

B2B eWOM on Alibaba: Signaling through online reviews in platform-based social exchange

Abstract

This study investigates the contemporary role of electronic word-of-mouth (eWOM) in business exchanges through buyers' signaling of observable and unobservable supplier characteristics on the Alibaba e-commerce platform. Utilizing a qualitative pre-study of 20 interviews (five buyer–supplier dyads with two interviews per firm) and more than 8,000 buyer reviews on Alibaba, we identify characteristic patterns of this type of B2B eWOM.

Signaling Theory and Social Exchange Theory underpin the empirical investigation. To enable further conceptualization, the study distinguishes between online B2B reviews based on the extent to which they are controlled by organizational partners. Unlike some other forms of B2B reviews, reviews on Alibaba are uncontrolled and comprise a form of eWOM.

Findings indicate that the relational patterns of B2B eWOM shared on Alibaba can be aggregated into three categories: human touch, responsiveness, and resilience. Besides these new categories, the importance of product/service quality has been confirmed. Through Alibaba reviews, buyers' signals are sent not only to suppliers as feedback, but also to other prospective buyers to influence their purchase decisions.

Our study aims to contribute to the B2B literature on eWOM and signaling in business relationships. By showing that human touch occurs even in online-only buyer–supplier relationships, the study provides evidence that bonding, the development of mutuality, and relationship intimacy in buyer–supplier relationships does not always require in-person contact. Managerial implications are offered with a focus on the signaling of unobservable qualities, such as human touch, with the help of B2B eWOM.

Keywords: WOM, eWOM, signaling, online reviews, online B2B marketing, human touch

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1. Introduction

Business markets have experienced significant changes in buying behaviors with the growing prevalence of e-platforms and other digital influences on the buyer–supplier exchange. The rise of B2B e-platforms facilitates online transactions between companies and allows suppliers to enlarge their market reach (Jean, Kim, Zhou, & Cavusgil, 2021; Kim & Moon, 2021). Meanwhile, buyers have become increasingly receptive to digitally available information about suppliers; thus, the role and functions of B2B selling and buying are changing (Bag, Gupta, Kumar, & Sivarajah, 2020), as is the development of buyer–supplier exchanges facilitated by e-platforms. Digital presence offers a way to improve the efficiency of business interactions by reducing response time, increasing cost-efficiency, overcoming geographical boundaries (Lam, Yeung, & Cheng, 2016), sharing information about product/service quality (Lehdonvirta, Kässi, Hjorth, Barnard, & Graham, 2019), and supporting innovation efforts (Roberts & Piller, 2016). Moreover, the generation of word-of-mouth (WOM) is supported by a firm’s online presence (Trusov, Bucklin, & Paiwels, 2009), from the initiation of business relationships to the nurturing of existing relationships (Michaelidou, Siamagka, & Christodoulides, 2011). Digitally enhanced market intelligence for buyers can include information gained from client testimonials on suppliers’ websites (e.g. Cuevas, 2018), big data (e.g. Hallikainen, Savimäki, & Laukkanen, 2020), social media (e.g. Itani, Agnihotri, & Dingus, 2017), and customer reviews publicized on e-platforms. Such e-platforms include Alibaba, the world’s largest B2B e-platform with over 600 million active buyers each month, exceeding the size of eBay and Amazon combined (Jean et al., 2021).

Online customer reviews, a major form of electronic word-of-mouth (eWOM), appear to be the least studied in B2B compared to B2C contexts, despite their practical relevance for buyer–supplier exchange. Our study aims to address this shortcoming. E-platforms—and especially eWOM created on these platforms—have mainly attracted research attention in B2C marketing (e.g. Fagerstrøm, Ghinea, & Sydhes, 2016; Floyd, Freling, Alhoqail, Cho, & Freling, 2014; King, Racherla, & Bush, 2014; Tang, Mehl, Eastlick, He, & Card, 2014; Tirunillai & Tellis, 2012; Wu, Shen, & Chang, 2015) rather than B2B contexts. However, empirical evidence suggests that several B2B firms collect, analyze, and display information from e-commerce platforms (Steward, Narus, & Roehm, 2018) to reduce information asymmetries through the

third-party inputs of ratings and customer reviews (Kannan, 2017). As a result, a gap has developed between managerial practice on B2B e-platforms and the conceptual development of relevant literature. Regarding the benefits of e-commerce platforms that facilitate buyer–supplier exchanges, Ollus, Jansson, Karvonen, Uoti, and Riikonen (2011) suggested the need to consider e-commerce platforms at a strategic level; for example, to strengthen trust and increase collaborative efforts. B2B relationships are typically considered more personal than interaction with consumers (Mudambi & Aggarwal, 2003) and the literature has questioned whether human touch is exclusively associated with physical contact (Corsaro & Snehota, 2010; Leung & Wong, 1995; Pulles & Hartman, 2017) and so becomes diminished in an online-only business environment.

Whether in-person or on e-platforms, buyers and suppliers send intended and unintended signals to each other that reduce information asymmetry in partner selection (Chaker, Nowlin, Pivonka, Itani, & Agnihotri, 2022; Öberg, Henneberg, & Mouzas, 2007) and reveal information about the potential partner’s otherwise unobservable qualities (Bergh, Connelly, Ketchen, & Shannon, 2014). Signaling Theory addresses the issue of information asymmetry (Spence, 1973) and acknowledges the influence of observable signals that are often costly to create (Connelly, Certo, Ireland, & Reutzel, 2011), but contribute to more informed business decisions (Bergh, Ketchen, Orlandi, Heugens, & Boyd, 2019). At the same time, Social Exchange Theory assesses behaviors in the context of social exchange, cost–benefit considerations, equity, and reciprocity (Lee, Chan, Chong, & Thadani, 2019). These behaviors have been proven to be relevant for e-platforms mechanisms as well (Breidbach & Maglio, 2016; Mudambi & Aggarwal, 2003). Our research draws on Social Exchange Theory (Blau, 1964) to study relevant cost and benefit considerations, as well as reciprocity. Signaling Theory (Spence, 1973) is used to address the efforts invested into overcoming information asymmetry in buyer–supplier relationships on e-platforms. This study explores observable and unobservable (relational) characteristics of B2B relationships expressed through eWOM, including the role of human touch in a digital business environment, and thus aims to contribute to the current understanding of signaling in buyer–supplier exchanges on e-platforms.

Information asymmetry is a major challenge in B2B contexts, and can be reduced using signals, such as client testimonials (Jaakkola & Aarikka-Stenroos, 2019), sharing information about industry awards (Gallus & Frey, 2017), and mergers and acquisitions (Öberg et al., 2007). Signals contain information about observable and unobservable qualities that are difficult to

assess otherwise (Mavlanova, Benbunan-Fich, & Lang, 2016). Unobservable qualities of suppliers are relational qualities that are created in the buyer-supplier dyad and are thus mostly hidden from other businesses. Some of the signals may be strategically planned, while others may occur organically (Lorange, 1996). Recipients construe certain capabilities and resources based on the received signals (Celani & Singh, 2009). The mentioned B2B signals (client testimonials, industry awards, and mergers and acquisitions) fall under the category of strategic signaling in the sense that firms create these signals through co-creation and curation of information to expand and strengthen their business networks (Eklinder-Frick, Eriksson, & Hallén, 2011). These signals are controlled to the extent that Hada, Grewal, and Lilien (2014) depicted some as supplier-selected. Even official B2B social media platforms allow a level of control; for instance, through the elimination of some negative comments (Nunan, Sibai, Schivinski, & Christodoulides, 2018).

However, not all B2B signals are controlled. The reviews and ratings published on e-platforms such as Alibaba are not supplier-selected or controlled. As opposed to the positive statements about successful business relationships that appear on corporate websites (Aarikka-Stenroos & Makkonen, 2014), Alibaba's buyers share their views about suppliers without any prior approval from those suppliers. Therefore, the uncontrolled nature of these signals can be seen to increase their veracity. Given the lack of formality and curation by suppliers, reviews on Alibaba fall under the category of eWOM, where WOM is defined as informal communications directed at others about the ownership, usage, or properties of particular products, services, or their sellers (Westbrook, 1987). Our study takes an exploratory view on the characteristic traits of the uncontrolled signals of B2B eWOM that appear on e-platforms, with special consideration of Alibaba.

Our research outlines three core contributions. First, we contribute to the literature by exploring characteristic patterns of buyer-supplier exchanges communicated through B2B eWOM. A pre-study of buyer-supplier dyads and a systematic assessment of Alibaba reviews confirms the importance of B2B eWOM in buyers' purchasing decisions. The assessment of Alibaba reviews reveals characteristic themes for the creation of B2B eWOM such as (1) human touch, (2) quality of the offering (product/service), (3) responsiveness, and (4) resilience.

Second, this research extends current knowledge on human touch via B2B eWOM by providing new insights into the concept in terms of its relationship to other digital B2B signals. The study demonstrates that the importance of human touch does not diminish in B2B e-commerce—in

fact, it becomes increasingly important. For instance, it emerges that having named contact persons, and the personal qualities of these contact persons, play a key role in customer satisfaction. This is in contrast with the case of supplier-selected referrals that appear on corporate websites, typically with emphasis on delivered benefits attributed to the supplier (at organizational level) rather than praising the contact persons (interpersonal level).

