Pass et al., 2004; Rapp et al., 2014; Wotruba & Mangone, 1979).

Despite this extensive research on motivational drivers for collecting market information, Le Bon and Merunka (2006) found that the same few salespeople collect information, regardless of efforts expended by managers to motivate salespeople to collect information; the executives in the study therefore concluded that the motivational tools used did not work as expected.

This apparent gap in research regarding what motivates salespeople to collect market information warrants a finer-grained approach to understand why salespeople react differently to the same stimuli. The majority of previous studies have employed an individual-level perspective, and the lack of focus on the effects of individual differences is somewhat surprising in light of the well-established relationship between motivation and personality. Judge and Ilies (2002) concluded in a meta study that "the Big Five (personality) traits are an important source of performance motivation".

Personality can be defined as "those inner psychological characteristics that both determine and reflect how a person responds to his or her environment" (Schiffman et al., 2012, p. 126). Based on this definition, which focuses on inner psychological characteristics, we argue that people who differ in personality might respond differently to the same stimuli. In turn, personality will be a relevant moderator when examining how certain stimuli motivate salespeople to gather information.

The main contribution of this paper is therefore how personality differences moderate the relationships in a model explaining salespeople's propensity to collect market information.

In the following section, we present our baseline model, as well as how this model might be moderated by locus of control (LOC). We then present the hypotheses and detail the methodology and measurements used before testing this model with data from 255 B2B salespeople. Finally, we present the results, discuss the findings, and conclude by discussing the research limitations and directions for further research.

Model development

A broad range of drivers motivate people to gather information, but an essential prerequisite is the context in which people search for information. In a private context, people might search for information out of self-interest, but in a work/professional context, motivation can also be prompted by an assignment (Case, 2012).

Two models of interest are the Leckie model (Leckie et al., 1996) and the Johnson model (Johnson & Meischke, 1993), which both focus on professional information search behavior. In the Leckie model (1996), "work roles" and "tasks" are the primary motivators for information seeking; in the study context, this means that motivation can be initiated by the role of salesperson, i.e., the motivation for collecting information is extrinsically driven.

The Johnson model (1993) classifies motivations to gather information into background and personal relevance. The background category consists of demographics (e.g., age). The personal relevance category consists of salience and beliefs; salience refers to how important the information is to the salesperson, and beliefs "are important in information seeking because they constrain the individual's thinking and level of motivation regarding information seeking" (Case, 2012, p. 153). Thus, Johnson argues that professional information search behavior can be driven by both extrinsically and intrinsically driven motives.

Our baseline model includes several variables shown to influence a salespersons' propensity to collect market information, as presented below.

Propensity to collect market information

In sales, motivation refers to a salesperson's desire and willingness to expend effort on specific tasks and is divided into three dimensions: the selection of a specific task to focus on, what level of effort to use on the task, and the persistence in performing the task (Johnston & Marshall, 2013). We focus on an aspect of the first dimension, i.e., whether salespeople choose to collect market information, defined as the propensity for collecting market information. We use motivation and propensity interchangeably. As mentioned previously, the motivation of the sales force to collect market information has been a focus of several papers, and we use an adapted version of the motivational scale from Le Bon and Merunka (2006) as the dependent variable in our model.

Independent variables

In accordance with the Johnson model (1993), we argue that intrinsic motivation will affect a salesperson's propensity to collect market information. The personal relevance category of this model includes the salesperson's beliefs about collecting information, and we argue that the salesperson could be motivated to collect information based on personal interest and curiosity, consistent with Amabile's (1993, p. 188) concept of intrinsic motivation: "individuals are intrinsically motivated when they seek enjoyment, interest, satisfaction of curiosity, self-expression, or personal challenge in the work."

Salient (important) information is useful in solving a problem and is seen by Johnson (1993)as the key motivator for deciding to look for information. Perceived value is also viewed as a determinant of behavior (Lapierre et al., 1999): the higher the expected value of information compared with the cost of acquiring it, the more likely the information will be collected. Therefore, we consider information's perceived value as an important driver of information gathering.

As previously mentioned, the most influential variable in information gathering is the control system. Measuring the collection of market information and rewarding this collection will increase the focus a salesperson allocates to gathering information (Kuester & Rauch, 2016).

However, detailed contracts delineating how work is to be conducted are rare among salespeople, and therefore most salespeople are not formally measured on collecting market information. Accordingly, we use activity perception as a measure of the level of formalization of information collection. We conceptualize activity perception as the extent to which the salesperson views collecting market information as an in-role or an extra-role

activity, where extra-role activities are those activities for which the salesperson receives no immediate reward (O'reilly & Chatman, 1986).

Several authors have focused on the relationship between the salesperson and the organization when measuring motivation to collect information. The theoretical argument that this relationship has a positive effect on information collection (Festervand et al., 1988) has received mixed empirical support (Le Bon & Merunka, 2006; Rapp et al., 2014). We use perceived organizational support to measure the relationship between the salesperson and his/her organization, which is conceptualized as the value the organization places on employees' contributions and well-being (Eisenberger et al., 1986).

Adaptive selling skills relate to the salesperson's ability to alter his/her behavior during a customer interaction based on feedback they receive during the interaction (Weitz et al., 1986). High adaptive selling skills can also influence how advantageous competitive intelligence is to the seller's organization when the salesperson shares this information with the customer (Hughes et al., 2013). Accordingly, we argue that adaptive selling is a relevant variable when examining salespersons' propensity to collect market information.

Moderator

In the introduction, we argued for using personality as a moderator when examining the baseline model's variables and their effects on the propensity to collect market information. Personality traits can be arranged in a hierarchy in which the top level includes broad traits such as the Big Five, which encompasses several related traits. More specific traits, e.g., LOC, that explain more specific patterns of behavior are located further down the hierarchy (DeYoung et al., 2007). In a meta-analysis, Judge et al. (2013) found that lower-level traits had greater predictive power for task performance, whereas higher-level traits were best for predicting overall performance. As the focus of the present study is the variables that influence information gathering, one of many tasks conducted by salespeople, lower-level personality traits should be used as moderators.

LOC is a well-documented personality trait based on social learning theory (Rotter, 1975) with a proven effect on information collection. In a study of the feedback-seeking behavior of sales and customer-service representatives, Renn and Fedor (2001) found that those who felt they had more control over their environment (internal LOC) exhibited greater engagement in feedback-seeking behaviors. It has been suggested that those who tend to see outcomes as depending on luck (external LOC) differ in the way they collect information (Noe & Steffy, 1987; Srinivasan & Tikoo, 1992; Thornton III, 1978), supporting the use of

LOC as a relevant moderator.

Hypothesis development

The following section outlines the arguments for the hypotheses. We first present our baseline model, followed by a discussion of the suggested moderating effects of LOC.

Intrinsic motivation and the propensity to collect market information

We argue that intrinsic motivation is positively related to salesperson motivation to collect market information. In self-determination theory (Ryan & Deci, 2000), motivation is basically divided into intrinsic and extrinsic types. The former is defined as performing "an activity for its inherent satisfaction rather than for some separable consequence" (Ryan & Deci, 2000, p. 56). The latter, extrinsic motivation, is based on pressure to perform an activity, such as being measured on activity performance or rewarded for performing the activity. In line with this definition, all activities captured in the sales role might be argued to be extrinsically motivated as they are all performed to attain the sales budget, an important measure of the salesperson's performance. However, we argue that the sales role contains numerous activities, and the salesperson may choose to invest greater effort in some roles than others. We suggest that intrinsic motivation is at play when a salesperson chooses to collect market information based on personal interest and curiosity and without any extrinsic reason. This perspective is consistent with other definitions of intrinsic motivation, such as the claim by Amabile (1993, p. 188) that "individuals are intrinsically motivated when they seek enjoyment, interest, satisfaction of curiosity, self-expression, or personal challenge in the work."

Intrinsic motivation is suggested to result in higher-quality learning, greater interest, and increased creativity (Ryan & Deci, 2000); high levels of satisfaction and motivation (Amabile, 1993); greater effort and persistence (Ferrer-Caja & Weiss, 2000); and a more positive, flexible, and open approach to events (Pullins, 2001). Higher levels of intrinsic motivation have been found to have a positive effect on salespeople's performance (Tyagi, 1985). Intrinsic motivation has also been shown to positively influence employees' willingness to share information (Lin, 2007). Thus, our first hypothesis is as follows:

H1: There is a positive relationship between intrinsic motivation and the propensity to collect market information.

Perceived information value and the propensity to collect market information

Perceived value is a well-established construct in the marketing exchange literature; drawing on Zeithaml (1988) and others, Hansen et al. (2008, p. 207) defined perceived value in a B2B setting as "the benefits received by the customer divided by the resources sacrificed to acquire them."

Research on firms' perceived value of information has mostly addressed the organizational level and the use of information while somewhat neglecting the perceived value of collecting information (Menon & Varadarajan, 1992; Toften & Olsen, 2004). As suggested by the economics of information (Stigler, 1961), the decision by an actor to invest in collecting information might not be a simple task (Mosakowski, 1997). Hirshleifer (1973) suggested that the value of information can be evaluated according to the following criteria: 1) certainty (whether gathering the information will reduce uncertainty); 2) diffusion, which affects the information's scarcity value (do others have easy access to the same information?); 3) applicability (spesific vs. general, i.e., is the information relevant only to a particular customer or broadly applicable, e.g., more strategic); 4) type of content (e.g., pertaining to the physical environment or strategies/behavior of individuals or technology and market characteristics like product quality); and 5) decision relevance (whether the information is relevant to decisions the salesperson will make). We propose that the salesperson will view collecting market information as valuable if the collected market information reduces uncertainty about customer needs, is not available to the salesperson's competitors, and helps the salesperson close a sale. As perceived value is considered a determinant of behavior (Lapierre et al., 1999), the higher the perceived value of information, the more likely the information will be used (Toften & Olsen, 2004) and, consequently, collected. For a salesperson, the most important cost of collecting information is time. One important mechanism in goal-setting theory is that goals "direct attention and effort toward goal-relevant activities and away from goal-irrelevant activities" (Locke & Latham, 2002, p. 706). As relevance is an important dimension in the conceptualization of perceived information value (Hirshleifer, 1973), we argue that motivation to collect information is greater when the salesperson perceives market information as goal-relevant and therefore valuable.

H2: There is a positive relationship between perceived information value and the propensity to collect market information.

Activity perception and the propensity to collect market information

We conceptualize activity perception as the extent to which the salesperson views collecting market information as an in-role or extra-role activity. In accordance with the related terms "extra-role performance" (MacKenzie et al., 1998) and "extra-role behavior" (O'reilly & Chatman, 1986), extra-role activities are those for which the salesperson receives no immediate rewards and that are not perceived as part of the salesperson's job description but still benefit the larger organization. In-role activities are thus defined as activities that are measured and defined in the salesperson's job description. Previous research on work performance indicates that outcomes are driven by appraisal and reward systems (Puffer, 1987). Early research on work performance assumed that people focus on the activities on which their performance is measured (Welbourne et al., 1998). Research on collecting market information suggests that formalization increases the sales force's propensity to collect market information. Le Bon and Merunka (2006) found that a strong behavior-based control system increases the salesperson's behavioral effort toward collecting market information. Similarly, Liu and Comer (2007) found support for increased collection of market information if management rewards such behavior. Evans and Miao (2011) argued that a lack of clarity in reporting market information as part of a company's management information system (MIS) will prompt salespeople to place a lower priority on collecting information as this activity might be viewed as an extra-role activity. We thus propose that defining market information collection as an in-role activity will increase the salesperson's focus on market information collection.

As the understanding of what drives performance has evolved, the importance of extra-role activities has increased (Ingram et al., 2005). The related construct of extra-role behavior, conceptualized as organizational citizenship behavior (OCB), has been shown to have a positive impact on how sales managers evaluate salesperson performance (MacKenzie et al., 1993). Other research demonstrates that a higher level of OCB leads to greater customer orientation (Marshall et al., 2012). Nevertheless, based on the increased complexity of the salesperson role (Moncrief et al., 2006), we propose that salespeople will be more inclined to collect market information when the task is part of their job description, leading to the following hypothesis:

H3: The more collecting market information is viewed as an in-role activity, the higher the propensity to collect market information.

Perceived organizational support and the propensity to collect market information

Perceived organizational support can be conceptualized as the value an organization places on the contributions and well-being of its employees (Eisenberger et al., 1986). We argue that a higher level of perceived organizational support will increase the salesperson's propensity to collect market information. Organizational support theory argues that employees bond with the organization through personification (Eisenberger et al., 1986). The more employees perceive organizational support through likeness, supervisor support, and favorable job conditions, the more positive the relationship employees build with the organization, thus increasing their commitment, feelings of competence and worth, involvement, and performance (Rhoades & Eisenberger, 2002).

We propose that these positive outcomes of perceived organizational support will have a positive effect on the collection of market information. A stronger feeling of competence and worth might motivate the salesperson to go the extra mile in information collection. Several empirical papers support a positive link between perceived organizational support and market information collection. Thietart and Vivas (1981) divided salespeople into three groups (the follower-suspicious group, the participative-confident group, and the senior-blasé group) based on trust, participation, perceived environmental uncertainty, and seniority. They found that the speed of information sharing varied among these three groups. Liu and Comer (2007) uncovered a positive link between higher levels of perceived upper management support and increased information gathering, arguing that salespeople who feel that upper management is on their side are more willing to work harder on behalf of the organization. Managerial recognition has also been positively related to information-reporting effectiveness, conceptualized as the quantity, accuracy, relevancy, bias, and timeliness of sales force marketing reports (Wortruba & Mangone, 1979). However, Stamper and Johlke (2003), using a sample of boundary-spanning salespeople, found no relationship between perceived organizational support and specific task performance. These somewhat contradictory results suggest that the relationship between perceived organizational support and the propensity to collect market information depends on some moderating variables. Still, organizational support is argued to be a motivation for increased information collection (Festervand et al., 1988), leading to our fourth hypothesis:

H4: The higher the perceived organizational support, the higher the propensity to collect market information.

Adaptive selling and the propensity to collect market information

Adaptive selling is an individual salesperson characteristic and can be defined as "the altering of sales behaviors during a customer interaction or across customer interactions based on perceived information about the nature of the selling situation" (Weitz et al., 1986, p. 175). An important part of the adaptive selling construct is the salesperson's knowledge of different sales approaches/strategies and the ability to change approaches/strategies when interacting with the customer. Another fundamental component is detailed knowledge about the customer's needs and preferences. Adapting to the customer can be performed both before and during a sales meeting, and the collection of information facilitates this adaptation (Spiro & Weitz, 1990). We argue that the information needed goes beyond specific knowledge about the customer's needs and preferences to include a broad understanding of the business environment in which the customer operates. In other words, an important condition for practicing adaptive selling is the collection of market information. In a meta-analysis, Franke and Park (2006) found that adaptive selling has positive effects on both salesperson performance and satisfaction. We therefore argue that adaptive selling will have a positive effect on information collection, both because information collection is a fundamental part of adaptive selling and because a higher level of adaptive selling leads to a higher value of the information collected. Thus, our fifth hypothesis is as follows:

H5: The higher the level of adaptive selling, the higher the propensity to collect market information.

Having outlined the baseline model, we will now turn to how this model is influenced by the salesperson's LOC.

