How the digital transformation from COVID-19 affected the relational approaches in B2B

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Abstract

Purpose – The purpose of this paper is to understand the main drivers of change in the relational approaches adopted in business-to-business (B2B) companies as an effect of the digital transformation processes boosted by COVID-19 pandemic.

Design/methodology/approach – The methodology includes a qualitative study based on an abductive approach. Twenty-eight semistructured interviews and two focus groups have been carried out with sales and marketing professionals from different industries.

Findings – The research defines a conceptual framework that describes what the main changes of B2B relational approach are in a context affected by the pandemic, as well as its effects. The framework is constituted by three dimensions, namely, efficiency of the interaction, coordination and digital trust, and seven subdimensions.

Practical implications – This research also contributes to managerial practice, defining some directions to be fulfilled in a business context affected by the COVID-19 emergency to improve efficiency, coordination and trust.

Originality/value – Academic literature has greatly analyzed the transformation of the B2B scenario; less studies have explored how the relational approach is changing due to the digital acceleration caused by COVID-19 pandemic.

Keywords B2B, Digital transformation, Business relationships, COVID-19 pandemic

Paper type Research paper

1. Introduction

The business context has radically changed in the past few years. Due to digitalization and its impact on contexts of interaction, many market barriers have fallen, and firms' space boundaries are becoming more flexible and permeable (Ramaswamy and Ozcan, 2018; Moravcikova and Kliestikova, 2017). Digital tools, such as social media, Internet of things (IoT), Big data, artificial intelligence (AI) software, social customer relationship management (CRM), augmented reality and others (Rindfleisch *et al.*, 2017; Chang *et al.*, 2019), are transforming the structure and the essence of social interaction in the business-to-business (B2B) context (Pagani and Pardo, 2017; Zaki, 2019).

The digitalization of many marketing and sales processes was already present before COVID-19, leading to a complete rethinking of the role of sales in the management of customer-supplier relationships (Moncrief, 2017). The new sales blueprint moves from product features to customized solutions as well as redefining traditional business processes with the adoption of new technologies. In business market where companies need to constantly be connected to their stakeholders, where the players are looking for new ways to interact and new touch-points, digital relationships have become key to creating value for B2B firms (Steinhoff *et al.*, 2019; Mahlamäki *et al.*, 2020). This is due to the fact that,

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similarly to consumers, business buyers are more often searching for products and services online. They are trying to find customized solutions on their own and speeding up the purchasing process, relying on human support only when it is truly necessary, for example, in complex and novel situations (Thaichon *et al.*, 2018).

When the pandemic hit, the transformation of the digital process was further boosted. Recent research indicates that 80% of B2B players have preferred to carry on with relationships and interaction online (Mckinsey, 2020) and that investments in e-commerce platforms will rise to 85% by 2022 (Selligent, 2020). The COVID-19 pandemic has accelerated digital transformation, including omnichannel selling, inside sales, tech-enabled sales and e-commerce (Hadjikhani and Lindh, 2020):

Coronavirus (COVID-19) has been a great wake up call. It has clearly demonstrated how fragile business is. It has created disruption in the supply chain both domestically and globally, particularly with respect to food and energy. It is hard to imagine how a business could run today without smartphones, the internet, e-commerce, and Zoom meetings (Sheth, 2020a, p. 282).

B2B companies are feeling a sense of urgency in starting this shift, and many firms are disoriented on how to enter into the new context and on how to maintain a relational approach by integrating human and digital technologies. Recent special issues on the business transition after COVID-19 have highlighted the need for new frameworks that explain methods of interaction between companies and the other actors in their ecosystem (Lacka *et al.*, 2020). The use of digital technologies has augmented the number of touch-points a company has,

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leading to the need to manage greater relational complexities (Witell et al., 2020). At the same time, these new technologies should provide increased support in coordinating the relationships that firms have to manage considering all the players that make up the B2B ecosystem (Korpela et al., 2013; Shetha, 2020a) and who have been overwhelmed due to the pandemic situation. The landscape where B2B companies are now doing business is quite varied with few anchoring points. It must also be pointed out that many consolidated relational models in business-to-consumer (B2C) do not apply to B2B companies which were already struggling with the digital transformation before the pandemic hit. At a theoretical level, few studies are exploring how relational approaches are changing, considering the increasing digitalization process caused by COVID-19 and how physical and digital approaches will combine in this new postpandemic setting (Corsaro and Anzivino, 2021). The implementation of digital technologies in industrial business relationships carries both positive and negative effects for the relationship, which need to be further explored (Hadjikhani and Lindh, 2020), also given that these changes are likely to be permanent (Rangarajan et al., 2021).

The aim of this paper is to discover what dimensions are driving the B2B sales and marketing relational approach in the digital setting, considering the effects of COVID-19. We will present a theoretical framework that represents a starting point for a renewed understanding of relational approaches in B2B after COVID-19, as well as a practical guide for companies during the transition process. To reach this goal, we organized two focus groups and 28 interviews with sales and marketing managers from B2B companies in various industries. Data collection was carried out between June 2020 and February 2021, as the pandemic continued to spread.

Our study will develop a conceptual framework that explains the main dimensions that have become key in developing a relationship strategy in the B2B digital context as an effect of the pandemic. In this way, we contribute to both the debate on digital marketing and selling strategies in B2B, which are fundamental in a relationship-based approach. We establish a bridge between the two areas that have become fundamental post-COVID-19 with the increased acknowledgment that managing digital and physical interactions requires a higher integration between marketing and sales; they are now inextricably linked, no longer making it possible for them to be considered as parallel study streams or disconnected silos inside companies. Our research also contributes to managerial practices, as the dimensions and subdimensions included in our conceptual framework represent the key elements to adapt to new contexts of interaction. This can be problematic as companies that do not adapt, risk disappearing in a few years (Soto-Acosta, 2020; Hartmann and Lussier, 2020; Cankurtaran and Beverland, 2020). A clear understanding of the importance of such dimensions can help drive managers in conducting a transformation in a more effective way. The article is structured as follows. We will first conduct a literature review concerning the topic of digitalization in the B2B context and the influence of the COVID-19 pandemic on business activities. Then, we will provide an overview of our methodology including an analysis of the research approach and the data analysis phase. Next, we will provide our findings with the description of the theoretical framework and the

relative findings. We will conclude with the managerial implications and with future lines for other research.

2. Digitalization in the business-to-business context

Digitalization can be considered a pervasive force in the marketplace (Hofacker et al., 2016). Technologies have created new spaces to establish relationships (Boyd and Koles, 2019), and the economic activities have been transposed from a physical context to a digital one (Yadav and Pavlou, 2014; Bharadwaj and Shipley, 2020). Sheth (2020b) discuss how digital transformation transcends simple digitalization of resources to encompass the use of digital technologies to engender major business improvements. These improvements frequently culminate in new and revised business models. Thus, digital transformation enables organizations to improve operations and competencies, and increase the creation and delivery of value.

Improvements in business models and relational processes are also facilitated by a data-based approach enabled by the smart use of technology. Digital tools have the potential capacity to grant an innumerable number of information which, if exploited in the correct way, allows to increase operations and business decisions. Data are considered as a driving force that guides efficient choices in increasingly competitive and complex business contexts. However, this approach is not limited to the implementation of the most advanced tools by firms but it requires human capabilities able to interpret information and transform data in useful knowledge for companies. Visvizi et al. (2021) agree with the idea that integrating digital advanced tools or smart technologies is not sufficient since it is necessary to harmonize human and managerial capacities able to extract value from data. For this reason, innovation lead by data-driven approach might be defined as a multidimensional perspective that entails both technological and nontechnological capacities processes.

It is necessary to reinterpret value creation and innovation processes through the application of a data-based approach. Considering the great amount of information that companies manage to collect, firms can improve decisions and undertake innovative actions.

According to Troisi et al. (2020), there are three main layers that can facilitate data-driven innovation for firms that are: business model dimensions, value cocreation-based strategies and data-driven orientation. The first one refers to proactive changes by firms in the implementation of technology, in the adoption of new management skills or in settling new objectives and goals. The second one concerns the process of exchange and the cojoint creation of value between different actors. Finally, the last layer identified by the authors is connected to data-driven culture that considers data as a valuable asset to be integrated into technological infrastructure, in management skills and in business processes with the aim to transform the single information into useful knowledge for the company.

Digital instruments have also completely redefined the time and space dimensions in which interactions take place (Breidbach and Maglio, 2016; Kunish *et al.*, 2017). In this scenario, resources can be integrated into every place and every moment. These tools have become cocreation instruments that

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greatly influence not only the customer experience but also the marketing and sales process, creating new digital scenarios (Ordanini and Pol, 2001) and new touch-points where business can happen (Følstad and Kvale, 2018; Ramaswamy and Ozcan, 2018; Kotler and Armstrong, 2017). On that point, Corsaro and Anzivino (2021) observed that digitalization has changed the spatial and temporal dimensions of B2B interactions and have proposed a holistic and systemic view of value creation in digital contexts to interpret and manage interactions. B2B buyers, in particular, believe that digital channels are becoming more convenient with the possibility to have immediate access to product characteristics and to customer reviews (Catlin et al., 2016) which also increases the level of trust and transparency of the brand and the company itself (Pavlou and El Sawy, 2002; Kumar and Ganguly, 2021; Chang et al., 2019). Ray et al. (2020) discovered that B2B customers favored do-it-yourself technology or live bot chats and texts rather than traditional interactions with salespeople, and they preferred digital communication with salespeople only when self-service could not meet their needs.