Third, extant research has approached B2B signaling by focusing most of its attention on carefully planned strategic intent; for instance, in case of supplier-selected referrals (Hada et al., 2014), acquisitions (Öberg et al., 2007), and strategic communication of industry awards (Gallus & Frey, 2017). We argue that B2B signaling is better understood if both the strategically curated signals and those that are uncontrolled are investigated with regard to their influence on buyers' cost–benefit considerations in the exchange process. The eWOM created on e-platforms such as Alibaba represents a vital part of B2B signaling, albeit in a less controlled—and thus potentially more truthful—way. Broadening the focus of research attention to eWOM in B2B signaling provides conceptual advancement and new insights into how digitalization changes buyer–supplier interactions and exchange behaviors in contemporary business markets.

The next section presents an overview of extant research knowledge related to Signaling Theory, Social Exchange Theory, B2B signaling, and eWOM. This theory-informed overview is combined with insights from a qualitative pre-study involving five buyer–supplier dyads, followed by the results of the analysis of an extended pool of over 8,000 Alibaba reviews. We assess Alibaba reviews as B2B eWOM and position them within the body of digital signals relevant for B2B decision-making. Finally, we discuss the theoretical and managerial implications of our study and outline future research directions.

2. Theoretical framing

2.1. Signaling Theory and Social Exchange Theory

The study draws on Signaling Theory and Social Exchange Theory as informing theories (e.g. Ciuchta, Letwin, Stevenson, McMahon, & Huvaj, 2018; Przepiorka & Berger, 2017). The incorporation of both theories underpins our examination of buyer–supplier exchanges and the signals that business partners share and disseminate as a means of reciprocity and attractiveness. Within these theoretical realms, the signaling of costs and benefits is evidenced

(Przepiorka & Berger, 2017), and highlights how buyers and suppliers looking to form relationships evaluate the estimated benefits and costs of their exchanges using available signals and signs (i.e., buyers' reviews). Thus, this theoretical basis addresses the social-interactive embeddedness of buyer–supplier relationships and shared signs among buyers and suppliers. This is highly relevant to online reviews given that digital platforms, such as Alibaba, provide a place for social exchange with the interactions between buyers and suppliers taking place under conditions of uncertainty. Social Exchange Theory (Shiau & Luo, 2012; Tsai & Kang, 2019) and Signaling Theory (Jean, Kim, Zhou, & Cavusgil, 2021; Mavlanova, Benbunan-Fich & Koufaris, 2012) tie well to the context of online social exchange and the information asymmetry between buyers and suppliers.

Online reviews include informative and affective signals/signs (positive and/or negative valence) of the relational exchanges in buyer–supplier relationships, thus impacting the attractiveness (or lack thereof) of suppliers to other buyers. Attractiveness has been a central phenomenon since the beginning of the theoretical development of social exchange (Blau, 1964; Homans, 1958; Tanskanen & Aminoff, 2015). From the cost–benefit perspective of SET, online reviews exist in a social interaction context where the reviews shared by buyers have signs that could maximize buyers' and suppliers' benefits (e.g. social, relational, business, and experience and knowledge sharing) and minimize current and future costs for existing and new buyers (e.g. risk and uncertainty). These are believed to be used in calculating the perceived costs of an exchange between a buyer and supplier. Online interactions and exchange of information are perceived by individuals as a way to obtain benefits from exchange and sharing (Hsu & Lin, 2008). Buyers are motivated to add their reviews on Alibaba or other platforms because of the expectation that they will benefit socially (e.g. by showing their expertise and relationships with suppliers) or economically (e.g. by obtaining future deals from the supplier) from the interactions these reviews create with suppliers (e.g. replies from suppliers and receiving better future deals) and other buyers (e.g. allocating likes in support of the review and appreciations of the informational support). Buyers know that their positive online reviews derive indirect financial and psychological benefits to suppliers. In essence, online reviews are the social exchanges that result in signs that are vital for buyers and suppliers operating on digital platforms like Alibaba.

For suppliers, online reviews are informational signaling opportunities that indirectly result from the shared positive experiences buyers have with suppliers, leading to more frequent

exchanges and communications on the host digital platforms. A quality product and service offered by a supplier will normally encourage buyers to respond in kind with something of benefit, such as positive online reviews, thus creating a kind of reciprocal exchange. These reviews capture the buyer's signals of relational investment with the supplier, and commitment to the relationship. In turn, these reviews also benefit other buyers, especially new ones who will use the shared information to build on and reduce their uncertainty in dealing with the supplier. According to Lee and Youn (2009), platforms enable customers to connect with each another for product-related information through eWOM. Importantly, reciprocity plays a role among buyers when the reviews are shared with the expectation of returning something of value (e.g. further knowledge, informational support, and social interaction). In social contexts, individuals strive to collaborate with others for mutual benefits (Zhu, Benbasat, & Jiang, 2010). As such, buyers posting online reviews aim to share their experience and knowledge and expect others, in turn, to provide their feedback and share their experience for mutual benefit (Shiau & Luo, 2012). Thus, online reviews operate within a paradigm of social exchange that is determined, to a great extent, by reciprocity.

Informational support is associated with pleasure derived from enhancing one's knowledge and driving social value from educating others (Yan, Wang, Chen & Zhang, 2016). Engaging in online reviews can also drive other social benefits to buyers by increasing their confidence to make successful business decisions and choose trusted and credible suppliers. Moreover, online reviews may enhance buyers' social image as perceived by suppliers who have access to the buyers' details and may interact with them for social and future business exchange. To a great extent, online reviews signal the exchanges between a given buyer and supplier with the mutual purpose of developing these exchanges into a relationship, with both parties offering reciprocal financial and social benefits to one another over time. This reciprocity leads to further rounds of exchanges and offers the foundation for the development of an enduring relationship (Cropanzano & Mitchell, 2005).

Signals are critical when the offering is immaterial or complex, or when product/service specifics are difficult to access in business network settings (Mavlanova et al., 2016), including e-commerce (Mavlanova et al., 2012) and consumer markets (Packard & Wooten, 2013). In consumer settings, the individual's motivation regarding how much they wish to know can make a difference to WOM transmission (Packard & Wooten, 2013). In B2B settings, a more structured and professional approach is characteristic, especially in larger organizations, whereas the relative importance of personal liking and networks increases in case of smaller

firms and owner-managers (Morrissey & Pittaway, 2004). Thus, consumer eWOM can be considered to be more ad hoc, whereas B2B eWOM is typically more strategic—an example of the latter would be the use of awards as strategic signals in the creation of eWOM (Gallus & Frey, 2017). The signaling of capabilities (Skaggs & Snow, 2004) and reputation-building (Prabhu & Stewart, 2001) are important in inter-organizational settings for the purposes of partner selection; this has also been highlighted by Su, Peng, Tan, and Cheung (2016) in relation to the signaling effect of corporate social responsibility. “Business mating” – that is the matching between potential partner organizations in the beginning of their relationships – is highly important for buyers and suppliers alike (Wilkinson, Young, & Freytag, 2005), and can influence the creation of eWOM in B2B settings (Tóth, Naudé, Henneberg, & Ruiz., 2020). In B2B settings, the partner selection decision adds a unique layer to reviews that goes beyond signals about product or service quality.

2.2. Electronic word-of-mouth and signaling

Through eWOM, B2B e-commerce platforms, such as Alibaba, have transformed the way industrial buyers look for information, interact with suppliers, and, more prominently, purchase their supplies. Purchasing specialists regularly turn to the innumerable online reviews posted on e-commerce platforms by large samples of buyers to learn about new products, evaluate possible suppliers, and compare the firm’s existing supplier experiences. The Web has supported the creation of a digitally enhanced business environment in which sourcing professionals are provided with avenues to talk about suppliers before engaging with them (Steward et al., 2018). Specifically, the development of e-commerce platforms has allowed the creation of eWOM as a relatively new form of social communication content involving both information-sharing and -seeking behaviors by extant and potential buyers (Cheung & Thadani, 2012). Such eWOM provides an important vehicle for signaling (Lin & Kalwani, 2018), and thus influences awareness and attitudes (Liu, 2006).

While eWOM is the Internet-mediated written communication version of traditional face-to-face WOM that takes place between customers (You, Vadakkepatt, & Joshi, 2015), the major contextual difference is that eWOM is shared through digital platforms (e.g. e-platforms), leading to the perception of different characteristics that may require further examination on the buyer’s side. Buyers share their opinions online by expressing their positive and negative emotions toward suppliers and brands (Hennig-Thurau, Gwinner, Walsh, & Gremler, 2004). Compared to face-to-face WOM, eWOM communication possesses exceptional circulation

speed and often permits multi-directional exchanges of information (Cheung & Thadani, 2012). King et al. (2014), defined the major characteristics of eWOM (that differ from those of WOM) as enhanced volume, dispersion, persistence and observability, anonymity and deception, and community engagement. The quality of B2B eWOM provides useful signals about firms (Demoulin & Coussement, 2020), and these signals facilitate improved decision-making, sometimes along with quantifiable factors such as star ratings (Kauffmann et al., 2020).

This user-generated content (Chen & Huang, 2013; Godes & Mayzlin, 2004) provided by eWOM is an important type of online review (Floyd et al., 2014). It is defined as “any positive or negative statement made by potential, actual, or former customers about a product or company, which is made available to a multitude of people and institutions via the Internet” (Hennig-Thurau et al., 2004, p. 39). An important distinguishing feature of B2B eWOM from most other online B2B reviews, such as supplier-selected referrals or client testimonials (Aarikka-Stenroos & Makkonen, 2014; Jalkala & Salminen, 2009), is that the creation of the reviews is uncontrolled by the suppliers. Buyers can comment on qualities and experiences without having to get their feedback approved or filtering it through suppliers. Hence, buyers who share their reviews on e-platforms (e.g. Alibaba) only need to accommodate to the expectations of the platform, such as the length of the review text.