The moderating effect of LOC

LOC is a well-documented personality trait based on social learning theory (Rotter, 1975). The construct's core element is how a person assesses the link between their own actions and the outcome of these actions. When the person views the outcome as contingent upon their own behavior/action, the person has an internal focus. When the person tends to see the outcome as depending on luck, chance, or powerful external sources, the person has an external focus (Rotter, 1966).

LOC and intrinsic motivation

We argue that LOC moderates the relationship between intrinsic motivation and the propensity to collect market information. As previously stated, intrinsically motivated people are those who enjoy their work, engage in interesting tasks to satisfy their curiosity, or seek personal challenges in the work they do (Amabile, 1993). People with high intrinsic motivation are inclined to show more interest in their customers and ways to solve their customer's problems. Therefore, we argue that intrinsically motivated salespeople will spend more time (than extrinsically motivated salespeople) gathering information about their customers and about the competition to improve their ability to present a solution that will satisfy the customer's needs and outperform their competitors. We argue that the effect of intrinsic motivation on the propensity to collect market information will be amplified when the salesperson, in addition to being intrinsically motivated, perceives a high degree of control over the sales outcome (internal orientation). Salespeople with an internal LOC ("internals") feel they are "masters of their fate" and, in contrast to those with an external orientation, are often confident, alert, and directive when trying to control their environment (Ng et al., 2006). We argue that the probability of collecting market information increases when salespeople who are already intrinsically motivated become even more confident in their ability to solve the customer's problem and thus grow more alert to the customer's needs. Those with an external LOC ("externals") will generally be more extrinsically motivated, as they ascribe their failures or successes to external factors. Unless directed by supervisors or through behavior systems, they will be less willing to collect market information or see market information as important.

Thus we propose the following:

H6: The more internal the LOC, the stronger the relationship between intrinsic motivation and the propensity to collect market information.

LOC and perceived information value

As previously argued, perceived value of information can be viewed as a trade-off between benefits received and the resources sacrificed to acquire them (Hansen et al., 2008). We then suggested that the salesperson will view information collection as valuable if the collected information reduces uncertainty about customer needs, is something competitors do not have access to, and helps the salesperson close a sale. Accordingly, we argued for a direct effect of perceived information value on the propensity to collect market information. As internals and

externals differ in their views of how they can influence the environment, we further argue that differences in LOC will moderate the direct effect proposed: internals are likely to collect more information and in a more systematic manner than externals (Noe & Steffy, 1987; Srivastava, 2009; Thornton III, 1978).

Since those with an internal orientation believe they are masters of their own fate, one might argue that although they gather more information, internals also view outside assistance and information as less valuable compared with those with an external LOC. In a team setting, Boone et al. (2005) found that externals listen to and follow feedback from the group and have a stronger feeling that success is obtained when consulting others. Research has also revealed that externals are more likely than internals to rely on external decision aids, like statistical or mechanical systems (Kaplan et al., 2001). Accordingly, we argue that externals will see information as more valuable than internals and therefore collect more information. Our seventh hypothesis thus reads as follows:

H7: The more external the LOC, the stronger the relationship between perceived information value and the propensity to collect market information.

LOC and activity perception

We previously conceptualized activity perception as the extent to which the salesperson views market information collection as an in-role or extra-role activity. When viewed as an extra-role activity, the salesperson receives no rewards and is not measured on market information collection (O'reilly & Chatman, 1986). In addition, this activity is not explicitly mentioned in the job description. When viewed as an in-role activity, the salesperson is measured on collecting market information or strongly believes that she/he is. We previously suggested a direct effect of activity perception on the propensity to collect market information. Here, we argue that this effect will differ based on the salesperson's LOC. Previous research has found viewing market information collection as an in-role activity has a positive effect on information gathering (Le Bon & Merunka, 2006; Liu & Comer, 2007). In discussing H6, we argued that externals are more willing to collect information when directed to do so by their supervisors as they ascribe external factors, like powerful others, as the reason for their results. This argument is supported by previous research. Mitchell et al. (1975) found that externals, compared with internals, are more satisfied with a directive management style. Similarly, Spector (1982) argued that a directive supervision style is more effective when managing externals. Building on previous research, Cravens and Worchel (1977) found that

externals comply more easily with a directive leadership style, whereas internals are more resistant. Thus, we argue that when externals feel a clear directive to collect market information (defining the collection of market information as an in-role activity), they are more willing to comply than internals, leading to the next hypothesis:

H8: The more external the LOC, the stronger the relationship between activity perception and the propensity to collect market information.

LOC and perceived organizational support

We previously proposed that greater perceived organizational support will lead to more information gathering via a stronger feeling of competence and worth. Based on organizational support theory (Eisenberger et al., 1986), the greater the alignment between the employee's thoughts and values and the organization's thoughts and values, the more positive the employee's views of the organization. These thoughts and values are manifested in actions, and the more the organization supports activities substantiating market information collection, the more the salesperson will feel supported in collecting market information. Externals feel they are more dependent on others in performing their own jobs. Thus, if an organization shows a high level of support toward collecting market information, an externally oriented salesperson will be encouraged to engage in this task. By contrast, an internally oriented salesperson will be less dependent on organizational support, since they strongly believe they have the ability to control their work environment. This might imply that internals are less responsive to changes in perceived organizational support, whereas externals will not react until they are pushed by their organization. Empirical research supports this implication by showing that externals are more sensitive to organizational support than internals, with increased job satisfaction and organizational commitment when organizational support is perceived (Aubé et al., 2007). An alternative view was presented by Sturges et al. (2010), who argued that as perceived organizational support increases, externals will become even more passive regarding career self-management behavior because they believe that the organization will take charge of their career. Still, as internal orientation is also related to a higher degree of psychological empowerment (Ng et al., 2006), we argue that internals will be less dependent on perceived organizational support.

H9: The more external the LOC, the stronger the relationship between perceived organizational support and the propensity to collect market information.

LOC and adaptive selling

Adaptive selling is the ability of a salesperson to change the selling approach while interacting with a buyer based on the buyer's signals and feedback during the interaction (Weitz et al., 1986). Since this requires the salesperson to gather information, we previously argued that the salesperson's use of adaptive selling will lead to a higher propensity to collect market information. We suggest that LOC will affect the relationship between adaptive selling and the propensity to collect market information. As collecting information is a central part of the adaptive selling approach, an internally oriented salesperson will spend more time on this task. An ability to interact with the customer is an important prerequisite to succeed in adaptive selling, and internals are viewed as more sociable than externals and therefore better at interacting with others (Qiang Wang et al., 2010). Our final hypothesis is as follows:

H10: The more internal the LOC, the stronger the relationship between adaptive selling and the propensity to collect market information.

The proposed hypotheses are summarized in the model in Figure 1.

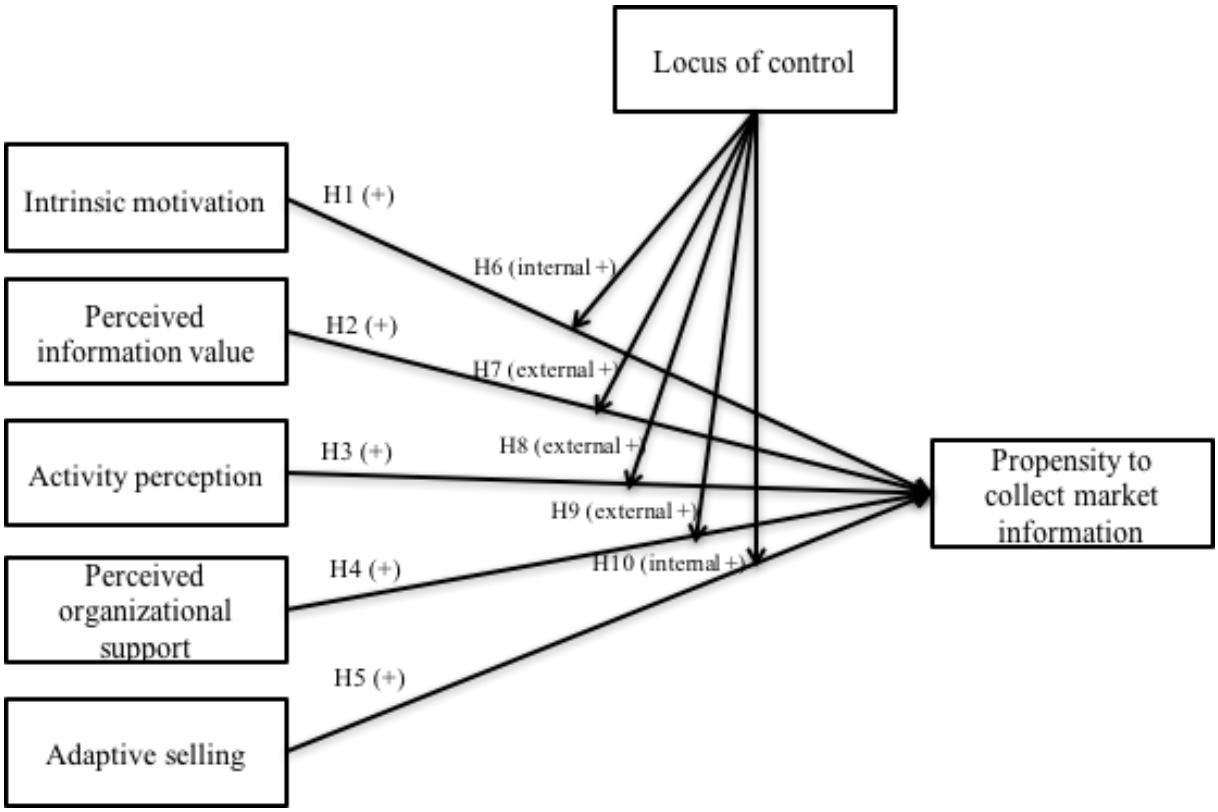

Figure 1. Research model

Methodology

Sample

The data used to test our conceptual model were collected through a cross-sectional design with a web-based survey and analyzed using SPSS version 21. The respondents were B2B salespeople from four different organizations; all organizations provided an endorsement from the sales director/sales manager encouraging the salespeople to participate in the survey.

A total of 507 e-mails were distributed, with 332 responses, giving a response rate of 65.5%. Thirty-eight respondents were removed through a screening question asking whether they had a primary customer responsibility. An additional 41 respondents were removed due to missing data, leaving 255 respondents for the analysis (adjusted response rate = 76.8%). The respondents' characteristics are presented in Table I.

	N	Mean	SD
No of years in current position	252	9.77	8.81
No of years in sales	252	18.62	9.60
Age	249	47.15	9.84

	N	%
Your primary way of contacting customers	252	
Physical meetings	220	87.3
By phone	32	12.7
Level of education	252	
- High School (10 years of lower compulsory school)	127	50.4
- Bachelor degree	81	32.1
- Master degree	44	17.5
Gender	255	
- Female	118	46.8

Table I. Sample characteristics

Measures

All measures used in this research was adapted from prior research. The propensity to collect market information was based on the scale developed by Le Bon and Merunka (2006). The adapted items were assessed by the sales managers/directors of the companies in this

research and then amended based on their feedback. Finally, items were rewritten to reflect the context of this research, i.e., a focus on collecting, not sharing, information. For example, the item "With regard to my customers' portfolio, if I make an effort to obtain relevant information for the Marketing and Sales Managers, the likelihood of success is…" (Le Bon & Merunka, 2006, p. 401) was shortened to "I spend a lot of my time collecting market information".

Intrinsic motivation was measured with the six-item intrinsic work motivation scale developed by Kuvaas (2006) and developed further by Kuvaas and Dysvik (2009).

The five perceived information value items were developed from the work of Toften and Olsen (2004), Hirshleifer (1973), Zeithaml (1988), and Lapierre et al. (1999) and adapted to the context of this research. For example, the Toften and Olsen (2004, p. 125) item "We consider market information to be very useful" was changed to "I consider market information to be very useful".

Activity perception was measured based on Williams and Anderson's (1991) measurement of in-role behaviors, and some of the wording was changed to reflect this study's purpose. For example, "Fulfills responsibilities specified in job description" (Williams & Anderson, 1991, p. 606) was changed to "Gathering market information is a defined part of my responsibilities".

Perceived organizational support was measured using the eight-item scale developed by Kuvaas (2008).

Adaptive selling was measured using a shortened five-item scale developed by Hughes et al. (2013) based on the original scale developed by Spiro and Weitz (1990).

LOC was measured with the 12-item sales LOC scale developed by Chung and Ding (2002).

All constructs were measured via a seven-point Likert scale ranging from strongly disagree (1) to strongly agree (7).

Initially, convergent validity was assessed by means of factor analysis (Field, 2013) using maximum likelihood as the extraction method and direct oblimin rotation. This was followed by a Cronbach's alpha internal consistency test. Items with low factor loadings (below 0.37) were removed (Stevens, 1986), as were items impeding unidimensional factor structures. The results of the factor analysis and reliability tests are summarised in Table II.

In further analysis, the LOC variable was subjected to a median split (Iacobucci et al., 2015a, 2015b). The median for the LOC variable was 4.49, and after the split, internals and externals each included 43.3% of the respondents. The remainder, 13.4%, were missing data.

Item	Factor loading	Cronbach's alpha
Adaptive selling (AS)		0.844
AS_1	.761	
AS_2	.615	
AS_3	.834	
AS_4	.821	
AS_5	.622	
Intrisic Motivation (IM)		.953
IM_1	.865	
IM_2	.919	
IM_3	.869	
IM_4	.914	
IM_5	.908	
Perceived info value (PIV)		.869
PIV_1	.854	
PIV_2	.790	
PIV_3	.772	
PIV_4	.752	
Perceived org support (POS)		.923
POS_1	.908	
POS_2	.846	
POS_4	.797	
POS_5	.846	
POS_7	.812	
Activity Perception (AP)		.869
AP_1	.851	
AP_2	.739	

AP_3	.742	
AP_4	.713	
AP_5	.735	
Propensity to collect market info (PCMI)		.777
PCMI_1	.639	
PCMI_2	.474	
PCMI_3	.784	
PCMI_5	.787	
Locus of control (SLOC)		
SLOC_1		.591
SLOC_1_1	.387	
SLOC_1_3	.496	
SLOC_1_4	.999	
SLOC_2		.648
SLOC_2_1	.370	
SLOC_2_2	.809	
SLOC_2_3	.580	
SLOC_2_4	.560	
SLOC_3		.808
SLOC_3_1	.822	
SLOC_3_2	.780	
SLOC_3_4	.704	

Table II. Factor solutions and reliability information

Correlations and descriptive statistics for all variables in the baseline model are reported in Table III. Tests to see if the data met the assumption of collinearity indicated that multicollinearity was not a concern (tolerance >.4, and VIF <2.5) (Allison, 1999). Adptive selling, Tolerance = .84, VIF = 1.19, Intrinsic Motivation, Tolerance = .53, VIF = 1.89, Perceived info value, Tolerance = .59, VIF = 1.69, Percieved org support, Tolerance = .61, VIF = 1.63, and Activity perception, Tolerance = .68, VIF = 1.48. We therefore concluded that there was no collinearity within the data.