Sellers are facilitated in acquiring new customers by the appropriate use of their media and digital inbound marketing strategies (webinars, blogs, e-mail, etc.) (Bharadwaj and Shipley, 2020). Technology helps in finding potential leads and through customized content transforms them into effective customers, loyal to the company. In this sense, digital approaches support firms to become more effective in generating customer engagement and finding new business connections.

This change of behavior in B2B customers has led sales organizations to rethink their relational approach in the phases of customer and prospect engagement, go-to-market strategies and resource integration with other parties.

In particular, resource integration represents the means through which different business players exchange their knowledge and capacities to cocreate value (Kleinaltenkamp et al., 2012). It emerges a holistic and dynamic perspective of value creation that happens through exchange in a wider and multiactor system (Vargo and Lusch, 2016; Storbacka et al., 2016); in this context, value is not the result of individual activities of single firms, but it is created through the integration of resources between different social and economic players (Lusch and Vargo, 2014). This process is clearly facilitated by the smarter and more extended use of digital tools that have become sharper, integrating human-like capacities and, therefore, operating autonomously, without intervention (Maglio and Lim, 2018). Technology plays a central role in value cocreation and in mediating interactions allowing an easier and more fluid exchange between those actors. In particular, digitalization highly influences inter- and intraorganizational resource integration, allowing also the possibility to connect with unrelated actors or organizations. In this sense, technology is changing the resource integration patterns and the ecosystem in which firms operate (Sklyar et al., 2019).

To enhance this process, the use of social media has increased drastically, even in B2B. Marketing teams use social media to identify and target specific clusters of customers and to create and exchange user-generated content (Pandey *et al.*, 2020; Agnihotri *et al.*, 2016). Sales teams have increased their

use as well. Social selling has taken on an important role in recent years. It is considered an innovative sales practice based on the power of social technology (Tiwary et al., 2021) and on the deeper customer knowledge obtained through a high level of interaction (Trainor, 2012). Salespeople can use these tools in a strategic way during all the stages of the selling process, from the acquisition of leads to the final follow-up (Cartwright et al., 2021), and they can adapt different social media channels to different objectives. For example, Twitter is needed to acquire new prospects or to find possible partners, LinkedIn to find out who the decision-makers are of a firm and to look for the right people to contact for new business. Initially, the use of social media in the sales process was not easily accepted by salespeople (Moncrief et al., 2015), but this has changed due to the ability to develop and maintain networks with internal and external players (Wang et al., 2020; Marshall et al., 2012; Järvinen et al., 2012) and the capacity to connect with new international stakeholders and to cross cultures (Quinton and Wilson, 2016). In the past, social media was seen as simply a tool for communication (Leek et al., 2016; Swani et al., 2014), while it is now intended as having a role as a relational resource between the entrepreneurial firm and its B2B partners (Drummond et al., 2020).

Selling through e-commerce has also increased dramatically with the pandemic, and a large number of B2B firms have decided to make this shift (McKinsey, 2020). E-commerce platforms are becoming vital for every B2B company as they not only facilitate the exchange of products and services but they also increase the level of the learning process of customers and the level of service and products offered (Pavlou and El Sawy, 2002; Chang et al., 2020; Koponen and Rytsy, 2020). In fact, they allow for the development of a new and more profound relationship with the final customers by maintaining continuous contact and creating a digital dialogue with all the stakeholders. This is outlined by Qi et al. (2020), who in their study define e-commerce as one of the main tools needed to enter the cross-border market, and as a possible solution to overcome the problems of the COVID-19 pandemic for B2B firms going abroad.

Furthermore, the process of creating new business relationships is also highly facilitated by sales and marketing automation (SMA) tools which allow business customers to connect in new ways and to simplify the marketing and sales processes (Thaichon *et al.*, 2018). Post pandemic, 78% of marketing and sales managers interviewed have declared that in the upcoming years, they plan to invest in technologies such as CRM and marketing automation systems, and they intend to open a proprietary e-commerce (Salesforce, 2021). Among the reasons for such investments is the need to improve the business customer experience by sending personalized communication, expanding customer service and the activities of cross-selling and up-selling.

The increased use of technology previously discussed in B2B is changing the relational pattern and relational dynamics of many companies. On the one side, most industrial companies depend on long-term and sometimes multigenerational relationships between the company, its customers and suppliers (Parvatiyar and Sheth, 2000; Saura *et al.*, 2021). On the other side, the use of digital technologies in B2B companies has made evident the difficulties these companies face in managing relationships with the community, the employees and the customers (Sheth, 2020a). Many studies have been dedicated

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the understanding and management of business relationships, both from the industrial marketing and purchasing (IMP) approach (Håkansson and Snehota, 1995; Gummesson et al., 2009), service science (Grönroos, 1994; Barile and Polese, 2010) and service-dominant logic (Lusch and Vargo, 2006; Lusch et al., 2007). Prior research in the IMP stream related to the impact of digital technologies on business relationships has led to the revision of the traditional activities, resources, actors in terms of activity links, ties to resources and actor-bonds-centered digitalization (Pagani and Pardo, 2017). Challenges related to digital platforms can be found on an individual level as well as on an intra- and intercompany level (Rajala and Tidström, 2019). For instance, Hadjikhani and Lindh (2020) demonstrated that digitization in industrial relationships has a positive direct impact on the commitment by increasing cooperation. They also noticed that digital use may increase uncertainty and negatively impact commitment.

The opportunities for sharing data enabled by digital technologies are a further element that generated uncertainty in B2B relationships, creating new issues between collaboration and competition, especially when the pandemic hit. Crick and Crick (2020), who adopted in their study a resource-based theory and the relational view, state that coopetition strategies are increasingly used to handle the COVID-19 pandemic.

Therefore, the effects of digital technologies on the marketing and sales relationship are still controversial. Whereas most B2B organizations have taken a more cautious approach in deploying digital technologies, the COVID-19 pandemic has compelled sales organizations to adapt quickly and embrace digital transformation (Rangarajan *et al.*, 2021; Kostis and Ritala, 2020). In the current literature, there is an evident gap in the joint study of digital and physical interactions for B2B companies and their relationships with other companies (Alonso-Garcia *et al.*, 2021).

The COVID-19 pandemic has changed the way individuals in the sales force interact with customers and with B2B organizations (Rangarajan et al., 2021). There is an urgency in B2B academic research to deeply examine organizational processes as well as sales and marketing practices in light of the COVID-19 pandemic and also to give firms managerial tools to navigate this difficult period. At the moment, less knowledge exists with respect to the management of business relationships mediated by digital aspects, which is becoming an increasingly more relevant issue after COVID-19. This study intends to systemize the relational approach of B2B firms focusing on all the dynamics and processes

that firms face daily, considering it as the primary interconnection between two main aspects, human and digital.

3. Methodology

3.1 Research approach and data collection

We adopted an exploratory approach involving a qualitative phase to find the main dimensions of the digital B2B relationship in the COVID-19 era (Creswell *et al.*, 2007); this technique has been useful to investigate phenomena, to propose new ideas and to develop a conceptual framework which helps define relationships in a digital B2B environment.

The study is based on an abductive approach with the aim to generate insights from qualitative observation of phenomena. It is a fluid process which intends to reinterpret a thesis with the empirical data obtained during the research phase (Alvesson and Skolberg, 2009). Furthermore, this method allows businesses to have a contextual analysis of material information and theoretical ideas with the goal of extracting new themes in the field of digital B2B relationships.

We started analyzing the principal literature on the topic of digitalization in B2B firms considering the COVID-19 situation, and then we enriched it through our findings. We started to understand how the relationship has been transposed from physical to a digital context and which objectives B2B professionals have in this "new" form of interaction. We moved on to analyzing the main themes and the key points of this relationship considering the COVID-19 pandemic that has redefined the way of carrying out business. In this process of alternating literature and empirical data, we discovered that our study could work in a conceptual framework that describes the business relation in the digital B2B environment.

We used a purposeful sampling technique to collect all the empirical data. The qualitative research has been developed through the use of projective techniques, useful for going indepth and carefully sounding the opinions of the respondents, thus allowing a business to understand the real essence of the digital B2B relationship, the expectations of B2B professionals during COVID-19, as well as to understand if there are areas for improvement of the relationship as it is structured today, by comparing the opinions of experts in the sector.

The qualitative phase was carried out through semistructured interviews and focus groups done between June 2020 and January 2021 (see Table 1).

Table 1 Data sources and applications

| Data source | Type of data | Applications |
|-----------------------|---|---|
| Business Documents | Business reports, business presentations (2020–2021) | Understanding the principles of digital transformation and B2B relation in the COVID-19 era |
| Interviews | First round (2020) Interviews of 16 sales and marketing professionals (16 h). Profiles detailed in Table 2, #1 to #16 Second round (2021) Interviews of 12 sales and marketing professionals (12 h). Profiles detailed in Table 2, #17 to #28 | Gaining how the B2B relation arises in a digital environment and how the COVID- 19 has influenced it A deeper analysis of the B2B relational approach in a second phase of the COVID-19 pandemic, trying to understand the main dimensions of this process |
| Focus groups | 2 Focus groups (2020) Total of 14 sales and marketing experts (4 h). Profiles detailed in Table 2, #29 to #42 | Validating the insights obtained during the interviews |

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Relevant academic literature agrees that the combined use of focus groups and interviews is useful in understanding different representations and conceptualizations of the phenomenon under consideration (Lambert and Loiselle, 2008). In fact, an increasing number of studies, even in the B2B sector, are using this type of methodology to obtain a more comprehensive view of the subject and to reinforce the validity of their findings (Mittal and Sridhar, 2020; Kooli *et al.*, 2016).