Thus, eWOM conveys stimuli that impact the attitudes and behaviors of other actors (Cheung & Thadani, 2012). Signals of good and bad suppliers are transmitted from current buyers to potential new ones through online reviews. New buyers possess less information about suppliers’ capabilities and credibility, due to lack of prior experience, lack of shared collaborators, and the psychological/geographical distance inherent in online transactions. For this reason, buyers search on e-platforms to find information that they can use for the identification of unobservable qualities of suppliers. Such unobservable qualities are relational in nature, whereas observable qualities typically relate to the quality of the offering.

eWOM can create customer-driven social influence that is highly effective in driving other buyers’ intentions and behaviors (Blazevic et al., 2013; Pansari & Kumar, 2017). Thus, eWOM provides an increasingly popular means of communication in B2B e-commerce settings, with customers being able to review suppliers’ services and products and share their experiences with other potential buyers. It accumulates multiple signals that potential buyers with little knowledge can rely on to reduce information asymmetry and reach more informed purchase decisions. Despite the importance of eWOM in the B2B e-commerce, extant literature has

provided limited information on the creation of eWOM through online reviews (Steward et al., 2018), with the majority of studies having been conducted in B2C contexts, leading to a gap of knowledge in B2B research (Kim, 2014; Liu, 2020).

As suggested by Steward et al. (2018), online B2B buyer reviews have transformed the buying process for customers. Such eWOM can contain negative or positive statements made by former, actual, and possible buyers about a product or a supplier online (Hennig-Thurau et al., 2004). Positive, negative, and mixed eWOM are all important in B2B contexts since buyers benefit from a more overarching view about suppliers (Steward et al., 2018). This would not be possible if buyers were to rely on supplier-selected referrals, as they are, by definition, positive (Hada et al., 2014). In fact, the power of eWOM through online B2B reviews depends on their user-generated, uncontrolled nature, and thus the increased credibility and practicality for buyers compared to supplier-sponsored content (e.g. Goh, Heng, & Lin, 2013). The user-generated reviews help to overcome the uncertainty and information asymmetry buyers experience when purchasing online. For instance, positive WOM is associated with longer and higher-quality buyer–supplier relationships (Kim, 2014), leading to increased stock performance of suppliers (Liu, 2020). eWOM can also be associated with numerical ratings, making interpretation of the strength of different views easier (Chevalier & Mayzlin, 2006). Overall, eWOM is more influential and effective compared to more official and controlled means of communication (Bakos & Dellarocas, 2011; Duan, Gu, & Whinston, 2008; Liu, 2020), and can be seen as less biased, as e-commerce platforms allow several buyers to share different opinions simultaneously (Lee, Park, & Han, 2008; Senecal & Nantel, 2004). In addition, eWOM is relatively easy to interpret and operationalize (Floyd et al., 2014; Park & Kim, 2008).

Despite previous assumptions that B2B companies are not keen to engage in online interactions to learn about products and to gain information about potential suppliers (Brennan & Croft, 2012; Kim, 2014), online B2B reviews have been found to be impactful data-points in the buyer’s decision-making process (Steward et al., 2018). Moreover, eWOM empowers extended social connections and public engagement (King et al., 2014). The buyer eWOM created through online B2B reviews can help nurture social connections and make online suppliers appear more humanized, thus enhancing perceived approachability and authenticity (Lee, Han, Nam, & Rho, 2013). Businesses that provide high-quality products, services, and customer experiences are likely to receive positive eWOM in the form of online B2B reviews and ratings

(Lim, 2017), and this has been found to apply to B2B settings as well (Molinari, Abratt, & Dion, 2008).

Table 1 summarizes the online signals pertinent to this research, some of which have more B2B relevance than others. As eWOM is informal by definition, and control is a distinguishing feature of supplier-selected reviews between B2B eWOM, one of the dimensions included in the table is the level of control/formality.

	Level of control/formality	
	Uncontrolled/informal (eWOM)	Controlled/formal
B2B	<p><i>Quadrant A</i></p> <p>Online B2B reviews on e-commerce platforms, such as Alibaba (this study)</p> <p>Research gap: decentralized power; human touch; combination of observable and unobservable characteristics in (uncontrolled) reviews</p>	<p><i>Quadrant C</i></p> <p>Supplier-selected reviews—e.g. client testimonials and case studies</p> <p>Prior research: supplier in control; triads; combination of observable and unobservable characteristics in (controlled) reviews (Aarikka-Stenroos & Makkonen, 2014; Jalkala & Salminen, 2009)</p>
B2C	<p><i>Quadrant B</i></p> <p>Consumer reviews on various e-platforms</p> <p>Prior research: information sharing; required knowledge level. (Bockstedt & Goh, 2011; Reuber & Fischer, 2009)</p>	<p><i>Quadrant D</i></p> <p>Tailored content for consumers influenced by the firm—e.g. sponsored endorsements by influencers for consumers</p> <p>Prior research: brand and customer engagement; influencers (Ye, Hudders, De Jans & De Veirman, 2021)</p>

Table 1 B2B vs B2C signaling on e-platforms

Quadrant A in Table 1 represents the area at the intersection of uncontrolled/informal and B2B signals that can be illustrated by the group of online B2B reviews on e-commerce platforms, such as Alibaba. The current study focuses on this segment as there appears to be a gap in the research considering uncontrolled/informal reviews in a B2B setting as opposed to B2C settings (Quadrant B). Quadrant B describes the case of consumer reviews shared on various e-platforms. Despite their generally limited relevance for B2B settings, negative and positive

eWOM in a consumer setting—for instance, on social media—can indirectly affect the B2B relationship, especially where there is a strong B2B2C link (Iankova, Davies, Archer-Brown, Marder, & Yau, 2019). The online B2B reviews in Quadrant A fall under eWOM, whereas those in Quadrant C do not. Quadrant C is populated by reviews that are controlled by one of the organizational partners (typically the supplier), such as client testimonials, case studies, or success stories. While these reviews may still provide some important signals for network-building purposes (Tóth et al., 2020), they lack the spontaneity and iterative creation between buyer and supplier seen in eWOM. Finally, Quadrant D represents controlled B2C reviews—for instance, sponsored endorsements by influencers (Hughes, Swaminathan, & Brooks, 2019). There are some instances in which such endorsement activities can have indirect B2B relevance—for instance, in the fashion industry (Hsiao, Wang, Wang, & Kao, 2020). However, this quadrant is out of the scope of this current study.

3. Methodology and data collection

This study adopted a two-stage design. The first stage was a pre-study consisting of interviews conducted within buyer–supplier dyads, and served as a smaller-scale investigation before the analysis of the Alibaba reviews. The pre-study employed an exploratory approach to investigate how e-platforms are utilized in buyer–supplier relationships. The rationale for the pre-study was to gain insights into buyer and supplier preferences and determine relational dynamics that are relevant for engaging in eWOM. This was followed by the investigation of Alibaba reviews of the interviewed organizations, as well as an extended pool of similar organizations (from industries with traditionally strong business markets). In this second stage, the focus was on gaining an in-depth understanding about the different characteristic patterns that arise across the online B2B reviews from buyers, what is being signaled by the suppliers, and what buyers are signaling through writing reviews on the Alibaba platform. All companies (buyers and suppliers) with which interviews took place, as well as suppliers in the analysis that displayed online B2B reviews on Alibaba, were based in China. Translations to English were carried out by researchers that worked at the Chinese campus of a major research-oriented UK university, and the analysis was discussed by the research team, which encompasses scholars from the North American, British, and Asian academic traditions. All interviews lasted around 60 minutes, and were audiotaped and transcribed. This resulted in 201 pages of transcripts. The interviews were followed by the collection of over 8,000 reviews from Alibaba that provided the main data source for this study.

Company	Industry	Position	Gender	Experience in the company (years)
B1	Furniture manufacturing	B1-1 Procurement director	F	5.5
		B1-2 Procurement manager	M	3.5
B2	Household cleaning	B2-1 Procurement manager	F	4
		B2-2 Procurement manager	M	3.5
B3	Cosmetics manufacturing	B3-1 Procurement manager	F	5
		B3-2 Procurement manager	F	3.5
B4	Cabinet manufacturing	B4-1 Supply chain manager	M	3
		B4-2 Procurement director	M	6
B5	Electronics	B5-1 Supply chain manager	M	7
		B5-2 Procurement manager	M	9
S1	Healthcare product manufacturing	S1-1 Marketing director	M	4
		S1-2 Sales director	F	3.5
S2	Daily cleaning	S2-1 Sales director	M	8
		S2-2 Sales manager	M	6.5
S3	Package printing	S3-1 Sales director	F	15.5
		S3-2 Business manager	F	8.5
S4	Bathroom installation	S4-1 Marketing director	F	15
		S4-2 Sales manager	F	6
S5	Office carpentry	S5-1 General manager	F	6
		S5-2 Vice-president	F	11

Table 2 Interviewed buyer and supplier profiles (*Note: B = Buyer, S = Supplier*)

Table 2 shows the companies, industries, and managers (role, gender, and years of experience at the company) in the pre-study. Buyer–supplier pairs comprise B1–S1, B2–S2, B3–S3, B4–S4, and B5–S5. One from each dyad was contacted through the network of the first author’s university. The second part of the dyad was identified with the help of the first interviewed party.