	Mean	SD		1	2	3	4	5	6	7
1. Adaptive selling	5.37	0.99								
2. Intrisic Motivation	5.50	1.17	r	.37*						
3. Perceived info value	5.04	1.07	r	.30*	.48*					
4. Perceived org support	5.14	1.11	r	.25*	.61*	.36*				
5. Activity Perception	4.07	1.32	r	.24*	.31*	.55*	.34*			
6. Propensity to collect market info	4.07	1.32	r	.34*	.38*	.48*	.27*	.62*		
7. Locus of control	4.45	0.97	r	.21*	.23*	.23*	.09*	.32*	.33*	

* All correlations are significant at the 0.01 level (1-tailed). Pearson correlation = r. N = 255

Table III. Variable Descriptive statistics and correlations

Results

The baseline model with direct effects was tested first, and the results are presented in Table IV. We regressed propensity to collect market information on the five independent variables, and in line with H1, the effect of intrinsic motivation was positively related to the propensity to collect market information ($\beta = 0.130$, $t = 2.244$, $p < .05$). The proposed positive effect of perceived information value (H2) was also supported ($\beta = 0.110$, $t = 1.984$, $p < .05$). H3 argued that when information collection is viewed as an in-role activity, the propensity to collect market information will increase. This hypothesis was also supported ($\beta = 0.385$, $t = 8.533$, $p < .01$). However, H4–higher perceived organizational support leads to a higher propensity to collect market information–was not supported ($\beta = -0.056$, $t = -1.062$, $p = 0.289$). Finally, in line with H5, a higher level of adaptive selling resulted in a higher propensity to collect market information ($\beta = 0.170$, $t = 3.001$, $p < .05$). Thus, the results provide support for H1, H2, H3 and H5 but not H4, as summarized in Table IV.

Hypothesis	Unstandardized Beta	t-value	Support
H1: There is a positive relationship between intrinsic motivation and the propensity to collect market information.	.13	2.24 *	Yes
H2: There is a positive relationship between perceived information value and the propensity to collect market information.	.11	1.98*	Yes
H3: The more collecting market information is viewed as an in-role activity, the higher the propensity to collect market information.	.39	8.53**	Yes
H4: The higher the perceived organizational support, the higher the propensity to collect market information.	-.06	-1.06	No
H5: The higher the level of adaptive selling, the higher the propensity to collect market information.	.17	3.00**	Yes

Adjusted R-square: 0.449

*= $p<0.05$, **= $p<0.01$

Table IV. Regression results for the baseline model

Next, the moderating effects of LOC were tested via a two-group procedure. According to Sharma et al. (1981), one way to identify the presence of moderating effects is to test whether the relationship form of the classic validation model differs across subgroups; typically, a Chow test or similar test is used to test the equality between the regression equations.
To test for moderation, the same model was run again using the observations from the two samples based on splitting the LOC variable into high- and low-score groups. Based on these model estimations, the residual sums of squares from all (three) regressions were incorporated in a Chow test (Chow, 1960) to evaluate whether the coefficients statistically differed between the subgroups. Stated formally, this procedure tests whether the parameter estimates in the linear regression models are equal. The results of the moderation test are presented in Table V.

Hypothesis	LOC Group	Unstandardized Beta	t-value	Support
H6: The more internal the LOC, the stronger the relationship between intrinsic motivation and the propensity to collect market information.	External	.09	1.17	No
	Internal	.22	2.53*	Yes
H7: The more external the LOC, the stronger the relationship between perceived information value and the propensity to collect market information.	External	.18	2.49*	Yes
	Internal	.01	0.06	No
H8: The more external the LOC, the stronger the relationship between activity perception and the propensity to collect market information.	External	.31	4.59**	Yes
	Internal	.40	6.24**	Yes
H9: The more external the LOC, the stronger the relationship between perceived organizational support and the propensity to collect market information.	External	-.13	-1.64	No
	Internal	-.01	-.06	No
H10: The more internal the LOC, the stronger the relationship between adaptive selling and the propensity to collect market information.	External	.22	3.19**	Yes
	Internal	.07	.79	No

Adjusted R-square Externals: 0.391 *= p< 0.05, **= p< 0.01
Adjusted R-square Internals: 0.434

Table V. Regression results two group analyses (locus of control)

The effect of intrinsic motivation on the propensity to collect market information increased if the salesperson had an internal LOC ($\beta = 0.224$, $t = 2.526$, $p < .05$) but was not significant when the salesperson had an external orientation ($\beta = 0.093$, $t = 1.173$, $p = 0.243$). This supports H6.

By contrast, the effect of perceived information value increased when the salesperson had an external orientation ($\beta = 0.180$, $t = 2.493$, $p < .05$) but was not significant when the salesperson had an internal orientation ($\beta = 0.005$, $t = 0.058$, $p = 0.954$). This supports H7.

For activity perception, which had the most prominent direct effect in our baseline model, the two-group procedure returned a significant effect in both subsamples (ext: $\beta = 0.309$, $t = 4.591$, $p < .01$; int: $\beta = 0.404$, $t = 6.241$, $p < .01$), but the beta coefficient was higher in the internal group ($\beta = 0.404$) than the external group ($\beta = 0.309$). To further examine whether the beta values for activity perception differed significantly across the two LOC groups, we conducted a pooled t-test (Levin et al., 2002) in which the regression coefficients in the two categories were tested more directly against each other. The regression coefficients

of activity perception for the external and internal LOC groups were not significantly different, implying that H8 was not supported. Perceived organizational support had no direct effect and no significant effect in both the internal and external LOC groups (ext: $\beta = -0.131$, $t = -1.640$, $p = 0.104$; int: $\beta = -0.005$, $t = -0.063$, $p = 0.950$), thus failing to support H9.

Finally, we argued that the effect of adaptive selling would increase when the salesperson had an internal LOC. However, the results were in the opposite direction, with a significant effect in the external LOC group ($\beta = 0.219$, $t = 3.186$, $p < .05$) and no effect in the internal LOC situation ($\beta = 0.077$, $t = 0.758$, $p = 0.450$), thus failing to support H10. Thus, the results support H6 and H7 but fail to support H8, H9, and H10.

Discussion

The purpose of this study was to increase the understanding of what drives the salesperson's propensity to collect market information. From a theoretical viewpoint, we show that personality, more specifically, trait theory (Judge et al., 2013), increases the understanding of what motivates salespeople to collect information. Our main contribution is that the effect of known drivers of salespeople's motivation for collecting information can vary with the personality characteristics of the sales person. This variation might explain, at least in part, why only the same few salespeople seem to collect information, despite attempts to get all salespeople to collect information (Le Bon & Merunka, 2006).

Our baseline model of the direct effects on information collection was primarily based on previous theoretical and empirical research, and this replication strengthens the validity of these variables.

In accordance with the Johnson model of information gathering (Johnson & Meischke, 1993) we found that the perceived value of information influences salespeople in gathering market information. This is also consistent with goal-setting theory, which specifies that the salesperson will focus on those goal-relevant activities with the highest value (Locke & Latham, 2002). Using LOC as a moderator, we found that an external LOC strengthened this relationship, whereas an internal LOC had no effect on this relationship. Several authors have highlighted the value of feedback in encouraging salespeople to gather information (Grove et al., 1992; Mellow, 1989; Pass et al., 2004). Feedback about how information is used could increase the perceived value of information for the salesperson. Externals have a stronger feeling that success is obtained through consulting others (Boone et al., 2005), whereas internals are less dependent on the opinions of others, which could explain why externals increase their information collection when they perceive the information as valuable. Thus,

explaining how the information salespeople collect is used and how it improves decision-making in the organization will increase the willingness of salespeople with an external LOC to collect information.

Consistent with previous research (Le Bon & Merunka, 2006; Liu & Comer, 2007), we found that salespeople will gather more market information when the task is perceived as an in-role activity. Activity perception was also significant in both the internal and external groups, but the effect did not differ between these groups. Hence, if a salesperson believes that collecting information is expected, she/he will collect information regardless of LOC orientation.

Our findings for perceived organizational support are in line with those of Stamper and Johlke (2003), who found no connection between perceived organizational support and specific task performance. However, our results are contrary to those of Liu and Comer (2007), who found that perceived upper management support was positively related to information gathering, and Wortruba and Mangone (1979), who found that managerial recognition was positively related to information reporting effectiveness. One reason for the mixed results of previous studies might be that some focused on managerial support, while others studied organizational support in general. Piercy, Cravens, Lane, and Vorhies (2006) argued that salespeople, due to their boundary-spanning role, often operate away from the company and frequently experience role conflicts due to expectation differences between the organization and customers. Accordingly, salespeople might have a higher commitment to their customer than to the organization. This commitment can be expressed in ways other than collecting information, such as increased availability and a faster response rate to better serve the customer.

Our baseline model also included some variables not frequently used in previous research. First, as noted by Le Bon and Merunka (2006), information collection models in the sales literature have mostly included extrinsic motivation variables. Based on models developed in the broader information science literature (Johnson & Meischke, 1993), we argue that intrinsic motivation is also a relevant variable in a professional environment and that intrinsic motivation is a significant driver of information collection among salespeople. With LOC as a moderator, we found that an internal LOC strengthens the relationship between intrinsic motivation and gathering market information, whereas no such relationship existed with an external LOC. Salespeople with an internal LOC view the results of their work as contingent upon their own behavior, which is again consistent with the autonomy component of intrinsic motivation. Consequently, increasing the autonomy of market information gathering will have a greater effect when the salesperson has an internal LOC.

Second, we found that increased use of adaptive selling increased the collection of information. This relationship is also moderated by LOC but is only significant when LOC is external, in contrast to our expectations. One possible explanation is that internals are more sensitive to information that supports self-worth (Phares, 1976); thus, negative customer feedback might reduce their sense of self-worth. Internals also believe that the environment around them is under their control (Ng et al., 2006), and customer feedback that contradicts the salesperson's expectation might reduce this feeling of control. This perceived loss of control might cause internals to be less responsive to information gathering in an adaptive selling situation, whereas the external salesperson will be more willing to collect information.

Managerial implications

As the business world is increasingly data driven (Davenport et al., 2012), information gathered from the sales force is becoming even more important because combining data from several different sources might increase the quality of information (McAfee & Brynjolfsson, 2012). However, from a managerial perspective, requiring salespeople to perform tasks that shift focus from actual selling is difficult. In addition, as we have argued, even when managers establish procedures that have the potential to increase salespeople's motivation to collect information, not everyone does so.

This paper's most prominent managerial implication is a possible explanation for why some salespeople do not collect information, even when the same motivational tools are used. When introducing personality as a moderator, we have shown that locus of control moderates motivational tools well-known from previous research and renders some not significant depending on the LOC orientation.

Extensive research on what motivates employees to increase productivity has found that incentives such as bonuses reduce the motivation for doing a job (Cerasoli et al., 2016). Even though previous research has emphasized the need to measure and reward salespeople for information collection, we have shown that increasing the perception among salespeople that information collection is part of their job might be as effective as actually formalizing information collection in a control system. From a managerial perspective, this increased perception can be achieved in different ways. If sales managers emphasize the importance of information collection and show how the collected information has been used to increase productivity, activity perception among salespeople might increase, thus motivating them to collect information. If managers successfully induce salespeople to perceive information collection as an in-role activity, this perception will have an effect on all salespeople,

regardless of LOC orientation. Such changes can be accomplished without increasing the cost of monitoring, a common feature of behavior-based control systems, thus addressing top managers' concern about reducing the cost of selling while simultaneously increasing productivity.

Limitations and Future Research

This study examines the moderating effect of LOC on drivers of information gathering. However, we have only studied one personality trait among a large pool of possibilities, and our results are therefore limited to this trait. Future research could further aid sales managers by extending the focus on the moderating effect of personality differences, including the need for cognition, need to evaluate, or even the Big Five. However, as previous research has shown that cardinal traits such as the Big Five are less predictive than more situation-specific traits, we recommend that future research explore traits that are somewhat context-relevant. Furthermore, our study does not consider that the act of collecting market information might be perceived as either an approach or avoidance goal. To some, the driving force is to achieve higher sales and a stronger market position; for others, it is to reduce the possibility of lagging behind. Thus, the motivational states of positive and negative motivation may warrant further exploration, again with the possible inclusion of personality traits as potential moderators. Another aspect worth pursuing is the ability to collect high-quality market information, since the perceived information quality is an important prerequisite for whether the information is used (Maltz & Kohli, 1996; Toften & Olsen, 2004). A potential weakness of our study is that we did not address the quality of the information collected. Accordingly, a fruitful path for future research may be to examine not only information amount but also information quality.

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Article 2: "Social Listening & Learning in Digital Sales: Adapting Customer and Competitive Intelligence and Knowledge to the Digital Era."

Submitted to *AMS Review* in 2022 (Mehl and Le Bon)

Social Listening and Learning in Digital Sales: Adapting Customer and Competitive Intelligence and Knowledge to the Digital Era

Abstract

Through digitalization, buyers in B2B sales have access to more information and are more empowered and informed than ever before. Moreover, they move further through the customer journey before contacting a seller, thus reducing potential opportunities for the seller to physically collect information from the buyer, a prerequisite for traditional listening models. In addition to increasing buyers' access to information, digital solutions can be an important source of information for salespeople. This research proposes a theoretical framework of Digital Sales Listening and Learning (DSLL), which is the first model of antecedents, mediators, and outcomes of online information collection by salespeople. Building on the construct of salesperson listening, we discuss how salespeople collect information in a digital world and how this information affects salespeople's learning and knowledge. We discuss salespeople's online listening, learning, and selling-related knowledge and develop propositions for future research in the promising area of digital listening.

Keywords: Digital sales – listening – learning – knowledge – information collection – digitalization – B2B sales

Active listening is a critical salesperson skill for building strong customer relationships, trust, and satisfaction (Castleberry and Shepherd 1993; Ramsey and Sohi 1997; Marshall et al. 2003). Conversely, inadequate listening is one of the most fundamental reasons salespeople fail (Ingram et al. 1992). In fact, listening has a higher impact on relationship and sales performance than adaptive selling (Itani et al. 2019). Although there are several definitions of listening, there is consensus that listening is a stable, multidimensional construct comprising 1) cognitive, 2) affective, and 3) behavioral processes (Bergkvist and Eisend 2021).

However, the evolution of B2B sales (Singh et al. 2019) calls for revision of the concept of listening. We argue that changes in the marketplace due to digitalization (Marshall et al. 2012) demand that listening begin before the actual meeting with the customer, which

has been the main focus in traditional listening (Drollinger et al. 2006). Thanks to digitalization, customers are more empowered and informed than ever before (Singh et al. 2019). The increases in the use of inside salesforces and virtual selling in recent years have been further accelerated by the Covid-19 pandemic (Hartmann and Lussier 2020). A recent McKinsey report found that almost 90 percent of B2B sales moved to a digital platform during the pandemic and that much of this shift will be permanent (Gavin et al. 2020). The more information that the customer collects from sources other than the seller, the further that the customer moves through the purchasing process without the seller's help (Adamson et al. 2012), thereby reducing physical touchpoints, and less traditional listening. Nonetheless, the shift in the sales environment from transactional to relationship selling practices (Marshall et al. 2003) has increased the importance of listening, and the abilities of salespeople to listen (Pullins et al. 2017) and provide sufficient support (Agnihotri et al. 2009) remain essential concerns in the sales literature (Bergeron and Laroche 2009).