For the qualitative analysis, we identified information rich men and women from a wide range of industries and different areas of the market.

The interviewees and the participants to focus groups were selected for having a key role in the marketing or sales department or for being the CEO of an Italian B2B company. This was done to have a different perspective of the same phenomena and to define a complete vision of the theme (See Table 2).

Given the exploratory nature of the study, the research was conducted across multiple sectors to identify and analyze common drivers. The goal was to include the largest number of industries in the study to have a clearer and more complete reference framework for the B2B landscape. Moreover, the variety of contexts represents a resource for identifying common factors between the various industries and prevents the mistake of considering final findings as conclusions that result as true for only some sectors. Through this approach, we

Table 2 Participant profiles

| # | Job position | Gender | Seniority (in years) | Industry |
|----|----------------------|--------|----------------------|---------------------|
| 1 | Sales Director | Male | 30 | Food |
| 2 | Marketing Director | Female | 12 | Food |
| 3 | Marketing Director | Male | 15 | Digital Services |
| 4 | Marketing Director | Male | 19 | Fashion |
| 5 | Sales Manager | Female | 8 | Food |
| 6 | Sales Director | Male | 18 | Beauty |
| 7 | Sales Director | Male | 10 | Beverage |
| 8 | Marketing Director | Female | 15 | Gas service |
| 9 | Sales Director | Female | 8 | Large distribution |
| 10 | Marketing Director | Male | 14 | Fashion |
| 11 | Sales Director | Male | 14 | Pharmaceutical |
| 12 | Marketing Director | Female | 15 | Consultancy |
| 13 | Sales Director | Male | 20 | Large distribution |
| 14 | Sales Director | Female | 8 | Iron production |
| 15 | Sales Director | Male | 12 | Automotive |
| 16 | Marketing Director | Male | 15 | Financial |
| 17 | Sales Director | Female | 16 | Financial |
| 18 | Sales Director | Male | 6 | Travel |
| 19 | Sales Director | Male | 5 | Financial |
| 20 | Marketing Director | Female | 20 | Manufacturing |
| 21 | Sales Director | Female | 35 | Insurance |
| 22 | Marketing Director | Male | 20 | Metal manufacturing |
| 23 | Key Account Manager | Male | 7 | Beverage |
| 24 | Marketing Director | Female | 15 | Digital services |
| 25 | Sales Director | Male | 11 | Hospitality |
| 26 | Sales Director | Female | 12 | Pharmaceutical |
| 27 | Sales Director | Male | 12 | Fashion |
| 28 | Sales Manager | Male | 15 | Large distribution |
| 29 | Sales Director | Male | 16 | Fashion |
| 30 | Marketing Director | Female | 15 | Financial |
| 31 | Marketing Director | Female | 4 | Automotive |
| 32 | Sales Director | Male | 5 | Food |
| 33 | Sales Director | Female | 6 | Pharmaceutical |
| 34 | Sales Director | Male | 8 | Healthcare |
| 35 | Marketing Specialist | Female | 5 | Food |
| 36 | Sales Director | Male | 7 | Financial |
| 37 | Sales Manager | Female | 12 | Fitness equipment |
| 38 | Sales Director | Female | 15 | Publishing |
| 39 | Marketing Director | Female | 8 | Financial |
| 40 | Sales Director | Male | 6 | Advertising |
| 41 | Marketing Manager | Female | 16 | Food |
| 42 | Sales Director | Female | 19 | Beauty |

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managed to identify a multifaceted perspective of the phenomenon analyzed.

Twenty-eight semistructured interviews were conducted through the use of Zoom platform considering that the COVID-19 social distancing policies compromised the possibility to carry out in-person activities. The decision to do semistructured interviews allowed the participants to go more in-depth in issues which were emerging as the interview progressed. All interviewees were asked to keep their cameras and microphones on during all the phases of the interviews. One week prior to the meetings, each professional was informed with regard to the main topics that would be discussed. The questions were chosen considering the preliminary literature review and the study of business cases. The questions were open-ended or semistructured, and they mainly regarded the way in which relationships have changed with digitalization during the COVID-19 pandemic; which critical elements emerged in interacting with customers and other stakeholders and how they have been managed; which are the main technologies implemented and the areas of investments in the near future. The interviews lasted 1 h and were recorded and transcribed by the authors. We then contacted the managers a second time to check the reliability of their comments. At the conclusion of the research, we sent a report to each interviewee containing the main points of this study.

We also organized two focus groups involving 14 B2B professionals to corroborate and certify the insights obtained through the interviews. To ensure an easy and fluid interaction, each focus group had a maximum of eight people. The meetings were conducted virtually through the use of Zoom and lasted an average of 2 h. Both focus groups were moderated by the authors who also chose the main themes of the discussions. The topics were digitalization in the B2B context and the evolution of relationships, the possibility of investments in technology in the near future and the effects of the pandemic on business realities. The focus groups were approached in an informal way with the support of the researchers to facilitate the process. The moderators tried not to excessively drive the discussion, and the participants were free to communicate their opinions, their visions and to offer examples. The conversations with the focus groups were recorded through Zoom to guarantee that no useful research information was lost.

When we concluded the 28 interviews and the two focus groups, we understood that we had reached the saturation point on the topic and we stopped collecting data (Strauss and Corbin, 1998).

We have also included a table that outlines the strengths and the weaknesses of the research method used to conduct the analysis (See Table 3).

3.2 Data analysis

Interview analysis was conducted with the aim of developing categories and looking for common topics among all the data reached (Yin, 1989; Eisenhart, 1988). The abductive approach also influenced the phase of data collection creating an exchange between theoretical information and empirical data. We started analyzing the material that we obtained during the interviews and the focus groups, and during the coding process, we have been able to extract the main dimensions of B2B relationship in a digital environment.

The analysis carried out was based on a manual coding procedure considering that being a research on multiple industrial sectors, we needed an approach that could allow us to concentrate on a general context, to have a holistic vision of the phenomenon that integrates and interconnect heterogeneous processes; in this sense, manual coding permits to transcend to more conceptual and theoretical levels of analysis (Saldaña, 2021). Furthermore, this approach, more than the software coding, enables a direct and meaningful interaction with data that are continuously handled by researchers who can, therefore, constantly compare them, change view perspectives and develop different interpretative insights. In this kind of research, it has been essential to analyze every possible interconnection and relationship between information, to move from micro- to macro-view perspective with the aim to generate theory or conceptualization. Furthermore, manual coding permits to focus and include in the analysis also nonverbal language like body language, tone of voice, the inflection and the feelings of the participants (John and Johnson, 2000), that, in the same way, have produced important meanings for this research.

The analysis has been conducted by both the researchers that constantly cooperated to improve the reliability, the systematicity and the transparency of the coding process promoting reflexivity and a continuous dialogue to enhance the trustworthiness of the results.

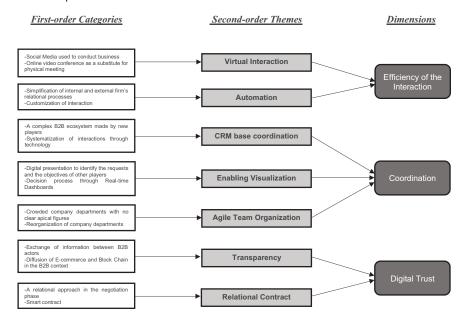
The analysis follows three different stages to identify the main themes and the dimensions of the B2B relationship in a digital environment. Figure 1 illustrates the result of our final coding structure with the conceptual framework that we extracted.

Table 3 Strengths and weaknesses of the research method used

| Items of the research | Strengths | Weaknesses |
|--|---|---|
| Investigating the relational ecosystem of B2B firms Analyzing digital transformation processes of B2B firms Examining the effects of COVID-19 on business B2B relationships | Wide-ranging exploratory research Broader analysis of the reference context Identification of latent constructs Generation of theories and conceptualization of the phenomenon In-depth information on individual cases Flexibility in research processes Closeness to data | Nonstatistical reliability of the results Possible influence by the researcher's perspective on the analysis Risk to gain misleading findings Time-consuming analysis Social and unconscious biases of the interviewees |

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Figure 1 Coding structure and conceptual framework



3.2.1 Open coding

Following the approach of Gioia *et al.* (2013), we began analyzing the empirical information obtained during the interviews and the focus groups to identify initial categories. We then assigned numbers to each category and we grouped similar codes to obtain 14 first-order categories.

3.2.2 Axial coding

In the next step, we further analyzed the relationships between the open codes (Strauss and Corbin, 1998). To do so, we alternated data obtained during the qualitative phase with data from existing studies, trying to link emerging themes to past literature (Gioia et al., 2013). We then grouped first-order categories into second-order themes. For example, the first-order categories "simplification of internal and external firm's relational processes" and "customization of interaction" have been clustered into the second-order theme "automation" as they reflect the fact that B2B firms are increasingly using technology and, in particular, SMA's tools to manage business interactions.