Alibaba is one of the leading platforms in B2B commerce (Kwak, Zhang, & Yu, 2019), and since it was the most frequently mentioned e-platform throughout the interviews, in this research this platform was used for the collection of online B2B reviews shared by buyers. Alibaba is a B2B e-platform that connects Chinese and other suppliers to international buyers, who are normally wholesalers, retailers, producers, and small- and medium-sized enterprises (Alibaba Group, 2020). In 2019, over 9.9 million suppliers were listed on its platform. The objective of the platform is to facilitate interactions between suppliers and buyers online so that representatives from both parties can build a dialog about goods and experiences, and find solutions to business issues (Zhang, Lu, & Zheng, 2020). Alibaba has revolutionized the way industrial buyers search for information about suppliers, interact with them, and place their purchase orders. Around two-thirds of B2B buyers decide to perform business in an online context rather through a sales agent, as e-platforms provide more flexibility, product features and price transparency, and valuable insights through customer reviews (Catlin, Harrison, Plotkin, & Stanley, 2016).

It was ensured that a wide variety of suppliers across several B2B-intense industries is represented. The suppliers included in the study were scrutinized based on the following conditions:

- (1) they had a certain minimum order size to assure the supplier operates in B2B context (e.g. suppliers that had a minimum order of at least one unit for electronics were not considered, but those who had a minimum order of one unit for industrial machinery were considered);
- (2) they represented an industry that is B2B-intense in nature (cases where consumer purchases appeared characteristic were excluded, e.g. health and beauty; gifts, sports, and toys; bags, shoes, and accessories; and apparel and textiles) – suppliers classified under the eight sectoral categories listed below were selected from the 12 broad classified categories on the Alibaba platform (Alibaba, 2021b); and
- (3) they had a minimum number of reviews (i.e. companies with no or very few reviews were disregarded). For instance, the selected suppliers had a number of reviews that totaled at least 10% of the number of performed transactions. When at least 10% of the transactions has reviews associated with them, it was considered to be a sufficient for each product category (this is aligned with the guidelines provided by the platform in which they encourage the creation of reviews; Alibaba, 2021a). Additionally, any interactions within categories that may

have been B2C-focused were disregarded, and only interactions between verified suppliers and buyers were considered.

Following the above guidelines, the sample, composed of the eight categories, was deemed to be representative of the overall business population because of their representation of B2B-intensive industries on the Alibaba platform. These categories were: (1) agriculture and food; (2) automotive and transportation; (3) electrical equipment, components, and telecoms; (4) home, lighting, and construction; (5) electronics; (6) machinery, industrial parts, and tools; (7) metallurgy, chemicals, rubber and plastics; and (8) packaging, advertising, and office.

20 suppliers were randomly selected from each sectoral category. In total, 160 suppliers were chosen across the categories. Table 3 shows the suppliers' profiles. Data collection resulted in the extraction of 8,003 online reviews (consisting of 182,325 words). The extracted information from the e-commerce platform comprised suppliers' and buyers' names, country of residence, review content information, emoticons, dates, response messages, and overall ratings.

Category	Number of reviews extracted	Average number of years the companies present on Alibaba	Average number of transactions per company
Electronics	3,015	6.8	527.7
Agriculture and food	1,121	6.4	335.9
Automotive and transportation	431	6.8	91.6
Electrical equipment, components, and telecoms	776	7.1	107.5
Home, lighting, and construction	689	7.2	131.9
Machinery, industrial parts, and tools	637	7.4	102.8
Metallurgy, chemicals, rubber, and plastics	586	6.5	109.6
Packaging, advertising, and office	746	6.2	141.4

Table 3 Alibaba suppliers' profiles

In this study, thematic analysis (that is theoretically informed) was combined with open coding, as this allowed themes to emerge from examination of the original collected data (e.g. Boyatzis, 1998), thus resulting in the advancement of a distinctive framework. This combination of

thematic and open coding has been adapted to analyze both the semi-structured interviews and online reviews. Thematic analysis is a technique used “for identifying, analyzing, and reporting patterns within data” (Braun & Clarke, 2006, p. 80), where repetitive patterns make up the grouping for the systematic analysis (Fereday & Muir-Cochrane, 2006), permitting a thorough representation of key issues within the data to be discovered.

The obtained data were read by the authors to ensure familiarization with data and to establish a contextual understanding. Then, following the step-by-step guidelines of Braun and Clarke (2006) on thematic analysis, the authors then started analyzing the interview data and then the reviews collected from the Alibaba platform. This way theoretical understanding informed by Signaling Theory and Social Exchange Theory helped the identification certain codes. For instance, ‘information asymmetry’ derived from Signaling Theory, whereas the identification ‘cost-benefit considerations’ were motivated by Social Exchange Theory. Keyword search within NVivo proved to be useful for the thematic analysis, along with non-automated additions and considerations to the thematic coding. For instance, the keyword ‘cost’ characteristically highlighted cost-benefit considerations – and each instance was studied one-by-one before the consolidation of the coding. Another procedure that has been applied was that online reviews were classified based on the ratings associated with them on Alibaba, ranging from 1 star (extremely negative review) to 5 stars (excellent positive review) to identify their valence, i.e. that they were overall more positive or negative evaluations. Due to the Alibaba platform’s structure every review has a rating (1-5 stars) associated with them that comes from the same source as the review itself.

As part of the open coding (that was combined with thematic coding), a word frequency query was run in NVivo to identify the most frequently repeated words across all data. This technique was useful to gain insight into emerging themes that should be taken into consideration but were not necessarily included as part of the theoretically driven thematic analysis. For instance, several aspects of product- and service quality, including delivery (especially timing of delivery) as well as bonding in the buyer-supplier relationship evolved this way in the coding process of the Alibaba reviews.

All transcribed interviews and reviews were separately imported to NVivo as Word documents. The NVivo software was used to organize and document the coding procedure (Silverman & Marvasti, 2008). The role of the software in this case is not to undertake the analysis, but to provide assistance to researchers in the organization of complex data whereby the “researcher’s

mind is the power behind analysis and not any software program” (Castleberry & Nolen, 2018, p. 809). The analysis was revised in an iterative manner, resulting in different codes and themes. Coding was discussed by the authors, who compared and contrasted different views. To strengthen the reliability of the results, one of the authors performed the primary data analysis. Then, two other authors revised the themes, along with the in-depth interviews and online reviews data. Any issues raised from inter-coder differences were discussed and codes were reassessed accordingly, thus ensuring inter-coder reliability (Hayes & Krippendorff, 2007). The research procedure, including sampling, data collection and analysis, is summarized in the figure (Figure 1) below.

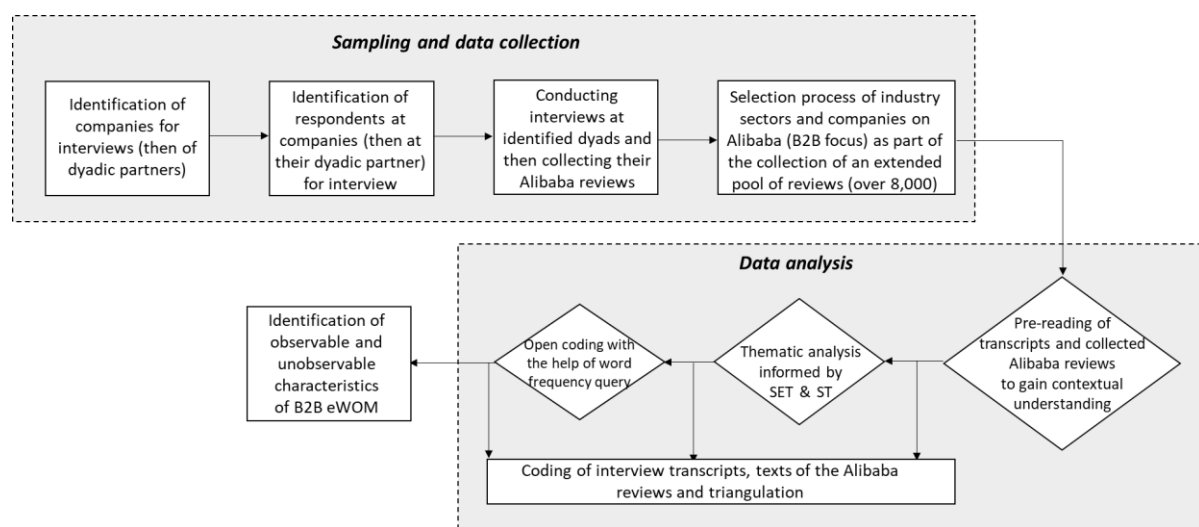


Figure 1 Overview of the research procedure (adaptation from Nenonen et al. 2019). *Note: SET refers to Social Exchange Theory and ST to Signaling Theory*

In the following section, the results of the study are presented. Direct quotes of online reviews in addition to quotes from in-depth interviews are presented to illustrate the identified themes. The diversity of collected data (online reviews and interviews from buyers and suppliers) permitted triangulation to be carried out (e.g. Olsen, 2004).

4. Findings

4.1. Pre-study: Buyer–supplier dyadic interviews

Throughout the interviews, Alibaba was noted by buyers and suppliers as one of the largest platforms for B2B exchanges, and an essential platform for suppliers seeking to be attractive to a wider spectrum of buyers. This platform appears to be a characteristic starting point used by buyers in order to get information about the best suppliers in general, and for their sourcing

needs in each product category. This allowed buyers to source the right suppliers and negotiate payments and logistics with them through the platform translation chat.

“Alibaba can be used as an integrated channel; for instance, all the information that we get from other platforms can be observed and verified on Alibaba, and then lead to further negotiation.” [B2-2]

“Alibaba has proven to be the most frequently used and the most effective platform.”
[S2-1]

The interviews also indicated that buyers paid attention not only to supplier-shared content (e.g. videos, photos) but also to online B2B reviews. Buyers expect suppliers to display significant amounts of information, signaling their quality as suppliers and revealing genuine claims about the quality of their products. Given the information asymmetry, buyers want to gather information so that they feel assured that they are selecting the right supplier in order to avoid false claims that may result in losses. For this reason, they form buying decisions based not only on available reviews on the platform but also on the sales volumes performed by a given supplier.