Listening becomes more challenging as customers increasingly demand enhanced services and greater added value from salespeople (Piercy 2010). It is important to listen more to learn more, and changes in the business environment that reduce face time with customers heighten the need for the seller to have extensive customer knowledge. Collecting information and knowledge before meeting a potential customer helps the salesperson learn about the customer before the traditional listening process starts. A high level of knowledge about the customer has been proposed to be an essential positive antecedent of salespeople's listening skills (Castleberry and Shepherd 1993). Among antecedents of individual listening skills, Bergeron (2004) found that customer knowledge was the strongest predictor of salespeople's listening skills. From a relationship marketing perspective, the expertise of the seller, in this case the salesperson, has the strongest positive impact on the quality of the relationship between the seller and buyer (Palmatier et al. 2006). Since a digital environment makes it more difficult to build a strong relationship of gratitude and trust, salespeople's knowledge is an important factor that accelerates the establishment of an online relationship with customers and can be gained by online listening.

Based on the above observations and arguments pertaining to the changing nature of B2B sales, this research presents a theoretical framework of Digital Sales Listening and Learning (DSLL) and related research propositions. DSLL is a new construct focused on listening in a digital setting before the physical meeting with the customer. Thus, DSLL is distinct from the concept of traditional listening, where the focus is to listen to the customer face-to-face or over the phone. DSLL also differs from various constructs measuring

salespeople's motivation to gather marketing intelligence (Le Bon and Merunka 2006), which focus on motivation in general and not through a specific channel.

Consistent with the categorization scheme of MacInnis (2011), our main contribution is a revision of the concepts of listening and learning by salespeople that includes how salespeople listen to their customers online before they meet to increase their learning and knowledge about their customers. Thus, our work expands the concept of salesperson listening beyond face-to-face or telephone interactions between sellers and buyers. We do this by presenting an individual theoretical model of DSLL, including proposed antecedents, consequences, and mediators. A second contribution is a focus on how salespeople learn through online listening. Both the traditional listening literature and the literature on how to motivate salespeople to collect and share marketing intelligence have largely omitted how salespeople learn through listening. Grounded in regulatory focus theory, we argue that salespeople collect information and learn through exploratory and exploitative orientations (Levinthal and March 1993) and that much of this learning can occur through digital channels as proposed by the learning theory of connectivism (Siemens 2005). The proposed outcome of DSLL is increased customer knowledge, conceptualized as selling-related knowledge, which is argued to be the strongest predictor of salespeople's listening skills (Bergeron 2004; Verbeke et al. 2011) and to have the strongest positive impact on the quality of the seller-buyer relationship (Palmatier et al. 2006).

The rest of this paper is organized as follows. The next section presents the theoretical foundations of listening and learning in the digital age. Based on these theories, we present our model of DSLL and propositions that can be derived from the model. Finally, we conclude with a discussion of implications, and future research opportunities.

Theoretical Foundations of DSLL

We offer two theories to understand DSLL. First, we use listening theory, more specifically, the dual-process theory of supportive message outcomes (Bodie 2009), which has previously been established in the sales listening literature and argues that listening is a multistage process involving sensing, evaluating, and responding (Drollinger et al. 2006). Second, a significant effect of DSLL in the model is increased salesperson learning, and the variation of this learning can be explained through connectivism, a learning theory for the digital age (Siemens and Conole 2011).

Listening theory

The use of theory in listening research has been widely discussed (Bodie 2009; Purdy 2011). Bodie (2009) evaluated several theories related to listening, including the dual-process theory of supportive message outcomes, which has gained a foothold in understanding the core of listening. The theory of supportive message outcomes aims to explain why a message affects the receiver on specific occasions (Burleson 2009). Central to this theory is the argument that the outcome of an interaction depends on elements of supportive interactions and how the receiver cognitively processes these elements (Bodie 2009; Burleson 2009). To achieve the desired outcome, the receiver must cognitively scrutinize the message extensively (Burleson 2009). This scrutiny is driven by the recipient's motivation and ability to process the message and by the quality of the message. The outcomes can include cognitions, affects, and behaviors.

Goad (2014) found support for the dual-process theory of supportive message outcomes (Bodie 2009; Burleson 2009) in the financial sector when testing the effects of salesperson listening on customer satisfaction and loyalty. Goad (2014) also confirmed that listening is a multistage process involving sensing, evaluating, and responding, as previously proposed by Drollinger et al. (2006). As the theory of supportive message outcomes argue, the more motivated the salesperson is to evaluate what has been sensed, the stronger the cognitive outcome will be.

The theory of supportive message outcomes as a multistage process has also been used in an online setting. Using active empathetic listening as their theoretical framework (which builds on the theory of supportive messages and the multistage model), Park et al. (2015) found that e-listening is strongly related to interpersonal service quality in e-contact centers. Figl and Bauer (2008) found that online active listening has a positive effect on communication among students.

As the theory of supportive message outcomes has been used frequently in sales settings (Goad 2014) and has been shown to work in an online setting, we use this framework as the basis for the listening part of our model. We examine one particular outcome of this theory, namely cognition, which focuses on the process of acquiring knowledge. We therefore increase the explanatory power of the model by including two learning theories: connectivism and regulatory focus theory.

Learning theories

As our focus is listening in an online environment, we use a learning theory that focuses on learning through online sources: connectivism. As "a learning theory for the digital age" (Siemens 2005), connectivism is "characterized as a network theory of knowledge and learning with an emphasis on the use of digital technology" (Downes 2019, p. 112). For a comprehensive overview of the use of connectivism in the literature, please see Downes (2019). Connectivism has been applied to learning in multiuser open online courses (MOOCs) (Steffens 2015), in studies of artificial neural networks (ANNs) (AlDahdouh 2017), and to leadership programs in a traditional classroom setting targeting a highly skilled professional group (Natt och Dag 2017).

The following eight principles form the basis of connectivism (Siemens 2005):

1	Learning and knowledge rests in diversity of opinions.
2	Learning is a process of connecting specialized nodes or information sources.
3	Learning may reside in non-human appliances.
4	Capacity to know more is more critical than what is currently known.
5	Nurturing and maintaining connections is needed to facilitate continual learning.
6	Ability to see connections between fields, ideas, and concepts is a core skill.
7	Currency (accurate, up-to-date knowledge) is the intent of all connectivist learning activities.
8	Decision-making is itself a learning process. Choosing what to learn and the meaning of incoming information is seen through the lens of a shifting reality. While there is a right answer now, it may be wrong tomorrow due to alterations in the information climate affecting the decision.

Table 1. The 8 Principles of Connectivism

In connectivism, learning is viewed as a network phenomenon that is influenced by technology, diversity, and tie strength (Tschofen and Mackness 2012; Goldie 2016). The nodes in this network can be people, organizations, websites, books, databases, or any other source of information (Steffens 2015). Learning comprises the ability to successfully navigate through and create these networks of nodes (customers, prospects, sales experts, other salespeople etc.) (Transue 2013). Salespeople who build diversified networks will collect

more novel information and learn more. Such networks are particularly important in B2B sales, where the main source of information is the customer.

Moreover, as stated by Dunaway (2011, p. 676) “knowledge emerges from an individual’s learning network as she recognizes connections between concepts, opinions, and perspectives that are accessed via Internet technologies such as electronic databases, web search engines, and online information resources.” Viewing this learning network as the source of the message is an important factor affecting the level of supportive message outcomes. Connectivism can therefore provide a richer explanation of how salespeople collect information through a range of sources, how this information can be used to build customer knowledge, and why some salespeople gain more knowledge and learn more from their online networks than others.

While connectivism explains how salespeople learn in a digital age, regulatory focus theory explains why they engage in such learning activities by collecting digital information and the form of learning. Regulatory focus theory is, at its core, a motivational theory centered on approach-avoidance motivation (Higgins 1997). In contrast to other motivational theories, “regulatory focus proposes that there are different ways of approaching different types of desired end-states” (Higgins 1997, p. 1281). How people address change can therefore be understood according to whether they are promotion oriented or prevention oriented. People whose regulatory focus is more promotion oriented focus on hopes and aspirations, whereas those who are more prevention oriented prioritize avoidance and safety (J. Wu et al. 2019). According to Wu et al., “effects of RF (regulatory focus) can be observed in all stages of decision-making processes, such as information searching, information processing, and choice (2019, p. 746).”

Based on the organizational learning literature, March argued that “a central concern of studies of adaptive processes is the relation between the exploration of new possibilities and the exploitation of old certainties” (March 1991, p. 71). Exploration is linked to a promotion orientation, while exploitation is associated with a prevention orientation. Exploration and exploitation are well documented in organizational learning, but these concepts have also been used at the individual-level to understand the link between control systems and performance (Katsikeas et al. 2018; Neubert et al. 2008). Here, exploitative learning is defined as “a salesperson’s advantage-seeking learning behavior that enhances productivity and efficiency by adhering to proven methods of selling and leveraging existing knowledge and experience, resulting in minimal deviation from routine selling” (Katsikeas et al. 2018, p. 49). Exploratory learning, on the other hand, is defined as “a salesperson’s

opportunity-seeking learning behavior that is based on entrepreneurial actions focused on experimenting with, searching for, and discovering novel, creative, and innovative selling techniques" (Katsikeas et al. 2018, p. 49). In a changing market with greater customer demands (Piercy 2010), we propose that salespeople will search for market information from an exploration or exploitation perspective.

Conceptual Model and Research Propositions

The goals of listening are to acquire information from customers, proactively use this knowledge, and inform courses of action (Castleberry and Shepherd 1993). For salespeople, listening can be defined as "the cognitive process of actively sensing, interpreting, evaluating and responding to the verbal and nonverbal messages of present or potential customers" (Castleberry and Shepherd 1993, p. 36). Although Castleberry and Shepherd (1993) viewed interpreting and evaluating as separate dimensions, factor analyses by others have shown that they are part of a single dimension (Ramsey and Sohi 1997). The theory of supportive message outcomes argues (Bodie 2009) that listening comprises three stages: sensing, evaluating, and responding. Our proposed conceptual model adopts this structure but omits responding, as the focus of the model is how salespeople learn through online listening.

Traditional listening is based on a physical meeting between two parties, in this case, the buyer and the seller (Castleberry and Shepherd 1993), or talking on the phone (de Ruyter and Wetzels 2000). Digital listening, the basis of DSLL, differs from face-to-face and telephone channels in several ways, as outlined in Table 2. Given these differences, we argue that digital listening should be treated as a separate listening process.

Dimensions	**Digital listening**	**Traditional listening**
Preparedness	In an online setting, when the first contact with a potential customer has been made (e.g., through a LinkedIn message or an initial email), there is a delay between when the message is sent and the response. The opportunity to prepare before responding has been identified as a positive	When listening to a customer in a face-to-face meeting, there is not much time for the salesperson to reflect upon (evaluate) what is said before responding to what the customer says or does.

	consequence of listening online (Figl and Bauer 2008).	
Scope	Digital listening is performed with access to a multitude of channels. In an omni-channel structure, the salesperson has access to a larger variety of inputs (Cummins et al. 2016).	Traditional listening happens during a face-to-face or telephone conversation between the salesperson and a single customer and therefore has less variety.
Time	By using social media and other online resources, both internal and external, the salesperson can access abundant information at any time.	In traditional listening, where contact is physical, access to information is limited to the time the salesperson spends with the customer.
Outcome	In digital listening, the salesperson can gain several perspectives regarding the issue at hand due to the multitude of channels and timely access to those channels. Listening to several sources can increase the accuracy of decisions and may reduce risk, especially if the sources are independent (Clemen and Winkler 1985). The delay in responding also gives the salesperson more time to evaluate and learn from online listening. Active use of online sources has been shown to have a positive impact on prospecting and qualifying activities (Rodriguez, et al. 2012)	In traditional listening, listening occurs during a face-to-face or telephone conversation between a salesperson and a single customer. The salesperson is therefore more affected by a single or fewer perspective(s). In a physical meeting with the customer, the salesperson senses what the customer says and proceeds with sensing, evaluating, and responding almost *simultaneously,* with less time to reflect and learn.

Table 2. Dimensions of Digital listening and Traditional listening

We noted previously that consensus has been reached on the major elements of the construct of listening. This conclusion is supported by a meta-analytical study by Itani et al. (2019), who argue that the many definitions of listening all "seem to indicate that listening is a multi-dimensional process involving intellects, emotions, and responses" (Itani et al. 2019, p. 120; Gearhart and Bodie 2011). This would put the concept of listening within the consensus stage of Bergkvist and Eisend's (2021) framework: in Stage 4 (consensus), a shared understanding of the construct is attained, but this understanding is still open to challenge or testing. As the world of B2B sales develops and changes, the value of the construct of listening may need to be reassessed. Based on the changes presented in table 2, we argue that the construct of listening is still important and appropriate when meeting customers face-to-face. However, the need to listen and learn about customers *online* has grown in importance, as digitalization has moved the interactions between sellers and buyers to digital encounters where customers are more informed and less willing to physically meet the seller (Hartmann and Lussier 2020; Singh et al. 2019).

Based on MacInnis's (2011) framework, we argue for a revision of the traditional listening concept that better matches the concept of B2B sales listening for the digital age. According to MacInnis (2011), revision involves "reconfiguring or taking a novel perspective on something that has already been identified" (MacInnis 2011, p. 143). In presenting our revised construct of listening in the digital age, we hold that previous constructs are better suited to traditional listening and may not capture novel approaches and skills for gaining customer information and knowledge (Bergeron 2004; Castleberry and Shepherd 1993). We define DSLL as *the cognitive process of actively sensing and learning through online resources to increase knowledge about existing and potential customers, selling situations, and strategies*.

The DSLL framework includes two antecedent variables. The first is linked to the fifth principle of connectivism, i.e., nurturing and maintaining connections to facilitate continual learning. As noted previously, listening to several sources is critical for digital listening. We argue that a range of independent sources (sources not dependent on the same background information) will provide more novel information than listening to sources with higher dependency (Clemen and Winkler 1985). This is in line with the concept of "the strength of weak ties" (Granovetter 1973), which implies that people with networks consisting of more distant relationships will benefit from more novel information. A salesperson's network strength will therefore have a direct effect on sensing in the DSLL model.

The second antecedent is need for cognition, which increases the collection of information and is defined as an "individual's dispositional tendency to engage in and enjoy thinking" (Cacioppo and Petty 1982, p. 116). Those with a high need for cognition tend to seek out more and novel information than those with a low need for cognition (Lins de Holanda Coelho et al. 2018) and show better learning capabilities (Cacioppo et al. 1996). The need for cognition will therefore increase the level of sensing.

The definition of salesperson listening consists of sensing, interpreting, evaluating, and responding (Castleberry and Shepherd 1993). As discussed above, interpreting and evaluating have been found to be part of a single dimension (Ramsey and Sohi 1997), which is supported by the theory of supportive message outcomes (Bodie 2009). Accordingly, the DSLL model treats interpreting and evaluating as one variable named "evaluating different learning strategies". This phase includes both "learn[ing] from the context" (Castleberry and Shepherd 1993, p. 36) and "cognitive processes that allow the salesperson to assign meaning to the message and determine its importance" (Ramsey and Sohi 1997, p. 128). The latter processes consist of three steps: "a) understanding the meaning of the message, b) evaluating the message, and c) retaining the message in memory" (Castleberry and Shepherd 1999, p. 31). This is the variable of the listening model that is most cognitively demanding (Castleberry and Shepherd 1993) and is an important part of learning.