3.2.3 Selective coding

Finally, we merged the second-order themes into core categories (Creswell and Creswell, 2018), with the objective of identifying a conceptual framework that explained the main dimension of B2B relations in a digital context considering the acceleration caused by the COVID-19 pandemic. We connected second-order themes with data deriving from the empirical research to obtain dimensions that present a high level of theoretical abstraction. For instance, the second-order themes "CRM base coordination," "enabling visualization" and "agile team organization" have been aggregated into the higher-order dimension "coordination" as they represent ways to increase alignment in the relationships between B2B firms or players.

Our findings were validated by the data obtained through the interviews of multiple participants to verify the veracity beyond a single case or industry. We also applied the comparison method in all the interviews and in the focus groups, identifying the main themes and comparing them to verify the consistency of our findings and underlying the common themes and the differences.

4. Findings

Our analysis resulted in a conceptual framework that describes the main dimensions of the digital B2B relationships. In the framework we have theorized, there are three higher dimensions that represent the core elements of this study with a significant level of abstraction, and they are: efficiency of the interaction, coordination and digital trust; each of them presents particular subdimensions: virtual interaction, automation, CRM base coordination, enabling visualization, agile team organization, transparency and relational contract.

4.1 Efficiency of the interaction

This first dimension has been extracted analyzing how the B2B professionals maintain and create relationships in a digital environment after COVID-19.

We observed from the interviews that during the initial phases of the pandemic, specifically small- or medium-sized companies did not have the tools, the skills or the culture to manage business relationships exclusively online. In many cases, in fact, they simply implemented the approaches and the modalities they used in the physical world to the digital setting. For instance, they were not ready for the immediacy of communication, and their web calls with customers tended to last very long. With the persistence of the pandemic, however, even the aforementioned companies understood the potential of digital and began to adapt and to use it to empower their traditional practices.

In this regard, firms discovered the positive effects that digitalization could generate and for this reason, technology was then perceived as an opportunity, a different way to

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establish new business relationships, to conclude new deals, to connect with different and more international stakeholders by reducing the costs and splitting time between all activities. Digital systems facilitate B2B firms in managing and handling interactions with the main players of their network (Pagani and Pardo, 2017; Hofacker *et al.*, 2020).

We were very skeptical to digitalize most of our asset and processes, we were wrong. During the pandemic and the lockdowns, we immediately understood the validities of these instruments and the costs that we managed to cut. Digitalizing many processes allowed us to establish new relations and we managed to find new business interlocutors (Sales manager, large distribution company).

During the COVID-19 pandemic, the only solution to maintain and create new business interactions has been the digital one, we discovered that we could increase the efforts in using those technological tools. We managed to connect with our stakeholders and to find new customers that without technology would never be connected. Technology allowed our firm to increase the efficiency of our interactions (Sales director, beverage company).

Coding the interviews and the focus groups, we found out that the digital tools mainly used to increase efficiency in the relationship are: social media, social CRM, digital platforms for meetings, artificial intelligence, automation systems, IoT. These technologies represent the way in which marketing and sales professionals can increase the efforts of their activities, diminishing the time spent on them and reducing

Analyzing the new essence of the digital interaction, as described above, and going in depth into the interviews and the materials of the focus groups, we have also been able to extract two subdimensions that explain the importance of the efficiency of the interaction in the digital B2B context and they are: virtual interaction and automation (See Table 4).

4.1.1 Virtual interaction

The first subdimension is virtual interaction, which concerns the new way in which B2B players communicate in the COVID-19 era and how digital tools can increase the efficiency in interacting with business professionals. This has been extracted by analyzing the environment in which B2B actors cooperate. In this difficult panorama, business professionals claim that there is an urgency to constantly remain connected, to nurture business in every situation and to avoid any time dispersion. For this reason, the use of e-mail and phone calls is dropping significantly; B2B players prefer to use social media such as WhatsApp to communicate in business contexts because they are in immediate contact with their partners. In fact, as stated in various interviews, the increased use of smartphones by managers is pushing the management of company interactions toward a more technology centered way. The professionals understood how the use of traditional tools brought the delay of economic processes; in some cases, they affirm that they often waited for days before receiving an e-mail

Table 4 Efficiency of the interaction: selected evidence

Second-order themes Selected evidence on first-order codes

Virtual interaction

Social media used to conduct business

We use Social Media to find customers and to nurture them. They are well designed and they permit to have an immediate interaction. (#16)

With social media like LinkedIn we can immediately have access to central information regarding our prospect partners and to understand if we can build a valuable relation. (#36)

Social Media represents the future to entertain business interactions. We do not use anymore email or phone calls, they take too much time. We need tools that allow a faster relational process. (#38)

Online video conference as a substitute for physical meeting

We have been using Platforms for meetings for years, they are very efficient systems. We cut off all the costs of travels, of business trips, but we maintained the same level of interaction. Initially it was very difficult to convince our interlocutors to use online tools. However, with this pandemic they all have been forced to adapt to this new reality and they have discovered how it is positive for economic activities. (#19)

When COVID-19 started I have been obliged to conduct business meetings online, it has been very difficult for me, at the beginning I did not know how properly use those tools and platforms, and I thought I could lose many affairs. Now it has become normal for me to conduct meetings online. (#20)

Platforms like Zoom or Microsoft Teams have become fundamental with the arrival of the COVID-19 Pandemic. We used to travel a lot to meet personally our customers, now we can easily conduct affairs in our offices. (#10)

Simplification of internal and external firm's relational processes

COVID-19 pandemic made much more difficult the relational activities with our customers, but also internally between firm's departments, for this reason we have introduced Sales and Marketing Automation Systems to simplify processes. This makes easy our daily work and it increases the quality of our relational capacities. (#22)

We have to face hundreds of interactions daily, we needed a tool to systematize them and to substitute our approach in the initial phase of the lead nurturing. (#15)

Customization of interaction

We are a big company, with many customers and we have continuous interactions and we wanted to personalize each contact, for this reason we opted for a Sales and Marketing Automation System that perfectly allow to tailor all our contents for every kind of clients. (#41)

In our lead nurturing campaigns we want to customize every interaction to increase the possibility to acquire new customers, doing it personally was becoming very complex, for this reason we adopted a Sales and Marketing Automation System (SMA's). (#37) Customization is becoming fundamental with COVID-19, clients need personalized interactions. (#19)

Automation

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or a phone call to close deals with their customers. This situation is no longer acceptable with the pandemic emergency, which has boosted business processes and demands immediate interaction to push business.

At the beginning, I was a little skeptical of using social media to conduct transactions, since they are not proper business tools and they have been created for other reasons, but now I cannot do without them, they are becoming the main way to communicate with my dealers, my customers and also with my team. In this way we can nurture affairs only with our smartphone obtaining the same goals (Sales Director, beverage company).

I started to use social media to conduct business affairs given that I understood I could better communicate the sense of urgency to my counterparts. In some cases, I waited for an email for days without receiving any response, or I spent hours on the phone waiting for my counterpart to finally decide to respond. With the pandemic, it is not possible. I need to know in an hour whether I have closed the deal, and using this new chat is perfectly feasible. Furthermore, people using social media are 'forced' to respond, in as much as I can clearly visualize whether they see my communication and they decide to ignore it, and when it happens, I immediately decide to look for new deals, new firms or new counterparts (Marketing director, fashion company).

Social media is also substituting the "old" media to communicate inside companies; marketing and sales teams are experimenting with new ways of interaction based on social tools. With the introduction of remote working and with the social distancing policies inside offices, it is necessary to find alternative methods to always be in contact, and social media perfectly meets this need. The pandemic situation brought with it the risk of isolation, while the creation of common chats and the continuous flow of messages and interaction recreated the "in office" atmosphere giving a valuable and faster tool to connect entire departments.

I am the head of my department and with the forced lockdowns I have had to rethink the ways of interacting with my team. Email or phone calls create too much confusion after all, it is difficult to communicate at the same time with all of my team and it takes too much time. For this reason, we experimented with social media in daily activities, now we make decisions and we easily communicate through them creating common chats and discussions (Marketing director, financial company).

Another important approach that derives from this subdimension is the new way to conduct business meetings: interaction has been transposed online. With the pandemic, it has become the rule and the only way to carry out business and to nurture relationships. It was already a trend in previous years to have virtual business meetings; however, this trend has been accelerated by COVID-19 because of the forced distancing policies. This new form of techno-mediated interaction is based on digital platforms (like Zoom or Microsoft Teams), which allow visual contact in an innovative way.

As stated by the respondents, the online experience has become the main way to continue ordinary activities and to start a new business. We understood through the interviews that, especially small companies, struggled, in the beginning, to organize a new visual business approach, being that they were used to having direct contact with the interlocutors and they had not been given the proper tools to digitally manage these new meetings.

At the beginning of the pandemic we were very much in trouble, and we did not know how to carry on with business activities. We used to travel a lot to go to our customers and close deals, but with COVID-19 it was impossible. We ignored the existence of platforms like Teams or Zoom and we used to call our interlocutors, but it was a limited interaction and we were not able to gain positive results (Sales Director, pharmaceutical company).