“We use Alibaba to search for some of our raw materials, and we rely on sales volume and customer reviews. The supplier can be perceived as trustworthy if they can demonstrate a variety of information, for example, more pictures, videos. That said, [when they put videos on Alibaba], I still want the video to demonstrate authentic information about the company, rather than exaggerated information.” [B2-1]

Overall, suppliers emphasized the signaling of information about product/service quality and being responsive to buyers on e-commerce platforms like Alibaba. Besides these characteristics, buyers mentioned the supplier’s trustworthiness and considerate approach. Insights from the buyer and supplier interviews informed several themes that we focused on during the analysis of buyers’ reviews shared on Alibaba.

4.2. Signaling through eWOM with Alibaba reviews

4.2.1. Suppliers’ un/observable characteristics in Alibaba reviews from buyers

The analysis of the reviews revealed that the Alibaba platform contains information about the suppliers’ unobservable and observable characteristics that buyers on Alibaba inspect in order to assess the credibility and validity of the suppliers’ qualities. Identified unobservable

characteristics of suppliers were grouped into three major categories—human touch, responsiveness, and resilience—whereas observable characteristics included observations about the quality of the offering: product and service quality. Second-order themes were gathered into theoretical dimensions. Figure 2 summarizes the coding for unobservable characteristics, while Figure 3 focuses on observable characteristics of suppliers on Alibaba, presenting first-order categories, second-order categories, and aggregated theoretical dimensions (Corley & Gioia, 2004; Gioia & Thomas, 1996; Pratt, Rockmann, & Kaufmann, 2006).

4.2.1.1. Human touch

Human touch in different forms was included in one-third of the pool of over 8,000 Alibaba reviews. While online selling may seem distant and impersonal (Mimoun & Poncin, 2015), the analysis reveals that buyers still expect social/personal interactions with firms' representatives, even on e-platforms, thus confirming that Alibaba buyers are in need of a human touch (Bowen, 2016). The results indicate that human touch causes a distinctive personal closeness between the supplier and the buyer and has a positive impact on business relationships. However, this was more pronounced in the reviews, as these were not always focused on the supplier but often instead on the supplier's representative with which the buyer was dealing. A prominent theme that emerged from the review analysis is the extent and depth of intimacy when it comes to the connection between buyers and suppliers' representatives. Buyers used emotionally loaded words, and sometimes emoticons, in order to express their feelings toward suppliers' representatives—typically the salesperson.

“She is the Most patient and Caring Sales agent, I have encountered here in Alibaba. I will surely order More from her!” [Buyer from packaging]

“Louisaaaaaaa! You are the best sales person in the entire world! I love your service and your patience.” [Buyer from electronics]

“George is a very professional salesman, I looking forward to do more big business in the future with you guys! I love Jinan and Sinotruk.” [Buyer from automotive and transportation]

Participants on the buyer side suggested that they would prefer more personalized communication, enabling them to get more tailored information and content related the

products they need. This was also echoed by the supplier side. Suppliers indicated that they wanted to provide products with more humanized characteristics.

“There is a tendency that our suppliers provide more customized information to our end-user department on social media. This demonstrates their understanding of our needs.” [B2-1]

“One of our suppliers uses personalized materials for us for promotion; we have a close relationship with them.” [B1-1]

“More customized information on SM gives us [the buyer] more warmth.” [B3-2]

“We want to explore the usage of [Alibaba’s] live-streaming services to attract customers. This may not necessarily mean selling any products via live-streaming, but at least demonstrating that we have the capability to open up a new channel, or to be seen via a new channel, and the information that we put online is not only more vivid but also more customized.” [S2-1]

“If we could provide more tailored [social media], this could help us to portray a more professional image to our buyers.” [S4-1]

Human touch was also found to be important in building rapport with first-time buyers and in seeking to develop mutually beneficial and rewarding interactions. Rapport-building is considered to be the basis for establishing new relationships with customers (Kaski, Neimi & Pullins, 2018). This was supported by the interviews, as suggested in the following quote:

“For customers that we meet at an exhibition for the first time, we’ll keep in touch and send seasonal greetings on WeChat. We also shoot a short live stream video on TikTok.” [S2-2]

Furthermore, our data reveal a sense of mutuality with the firms’ representatives whenever they were able to exceed expectations. In addition, some buyers reported how helpful representatives were in growing their business by offering them new products, providing them with solutions and access to new ideas, thus improving the buyers’ decision quality and overall success, sometimes through cost savings (e.g. shipment costs). Buyers also revealed how important it was that the supplier’s representatives treated them in an attentive way, including the help provided with after-sales follow ups.

“We talked with a really incredible person (Peter), amazing guy, attentive and very responsive, that’s what I find very important in this kind of transactions. Peter kindly helped us to develop our idea and make it into a reality, sent 3D previews of truck in a very professional manner and on time.” [Buyer from metallurgy, chemicals, rubber, and plastics]

“Wow. I am so happy that we have found this company. They have one of the best customer services I have ever dealt with in China. Let me explain why. First, Sherry, my representative which I am dealing with, she is giving me amazing service. She contacts a new freight forwarder for me so I can save on shipping. They shipped my package the next business day.” [Buyer from electronics]

4.2.1.2. Responsiveness

Results also indicate the focus of buyers on the suppliers’ responsiveness and the different features of communication and interactivity (e.g. Agnihotri, Trainor, Itani, & Rodriguez, 2017). Reviews emphasized the way suppliers communicate with buyers from a service perspective, concentrating on process-related, more interactive elements when identifying enablers of a stable relationship. The frequency of interaction was also important, with special consideration for the supplier’s responsiveness to buyers’ enquiries and online messages, along with the quality of information they provided. A surprising theme that emerged was language skills. Due to the international context, some buyers had communication issues with regard to language. Buyers also emphasized the importance of good English skills and language command in making communication easier with suppliers.

“Seller was ALWAYS on time to answer my questions, very good customer support service.” [Buyer from electronics]

“The two ovens are well packed and arrived in good condition. The communication is very smooth with good understanding of our special requirements.” [Buyer from machinery, industrial parts, and tools]

“Good command of English, communicating with ease.” [Buyer from agriculture and food]

Reviews underlined the way suppliers communicate with buyers from a service perspective, concentrating on process-related, more interactive elements. Interestingly, follow-up communications were especially highly regarded by buyers. This form of response is deemed to be crucial in diminishing the perceived risk among hesitant buyers. Buyers acknowledged the importance of receiving useful information in a speedy and responsive manner, especially considering that they themselves were at times under pressure to make quick, informed decisions. Additionally, patience was reported as an admirable quality across different reviews that described how representatives were ready to listen to them and dedicate time to understand their distinctive needs, challenges, and objectives. Due to the risk associated with online purchasing, some reviews linked the effectiveness in the communication with the availability of formal letters and documents to establish more legitimacy. The availability of verification messages acted as an indicator of quality. The verification message confirms that the supplier has acknowledged a receipt of the order, whereas its absence results in suspicion that the transaction is fraudulent (Mavlanova et al., 2012).

“[The supplier] is very responsible, they help to coordinate and communicate well. [The supplier]’s services are professional and up to standard, they offer high quality. The delivery is on time, and the product is well-packed. Its service is very considerate. The products are authentic, and value for money.” [B5]

“I would like to recommend company [X] for their customer service, patience and willing to go out their way to listen to client request.” [Buyer from agriculture and food]

4.2.1.3. Resilience amidst crisis

Reviews also reported on the suppliers’ abilities to manage and cope with crisis. COVID-19 has had a disruptive effect on business networks, and reviews depicted how buyers were evaluating the suppliers’ performance under uncertain conditions. Results indicated that suppliers were largely assessed based on their communication performance. Buyers expected to receive regular updates about shipments and there seemed to be an implicit presumption that the supplier needed to be more patient in addressing buyers’ needs. In addition, as buyers were faced with higher perceived risks, they expected to receive more accurate and precise information related to products, production, and shipment. Buyers who were well-assisted during these challenging times focused less on the features of offerings, such as delivery time, product quality, and payments. Instead, they appreciated good communications between them and suppliers and so continued to cultivate these social exchanges, even if online only. In line

with the literature (e.g. Cortez & Johnston, 2020), our results demonstrate that when relationships were built based on trust and reliability, buyers were more understanding toward suppliers who were not able to meet their demands or requests completely.

“In spite of the present medical crisis affecting everyone most specially them, the supplier and specially the sales agent Laura Lee still did everything they can to fulfil our order which is very much appreciated. We will definitely support and order from them again.” [Buyer from automotive and transportation]

“Even though there was COVID they did their best to make sure I was informed and involved in the whole process. Easy to connect with and products is always in great shape and of great quality. Highly recommended.” [Buyer from home, lighting, and construction]

Even when things did not work out as planned on the supplier’s side—for instance, with regard to the expected delivery time—there is some evidence of increased forgiveness from buyers.