We propose that the context depends on the salesperson's perspective, a notion that is grounded in regulatory focus theory (Higgins 1997, 2002). We argue that a salesperson approaches changes in the market situation through the concepts of exploratory and exploitative learning (Katsikeas et al. 2018): they will either stick to what they know (exploitative learning) and do more of it (making cold calls, sending sales pitches through e-mails) or find new and innovative ways of accessing their customers (exploratory learning) (Katsikeas et al. 2018). We propose that evaluating, which includes exploratory and exploitative learning, mediates the relationship between sensing and the outcome variable, selling-related knowledge. Selling-related knowledge is defined as "the depth and width of the knowledge base that salespeople need to size up sales situations, classify prospects, and select appropriate sales strategies for clients" (Verbeke et al. 2011, p. 409). The impact of sensing on selling-related knowledge will differ according to the mediating effects of exploratory and exploitative learning. Exploitative learning will increase and strengthen the existing knowledge base of the salesperson, whereas exploratory learning will challenge their existing knowledge base with respect to which prospects to pursue and strategies to employ.

Last, we argue that positive outcomes of collecting information (e.g., closing more orders using a new strategy) should increase the salesperson's motivation to collect more information and, in turn, sensing. Conversely, interest in spending time on sensing may decrease if the effort does not obviously lead to improved performance (Argyris and Schon 1974). Such positive or negative outcomes should affect how the salesperson reflects on their learning (evaluating). Reflection has been argued to lead to a higher degree of learning and higher levels of competence and confidence (Brockbank and McGill 1998; Rothwell and Ghelipter 2003). Peltier et al. suggest that the reflection process can be conceptualized as "awareness—critical analysis—and change" (2005, p. 252). In our setting, the salesperson experiences that sensing leads to more learning, which again affects selling-related knowledge (awareness). The salesperson analyzes the effect of this learning (critical analysis), and a positive outcome will increase their confidence in their way of learning (exploratory or exploitative learning). On the other hand, if the outcome is negative, the salesperson might question their ways of learning and thinking (the change).

The conceptual model is presented in figure 1.

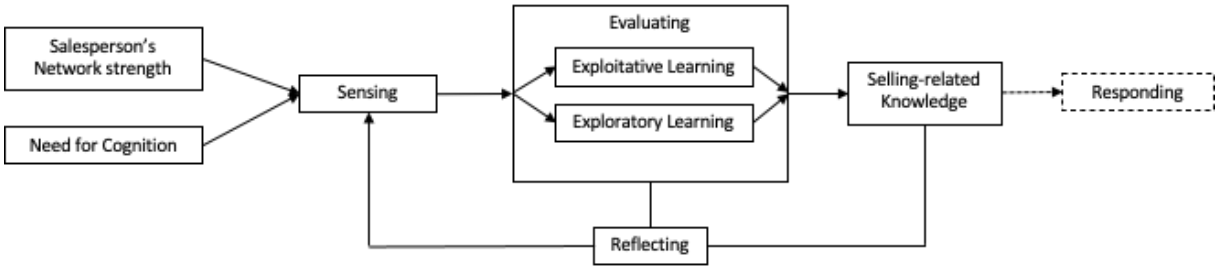

Figure 1. Conceptual model

We now discuss the variables in the model in more detail and present propositions derived from the model.

Development of Propositions

In line with listening theory, the listening process starts with sensing and does not require any cognitive treatment (Comer and Drollinger 1999). In DSLL, sensing includes using online resources to collect information. This can include reading newspapers or trade magazines online to collect business and financial information about prospects or customers. However, sensing is also dependent on the composition of the salesperson's online network, which is an essential factor in accessing new and novel information. According to "the strength of weak ties" theory (Granovetter 1973), people with networks with weaker ties have

access to more novel information than people with networks with stronger ties. In strong-ties networks, people tend to know each other and therefore have more of the same information. In weak-ties networks, relationships are distant and infrequent, and therefore these networks provide access to more novel information.

Weak ties have also been shown to have a stronger effect on individual innovation than strong ties (Wang et al. 2015). This is in line with the principles of connectivism, particularly principles one and two: learning and knowledge rests in diversity of opinions, and learning is a process of connecting specialized nodes or information sources (Siemens 2005). Weak ties provide new and novel information, while strong ties confirm what is already known. People with weak-ties networks tend to search for more information and have more diverse information (Powell and Smith-Doerr 1994). Therefore, a salesperson whose network contains more weak ties should access more novel information from multiple sources not connected to one another. Hence, we propose the following:

Proposition 1: A network with a higher degree of weak (strong) ties will increase (decrease) the impact of the level of sensing.

Another antecedent that will influence sensing is the need for cognition, defined as an "individual's dispositional tendency to engage in and enjoy thinking" (Cacioppo and Petty 1982, p. 116). The need for cognition has been shown to influence the amount of effort devoted to cognitive elaboration, and people with higher need for cognition have better learning abilities (Cacioppo et al. 1996). People high in need for cognition are also more innovative than those low in need for cognition (C.-H. Wu et al. 2014). The need for cognition substantiates several of the principles of connectivism, as learning is a process of connecting specialized nodes or information sources and perceiving connections between fields, ideas, and concepts beyond what is currently known (Siemens 2005). Salespeople high in the need for cognition will spend more time building their digital networks and connecting nodes and information sources and will more readily see connections between fields, ideas and concepts and want to know more. Therefore, a high need for cognition will have a positive impact on sensing, and we propose the following:

Proposition 2: An increased need for cognition will lead to more sensing.

According to Ramsey & Sohi (1997, p. 128), evaluating "involves cognitive processes that allow the salesperson to assign meaning to the message and determine its importance." According to Castleberry & Shepherd (1999), evaluating or processing includes three steps: "a) understanding the meaning of the message, b) evaluating the message, and c) retaining the message in memory" (Castleberry and Shepherd 1999, p. 31). Evaluating the meaning and importance of the message is a cognitive process in which learning also occurs. The type of learning is dependent on how people address change and whether they are promotion oriented or prevention oriented as proposed by regulatory focus theory (Higgins 1997). Regulatory focus can be chronic, which is defined as a stable trait, or situational, which is affected by factors both inside and outside the firm (Higgins 2002). Situational regulatory focus has been shown to mediate the relationship between situational antecedents and different forms of performance (Katsikeas et al. 2018). We therefore argue that exploitative and exploratory learning will mediate the relationship between sensing and selling-related knowledge, albeit in different ways.

Exploitative learning involves "the use and development of things already known" (Levinthal and March 1993, p. 105) and focuses on refinement and efficiency (Katsikeas et al. 2018) and implementing existing knowledge and skills (Kostopoulos and Bozionelos 2011). Exploitative learning helps meet the needs of existing customers by deepening existing knowledge of customers and prospects (Jansen et al. 2009). By contrast, explorative learning focuses on pursuing new information (Gupta et al. 2006), attracting new customers (Abernathy and Clark 1985), and meeting the needs of emerging customers and markets (Jansen et al. 2009). Exploratory learning focuses on the "pursuit of new knowledge" (Levinthal and March 1993, p. 105) and leads to a broader search for new selling techniques and novel information the salesperson does not possess (Katsikeas et al. 2018).

According to Schilling et al. (2003, p. 45), "when a person gains experience and knowledge in an area, he or she creates new cognitive nodes of knowledge, and strengthens the connections between those nodes. The more knowledge nodes that are developed, and the more links developed between them, the larger and denser the scaffolding within which to build new knowledge structures." This is in accordance with the sixth principle of connectivism, which states that the "ability to see connections between fields, ideas, and concepts is a core skill" (Siemens 2005).

We now focus on the outcomes of listening and learning in digital environments. According to Verbeke et al. (2011), selling-related knowledge is strongly correlated with sales performance. Defined as "the depth and width of the knowledge base that salespeople need to

size up sales situations, classify prospects, and select appropriate sales strategies for clients" (Verbeke et al. 2011, p. 409), selling-related knowledge provides salespeople with the "know-why" of their products, the "know-how" by which the solution or product will produce value for a customer, and the "know-who" regarding the customers who are most likely to buy the solution (Verbeke et al. 2011).

To utilize knowledge, one needs to collect information, understand how this information relates to the situation and can be used (evaluating), and assign the information to the appropriate conceptual grid (selling-related knowledge) (Weitz et al. 1986). Evaluating is a cognitive ability that is one of the most valid predictors of learning (Oakes et al. 2001). In a study using a sample of salespeople from a single industry, Roman et al. (2005) found that a salesperson's listening behavior correlates positively with their ability to use customer knowledge. Sujan et al. (1988) showed that a salesperson's knowledge structure is a significant predictor of their level of effectiveness. Based on the above, we argue that the effect of sensing on selling-related knowledge is mediated by exploitative and explorative learning, albeit with different focuses. We therefore propose the following:

Proposition 3a: Exploitative learning mediates the relationship between sensing and selling-related knowledge on proven methods of selling.

Proposition 3b: Exploratory learning mediates the relationship between sensing and selling-related knowledge on more novel methods of selling.

Reflecting has been defined as "active, persistent and careful consideration of any belief or supposed form of knowledge" (Dewey 1933, p. 9). The basis of reflection is evaluating what one knows and then deciding on future actions (Peltier et al. 2005). Although much used in the literature on education, reflection is also an important managerial trait, as it involves looking back on one's experience and taking action and learning from it (Raber Hedberg 2009). Reflection on current and past knowledge enhances understanding (Paladino 2008) and can reveal the need for new knowledge (Schilling et al. 2003), which requires the collection of new information. Reflecting on one's knowledge structures, such as selling-related knowledge, facilitates the collection of new information (Weitz et al. 1986). Reflection corresponds to the learning theory of connectivism (Siemens 2005), especially the principles related to the need to know more. We argue that salespeople who reflect on what

they know, either through the evaluation process or selling-related knowledge, will gather more information to cover current knowledge gaps. Hence, we propose the following:

Proposition 4a: Selling-related knowledge mediated by reflection increases evaluation/learning.

Proposition 4b: Selling-related knowledge mediated by reflection increases sensing.

Discussion and Research Agenda

Theoretical implications

In industrial markets, the power balance between the seller and buyer is moving toward the buyer (Singh et al. 2019). Much of this shift is due to advances in technology, such as the Internet, that allow customers to collect extensive information about possible solutions before contacting a seller (Adamson et al. 2012), thereby reducing physical touchpoints between seller and buyer. Although the trend of digitalization has been evident for a long time, it was accelerated by the Covid-19 pandemic (Hartmann and Lussier 2020), which moved most B2B interactions online. For many B2B companies, this change is permanent (Gavin et al. 2020). A potential negative outcome of digital interactions is greater difficulty in establishing trust in the seller-buyer relationship due to increased distance and anonymity, which in turn could reduce sales performance (Kozlenkova et al. 2017).

In physical settings, a prominent construct for building trust and strong customer relationships is active listening (Castleberry and Shepherd 1993; Ramsey and Sohi 1997; Marshall et al. 2003). However, the traditional listening concept is insufficient for explaining how to build a strong relationship in a digital environment with fewer physical meeting points between the seller and buyer. Nonetheless, the importance of listening is increasing as sellers move from transactional to relationship selling (Marshall et al. 2003) and buyers demand greater added value from salespeople (Piercy 2010).

We extend and revise the traditional concept of listening to present a theoretical framework grounded in the dual-process theory of supportive message outcomes (Bodie 2009) and in connectivism (Siemens 2005). A revised perspective of listening, Digital Sales Listening and Learning (DSLL), is developed to illustrate how salespeople listen and learn in a digital environment and increase their selling-related knowledge. Increased knowledge has been shown to be the strongest predictor of a salesperson's (traditional) listening skills

(Bergeron 2004) and to have the strongest positive impact on relationship quality between seller and buyer (Palmatier et al. 2006). Active listening, a well-established construct in the pre-digital age that strongly impacts relationship and sales performance (Itani et al. 2019), is still important when the seller and buyer in a B2B market meet in person. However, as interactions are increasingly limited to the digital environment, this traditional construct requires revision.

Our first contribution is an extension of knowledge of listening to the digital environment. Listening starts before the seller and buyer have established any contact, which is important because a buyer often moves through several phases of the purchasing process without contacting a seller (Adamson et al. 2012). Consistent with the categorization scheme of MacInnis (2011), we propose a revised model of listening in the digital environment that illustrates how individual salespeople can collect information from digital sources and use this information to increase their knowledge about prospects and customers. DSLL is not meant to replace the original listening model; rather, it is a revision of the construct to explain listening in an online environment.

Our second contribution pertains to salespeople's learning through listening in an online environment. How salespeople learn through listening has received sparse attention in both the traditional listening literature and the literature on how to motivate salespeople to collect and share marketing intelligence. Grounded in regulatory focus theory, we argue that salespeople learn through exploratory and exploitative orientations (Levinthal and March 1993). Exploitative learning increases when salespeople focus on leveraging existing knowledge and experience, that is, on proven and traditional ways of connecting with customers. Exploratory learning, on the other hand, increases when salespeople are open to experimenting with creative and innovative techniques (Katsikeas et al. 2018). These different learning orientations will have different impacts on the outcome, selling-related knowledge. Exploitative learning will build on the established foundation of the salesperson's selling-related knowledge and strengthen what is already known, whereas exploratory learning will challenge the salesperson's foundation of selling-related knowledge and broaden their perspective on customers, prospects, markets, and sales strategies.

Finally, this paper also addresses the call from Verbeke et al. (2011) to examine how salespeople use digital networks to source new and relevant knowledge.

Managerial implications

The DSLL model offers several important managerial implications. First, the skillset for DSLL differs from that needed for traditional listening. In traditional listening, it is important for the salesperson to ask probing and insightful questions but leave most of the talking to the customer. By contrast, when salespeople listen online, they do not meet the customer (at least not initially), and the amount of information can be overwhelming, possibly leading to information overload. One way to mitigate information overload is to know what one is looking for, but this can be difficult, especially for a salesperson with an exploratory orientation. A salesperson's product knowledge increases the collection of relevant information from the market (Mariadoss et al. 2014). Operationalizing the business strategy to understand how it impacts sales activities has been argued to be important for improving sales effectiveness (Cespedes 2014). Therefore, focusing on online listening can have important implications for both selection and training. Sales organizations need salespeople skilled in using social media and online technology as part of their work. Navigating and leveraging digital platforms to extend salespeople's market, customer and competitive intelligence activities (Le Bon and Merunka 2006) should be an important part of sales training programs.

Second, listening online can be time effective for salespeople, but making sense of the collected data can also be challenging and time-consuming. The collected data must be shared within the organization to build knowledge at the organizational level. Sales enablement is one structure that could help organizations both support salespeople in their efforts and ensure that data is shared to promote collective learning among salespeople and at the organizational level. Defined as "an overarching dynamic capability that aligns varied firm resources to benefit the customer journey and selling productivity" (Peterson et al. 2020, p. 155), sales enablement could aid the collection of information from salespeople and ensure a holistic knowledgebase of the collected information. This collective knowledge could increase an individual salesperson's understanding of the collected information and direct their attention toward specific types of information. Sales enablement could also provide important support for salespeople by linking the strategy of the firm to what salespeople should focus on and by supporting salespeople to improve their online sensing. Sales enablement can do this through effective onboarding and training of salespeople and through support of digital solutions that increase the efficiency of online sensing.

Research agenda

Ahearne et al. (2021) argued for increased research on the buyer-seller interaction because the information asymmetry brought by digitalization is shifting power toward the buyer. The proposed DSLL model of digital sales listening and learning builds on some of the same assumptions while focusing on how the seller can use these digitalization shifts to access information and increase the seller's relevance to the buyer. Derived from this technological shift and the DSLL model, we propose an agenda for research on intelligence collection and learning by salespeople that covers several perspectives.