When COVID-19 started we were obliged to have meetings online but it was very complex; In face to face interactions I can understand their approach through facial expressions and their emotions through body language or vocal intonation, if they do not agree or any signs of hesitation or fear. With digital tools, it is much more complicated (Sales Director, food company).

However, after a period of running these meetings, in most cases, professionals state that they would never return to the "old" normal. They have discovered the efficiency of digital meetings as they offer more benefits and a significant cost reduction.

During the COVID-19 pandemic, we could only have meetings online, it has been great for our company, since we have managed to have more meetings a day with more international interlocutors reducing the time of each one and avoiding any delays that we had had before. We were only concentrating on obtaining maximum effort in the minimum amount of time (Sales Director, fashion company).

We have increased the efficiency of interactions in our company, cutting many costs, considering all the travel, all the hours spent to reach clients that are no longer necessary. With this new method you can empower your time (Sales Director, pharmaceutical company).

Respondents underlined how in-person meetings are longer than the online ones, with a high dispersion of resources and time, and in many cases, they did not obtain the desired results. With the digitalization of these interactions, it has been possible to concentrate more business on the same day and to reach the maximum effort in the minimum amount of time. B2B professionals outline how people are concentrated and get straight to the point so as not to complicate the interaction. There are no longer time dispersions, and companies have easier access to new markets and economic opportunities, expanding their businesses and their networking (Fraccastoro et al., 2021).

4.1.2 Automation

From the coding process, we have clearly stated that B2B professionals have less time to nurture business relationships because of the COVID-19 pandemic, which has greatly expanded the economic landscape and has them dealing with new complex figures. For this reason, managers have decided to simplify their relational approach with the automation of certain activities. This permits to avoid wasting time on repetitive actions, and B2B professionals can concentrate their forces on closing deals and on focusing more on customers at the same time. As stated in interviews, automation systems allow managers to look for prospective customers and trace their buyers' journey, to shorten the sales process by automatically sending the most relevant information, to revitalize dormant leads through e-mail retargeting campaigns and to save time by sending only qualified contacts to the sales team. This approach requires the mediation of technology which can substitute the human touch with mechanical tasks (Mero et al., 2020). The human interventions happen at a more strategic level by addressing the strategy the machine should follow, and which is enhanced by artificial intelligence.

The introduction of SMAs is a widely discussed topic among all the companies we interviewed. Most large companies considered for this research had already presented SMAs in their organization and had understood the effects that this tool had brought to their relational approach.

The topic of automation has always been discussed in my firm, but no one wanted to invest in it. With the arrival of the pandemic, it has become vital

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to continue our business activities. We did not have time to dedicate to certain activities, our work had suddenly become more complicated. We had to face unthinkable problems; for this reason, the only solution was to incorporate an automation system in our firm. The software has helped us in repetitive activities, in attending to more customers and fixing the key performance indicator (KPI's). In this way, we could take the leads to a more advanced stage, closing the deal easily by skipping the preliminary phases (Sales Director, Gas company).

Introducing SMAs in our organization has helped us to automate the relationship processes at the initial phases of the buyer's journey. This tool takes care of and personalizes every interaction, increasing the efficiency of our business approach (Sales Director, large distribution company).

Instead, the perception of automation systems in some smalland medium-sized companies is different, and they consider these tools too expensive or ineffective for their business.

For our firm, Sales and Marketing Automation Systems, are ineffective, they are too advanced. We do not have the digital culture and the resources to adopt this kind of Technology. Our Marketing and Sales Processes are not so developed to require these kinds of tools (Sales Director, hospitality Company).

We know the potentiality of automation systems, but we are a small family company we do not have so many contacts to look after; for this reason, we prefer to manage the interaction with our customers and stakeholders personally. However, if our business grows the introduction of a SMAs will become required (Sales Director, food company).

However, in most of the cases, despite the doubts of some small- and medium-sized companies, B2B players understand how these tools enable the actions of B2B firms and increase the efficiency of the relationship approach.

The automation systems also simplify the companies' internal relationship processes by creating new ways to interact and cooperate. In fact, SMAs represent valid tools to directly interact with and to define common objectives and KPIs by creating a more fluid connection between company departments. Most of the marketing and sales professionals that we interviewed claim that these tools permit to increase the level of communication within the company and to define common strategies.

Automation systems have helped our sales and marketing team fix common goals and KPIs, to share information and save resources in repetitive tasks. We can directly interact and communicate through these tools. We manage to cooperate easily without wasting time (Sales Director, large distribution company).

Introducing SMAs has helped the internal departments of this company (like Sales and Marketing) in communicating better, defining common strategies and avoiding creating company silos that work separately without interconnection (Sales Director, beverage company).

From these interviews, it is clear how automation is a very crucial topic in modern markets; it substantially increases the efficiency of interaction not only outside the firm, with clients and customers, but also inside the company within departments.

Moreover, with the COVID-19 pandemic, the centrality of customers has become even more dominant than before; for this reason, companies are required to have a tailored approach in developing relationships with them; automation systems represent a valid ally in reaching this objective for its capability to personalize each contact with the main characteristics of interlocutors.

4.2 Coordination

Another dimension that is affected by the digital relationship in the B2B context is coordination between internal and external players and relationships that coexist in the B2B ecosystem. This approach becomes even more complex to achieve success in a digitally mediated environment considering the "remote" nature of business interactions, the exclusive use of virtual communication instead of face-to-face interactions and more in general, the difficulties in finding agreement between multiple players with different interests.

To obtain coordination and to establish profitable relationships with other B2B players, it is necessary to align your interests with the interests of the other party and, in a techno-mediated environment, this is facilitated by the use of technologies like digital matching platforms which are increasingly used in online events like virtual trade fairs. They are sophisticated tools that, through a preliminary analysis, create connections between players with similar interests, thus effectively maximizing coordination.

In particular, B2B business actors need to understand what kind of processes can be developed together with other players, and this requires coordination inside the firm (Sleep *et al.*, 2020) and, at a more general level, coordination with the network of players that influence the B2B market.

This dimension has been clearly underlined in the interviews, and by deeply analyzing the empirical material, we have been able to extract three subdimensions: CRM base coordination, enabling visualization, agile team organization (See Table 5).

4.2.1 CRM-based coordination

In the interviews, B2B players stated how business scenarios are becoming more selective, each firm having to face and develop more relationships than in the past, considering phenomena like international networking and global business deals. It has increased the number of forces and players that act within the business scenario, creating complexities in the approach to relationships. In other words, the number of interests and stakeholders that revolve around each company has increased significantly, overwhelming the entire ecosystem of B2B firms. Businesses have to face more interactions with a variety of interlocutors which present diverse requests and priorities. Furthermore, these new business players are becoming more complex to deal with than before; as stated in the interviews: intermediate figures with specialized functions in marketing, sales or in management engineer are born and they require a higher level of competences; customers are much more informed and prepared than in the past, they have developed new characteristics and they have raised the level of products and services that they require. This situation has been complicated by the digital transformation and by the COVID-19 pandemic, which have introduced new figures and new players in this scenario, creating a new digital and more complex ecosystem. This overcrowded panorama needs to find an order; firms should research new ways to coordinate their internal and external players.

It is much more complicated to deal with all our interlocutors with a high level of interest, there are too many players and too many complications in this new panorama. Our interlocutors are much more prepared than in the past, they have developed new characteristics; sales and marketing skills are no longer sufficient to survive in this context. We needed a new way to coordinate in order to survive and to simplify the approach to relationships (Marketing director, consultancy company).

In our ecosystem, there are new figures, many digital stakeholders, our customers are so prepared and informed that my team needs to pay much more attention to always be on the ball and to manage the entire value chain.

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Table 5 Coordination: selected evidence

| Second-order themes | Selected evidence on first-order codes |
|------------------------|---|
| CRM-based | A complex B2B ecosystem made by new players |
| coordination | COVID-19 has increased the number of actors and the number of interactions that we have to face, and it is not easy to give attention to all these players. (#35) |
| | With the emergency, with the boosting of digitalization, the B2B context has been overwhelmed by new online players, new digital communities have born, and we were very in trouble in the initial phase of the emergency since we did not know how to face all these interactions. (#19) |
| | Systematization of interactions through technology |
| | Our firm needed a tool to coordinate all the interactions and to deal with my customers and all the stakeholders. For this reason, we introduced a CRM in our organization. (#26) |
| | COVID-19 has complicated the alignment, internally with my team, and externally with customers, for this reason we adopted a CRM to manage and face these complications. (#17) |
| Enabling | Digital presentation to identify the requests and the objectives of other players |
| visualization | With the online meetings we have less time to show our ideas, for this reason we increased the use of presentations to allow a perfect identification of our points. (#30) |
| | New digital meetings are very concise, these go straight to the point, the use of presentation is fundamental to identify the main ideas and to states the objectives. (#16) |
| | Decision process through Real-time Dashboards |
| | During the decision process we needed a tool to visualize all the primary data in order to take decisions coordinated with all the team, for this reason we adopted Real-Time dashboards. (#24) |
| | To take the right choices we need to be aligned with the entire firm and with their requests, for this reason we introduced Real-time dashboards that allow to easily visualize all the information. (#29) |
| Agile team | Crowded company departments with no clear apical figures |
| organization | We were too many professionals in the sales department, our work was very fragmented and we did not manage to be coordinated. (#38) |
| | There were a lot of figures with the same role, there was not an alignment in our operational processes. (#14) |
| | There were three heads of marketing department and we did not know who to interface with, there was not a clear organization in the firm. (#41) |
| | Reorganization of company departments |
| | With the Pandemic, we have decided to organize differently our firm's departments, and we have decided to readapt some figures in other roles to create more agile teams. (#13) |
| | We rethought internal departments to create smaller teams that are able to work more coordinated. (#18) |

We have searched for new tools in order to organize all the interactions (Marketing director, automotive company).