“Very pleased with the effort and product! While shipping was delayed due to the pandemic, they helped track the product delivery and were responsive to our inquiries. The product is excellent. Would use them again.” [Buyer from packaging]

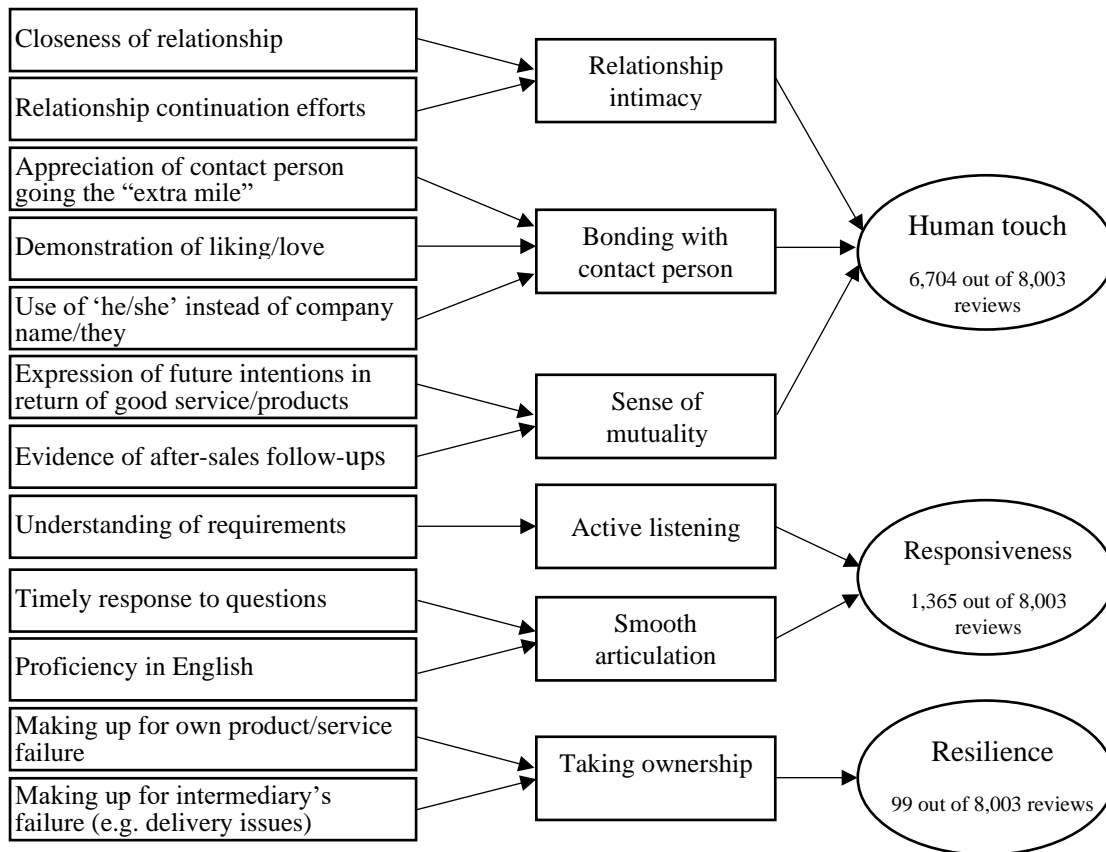


Figure 2 First-order codes and second-order themes of unobservable/relational supplier characteristics

4.2.1.4. Quality of offering

The quality of the offering (whether products, services, or both) provided a vital component of buyers' eWOM creation. Some buyers were driven to establish relationships with the company as long as they obtained a product that met their needs and standards (Clauss & Tangpong, 2018). The analysis of the Alibaba reviews indicated a variety of emphasized product quality features. The quality of the offering appeared frequently (84% of the studied Alibaba reviews) and was emphasized to a greater extent than price. Reviews highlighted the importance of product performance, product features, ease of use, aesthetics, design, durability, and consistency of quality with other products. For instance, while evaluating the product quality, buyers tended to be specific on whether the product performed as expected, whether it integrated certain features, and its potential to fail. In addition, the ultimate test for product quality was the way it was perceived by customers of the buyers (B2B2C feedback loop). Buyers recounted as part of their reviews how their customers assessed quality and the type of complaints they may have had.

“I sold the 15 units and customers began to complain because some could not be connected to the TV and others stopped working at the days.” [Buyer from electronics]

Service quality also emerged as a characteristic theme across the reviews. Buyers consistently compared their experiences to their expectations of the supplier’s performance. Based on both the interviews and the analysis of the collected reviews, B2B buyers relied on the available reviews and verifications shared on the Alibaba platform to evaluate foreseeable service quality. Buyers also seem to assess hard and soft service quality in terms of what is being delivered during the process and how the actual service is performed (e.g. Gounaris, 2005). Buyers described that both on-time delivery and the operational effectiveness to plan and coordinate the delivery played a significant role.

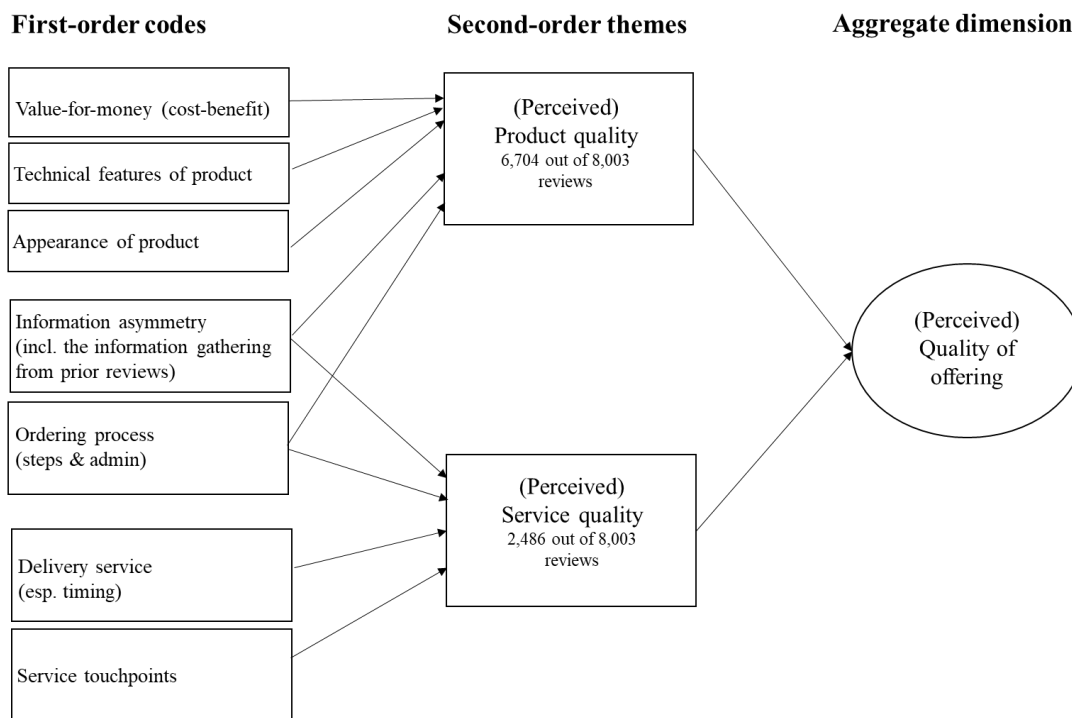


Figure 3 First-order codes and second-order themes of observable supplier characteristics (*Note: some reviews incorporate references to both product- and service quality*)

4.2.2. The spectrum of positive and negative Alibaba reviews

Buyers will send signals based on their purchase / experience to both other prospective buyers as well as the supplier in question. Our analysis indicates that buyers were not only recipients of signals from suppliers but were also recipients of signals from other buyers. These signals were used to assess the validity and credibility of the supplier with whom they interacted.

First, on the Alibaba platform, suppliers share information with buyers. This is typically information about the company (company overview, quality control, production, research & development, trade, capacity), product details (features, packaging, delivery), and supplier verification (response time, transactions, inspection). Second, buyers assess this information, for instance, for supplier selection purposes. For instance, while suppliers may share information about observable characteristics, such as product quality and service, the reviews from their previous buyers indicate also otherwise unobservable signals, for instance in relation to human touch. Displayed buyer experiences involved feelings of happiness, joy, pleasure, delight, love, and enjoyment resulting in manifested satisfaction, while at other times reviews expressed feelings of frustration, disappointment, anger, regret, and hate resulting in pronounced dissatisfaction. These experiences influence relational outcomes such as loyalty, trust, and future repurchase intentions in addition to providing eWOM that other buyers may consider while taking decisions. Our analysis indicates that buyers sent a variety of positive and negative signals through reviews on the Alibaba platform. The previously shared themes (see Figure 2 and 3) indicate the importance of both observable and unobservable characteristics of suppliers in the eyes of the buyers.

4.2.2.1. Positive reviews

It appeared that buyers who were actively spreading positive eWOM were not only loyal and satisfied but also had strong emotional bonds with suppliers and agents. The analysis of the reviews indicated different forms of satisfaction, such as economic and psychological satisfaction. The economic satisfaction of the buyer (e.g. Geyskens, Steenkamp, & Kumar, 1999) was linked to their positive response to the financial rewards they received through their connection with suppliers. For instance, some buyers' satisfaction was based on the suppliers' willingness to compensate them when issues arose. Buyers were especially delighted whenever suppliers focused on the provision of accommodation, an emerging concept that captures all suppliers' responses to buyers' requests for operational alterations and tailoring (Murfield, Esper, Tate, & Petersen, 2016). Some suppliers not only met buyers' needs but were also able to adapt to buyers' requirements by making alterations to goods and procedures, resulting in an overall positive experience. Results also indicate the extent to which transactions performed with suppliers lead to a better overall business performance from the buyers' side. For instance, for some buyers, this exchange enabled them to satisfy their own clients and grow in the market.