Market intelligence perspectives

The DSLL model focuses on how salespeople can use the digitalization shift to collect information, and accordingly, we argue that the network strength of salespeople is important, as individuals with weaker network ties collect more novel information (Granovetter 1973; Powell and Smith-Doerr 1994; Wang et al. 2015). The notion that technology is an important motivator for collecting intelligence is not new. Previous research has argued that the use of technology increases salespeople's motivation for collecting intelligence (Ahearne et al. 2008; Marshall et al. 1999). Building on this, Itani et al. (2017) found that salespeople's social media use had a positive effect on their collection of competitive intelligence and that this collection had a positive effect on sharing information with buyers (Itani et al. 2020), increasing the amount of intelligence available to the seller. Although the importance of digitalization for collecting intelligence in general is well documented, less is known about the impact of digital channels on the collection of specific types of intelligence. Network strength provides a possible explanation of the type of intelligence collected, i.e., whether it is novel and new (as in a weak-ties network) or already known (as in a strong-ties network). More research is needed to understand how digital channels affect the type of intelligence collected and what types of information sellers should focus on as customers collect more information through digital channels.

Organizational perspectives

We have argued that sales enablement (Peterson et al. 2020; Rangarajan et al. 2020), could be an important organizational structure for helping salespeople make sense of the intelligence they collect and sharing this intelligence with the organization through their internal networks. Access to internal networks has been shown to positively impact both the collection and sharing of intelligence (Woisetschläger et al. 2016). One important sales

enablement service is the use of technology tools to help salespeople sell more effectively (Rangarajan et al. 2020). For example, a CRM system can be used to present important information to salespeople to help them better understand their customers (Peterson et al. 2020). However, some technology systems (such as sales force automation systems (SFAs)) may have negative effects on the collection of market intelligence from salespeople (Mariadoss et al. 2014). Future research should therefore focus on how technology tools impact the collection of intelligence by salespeople. The organizational structures of sales enablement need to provide relevant information for helping salespeople move customers further through the buying funnel. A promising research avenue is identifying the factors that sustain salespeople's motivation to listen internally and collect and use intelligence in organizational structures where intelligence is distributed through sales management and technology services.

Learning perspectives

The DSLL model proposes an effect of online listening on selling-related knowledge through exploitative and exploratory learning. Changes in selling-related knowledge and the salesperson's experience of these changes will lead to a feedback loop that influences both sensing and learning through reflection. This feedback loop is closely related to the concept of experiential learning (Kolb 1984), where personal experience is the basis for reflections and learning (Matsuo 2011). The role of reflection raises questions about the kinds of experiences that affect the relevance of reflection to changes in selling-related knowledge. This also implies that the findings of research leveraging the model will be time dependent and that longitudinal studies could uncover important knowledge on how learning affects the development of salespeople's selling-related knowledge.

Other perspectives

Several control variables have been tested in research using the traditional listening model, including gender. Castleberry et al. (2004) and Román et al. (2005) found that women were more effective at listening than men based on traditional listening in a face-to-face setting. Exploring such gender-related listening abilities in the context of DSLL represents an interesting research avenue.

Although not conceptualized in this paper, there is a correlation between selling-related knowledge and sales performance in general (Verbeke et al. 2011). We have argued that by showing how salespeople can collect information before meeting a prospect, the

DSLL model precedes the traditional listening model. Customer-qualification skills are related to selling-related knowledge but focus on the "salesperson's learned proficiency to qualify or categorize prospects and customers" (Román and Iacobucci 2010, p. 368) and are therefore a narrower concept. It would be interesting to examine how customer-qualification skills correlates with narrower performance goals, such as the acquisition of new customers, since DSLL can be used to monitor potential customers' digital activities to uncover potential purchase intentions before they contact a seller.

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Article 3: "Is more always better? Motivators and obstacles for the collection of specific types of information by B2B salespeople."
Submitted to *Information and Organization* in 2022 (Mehl)

Is more always better? Motivators and obstacles for the collection of specific types of information by B2B salespeople.

Abstract

This paper discusses the types of competitive intelligence (CI) that business-to-business (B2B) salespeople collect and motivators and obstacles for the collection of specific types of intelligence. These issues are explored by using grounded theory to conduct a qualitative study of the types of intelligence that B2B salespeople collect. Four major findings are obtained. 1) Most intelligence collected by salespeople is collected for the salesperson's own, immediate interest. 2) Before meeting the customer, the salesperson mostly focuses on whether the customer is financially strong and who the decision-makers are. In the first meeting, the focus is on understanding the customer and identifying needs. 3) The major obstacles are time and role overload, which further increase the egocentric focus on intelligence collection. 4) Organizations do little to sincrease intelligence collection by salespeople. To enhance the collection of a broader range of intelligence, organizations need to increase their focus on information collection by salespeople, especially through their sales managers.

Keywords: B2B salespeople, sales managers, Competitive intelligence, Type of intelligence, role overload

1.0 Introduction

The demand for B2B salespeople to collect competitive intelligence (CI) from the marketplace is growing, and therefore a significant amount of research has focused on what motivates salespeople to collect CI, with a main focus on the amount (customer and competitor) of CI collected (Le Bon & Merunka, 2006). Another topic of discussion has been whether CI should be used as input by organizations for strategic decision-making (Chonko et al., 1991; Webster Jr., 1975) or whether it is more valuable at the individual-level (Agnihotri & Rapp, 2011; Rapp et al., 2011), that is, tactical. The specific type of information collected is also increasingly important for determining the value of CI, as more complex sales approaches focus on certain types of information about customers. The present paper therefore aims to provide a deeper understanding of the types of information that salespeople collect and how the organization can affect the type of intelligence collected.

The important trends driving the need for more intelligence include the growing knowledge and power of customers (Lee, 2011) and the use of more advanced sales approaches by sellers (Tuli et al., 2007; Ulaga & Kohli, 2018). First, the knowledge and buying power of B2B customers have increased in recent years due in part to digitalization and the accompanying greater access to information (Lee, 2011). Consequently, customers are empowered to move through a majority of the buying process before making contact with a potential seller (Adamson et al., 2012), which heightens the pressure on salespeople to bring value to their relationships with customers: " … if the seller cannot bring added-value to the relationship by identifying new opportunities for the buyer to gain competitive advantage in the end-use marketplace, then the seller is no more than a commodity supplier …" (Piercy, 2010, p. 353). The increased use of buying centers on the customer side (Paesbrugghe et al., 2016) places further pressure on salespeople to collect more detailed information about customers' internal lines of power and influences on the purchase decision (Ingram, 2004).

Second, in response to this increased power and expectations from customers, sales organizations are looking for ways to avoid commoditization by positioning themselves as valued partners. Powered by the move from transactional to relationship selling practices (Marshall et al., 2003), sellers are expanding their use of advanced selling approaches (Marshall et al., 2003) like solution-based (Tuli et al., 2007) and value-based selling (Ulaga & Kohli, 2018). Value-based selling requires detailed intelligence on the strategic decisions made by customers as well as a deep understanding of their value-creation processes in order to set the price based on the actual value added (Töytäri et al., 2015). Selling solutions (combining products with services) involves a deeper level of understanding of the potential customer's business, with a greater "need to focus on details" (Ulaga & Loveland, 2014, p. 122). These two trends increase the pressure on salespeople not only to collect more intelligence but also to focus on the types of intelligence collected in order to better meet customers' expectations. This need for a deeper understanding of customers and their markets led Ingram (2004) to describe salespeople as applied social scientists.

Several reasons have been offered for why managers do not collect information from salespeople, most notably that salespeople lack the competence and training to collect the right information (Rapp et al., 2011) and do not fully understand the complex interrelationships in the marketplace (Klompmaker, 1980). These limitations could be largely resolved by focusing on the collection of specific types of intelligence by the salesforce. Accordingly, this paper argues that although motivating salespeople to collect more information is important, focusing on the type of information collected is increasingly

relevant. In other words, simply collecting more information might not always be better. Therefore, the aim of this paper is to discuss the types of CI collected by B2B salespeople, leading to the following research questions: 1) What types of CI are collected by B2B salespeople? 2) What are the obstacles and motivators in the collection of specific types of intelligence by salespeople?

This paper contributes to the literature on CI collection by B2B salespeople in several ways. First, it develops an understanding of the types of information that salespeople collect when not directed by their company to collect information, which has not been examined previously. Second, the mechanisms that motivate salespeople to collect specific types of information that might have greater value for the selling organization and the customer are discussed.

This paper uses the term "competitive intelligence" (henceforth "CI" or just "intelligence"). Several interchangeable names have been given to information collected about the external environment, but competitive intelligence is one of the most frequently used (Agnihotri & Rapp, 2011; Ahearne et al., 2013; Ali Köseoglu et al., 2015; Hughes et al., 2013; Itani et al., 2017; Kalra et al., 2020; Mariadoss et al., 2014; Rapp, Bachrach, et al., 2014; Rapp et al., 2011). The next section presents a short review of the literature on CI collection by B2B salespeople, focusing on the type of CI collected and the level (strategic vs. tactical) of intelligence. Then, the methodology and the findings of the quantitative research are presented. Finally, the findings, implications for practice, limitations, and future research directions are discussed.

2.0 Literature review

Salespeople are boundary spanners (Burt, 2004) who, because of their proximity to customers, are in a unique position to collect CI from the markets they operate in. Through their established relationships with customers, they can obtain hard-to-come-by (Arditto et al., 2019) and sensitive (Evans & Schlacter, 1985) intelligence about customers and competitors. Consequently, salespeople are widely used as a source of CI (Le Meunier-FitzHugh & Piercy, 2006), but it has been argued that they remain an underutilized resource (Liu & Comer, 2007; Pass et al., 2004).

Collecting, sharing and using CI has potential strategic value at the organizational level (Said et al., 2015) and is an important part of market orientation (Schlosser & McNaughton, 2007). CI from the salesforce is viewed as the single best internal source of information (Rapp et al., 2011) that can serve as an early warning of changes in customer

preferences (Lambert et al., 1990) and competitors' actions (Le Meunier-FitzHugh & Piercy, 2006). The collection of CI can therefore be argued to have a critical role in creating superior competitive advantage (Hughes et al., 2013). The extensive body of research focused on what motivates salespeople to collect CI has mainly focused on the amount rather than the type(s) of CI collected (Bonfrer et al., 1992; Le Bon & Merunka, 2006).

2.1 Types of CI collected

A search of the literature uncovered nine articles assessing types of intelligence collected primarily by salespeople spanning a period of 51 years. The main conclusion is that the type of intelligence collected is mainly of value to the selling organization and, in particular, the salesperson and is of less value to the customer. In addition, the collected intelligence is mainly short-term oriented and not very organized (Evans & Schlacter, 1985; Keegan, 1974; Pass et al., 2004). This can pose a challenge when customers move through much of the buying process without contacting a salesperson until the end (Adamson et al., 2012) and then expect the salesperson to bring some added value to the relationship (Piercy, 2010).

The articles describe four main categories of intelligence (Pass et al., 2004): 1) customer intelligence, which revolves around customers' reactions to the company's prices and marketing, competitors' actions, and how the customers learned about the company (Ali Köseoglu et al., 2015; Chonko et al., 1991; Evans & Schlacter, 1985; Gordon & Schoenbachler, 1997; Grove et al., 1992); 2) competitor intelligence, which focuses on who the competitors are, their prices and types of products and services provided, and changes in these products and services (Ali Köseoglu et al., 2015; Gordon & Schoenbachler, 1997; Grove et al., 1992; Pass et al., 2004); 3) market intelligence, which includes intelligence about governmental regulations and rulings, access to resources, and economic climate (Keegan, 1974); and 4) customers industry intelligence, which comprises intelligence about changes in customers' products, services and prices, the relationship of customers with end-customers, and the impact of technology changes (Pass et al., 2004). Information in this last category is collected less frequently than any of the other categories (Evans & Schlacter, 1985).

None of the respondents in these articles were salespeople; most were managers (e.g., Pass et al., 2004), and it would be reasonable to assume that salespeople collect the type of intelligence that management asks them to collect. Consequently, knowledge of intelligence collection from the salesperson perspective is lacking.

2.2 Tactical or strategic?

Earlier research on the use of information from B2B salespeople focused on two broad categories: sales forecasting and input for strategic management decisions (Chonko et al., 1991; Evans & Schlacter, 1985; Webster Jr., 1975). These emphases argue that information collected by the salesforce is used as strategic input by firms. Strategic information can be categorized as long-term oriented and thus may be less interesting to salespeople, who work in a more short-term environment (Rapp et al., 2011). Salespeople might view the collection of such information as yet another organizational process that offers little or no value to the individual salesperson (Agnihotri & Rapp, 2011; Helm et al., 2014), making them reluctant to participate.

The concept of salesperson competitive intelligence (SCI) was developed to describe "individual-level knowledge about competitors and the competitive environment that can be used tactically to aid in enhancing salesperson performance" (Rapp et al., 2011, p. 142). It has been argued that intelligence collected by the salesforce should be viewed as more tactical and mostly relevant for the individual salesperson. A positive relationship between SCI and individual performance has been established (Rapp, Agnihotri, et al., 2014).

In summary, the above review shows that research focused on B2B salespeople as collectors of intelligence has focused on the amount of intelligence collected, and the few studies that have examined the types of information salespeople collect have adopted the managers' perspective and asked managers what type(s) of information they collect from salespeople. In addition, discussions of the tactical versus strategic interest of the collection of intelligence have been largely conceptual (Rapp et al., 2011; Webster Jr., 1975) and have not focused on the type(s) of intelligence collected.

3.0 Methodology

To address the gaps in the literature identified above, the objective of this study was to examine the types of intelligence that B2B salespeople collect and to identify the motivators and obstacles for the collection of certain types of intelligence. A qualitative study was adopted as the research methodology, as such a study is appropriate for exploring and understanding the meaning that individuals ascribe to a social problem (Creswell, 2014). Grounded theory is well suited for studying processes and social interactions and therefore was used here to study the process of collecting specific types of CI (Glaser & Strauss, 1967). In addition, the use of grounded theory is well established in research on B2B selling (Johnson, 2015).

3.1 Sampling procedure

Sources for the research were collected using theoretical sampling (Johnson, 2015; Töytäri & Rajala, 2015). "Theoretical sampling involves selecting sources with intimate and extensive knowledge pertinent to the research questions" (Johnson, 2015, p. 263). As the main objective of this paper was to increase the understanding of intelligence collection by salespeople, specifically the types of intelligence collected, B2B salespeople were the unit of interest.

Several organizations located in Norway were contacted via LinkedIn or e-mail and asked if they were willing to participate in the study. The e-mail or LinkedIn message was sent to the CEO and/or sales manager of the organization. Four of seven organizations accepted the invitation to participate and granted access to salespeople. The salespeople included in the research were selected by the sales managers, and three salespeople from each organization participated. The sales managers were asked to choose among salespeople who differed in number of years in sales, age, and gender. Similarly, the different organizations that were contacted were selected to ensure diversity in the following characteristics: size, local or multinational, and, to some degree, type of industry.