Because of the previously mentioned complications, B2B managers have understood even more how digital technologies can facilitate firms in managing the increasing number of interactions and requests from their stakeholders; in particular, CRM represents a valuable tool to obtain coordination objectives (Kang et al., 2020).

As proof of this, by coding the interviews, we discovered that to coordinate different actors in their network and to systematize relations, firms are using CRM systems much more often than before.

I introduced the CRM before the COVID-19 pandemic and I could see the benefits even before this emergency but now this tool has become vital for my company. We manage to attend to many more relationships and interactions and the software is able to prioritize the leads that are ready to close the deals (Marketing director, manufacturing company).

I have been forced to adopt a CRM system in my operational system during the pandemic emergency, because my marketing and sales department were no longer able to coordinate their work, exchange data and trace the customer's activities. The experience in the office was different before the pandemic; we all worked together and we usually exchanged opinions and information but with the forced distancing policies, it has been more difficult to manage those activities. For this reason, we have decided to implement a CRM to have better coordination (Marketing director, food company).

This technology was a trend even in the prepandemic panorama, but with the new situation created by COVID-19, in such cases, it has become mandatory to survive. The mixture of physical and online players, as well as new challenges brought on by the pandemic, has complicated the business landscape. These CRM systems help coordinate all interactions; they distinguish and prioritize the customers and manage to spread the most useful information among stakeholders.

4.2.2 Enabling visualization.

During the interviews, we understood how B2B players, during business interactions, want to have a clear idea of what the requests and the objectives of their interlocutors are. In this context, visualization is a necessary approach to communicating and illustrating the value of their offers and the potentialities in business relationships. In fact, a clear visualization of the other party's points helps firms to increase the level of coordination to be aligned in reaching the objectives desired

To be in line with my clients I need to understand what the objectives and their requests are. It's no longer sufficient to simply discuss them. You need to demonstrate your points. For this reason, the use of the visual element has become vital in every business meeting or brief, it helps to focus attention and to better explain your line (Key Account Manager, beverage company).

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When I have to meet new customers, my first priority is to give a clear visualization of my objectives, of my products and services, this is the basis in which to align. In this way we can build stronger relationships based on an interrelated exchange (Sales Director, food company).

In a new techno-mediated environment where complications from the COVID-19 pandemic has moved business relationships online, visualization as an element of coordination is achieved through the use of digital presentations.

In digital meetings we have used the visual element more than in the physical context., Preparing presentations to convince our customers has become central to align and to reach our objectives. Identifying the other party's requirements is now mediated by the use of technological tools (Sales Director, large distribution company).

With the emergency we have not been able to meet our customers in person, for this reason we have thought of new ways to communicate our points. We have implemented the use of visual presentations during meetings. We immediately noticed the benefits: more attention from our clients, more possibilities to close the deal and a perfect coordination between our interests and their requirements (Marketing director, digital company).

We usually conduct our negotiations with only our price lists and informative documentation of our products. With digital meetings, it is no longer possible, we have to prepare a good presentation in order to acquire new leads and to coordinate our points (Sales Director, large distribution company).

Visualization has become a fundamental element in today's digital B2B relationships and this has been exacerbated by the pandemic. Business professionals have a restricted amount of time in which to make their selling points, and there is no direct contact to communicate their ideas. In all business interactions, B2B managers have to illustrate the pros and cons of their projects by giving a clear picture and visualization; with the use of digital presentations has become vital to making their point immediately clear. This is even more true in the case of meetings that are rich in information or data as cognitive overload can occur, with the consequence that the audience has difficulty remembering the main concepts. To avoid this, the use of visual tools becomes of primary importance (West et al., 2020).

However, visualization has another use. It can also be considered a new way for business professionals to make decisions in real time to coordinate with clients who need aligned interlocutors.

The ability to coordinate the decision phase is related to the capacities of B2B players, but it is highly facilitated by visualization through the use of technology that manages to increase the efficiency of this process. This approach is mediated by the use of real-time dashboards which can be considered visual and interactive tools designed to provide a rapid analysis of a company's performance. They represent a supportive tool in extracting analytical insights and facilitating communication inside by firms creating a continuous exchange of information across departments (De Jong et al., 2021).

Dashboards particularly support coordination and joint decision-making processes by providing information in real-time and the analytical insights to take the right actions that are aligned with the current situation of the company. It makes it possible to analyze the state of the firm and the requests of each department. This aspect has been further emphasized during the COVID-19 pandemic, when decision-making processes had to be managed remotely due to distancing policies and the use of digital technology, such as dashboards, has acquired primary importance and value.

I have implemented a dashboard in my activity. It was complicated at the beginning, but now it has become fundamental in everyday operations. I can analyze all the needed information in real time and I can make decisions based on data and being coordinated with all my team and their requests (Marketing director, digital company).

In this complex time, I needed a tool that could give me a complete vision of the state of the company since my business interlocutors needed real time responses. With this dashboard I could control any time, also during the business meetings, all the required information, giving me the possibility to make more appropriate decisions in line with the objectives of the firm (Sales Director, large distribution company).

These tools allow a clearer vision of the situation of the company, the resources, the needs, giving immediate insights to the users to make decisions, to undertake new deals and to create new economic relationships.

4.2.3 Agile team organization

Conducting our interviews, we noticed that there was a problem of coordination of relationships, also internally, among the departments of the same firm. Business professionals stated that situations where there are long-chain teams with a large number of workers located in different areas creates problems of communication and coordination. Departments with various figures cooperating in similar roles and where there are no clear apical figures to refer to, makes it complicated to align. This process has been exacerbated by the COVID-19 pandemic, the compliance with the distancing policies and other organizational complications and has required a new structure within the firms. In fact, companies have decided to simplify decisional and relational processes by eliminating slow-moving hierarchies and administrations (De Smet et al., 2020).

There were 8 marketing directors in the same country area, our colleagues didn't know who to refer to or to ask for authorization. Our duties were too fragmented, we all had to agree to make even the easiest decisions and this delayed all business activities (Marketing director, digital company).

The sales process that was too fragmented caused the presence of too many sales professionals and accountants for the same retail format. There was not a clear distinction of functions. With the pandemic situation there was much more confusion, for this reason, the company has redefined the entire structure of the Sales Team (Sales Director, travel company).

It is evident that the creation of "long channel teams" with too many professionals creates problems of coordination and communication. For this reason, it seems that B2B firms prefer smaller teams with a distinction between apical figures and with a clear differentiation of functions.

The overcrowded departments, even if allowing for more professionals and more specializations, create significant coordination problems. Furthermore, the choice for a short management structure does not represent the "size" of the firm. In fact, most of the larger companies that we studied present very small and agile departments with a limited number of professionals. In this way, they can cooperate and make quicker decisions.

There are only 4 sales accountants for the Italian territory, although our company is one of the biggest in its industry and its revenue revolves around 600 million Euros per year. I think that this agile structure is perfectly tailored to us. We are coordinated and we manage to close deals faster (Sales manager, food company).

The sales team of the entire company is made up of a few figures and $2 \, \text{key}$ accounts, both have their own team, but with a limited number of professionals. We think that small teams work more proficiently even though we have more tasks to complete. Our company is one of the biggest in its sector but when we worked with a large number of people in the sales department, we were not able to coordinate efficiently (Sales Director, food company).

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Agile organizations are also facilitated by the use of digital tools that allow direct interactions as well as the management of business processes in a coordinated manner (Pagani and Pardo, 2017). This is also demonstrated by the fact that, as analyzed in several interviews, companies are implementing digital collaborative platforms such as CRMs and AI software's capable of facilitating working relationships and interconnections between employees. The purpose is to create channels to manage information and to communicate with other colleagues without incurring logistical difficulties.

The process of an internal reorganization of teams through the use of technology has also been accelerated by the pandemic, which mandates speed and coordination to gain powerful outcomes and to increase the performance of the firms (De Smet et al., 2020). The COVID-19 pandemic has made it necessary to rethink the organizational structure of firms, especially in sales departments, with the aim of establishing more coordination between workers. This emergency has led to significant problems in aligning large teams considering the distancing policies and the complications brought on by the emergency. For this reason, as seen in different interviews, it is becoming a priority for B2B firms to adopt new structures and new digital approaches for coordination.

4.3 Digital trust

Digital trust is a third dimension that affects digital B2B relationships. It is probably one of the most penetrating forces in modern markets. It is a general concept, but we have strived

to understand how this dimension grows in a technology mediated environment. It specifically refers to trust between digital partners and it can also be influenced by the perception of the tools used. For instance, the opportunity to use technology that simulates real in-person contact reinforces trust, while only chatting has the opposite effect. According to this vision, technology represents an enabler of the relationship that can influence the formation of trust in a techno-mediated environment.