“It has been designed according to my requirements. This cannot be taken for granted and deserves praise and recognition. The actual business transaction ran very quickly and absolutely smoothly. Only 6 days passed from the day of payment to the arrival in Germany, during which the batteries were produced and shipped. All customs formalities were included in the transport service and were only paid for by me. Absolutely stress-free.” [Buyer from electrical equipment, components and telecom]

“I cannot thank you guys enough. business has been going well and I thank you very much for believing in me and my company. We have come a long way and it’s amazing to see how my amazon customers are loving the quality of your product. It’s amazing to have a great relationship with your supplier. If you are a seller and looking for someone to work with you have found the right partners that will support your business and make sure you get the best products on the market. Don’t let the other con artists on Alibaba fool you. [Buyer from electronics]

Furthermore, social satisfaction (e.g. Geyskens & Steenkamp, 2000), which refers to psychological features resulting in delightful and pleasing social interactions, was identified. Reviews consistently indicated the extent to which buyers appreciated the interaction with the supplier and, more specifically, the human touch or personal aspect. Our analysis shows that representatives who were able to assist buyers at different stages of the ordering process had additional future selling opportunities and were able to establish stronger relationships with the buyers. Buyers expressed various emotions, affective commitment, trust, and a sense of reciprocity in relation to the supplier, sharing how they trusted the supplier and had strong emotional bond with them, labelling them as a “partner,” “friend,” or even “family.”

The presence of human touch allowed buyers to evaluate the service not only in terms of efficiency in operations such as saving cost and time but also in terms of the service experience (e.g. Roy, Sreejesh, & Bhatia, 2019). Buyers assessed their rapport with the supplier in relation to the peace of mind and the feeling of relief and security while interacting with a firm’s representative. Interestingly, buyers signaled the importance of dealing with one specific representative over time as this provider developed an in-depth understanding of the buyers’ expectations and could create good experiences across multiple orders and transactions. This implies that the interaction between the specific sales agent and the buyer may hold more importance for the buyer than the relationship with the supplier in general. Our results indicate that buyers were highly keen in particularistic trust (with a specific agent). This finding is

assumed to be relevant to a selling environment, such as the Chinese market, where transparency is inadequate and significant information needed during the selling process cannot be obtained without direct interpersonal ties (e.g. Du, Gao, & Zhang, 2019). Thus, similar to offline selling, B2B buyers still want to maintain strong emotional bonds with online suppliers. This affirms the importance of interpersonal relationships in progressing long-term business relationships (Poblete & Bengtson, 2020). This means that the interactions between a specific agent and buyer are important and effective in building stronger long-term relationships and loyal customers.

Besides exploring the signals sent by buyers of their assessment of suppliers, it seems that buyers were also sending signals about themselves. First, signals were sent by buyers to foster social involvement and to express friendship with other members on the platform through the provision of supplier, product, and service-related information. Sending signals to other buyers may have also been motivated by the need to show off expertise to other buyers. Some examples of signals being sent by buyers to position themselves competitively in the market were noted. For instance, some buyers sent signals to a larger group of stakeholders, communicating their abilities by mentioning the size of their company in their reviews. They also seem to be proud to reveal online the number of orders they had made within a certain period of time and to signal their offerings to other buyers. Some also seemed to be happy to share that they had received upgraded services and more attention from the company. Moreover, these signals may be used not only to convey the added value that the buyer has received but also to gain the attention of the supplier. This may be done purposefully to foster more successful transactions, facilitate future orders, and obtain better quotations. Therefore, there appears to be some economic benefits driving buyers' eWOM production.

4.2.2.2. Negative reviews

One of the major concerns that buyers had on the platform pertained to the struggle to verify whether the displayed reviews correspond to the views of actual buyers, given that reviews may have been fabricated by suppliers. Some buyers seemed to face difficulties in recognizing the differences among suppliers, and may have misinterpreted the sent signals. Since some observable signals were easily recognized as deceitful, buyers seemed to refrain from buying from the given supplier and provided some negative signals. Buyers sent signals to other buyers and the suppliers, some of which seem to have been intentionally sent in order to convey negative information about the main signaler (the supplier) and to affect their reputation.

Deception can arise due to the geographic distances between suppliers and buyers, in addition to low levels of acquaintance and an inadequate number of connections. Some buyers wanted to express complaints about their orders by sharing them on the platform. The anonymous aspect of the B2B context was found to influence buyers' activities when sharing information about themselves and their business, which may remain private in an offline context. The motivation behind this signaling communication seems to have been linked to the experience of "converting other decisions" and being socially involved through resolving other buyers' ordering issues in the face of possible deception by the unfavorable suppliers. For instance, some buyers attempted to influence other buyers by stating the high-quality risks, while other went further by stating the financial risk of dealing with a specific supplier. While some reviews simply described the buyers' bad experiences, others were much more aggressive, warning buyers from doing business with these suppliers. Some reviews were also intended to alert other buyers not to be victims of fraudulent or deceptive companies.

"Trashy products. Horrible quality. Dishonest seller. Do not buy from this dishonorable, dishonest, deplorable seller. You will be disappointed!!! Buy from somewhere else. Do not trust this seller!!! Believe me. Horrible experience. They are dishonest THIEVES!!!" [Buyer from home, lighting, and construction]

"WARNING WARNING WARNING ⚠️ ⚠️ ⚠️ ⚠️ The five-star reviews here are fake ... I warn you all, do not make the same mistake I did after see the fake comments here."
[Buyer from agriculture and food]

One of the advantages of this form of communication is that buyers can voice the damage they have endured from suppliers without being taken advantage of by their competitors, as may occur in the offline context. The Alibaba platforms allows for expression without affecting the buyer's reputation, since users remain anonymous.

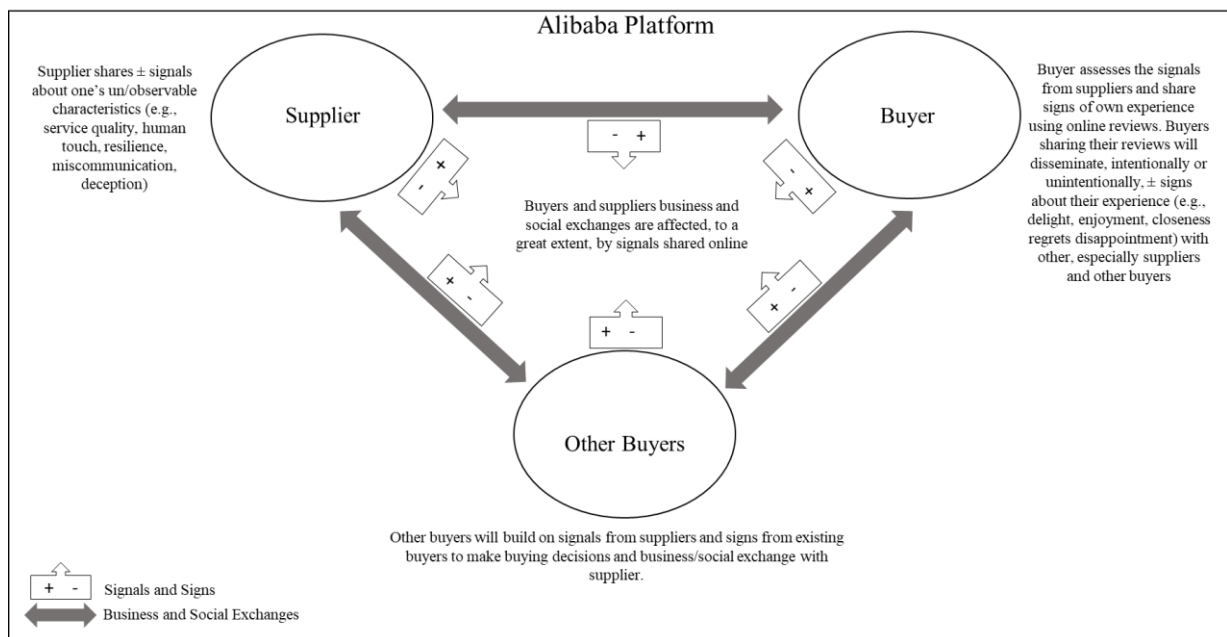


Figure 4 A network view on B2B signaling through eWOM on the Alibaba platform

The business exchange that takes place on e-platforms, like Alibaba, is not limited to the interaction between buyers and suppliers but also includes information shared with other buyers to influence prospective purchase decisions. Figure 4 demonstrates the interconnectedness (between the focal buyer, other buyers, and suppliers) in exchanges that take place on Alibaba. The figure shows that individual buyer–supplier business exchange is affected by other buyers’ feedback. The three parties connect to each other and send signals that can have direct and indirect impacts on other parties. For example, Figure 4 shows how other buyers can disseminate positive or negative signals about a supplier on Alibaba, in turn affecting the exchange between buyers and suppliers.

Suppliers have the opportunity respond to reviews from buyers on Alibaba, though a large number of reviews were left without any response. Especially in case of negative reviews, the lack of response can send an unfavourable message about the recipient supplier.

5. Theoretical contributions

Since digital technologies are changing marketing practices (Kannan, 2017; Kumar, Sharma, Vatavwala, & Kumar, 2020), there is a need to research the value of personal relationships between suppliers and buyers in technology-enabled digital sales exchanges (Bharadwaj & Shipley, 2020; Itani, Kalra, Chaker, & Singh, 2021). This study responds to the call for an in-depth examination of digital sales transactions and their effect on B2B relationships (Kumar et al., 2020). The proposed contributions are aimed at literature on B2B relationships in general

(for instance, regarding the role of human touch in digitally enhanced business relationships; a retail-specific example can be found in Sivaramakrishnan et al., 2007) and at the study of B2B eWOM in particular (for instance, through the identification of observable and unobservable characteristics of B2B eWOM in response to the calls from Agnihotri, 2020, and Lee et al., 2019).