This first wave of inquires resulted in only male salespeople. A second wave to increase female participation was therefore conducted. A post on LinkedIn was used to invite female B2B salespeople to participate in the research. This yielded five female respondents from different companies. The inclusion of female salespeople is important for at least two reasons. 1) B2B salesforces often consist of both male and female personnel, although the share of female sales representatives is typically smaller. In this study, female salespeople represented less than 30% of the total sample size. Although there are no official statistics on the number of female salespeople in the Norwegian market, an industry expert headhunter familiar with B2B sales recruitment considered this share reasonable. 2) Research has argued that female salespeople differ from their male counterparts in several aspects, like adaptive selling and customer orientation (Franke & Park, 2006), which might lead to differences in intelligence collection between males and females since customer orientation has been linked to intelligence collection (Hughes et al., 2013).

Overall, the sampling procedure yielded 17 B2B salespeople from nine different organizations. The literature provides support for the acceptability of this number of interviews. Specifically, Marshall et al. (2013) concluded that 15-30 interviews is appropriate and showed that qualitative researchers in the US tend to adopt larger sample sizes than qualitative researchers in other countries. A meta study found that 10 in-depth interviews are

commonly used (Mason, 2010), and an investigation of actual theoretical saturation found that saturation becomes evident after six in-depth interviews and definitely evident after 12 in-depth interviews (Guest et al., 2006). In the present research, theoretical saturation was clearly evident after nine interviews, despite the level of variation among the salespeople and their organizations. In line with discriminant sampling, an additional eight interviews were conducted, which included the five female B2B salespeople (Johnson, 2015). These additional interviews did not alter the initial conclusions. Therefore, given the small population of B2B salespeople in Norway, especially compared with the US B2B market, and the focused topic of the research, i.e., the process of intelligence collection among salespeople, it is argued that 17 in-depth interviews covering nine different organizations is an acceptable sample size.

Of the participating organizations, four were small or medium Norwegian-based firms, one was a Swedish-based multinational, one was a Swedish-based Nordic firm, and three were US-based multinational organizations. Most of the organizations were in the IT industry, one was in construction, one was a consultant company, and one was a non-profit organization. See Table One for a summary of the characteristics of the organizations.

Company	Industry	No. of employees**	Net. Income 2019 (USD)*	Part of multinational	Country of origin
Company 1	IT-Infrastructure	51-100	6-50 mill	No	Norwegian
Company 2	Construction	101-150	101-150 mill	Yes	Swedish
Company 3	IT-solutions	101-150	6-50 mill	Yes	US
Company 4	IT-distribution	51-100	351-400 mill	Yes	US
Company 5	IT-consultancy	51-100	101-150 mill	No	Norwegian
Company 6	IT-application	Less than 50	Less than 5 mill	No	Swedish
Company 7	IT-cloud	51-100	6-50 mill	Yes	US
Company 8	Consultant	Less than 50	6-50 mill	No	Norwegian

Company 9	Non-profit	Less than 50	Less than 5 mill	No	Norwegian
* All numbers are based on sales in the Norwegian market					
** Information collected from proff.no (a organization providing company information and financial statements)					

Table 1. Participating organizations.

The ages of the 17 B2B salespeople ranged from 27 to 58, with a mean of 42. The number of years in the current position ranged from 2 weeks to 30 years, with a mean of 6.3 years, and the number of years in B2B sales ranged from 3 to 30, with a mean of 16 years. The number of customers served by an individual salesperson varied from one to approximately 400. See Table Two for a summary of the characteristics of the B2B salespeople.

Code	**Date**	**Gender**	**Industry**	**No. of years in current position**	**No. of years in B2B sales**	**Type of customers**	**No. of customers**	**Complex/Simple solutions**
BtoB1	17.12.2019	M	Technology	30	30	Both private and public sector	30	Complex
BtoB2	18.12.2019	M	Construction	21	21	Private sector	350	Semi complex
BtoB3	18.12.2019	M	Construction	2 weeks	20	Private sector	(Just started)	Semi complex
BtoB4	18.12.2019	M	Construction	4	12	Private sector	400	Semi complex
BtoB5	19.12.2019	M	Technology	2	25	Private sector	2 to 3	Complex
BtoB6	19.12.2019	M	Technology	1 month	15	Private sector	4	Complex
BtoB7	19.12.2019	M	Technology	7 months	20	Private sector	140	Complex
BtoB8	19.12.2019	M	Technology	5	5	Both private and public sector	40	Semi complex
BtoB9	19.12.2019	M	Technology	5	35	Both private and public sector	20	Complex
BtoB10	20.01.2020	M	Technology	2	4	Private sector	25	Semi complex
BtoB11	20.01.2020	M	Technology	18	18	Private sector	2	Semi complex
BtoB12	20.01.2020	M	Technology	6	25	Private sector	1	Semi complex
BtoB13	28.01.2020	F	Technology	2	3	Both private and public sector	5 to 6	Complex
BtoB14	28.01.2020	F	Technology	6 months	3	Both private and public sector	50 to 80	Simple
BtoB15	29.01.2020	F	Technology	2	6	Both private and public sector	10 to 15	Complex

BtoB16	29.01.2020	F	Consultant	5	20	Private sector	300 to 400	Semi complex
BtoB17	31.01.2020	F	Nonprofit	4	18	Private sector	50	Simple

Table 2. Characteristics of the interviewed B2B salespeople

3.2 Data collection

To increase the reliability of the research, field data were collected using semi-structured interviews (Beverland & Lindgreen, 2010) developed by the author based on the literature review. This guide was used as loosely as possible so that the respondent could determine the course of the interview. The interview guide was evaluated by other researchers who were knowledgeable in the research area and qualitative research in general and was pre-tested on the first three respondents. As no major issues were found, these three initial respondents were included in the total sample of respondents. The interview guide is presented in Appendix 1.

All but one of the interviews were conducted face to face; the interview with salesperson BtoB1 was conducted via video conference. Each interview lasted from 40 minutes to one hour and 30 minutes. All interviews were audio recorded, and all but two (BtoB5 and BtoB17) were transcribed verbatim. In the two exceptions, all relevant information regarding the semi-structured interview guide was transcribed verbatim, and the rest of the interview was omitted. This resulted in a total of 120 transcribed single-spaced pages, with an average of seven pages per interview. All interviews were conducted between December 2019 and January 2020.

Before starting each interview, the respondent was assured of their anonymity, that no information would be shared with their management or others in the organization, that no questions would include any confidential information, and that their company name would be used in the work published. All respondents were also reassured that the interviews were voluntary and that they had the freedom to cancel the interview at any time. This point was especially emphasized with the male respondents, as they were selected by their managers. This point was emphasized to reduce the potential for information bias or socially desirable responses (Malshe et al., 2012).

Data and transcript management were conducted using Nvivo 12 for Mac. The data analysis started with open coding (Strauss & Corbin, 1998) using line-by-line coding without pre-defined coding categories (Glaser & Holton, 2004). The next stage was axial coding, where the codes developed during the open-coding process were grouped under higher-order themes (Strauss & Corbin, 1998). The last stage was selective coding and developed the core

categories (Strauss & Corbin, 1998). This approach to coding has been used previously in several papers in the sales domain (Bush et al., 2007; Johnson, 2015; Malshe et al., 2012). Examples of codes with example statements are presented in Table Three.

Selective codes	Axial codes	Statements
Task/work overload	Time, Task, Customer knowledge, Complexity of the buying process, Complex offering	"The product documentations are 53 pages, so yes, complex" (Complex offering); "There are so many cases we work with every day, and few are very similar" (Complexity of the buying process); "When you get to a meeting with a customer, they are already 70% through the process" (Customer knowledge); "My weeks are busy; two days of the week I am traveling and conducting meetings. Those meetings generate work, and then I have three days to write governmental contracts, offers, follow up on delivery, get ahold of my consultants, get back to other customers and so on" (Task); "I probably should know more about the customer before meeting with them, but I do not have the time " (Time).
Management focus on information (through people or systems)	Easy access to management, Management asking for information, Collecting as part of the contract	"We are a small company so it's a short distance to management—very different from where I used to work with several thousand employees" (Easy access to management); "I always had an interest in collecting information that was not driven by my managers" (Management asking for information); "Not part of the contract—you have to figure it out yourself" (Collecting as part of the contract).
MIS system logging of specific information	Frustration, Not using, Formalizing processes	"This was the reason why I didn't enjoy my old job. It was only reporting, reporting, reporting. We were supposed to spend one full day on reporting. It was very controlling, and I asked what it was used for" (Frustration); "We are not especially good at reporting information in the systems. We are not good at using internal systems in general" (Not using); "I think there should be a template for what you should do when you go visit a customer" (Formalizing processes).

Table 3. Examples of coding

To increase the trustworthiness of the coding and the findings and address possible biased subjectivity (Johnson, 2015), the coding process was evaluated by an independent judge based on four randomly selected interviews. There was a high level of overlap in the coding, and any disagreements were discussed and resolved. As a result, one code was removed, and two others were moved. None of these changes altered the main result of the coding.

Next, to address and foster reflexivity (Barry et al., 1999), peer briefing was used (Creswell & Miller, 2000). An external party critically reviewed the project as a whole, together with the coding and three randomly selected interviews. The external reviewer found no major issues with the structure or the conclusion. Minor differences were discussed and resolved.

Last, member checking (Creswell & Miller, 2000) was used to increase the credibility of the work. Two random interviewees were contacted and asked to review the arguments and the conclusion of the paper in order to assess the conclusion through "the eyes of the relevant population" (Johnson, 2015, p. 268). Both salespeople supported the arguments and conclusion of the paper independently of each other.

4.0 Findings

This article addresses the following research questions: 1) What types of CI are collected by B2B salespeople? 2) What are the obstacles and motivators in the collection of specific types of intelligence by salespeople? In this section, the types of intelligence collected by B2B salespeople are examined first, and then the second question is addressed using the MOA framework (Maclnnis & Jaworski, 1989). The MOA framework originally posited that the willingness of individuals to engage in certain behavior is a function of their motivation, opportunity, and ability (MOA) (Maclnnis et al., 1991). The framework has subsequently been used to explain different behaviors, e.g., information processing (Gruen et al., 2006), cross-selling and upselling by salespeople (Johnson & Friend, 2015), strategy implementation among salespeople (Johnson & Sohi, 2017), and knowledge sharing among employees (Siemsen et al., 2008).

4.1 Types of intelligence collected

The collected information mainly focuses on the first category of information discussed in the literature review, customer intelligence. The important types of intelligence and corresponding channels are presented in Tables Four and Five. A division was noted

between what is collected before and during the physical meeting with the customer. Before meeting the customer, the focus is on who will be attending the meeting; who the decision-makers are (and will they be attending the meeting); whether the salesperson knows anyone in the company (through their network); and whether it is worthwhile to pursue the customer based on their financial situation.

"So, I always ask who will be attending the meeting and what their roles are in the meeting." (Male, technology)

Important information	**No. of mentions**
Collected before meeting	
Who´s who / decision-makers (and reading about them on social media)	16
Who will be attending the meeting	12
Economic situation (can they buy?)	8
What they do (type of business)	5
What does the customer want	4
Reading annual reports	3
Trying to understand the culture of the company by reading their webpages	3
Possible competitors	3
Collected during meeting	
Uncovering needs and pain points	11
Future business opportunities	5
Check the chemistry with the customer	6

Table 4. Mentions of specific information (without probing)

Channel	**No of mentions**
Direct meeting or phone calls with customers	17
Internet/Google	10
LinkedIn/Other social medias	11
Proff /Proff forvalt	7

Industry-related webpages	4
Manufacturers	3
Annual reports/strategy documents	3
Home page	3
Events	3
Own people	2

Table 5. Channels

Social media platforms like LinkedIn are the primary resources for identifying people who work for the customer company and possible links or personal interests that could be used when meeting:

"I work a lot with customer X, which is a big company with many stakeholders. So, I spend time finding out what they are interested in. I have one who loves "swag", so when I meet him, I bring stickers. Another is really into new gadgets, so when I visit him, I bring some cool hardware stuff, and he often asks, "where did you get that?" So, it's like trying to find some common interests that help to connect." (Female, technology)

Another strategy is to "Google" the company and see what they write about themselves (or others write about them).

Overall, more than 60% of the respondents reported looking at customers' financials before making contact. For the remaining respondents, checking a customer's finances is not of interest because, e.g., they handle only a few large customers. Only four respondents mentioned looking at financial information provided by the customer before making contact, but seven said they use specific webpages to look at financial information (e.g., the website Proff).

"First and foremost, I qualify (the customer) by checking if their finances are good enough and that the company has money." (Female, technology)

During the meeting, the main focus is to discover possible business opportunities and uncover the customer's pain points.

"So, to win a case, my experience is to quickly uncover their ambition level (presents price early), decision path, decision makers, how many (decision makers), who am I talking to and then, over a couple of meetings, uncover a pain point big enough to motivate them to buy something." (Female, technology)

Although these results correspond with previous findings (Agnihotri & Rapp, 2011), it is surprising just how tactical the intelligence collected is, especially before meeting the customer. The intelligence collected is mainly of interest to the salesperson and is less valuable for the customer. As argued by Jones et al. (Jones et al., 2005, p. 106): "…in today's environment, salespeople who attempt to use the first call to obtain background information—because they had not accessed available information prior to the first sales call—will make a poor first impression and likely fail to penetrate the account." To some extent, this is what the respondents do, but the majority are high performers in their respective organizations.

"I have been the seller of the year for almost 10 years in a row, with the highest individual budget." (Male, technology)

One respondent offered a possible explanation:

"From the customer's side, I often feel I come more prepared than I need to. I think the standard (among salespeople) is quite low. I think many just show up and just, hello, thanks for meeting with me. So, you don't need to know much to impress them." (Female, technology)

In the next section, the findings regarding the second question on motivators and obstacles are addressed through the MOA framework (Maclnnis & Jaworski, 1989), focusing on motivation (M) and opportunity (O).

4.2 Motivation

In the MOA framework, motivation refers to an individual's desire to engage in a behavior (Maclnnis et al., 1991). The findings described above indicate that the salespeople agreed on the importance of collecting intelligence to understand the customer. It is therefore somewhat surprising that motivation for collecting information is quite low among most (80%) of the respondents.

"It's probably the most boring part of the job, I think. That might be the reason I skip some steps now and then." (Male, construction)

Most see collecting intelligence as a mere necessity, a part of the sales job, and, especially when dealing with new customers, something one must do not to be rejected at once.

"I feel it is important not to be rejected at once. If you are working on a new customer, then you need some basic information about them. I think they expect that." (Male, technology)

Several respondents expressed a need for more intelligence, but few reported an intrinsic motivation for collecting intelligence like the following respondent:

"Yes, I like having full control of the company, both their structure and people really. Then I always have a reference to contact, which I believe is my big advantage." (Male, construction)

From an organizational perspective, only a few salespeople respondents mentioned being measured on any intelligence gathering. In this case, intelligence collection is measured in regular business territory review meetings with senior managers (direct manager and manager's manager), where the salesperson provides a PowerPoint presentation about the territory. Another respondent argued that pressure to collect information is imposed by the company's culture, particularly if there are many senior and knowledgeable salespeople, but still maintained that collecting information is mainly internally driven.

None of the other respondents were measured on intelligence collection, whether through formal systems like contracts or job descriptions or informally through management interest.

"Not really (collecting as part of contract/job description)*; basically, if you haven't reached your financial goals, you won't get a very good rating, no matter what you do. But another goal is e.g., being a buddy for new hires, helping them to understand the process and the organization."* (Female, technology)

Also, most mentioned reporting as something negative.