Furthermore, it is even more difficult to build trust in a digital context where physical interactions are greatly reduced, and all contact is mediated by technology.

The COVID-19 situation has outlined the importance of this driver; the pandemic emergency that we are currently experiencing has created new economic possibilities, but at the same time, many difficulties, particularly for B2B firms. We noticed during our interviews, in fact, that managers and B2B professionals prefer to establish business relationships with trustworthy counterparts that demonstrate transparency.

By coding the empirical data, we have extracted two subdimensions within this dimension, and they are transparency and relational contract (See Table 6).

4.3.1 Transparency

The first subdimension is transparency which is a wide concept with many facets. It mainly regard the exchange of information between different players. This is outlined in the literature that defines information transparency as the degree of visibility and accessibility of information (Kumar, 2020; Zhu, 2002). What emerged from our interviews is the necessity to generate a more

Table 6 Digital trust: selected evidence

| Second-order themes | Selected evidence on first-order codes |
|------------------------|--|
| Transparency | Exchange of information between B2B actors |
| | We always search for partners that allow the exchange of information. This is fundamental to build business relations. (#25) In our market, it is difficult to have partners that will exploit data and information, but we think this is the base to build a trusty relation. (#25) |
| | We are available to give information and we try to avoid every vagueness in undertaking business, and this is what we expect from partners. (#21) |
| | Diffusion of e-commerce and block chain in the B2B context |
| | To avoid every form of vagueness with our customers we implemented an E-commerce, in which all the products and the services are explained perfectly. (#3) |
| | E-commerce helps us in increasing the level of trust of our customers since all our products are clearly defined and there is not space for mistake. (#18) |
| | We implemented Block Chain to trace the origins of all our products. We noticed how our customers have been delighted with this, and now they consider us as one of the trustiest companies in the market scenario. (#31) |
| Relational | A relational approach in the negotiation phase |
| Contract | With the arrival of the pandemic has become more difficult to negotiate a deal, since conditions change continually due to external factors, for this reason we adopted a relational approach in closing the contracts. (#36) |
| | Our customers did not manage to respect all the condition of the contracts due to COVID-19, but we have decided to be very understanding, contracting with them more flexible clauses. This increased the level of trust of our customers in us. (#25) |
| | We understood how penal clauses and rigid negotiation could be disabling in closing deals, for this reason we adopted a relational approach, with more flexible conditions. (#21) |
| | Smart contract |
| | We have introduced Smart Contracts to facilitate and customize the negotiation phase and the clauses for every customer. They allow a crystal negotiation with a tailored approach. (#19) |
| | We noticed how the use of Smart Contracts increased the level of trust of our customers since all the negotiation phase and the execution of the deal is carried on by the machine, for this reason there is not space for mistake. (#36) |

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"crystal-like" approach in business interactions where all conditions are made explicit, and there is no room for subjective interpretation of clauses and requests.

In most cases within the B2B context, the exploitation of information is not seen positively as data provides its owner with a position of power and the disclosure of this information could increase the efforts of competitors.

In my industry sector, it is very difficult to negotiate an exchange of information. We are only given the number of final products sold but nothing more. It is very problematic, we could have increased benefits by receiving more detailed data, we could change our strategies, our route to market, and our target (Sales Director, food company).

It is so bad when I have to buy data from companies like Nielsen because my interlocutors refuse to give me access to them. For this reason, I look for new collaborations where I can build more trustworthy collaboration (Sales Director, beverage company).

However, we noticed how this lack of information is harmful in the creation of new relationships, especially in a digital environment where there is no physical or direct contact among the players.

I always seek out customers that accept disclosing information to me, when I need to start a campaign for a new product, I need that data. However, in a large distribution company it is very difficult to find such trustworthy interlocutors. This situation has changed slightly with the Pandemic. The emergency is forcing us to exchange data since we have limited access to formats and our professionals cannot collect information in stores and E-commerce is becoming fundamental. We have discovered that collaboration is necessary to survive (Sales Director, large distribution company).

In the large distribution sector, we do not usually exchange data, we do not want to empower our competitors, even though I clearly know that this behavior is harmful for all of us. With digitalization something is changing, with the use of CRM or blockchains we try to create a flow of data useful for everyone (Sales Director, large distribution company).

It seems paradoxical that even if there is this difficulty in exploiting information, nearly all B2B professionals stated that when they begin a new digital collaboration, one of the main points that they try to negotiate is the visibility and accessibility of data. They look for firms that maintain a sufficient level of transparency for the entire duration of the relationship. For this reason, a big shift in business behavior is necessary. From a practical perspective, it is possible to state a need in the B2B context to create relationships based on the equal exchange of information and on a new "crystal" approach in carrying out business.

Various managers from the interviews conducted, affirmed how important it is to avoid all forms of vagueness and uncertainty in B2B relationships, especially in a digital context where business is conducted quickly. For this reason, we have seen, especially during the COVID-19 pandemic, the spread of B2B e-commerce used by managers as it guarantees clarity and the correct description of the goods or services offered. There is no room for error as everything is explained during order placement or directly during purchase. The use of e-commerce in B2B is leading to various positive aspects. First of all, buyers can get information more rapidly, receive orders, have support and develop new services in a quicker and more affordable way. It has also changed the nature of this tool from a platform where small amounts of money were spent with low-value purchases to a platform where buying more expensive products. The managers interviewed stated that customers are spending more money than before on these platforms as they have understood that e-commerce provides clear information and secure

transactions. Fewer mistakes are also made using the platform compared to face-to-face interactions as often these lead to misunderstandings or a lack of information being provided.

We have introduced our e-commerce because of the closing of all the commercial activities due to COVID-19, it has been an incredible opportunity and it provides all the necessary, detailed information to our customers. It is an amazing tool to carry out business transactions (Sales Director, fashion company).

Before the pandemic situation we have never used e-commerce solutions to place orders, we would have asked for a meeting in person. Now, we have been, in a certain sense, forced to use it, but we have discovered incredible functionalities and positive conditions as the clear traceability of all the items ordered. Differently from the past, we have more detailed information (Sales Director, beverage company).

We do not have our own e-commerce business, but during the pandemic we have started to collaborate with Amazon, this is a new experience for us. They represent the future; they are truly interested in their customers as well as the products. With them, we have begun a completely new kind of relationship, with a more transparent essence; we continually receive and send data (Sales Director, fashion company).

Now we use e-commerce to order materials, spending up to 500,000 euros. Before COVID-19, it was unthinkable, we would never have done a similar purchase using this tool. We have understood that this is a precious and clear tool for our business (Sales manager, iron production company).

4.3.2 Relational contract

During the interviews, we noticed how B2B professionals continued to state that to build trust and long-term business relationships, they look for more agile tools to negotiate and to conclude the deals. They stated that, especially after the COVID-19 emergency, they are using more relational contracts to close deals. These are new forms of agreements based on trust between the parties.

Relational contracts represent a different way of interpreting standard forms of transactions as they are based on a new sense of relationship (Kwiatek *et al.*, 2020). They are conceived in a way to include the complexity and variability of the context in which actors operate, as COVID-19 has shown so that clauses and conditions can be revised during the relationship while maintaining basic principles of transparency and fairness.

They are negotiated with the aim of creating value, not just focusing only on the deal. They seek to create a partnership that is more than a "one shot" interaction as they are based on social norms that influence all the processes, and they "live" in a more flexible ecosystem where clauses and conditions can be revised during the course of the relationship.

With the COVID-19 pandemic, professionals require more agile tools as they always need to react to sudden changes such as government mandated decisions, forced lockdowns, interruption of the supply chain or total closure of business activities. For this reason, rigid negotiations or penal clauses in a contract become useless in this unstable situation. Managers need flexible instruments to start new business relationships and to be sure to negotiate with a trustworthy interlocutor.

With the pandemic situation it was difficult for me to respect the terms of my orders, fortunately, my customers understood the situation and were very flexible. During the pandemic, I decided to negotiate contracts with a relational essence, this gave my clients and me the possibility to be more relaxed and to face the problems that derived from the pandemic (Sales Director, food company).

Negotiating a rigid contract as in the past, has become unthinkable, we have asked for the assistance of legal professionals in order to help us to find 'lithe' tools to start business interactions, with clear clauses that would

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protect us in case of a breach of contract (Sales Director, large distribution company).

With the persistence of the pandemic situation, B2B professionals have understood how a clear and fair negotiation is more profitable in acquiring new clients and in building more trustworthy relationships. Furthermore, they noticed how technology can facilitate this process, as the case of smart contracts that through the support of a blockchain system, based on the creation of linked block of contracts, allow more secure, customizable and trustworthy relationships. As stated in many interviews, blockchain is one of the most proficient tools in guaranteeing transparency and enabling secure and equal exchange of information between all stakeholders. It is used to analyze, control and share data, and it has been designed with the interest of interorganizational relationships.

Smart contracts can be considered like software programs that connect, in a cause-effect relationship, some conditions with the occurrence of some binding events decided by the parties without any human intervention (Chen et al., 2020). They are based on algorithm logic, and this increases the precision of these agreements, as also stated in many of our interviews. Moreover, these agreements are highly customizable and facilitate the creation of a more relational approach with customers.