Specifically, this study makes four proposed contributions. First, we explore how buyers and suppliers signal certain qualities in virtual platform-based social exchange. This study opens up the notion of signaling via eWOM on platforms with a wider group of connections. Besides signals sent by the supplier to buyers, this study identifies buyer-to-buyer signaling about the supplier (e.g. when the existing buyer warns prospective buyers about the supplier's credibility, delayed delivery, or problematic admin procedures), as well as signals shared about the buyers by themselves. Alibaba reviews can testify to the im/politeness, im/patience, and un/demanding nature of the buyer. Thus, the study confirms the importance of buyer-to-supplier signaling on e-platforms and extends the notion of e-platform-based signaling to buyer-to-buyer signaling, both about the suppliers, and implicitly about the buyers themselves. This interconnectedness of signaling is depicted in Figure 4 in a network view of B2B signaling through eWOM on the Alibaba platform.

Second, capturing relational complexity of B2B eWOM on e-platforms offers opportunities for conceptual development. Specifically, Alibaba reviews represent uncontrolled means for the creation of B2B eWOM. This is an important feature to highlight and differs from supplier-selected referrals (Hada et al., 2014), which have attracted considerable research attention in B2B marketing (Helm & Salminen, 2010; Terho & Jalkala, 2017). While supplier-selected referrals, such as client testimonials, are valuable signals from the buyers to prospective buyers, they are curated by the suppliers and typically appear on the suppliers' corporate websites. B2B eWOM on e-platforms, such as Alibaba, is published neutrally and is not controlled by the suppliers being evaluated. This eWOM represents a vital part of B2B signaling that is potentially more truthful as it provides a digital footprint about buyer experiences from buyers themselves. Broadening the focus of research attention toward uncontrolled eWOM in B2B signaling provides conceptual advancement and new insights into how digitalization changes buyer-supplier interaction in contemporary B2B markets.

Third, this study contributes to literature on B2B eWOM by identifying characteristic patterns in Alibaba reviews. The supplier's signaled unobservable (primarily relational) and observable

(primarily offering-specific) characteristics have been identified. Relational/unobservable characteristics include responsiveness, resilience, and human touch. Buyers, on the other hand, can signal qualities such as patience, understanding, appreciativeness, and friendliness—or lack thereof—on Alibaba. This study responds to calls made by Agnihotri (2020) and Lee et al. (2019) by identifying observable characteristics such as product/service quality and unobservable/relational characteristics relevant for B2B eWOM. Specifically, human touch, responsiveness, and resilience were identified as key themes specific to B2B eWOM.

Finally, the importance of human touch on e-platforms is considered. Our findings contrast with the idea that the development of relational qualities in B2B interpersonal interaction is typically associated with physical contact (Corsaro & Snehota, 2010; Pulles & Hartman, 2017) and “wining-and-dining” (Chen, Huang, & Sternquist, 2011, Leung & Wong, 1995). The importance of human touch in B2B eWOM demonstrates that physical contact is not always necessary for bonding. A sense of mutuality and relationship intimacy in buyer–supplier relationships can be facilitated through e-platforms. Human touch may include personalized communications, involvement in finding solutions, tailoring these to the buyer’s needs and showing politeness and respectfulness. Digital interaction between buyers and supplier does not preclude human touch—in fact, it makes it even more important. The results of this study suggest that, in B2B eWOM, the appreciation of named contact persons and identification of personal qualities of these contact representatives is key. This is in contrast with supplier-selected reviews, in which, while relational aspects are still important, they are mostly attributed to the company (supplier) rather than the contact person (Aarikka-Stenroos & Makkonen, 2014; Jalkala & Salminen, 2009).

6. Managerial implications

B2B eWOM plays a major role in suppliers’ online success due to the affirmative signals provided to potential buyers searching for suppliers online. Industrial buyers utilize reviews to decode signals of observable and unobservable characteristics of suppliers before making a purchase decision on e-platforms. Online reviews can provide information about the strengths and weaknesses of suppliers regarding the quality of their offering and relational aspects, and thus can highlight improvement potential.

Some buyers already include B2B eWOM in their evaluation of suppliers in a systematic manner, but for those who have not yet incorporated this source of market intelligence, this strategy can potentially improve purchase decisions. Specifically, buyers can design processes

for systematic evaluations and use online B2B eWOM from platforms both in extant buyer–supplier relationships and for the building of new relationships at a strategic level. Besides collecting information from B2B eWOM, buyers should also pay attention to what they signal to other organizations through the eWOM they create. For instance, being rude, attacking, and being unconstructive may not only damage the targeted supplier but can create an unfavorable impression about the buyer itself.

For suppliers, B2B eWOM provides important feedback to draw on to understand and enhance buyers' experiences. Instead of avoiding action on negative/mixed reviews, managers are recommended to respond to and resolve buyers' problems in a diligent way (Agnihotri et al., 2017). By doing so, suppliers can benefit from the service recovery that they can offer to buyers who have had negative experiences (e.g. Hübner, Wagner, & Kurpjuweit, 2018). Timely responses from suppliers to negative eWOM demonstrates dedication to solving buyers' problem, thus providing additional signals to attract new buyers. Overall, organizations that engage in e-commerce should consider how they send signals on e-platforms and how this shapes their image at the platform and beyond. By planning for a quick response time, and allocating communication tasks to contact persons with appropriate language and listening skills, partners can ensure smooth interactions (e.g. Alnakhli, Inyang, & Itani, 2021; Itani, Goad, & Jaramillo, 2019).

Suppliers should pay attention to the communication of both unobservable and observable characteristics in order to enhance buyers' experiences. This can lead to an increase in positive review content. Suppliers often focus on improving factual/observable characteristics, such as product quality. However, this study highlights the importance of unobservable/relational characteristics, particularly human touch. An important contribution of our study is that, despite the traditional approach that associates human touch with physical interaction, human touch is at least as important on e-platforms as in a non-digital business environment, if not more so. Our study demonstrates that human touch is highly appreciated by buyers on e-platforms; in fact, it is the second most important feature after product quality based on frequencies of associated keywords. It appears to be a frequently overlooked characteristic that—if managed appropriately—can be turned into an important point of differentiation for suppliers.

Thus, suppliers are recommended to incorporate the human touch aspect when it comes to signaling qualities to buyers. By having well-trained and personable service agents assigned to work with buyers and follow up on requests, and by being empathic, responsive, and respectful,

suppliers will be able to overcome some of the barriers that stem from digital business interaction, such as the lack of face-to-face interaction. The growth of B2B e-commerce will require suppliers to provide appropriate training to their employees who are in direct contact with buyers and those responsible for managing online stores. Employees should be equipped with skills and tools for working with buyers in digitally enhanced business environments that may include agility (e.g. time management training) and Customer Relationship Management technology (e.g. social CRM).

E-platforms such as Alibaba can introduce normative mechanisms for buyers and suppliers to share information that has high veracity in a timely manner, as well as to avoid verbal aggression. Deception and leaving enquiries unanswered should also be avoided, as these can incite negative eWOM. The incorporation of self-monitoring mechanisms between buyers and suppliers would be in line with the principles on self-governance (Ostrom & Gardner, 1993). This represents future development potential for platform providers. Platform-based mechanisms could also include real-time tracking and transaction information shared between buyers and suppliers. In this way, uncertainties could be further reduced. There is a need to encourage existing organizational buyers to post their reviews and share their experiences on e-platforms, as is the case in retail settings (Floyd et al., 2014). Both e-platforms and suppliers could encourage buyers to share their experiences by sending follow-up emails to collect feedback about the order and the buyer experience. Making it more convenient for buyers to post reviews online on a regular basis—for instance, by offering a single-click review mechanism—is likely to result in an extended pool of reviews and thus even more informed purchase decisions.

7. Limitations and future research directions

This study has a number of limitations that could form the basis for future studies. For example, we relied on a qualitative approach (i.e., interviews and online reviews); however, there is an opportunity to conduct sentiment analysis using an extended pool of Alibaba reviews and to run a field experiment to quantitatively examine the effects of online reviews in B2B settings. It would be interesting to examine the effects of new positive/negative online reviews added on Alibaba on suppliers' sales performance (e.g. number or volume of transactions conducted).

Although our results are based on one B2B e-platform (i.e., Alibaba), future studies can investigate the signaling of online review on other e-platforms (e.g. Bizbilla, EC21, ECVV, Tradewheel, and Worldtrade) with consideration of potential intercultural differences. These

e-platforms have varying sectoral and export/import focuses. Despite the variety of e-platforms, we believe that our findings hold relevance for B2B e-commerce in general. In addition, we acknowledge that under normal circumstances (e.g. in the absence of COVID-19) some dimensions of B2B eWOM, such as resilience, may be less important. However, the circumstances in which the study took place can inform the current knowledge base on humanitarian and disaster relief operations, with special regard to B2B eWOM.

Our findings highlight that human touch affects buyer–supplier relationships despite suppliers focusing more on observable characteristics, such as product quality, in their reviews. Researchers are encouraged to examine further why and how human touch is important for buyers seeking relationships with suppliers online and how this relationship can be strengthened. Additional avenues for future study include understanding the relative influence of signals coming from positive online reviews versus from negative reviews on new buyers’ decision-making process in choosing online suppliers. In B2C contexts, Cui, Lui, and Guo (2012) argued that the percentage of negative reviews has a greater impact on sales than that of positive reviews; similar dynamics may also apply in B2B. Lastly, it would be fruitful for research to explore the signals coming from suppliers replying to buyers’ negative and positive reviews.

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