"This was the reason why I didn't enjoy my old job. It was only reporting, reporting, reporting. One was supposed to use one full day for reporting. It was very controlling, and I asked what it was used for." (Male, technology)

In particular, dissatisfaction with reporting through the company's CRM system was a recurring issue for most respondents. Most felt they spent too much time adding information to the CRM system without really understanding why anything beyond the most obvious entries such as "deal closing date" and "order amount" should be reported. Most CRM systems did not request information about the customer's customers, competitors, or value-creation process. The focus was on information directly related to the current deal, as exemplified above.

There were indications that those who felt pressure to collect (either through review meetings or through cultural pressure) used more channels (e.g., annual reports) and collected a broader spectrum of intelligence before contacting the customer (e.g., competitor information).

Interestingly, Gordon and Schoenbachler (1997) found that intelligence collection was part of the job description for 90% of salespeople, whereas Pass et al. (2004) later reported that intelligence gathering tasks were included in the job descriptions of 33% of salespeople. In both studies, sales managers were the respondents, whereas the respondents in the present study were salespeople. It is possible that the discrepancy between our results and those of previous studies is due to differences in the respondents or a decrease in the inclusion of intelligence gathering tasks over the years.

The salespeople included in this study clearly collect intelligence mainly in their own interest and not as a common good. Le Bon and Merunka (2006, p. 405) argue that "Overall, salespeople's intelligence gathering and transmission effort seems to be considered essentially a utilitarian task". However, our interviews suggest that the driver for intelligence collection is closer to rational egoism (Overall & Gedeon, 2019):

"I (collect information) if it benefits me. Only if its benefits me really. I am kind of first myself, then myself, and then the others." (Male, technology)

4.3 Opportunity

In the MOA framework, opportunity reflects the extent to which a situation is conducive to achieving a desired outcome (Maclnnis et al., 1991). Most of the respondents agree that customers have become more knowledgeable, which, together with more complex solutions and selling strategies and increased competition, has made it harder to compete.

"It's a competitive market; we call it a red ocean." (Female, technology)

"*Previously* (years ago) *I had a success rate* (measured as getting a meeting) *of maybe 50% when mailing new customers; today I am closer to 10%.*" (Female, consultant)

"The product documentations are 53 pages, so yes, complex." (Male, technology)

Based on these market changes, not surprisingly, almost 70% of the respondents mentioned some dimension of time constraints when asked why they do not spend more time collecting CI.

"I am supposed to generate X millions per day; I don't have time." (Male, technology)

"Yes, it's time. Right now, we use too much time on internal processes and doing things other than selling." (Female, technology)

Almost all (90%) sell complex/semi complex solutions or products (Table 2), and approximately 40% mentioned the complexity of the buying process and the increase in day-to-day tasks covered by the salesperson.

"After the financial crises, there was a growing trend of using buying centers and centralization of the buying process, increasing the complexity of the buyers." (Male, technology)

"I am selling, servicing and teaching; it's one man doing mostly everything." (Male, construction)

4.4 Ability

Ability reflects the knowledge and skills of an individual to engage in a specific behavior (Maclnnis et al., 1991). Although ability is not a main focus of this research, the respondents in this research were highly experienced (16.5 years in B2B sales on average) and mostly perceived themselves as high performers. Thus, it can be argued that they had the knowledge and skills to excel as B2B salespeople, which again clearly requires some ability to collect intelligence. Although several had completed different forms of training, none had any special training in collecting intelligence or a clear directive from their organization/managers about the type(s) of intelligence valued by the organization.

5.0 Discussion, contributions, and implications

Previous work has argued that CI collected from the salesforce is the single best internal source of information (Rapp et al., 2011), as the role of the salesforce as boundary spanners (Burt, 2004) places them in a unique position to collect CI from the market(s) they operate in. Despite the general consensus on the important role salespeople play in collecting CI, there is still a discussion of to whom the collected CI is of interest (Agnihotri & Rapp, 2011; Chonko et al., 1991; Rapp et al., 2011). This study addressed this issue by examining the *kinds* of CI that salespeople collect and when. Three actors stand out as important recipients of the CI collected by the salesforce: 1) the salesforce itself (Agnihotri & Rapp, 2011), the selling organization (Chonko et al., 1991), and the customer (Piercy, 2010).

As presented in table 4, the study's findings suggest that salespeople collect information for their own interest and not as an input to their organization or customers and look for intelligence relevant to the current sales situation. The main intelligence collected before meeting the customer is related to who will be attending the meeting, whether the attendees are decision-makers, whether the attendees have possible connections to other

relevant people in the buyer organization, the customer's economic situation, and other information relevant to building a relationship with important people in the buyer organization. Only upon meeting the customer does the focus shift to possible business opportunities and identifying the customer's pain points, with a focus on whether the salesperson's solution is a fit.

Table 4 shows how many times each type of information was mentioned spontaneously by the salesperson respondents. After probing, the frequencies of most information types increased, typically with a phrase like "yes of course I do try to uncover that". Interestingly, two types of information did not increase: "Reading annual reports" and "Trying to understand the culture of the company by reading their webpages". In general, these findings strengthen the argument that salespeople are driven by rational egoism (Overall & Gedeon, 2019) and collect information for their own interest if they are not asked to collect or are not measured on the collection of specific information. This is a potential challenge for both the customer relationship and the seller's own organization.

The growing knowledge and power of customers increases the need to collect CI about the customer's market before contacting the customer (Lee, 2011). Collecting CI before contacting the customer increases the probability that the salesperson will bring added-value to the relationship (Piercy, 2010), which is important for improving the possibility of winning the customer (Jones et al., 2005). To present new and more advanced solutions, the seller also needs a deeper understanding of the potential customer's business and their value-creation process (Töytäri & Rajala, 2015).

With respect to organizational learning, the knowledge-based theory of the firm (Conner & Prahalad, 1996), organizational learning theory (Fiol & Lyles, 1985) and Nonaka's (1994) theory of knowledge all focus on the individual as the foundation of organizational knowledge (Flaherty et al., 2012). Although salespeople are only one of many sources of CI about the marketplace (Huber, 1991), their role as boundary spanners (Burt, 2004) makes them potentially capable of obtaining hard-to-come-by (Arditto et al., 2019) and sensitive (Evans & Schlacter, 1985) intelligence about customers and competitors. Failing to organize the collection of CI by the salesforce leaves untapped a resource that could enrich the organization's understanding of the marketplace by complementing other information channels. In addition, focusing on deeper customer information collection makes it easier for the customer to consider the salespersono a trusted partner, which could increase the selling organization's competitive advantage.

In terms of the motivation for collecting CI, several papers have argued for strong relationships between different organizational variables, such as assigned goals for collection (Kuester & Rauch, 2016), and the use of formal systems like behavioral control systems (Le Bon & Merunka, 2006; Liu & Comer, 2007). This is in line with Jaworski, Macinnis, and Kohli (2002, p. 301), who argue that "the starting point for CI efforts is organizing for CI". The effectiveness of formal systems of aligning employees' activities with organizational objectives is well established (Malek et al., 2018). Nevertheless, according to their salespeople, none of the participating organizations have a system in place to collect intelligence from their salespeople. With the exception of some respondents who gave presentations to management in regular business territory review meetings, none of the respondents felt any pressure from their managers to collect intelligence (although one cited peer pressure). In addition, none were measured on collecting intelligence or obligated to collect intelligence as part of any formal contract. This was also evident when the use of company CRM systems was discussed. Nearly all respondents expressed dissatisfaction with the use of such systems, consistent with prior research (Ahearne et al., 2012). Moreover, the requested input was clearly tactical in nature, e.g., the closing date of the order and estimated amount of the deal. None of the respondents was required to add broader information to increase the understanding of their customers' needs or market. One possible explanation for this might be the difficulty of operationalizing the inclusion of this information, such as the most relevant types. This could also explain why it is difficult to include the collection of CI in a formal contract or control system.

On a more personal level, although most of the respondents understood the importance of collecting intelligence for building strong relationships with customers and expressed a need for more intelligence, few actually enjoyed doing so. Most saw intelligence collection as a "necessary evil" and a less enjoyable part of the sales job. This might in part explain why salespeople focus on the minimum required tactical information that is closely related to the current deal they are working on. Nonetheless, a small group of respondents reported collecting more and different information than the rest. Three respondents reported that an important driver for information collection was a focus on CI by their direct manager. These respondents were asked by their managers to present more general presentations of the market(s) that they worked in at regular review meetings at six-month or one-year intervals. These respondents were the only ones to mention collecting information from annual reports and using a customer's webpage to better understand their company's culture. These respondents noted that webpages like "About us", "Our values" and "Job postings" were

important pages for increasing their understanding of their customers. One also conducted relatively regular meetings with competitors with the intent to share information. None of these respondents expressed any dissatisfaction with reporting this information to their manager, in contrast to the discontent most showed towards reporting through a CRM system.

The use of direct managers as a motivator for collecting specific CI through the salesforce has rarely been addressed in the literature but may be fruitful, as managers can direct the salesforce to collect specific information relevant for the company. In addition, the network centrality of managers in their own organization has been shown to influence CI quality, as managers with strong networks have access to a greater number of observations. When several sources of information confirm each other, it increases the trustworthiness of the information (Ahearne et al., 2013). From a specific CI perspective, it can be argued that sales managers who collect information from their salespeople and their peers become central hubs of potentially relevant and important information. There are some prerequisites for such a system to work. First, salespeople need to see their sales manager as a trustworthy partner to share information with. Salespeople's willingness to share specific information with their sales managers would therefore be moderated by the level of trust in the sales manager. Most respondents expressed a strong and positive relationship with their direct manager. However, some reported a lower quality of relationship with their managers, especially those respondents working in international organizations whose managers were located in other countries, which reduced direct and physical contact. Others blamed frequent organizational changes in which they received a new manager. Both conditions would lead to a decrease in trust and might therefore impact the salesperson's willingness to share information.

This study proposes a curvilinear relationship between management focus and collection: a weak focus from management might lead to confusion among salespeople about the importance of collecting intelligence, whereas an excessively strong focus might create dissatisfaction among salespeople about loss of autonomy and therefore unwillingness to focus on intelligence collection (Rapp et al., 2014). Regardless, the present study argues that focusing on sales managers as an information hub for specific CI is a fruitful avenue of research that could increase the collection of information relevant to both customers and the sales organization.

Among barriers to collecting intelligence, the respondents frequently cited limited time availability, which made them focus on the minimum required amount of intelligence. Other explanations included the increased knowledgeability of customers, the greater complexity of buying processes, increased competition, and selling complex products. Several

also mentioned an increase in tasks associated with the selling role. Most of these explanations are supported by previous research, which has shown that the increased complexity of the sales environment (Jones et al., 2005), the greater number of tasks included in the sales job (Marshall et al., 1999), and the complexity of solutions (Hunter & Goebel, 2008) put a strain on the sales role and encourage the collection of the minimum required intelligence.

Finally, the salespeople interviewed in this article were mainly high performers with long experience. This is an important consideration in interpreting the findings and drawing conclusions. As a highly experienced salesforce with several years in the same position (6.3 years on average), the respondents were well-versed in selling in a B2B environment and had good knowledge of their markets. Salespeople with extensive networks and industry knowledge can access intelligence in the marketplace more easily than those with less knowledge; consequently, the latter need to spend more time collecting intelligence (Verbeke et al., 2011).

In terms of managerial implications, this study proposes that clear expectations from management will lead to greater collection of specific types of intelligence by salespeople. This link will be stronger for more experienced salespeople with deep knowledge of their markets, as they often have knowledge on how to access this information and have larger established networks. On the contrary, a higher degree of overload in tasks or work for the salesperson will weaken this relationship and probably lead to a focus on the minimum requirements for intelligence collection.

6.0 Limitations and future research

Although the qualitative approach used in this paper is a strength, all qualitative research is limited in terms of the generalizability of the findings. Consequently, the validity of the conclusions drawn in this research should be investigated under other conditions. One such condition is culture, as it has been argued that cultural differences should be considered when developing sales management systems (Murphy & Li, 2012). All of the respondents in this study came from the same national culture, despite working in different multinational companies. In addition, the respondents in this study were mainly highly experienced salespeople with good knowledge of their markets. It would therefore be of interest to determine if these conclusions hold when more inexperienced salespeople are included. More research is also needed on the use of sales managers as a motivational factor for collecting specific information from salespeople. Fruitful avenues for future research include the

moderating effect of trust between sales manager and the salesperson, the network centrality of the sales manager in their own organization, and the ability of the sales manager to provide the salesforce feedback on the collected information. Finally, existing scales used to measure market intelligence collection, like the widely used scale developed by Le Bon and Merunka (2006), do not specify the types of intelligence collected. A more fine-grained scale needs to be developed and adapted to the type of intelligence collected.

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Appendix – Interview guide

This is a tentative interview guide. The questions were not necessarily asked in the order presented here. It was important to let the respondents lead the way and maintain the flow of conversation. However, all questions were addressed if the respondent did not bring the topic up.

The point(s) under each question were brought up only if not addressed by the respondent.

Intro

1. How long have you been employed in your current position?
    a. Were you previously in this company; if so, for how long?
2. What makes you thrive in a sales position?
    a. What is the best part?
    b. Anything you dislike?
3. Do you enjoy working in this organization?
    a. Do you feel loyalty towards your employer?
    b. Are you proud of working here?
4. How would you describe the market you are working in?
    a. Turbulent/competitors/technology/and so on
5. How would you describe the solution you sell?
    a. Easy for customers to understand/complex/well-known and so on
6. How many customers do you have?
7. Do you feel that customers' demands have changed over the years?

Intelligence

8. What kind of intelligence do you think is vital to land a contract?
    a. How important is information about the customer?
    b. Do you have examples of such intelligence?
9. What are your drivers for collecting intelligence?
10. How important are your colleagues?
11. Can you give any examples regarding how you collect intelligence?
12. What type of intelligence is most important to you?
13. Can you estimate how much time you spend collecting intelligence?
14. Have you ever felt that your customers expected you to know more about them when you met?

a. In what way?

15. Are there situations in which you feel it's more important to collect intelligence?
    a. Do you have any examples?
16. Can you walk through how you collect intelligence about new customers?
    a. What about existing customers?
17. What type of intelligence do you feel is important for you to do a good job?
    a. Do you normally collect such intelligence?
18. What sources do you use when collecting intelligence?
19. Do you have any examples of meeting with customers where you felt well prepared?
    a. What was it that gave you the feeling of being well prepared?

Obstacles

20. How do you feel about using time to collect intelligence about customers?
21. Have you ever felt that "I should have collected more intelligence before this meeting"?
    a. If so, what stopped you?
22. Have you ever deliberately not collected intelligence before a meeting?
    a. If so, why?

Information sharing

23. How do you share intelligence in your organization?
24. Do you feel your manager thinks sharing intelligence is important?
25. Is intelligence collection discussed during your meetings with your manager?

Work

26. How would you describe your relationship with your closest boss?
27. How do you get paid?
    a. What kind of salary system do you have?
28. Is your budget based on a monthly, quarterly or yearly basis?
29. Are you measured on anything else that you budget?
30. Do you feel that collecting intelligence is a work requirement?
    a. If so, how?

Results

31. How would you describe yourself as a salesperson in terms of budget achievements?
32. How do you compare with your colleagues?

About you

33. How old are you?
34. What is your highest education level?

Exit

35. In light of what we have discussed, is there anything you would like to add?
36. Is there anything that you want to ask me now?
    a. Regarding the study or the interview?
37. How do you perceive our conversation?

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