I have started to use Smart Contracts to stipulate securities or insurance. They allow us to systematize many processes and to customize many services. They facilitate the negotiation phase with my customers. We only have to insert our conditions and the rest is carried out by the machine. I really think that these agreements increase the level of trust with our customers since there is no room for errors or misunderstandings (Sales Director, Insurance Company).

We were looking for a digital tool to speed up the negotiation phase while maintaining a high level of relationship with our customers. For this reason, I have implemented Smart Contracts and a blockchain in my operating system. This allows us to increase the level of trust with customers, to provide more detailed information and any kind of data they may need. This has allowed us a relational approach to our business in a digital environment. We have also started to make transactions with our customers using this tool. It is very effective and much appreciated by all. Unfortunately, until now, few companies have decided to use this kind of technology (Sales Director, financial company).

Our transactions are carried out through Smart Contracts and a blockchain system. This permits to provide a more tailored service as well as a more secure instrument for our customers. Furthermore, this allows us to increase the trust behind us, everything is clear and more professional (Marketing director, financial company).

As clearly stated in the interviews, B2B professionals think this new techno-mediated interaction based on the use of smart contracts represents the future of negotiation. Moreover, these tools grant a high level of flexibility, allowing customization and personalization of the conditions. However, until now, it has not been the general business practice to apply these tools in all industry sectors, and not all companies are ready to take on this challenge in the immediate future.

5. Discussion

COVID-19 has shed light on the fact that digitalization is not an isolated phenomenon but has led to the need to manage relationships in a different way. The damage of the pandemic has indeed brought forth the issue of how business activities and relationship building processes should be reorganized, as well as how human and technology assets can be better integrated and coordinated (Sheth, 2020a).

For most B2B companies, there is no alternative; it is a matter of survival and of adaptation in a pandemic reality (McKinsey, 2020 Report).

In recent years, literature exploring the digital approach in B2B has become substantive with scholars focusing on social media (Agnihotri *et al.*, 2016), e-commerce (Pavlou and El Sawy, 2002; Chang *et al.*, 2020; Koponen and Rytsy, 2020) and virtual marketplaces (Ordanini and Pol, 2001), as well as CRM (Corsaro and Anzivino, 2021), among others. However, how companies manage relationships in a new digital setting created by the COVID-19 pandemic remains under investigated. Our study has shown that a relational approach can no longer be considered separate from a digital setting and the challenge is how to maintain this relational link when technology is involved.

From our data, we noticed that the digital transformation that COVID-19 has affected three main dimensions of a relationship approach in B2B. The first dimension is the *efficiency of interaction*. The use of technology and the digital mediated approach has enabled the proliferation of more efficient sales systems supporting interactions with customers and other stakeholders.

During the pandemic, B2B professionals, after an initial stage of complexities in handling digital-mediated relationships, understood how this technology could increase the quality of the interactions, the effectiveness of their operations and the resource integration processes between different players of the ecosystem (Sklyar *et al.*, 2019); B2B managers have changed the perception of digital transformation considering it as an opportunity to be exploited.

Companies are adopting new solutions to manage resources and technology is playing a crucial role.

We found in our research, more than described in previous studies that automation systems and CRM have decreased the capital used in repetitive tasks. For instance, e-commerce has cut logistics costs and simplified many activities. Video conferences and social media have introduced new forms of digital communication and have allowed companies to eradicate travel costs and the need for long negotiations. Furthermore, AI and IoT have guaranteed advanced tools to process data and information without the intervention of human workers. This idea is no longer only part of a B2C tradition. In fact, with the COVID-19 pandemic, B2B players through the use of digital tools need to personalize and tailor their products and services to attract more customers at a level never seen before (Hartmann and Lussier, 2020).

One more element that managers have mentioned is crucial to generating efficiency is the need to accelerate the marketing and sales funnel. As stated in recent literature (Corsaro, 2018), B2B players need to establish a sense of urgency in the other party and to understand when it is necessary to "lose fast." It is evident that time-related considerations have become even more strategic after COVID-19, notwithstanding the past where temporal elements were often ignored or assumed constant when approaching sales research matters (Kunisch et al., 2017), while it has become even more key with the onset of the pandemic. The COVID-19 landscape has defined a new concept of time which has completely reorganized marketing

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and sales processes by boosting the relational processes at a level never seen before. Time has a new essence (Corsaro and Anzivino, 2021), and digital tools may facilitate human actions by providing the tools to face this challenge.

The second dimension that has been affected by the pandemic is coordination. This dimension regard the coordination between all the interaction that B2B players face in the activity, and it has an internal and external essence. The internal coordination looks at the need for firms to define a unique organization with teams that can communicate and work together in a more effective way (Kotler and Armstrong, 2017). This aspect now plays an even more central role considering that the pandemic has redefined the in-office experience with the forced distancing policies and new restrictions. For this reason, B2B players are seeking new internal organization figures to simplify firm relational processes (as marketing and sales processes). During the interviews, B2B managers affirmed how the complications caused by the emergency outlined the necessity to create small and agile departments to allow for more fluid interaction and avoid any form of misunderstanding. We noticed how some companies presented overwhelmed working groups without clear apical figures and this created confusion and difficulty in making proper decisions. According to Hartmann and Lussier, (2020), the pandemic has caused gaps and disadvantages that require aligned decision processes. In fact, as clearly stated in the literature, the current global emergency has outlined the need to make decisions that derive from better coordination inside all departments of a firm to handle the customer with a unique approach and not through uncoordinated touch points. This is in line with the idea that new marketing, sales and service funnel organizational and coordination processes need to be defined (Enyinda et al., 2021), taking into account all of the complications and difficulties caused by the pandemic.

Externally, instead, coordination refers to the ecosystem of external players that make up the B2B market (Agnihotri *et al.*, 2016; Marshall *et al.*, 2012). In a business landscape in which networking is a central point (Quinton and Wilson, 2016), the ability to create relationships represents a must.

During the COVID-19 emergency, the number of players of the B2B ecosystem has increased considerably involving difficulties in the management of relationships and in handling business operations; companies, also considering these complications, are no longer able to carefully coordinate all interactions with their customers and stakeholders.

For this reason, they have decided to introduce a CRM to facilitate coordination (Chatterjee et al., 2021; Saura et al., 2021; Rindfleisch et al., 2017). An aspect of coordination that emerged from our study which has still not been fully studied refers to the use of visuals that allow for a clearer understanding of each party's perspective and whose role is leveraged in a digital setting as well as when multiple actors participate in conversations (Singh et al., 2020). From our findings, there is a connection between visualization and coordination in making decisions, as outlined through the use of real-time dashboards. These tools can show all the company data and information necessary to make a decision that is in line with the needs and the current company situation. This aspect has been outlined in the interviews, considering that B2B managers during the pandemic have been greatly facilitated in taking important

decisions or redefining internal or external processes through the use of dashboards, not having the possibility to have a constant and direct approach with all the member of their teams.

The third dimension that has been affected by COVID-19 is Digital Trust. Customers and stakeholders are no longer focused on the product or service itself but more on the trusting and transparent relationship that they can build with the firm. Trust is becoming a primary point in this new digital mediated relationship, leading us to specifically reference the label "Digital Trust" to stress the fact that some proxies and clues of trust have changed when most relationships occur in a digital setting. Our study outlines how this dimension is influenced by many factors. First of all, transparency that pertains to the interrelated and equal exchange of information between players is even more important. "Information transparency" has been identified in literature (Kumar and Ganguly, 2021) as being an equal flow of data during a business relationship. In the B2B context, the fear of exploiting data by the counterpart and the continuous search for players that provide all kinds of information coexists paradoxically. B2B players need and spasmodically search for data, but at the same time, they claim that they are not willing to provide or share all information. This significantly affects the possibility of building long-term and trusting relationships with other players. Furthermore, to create a transparent relationship, every form of ambiguity has to be avoided in a B2B context. This is a consequence of the pandemic emergency, and with the incredible acceleration of relationships, the room for error is less acceptable, and all conditions of a deal need to be clearly defined. It is a sort of general rule of conduct that B2B players should respect to build a trustworthy relationship with their customers. For this reason, paradoxically, the use of e-commerce has increased significantly in the current B2B scenario (Salesforce, 2020). In fact, we noticed during the interviews, as also clearly stated in the literature (Chang et al., 2020), how e-commerce facilitates a clear and trustworthy approach in handling business deals as it specifically describes all the details and it allows for a high level of customization of products and services offered through a defined learning process.

A particular interesting element that emerged from our study is that the people interviewed are becoming more and more familiar with blockchain to increase transparency in a digital environment (Rejeb et al., 2019). Blockchain guarantees an equal position between all the parts by granting clarity during interactions. All of the processes and information are traced using artificial intelligence, and all sides have easy access to this information. However, the use of this tool is, until now, limited to only some industries and sectors of the market. It is mainly implemented by larger companies rather than small or medium-sized companies that do not have digital and cultural infrastructures to properly use it (Chang et al., 2019).

The last point that this study underlines is that to build a trustworthy business interaction, companies are experiencing new forms of negotiations based on a relational approach. The COVID-19 pandemic has created a very unstable landscape in which external factors such as political decisions or government restrictions quickly change the scenario (Cankurtaran and Beverland, 2020). For this reason, managers look for agile agreements to face these unexpected changes that could

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compromise business agreements. They say that it is not the moment to negotiate based on rigid clauses but rather a relational negotiation seems the better solution. This leads to tools that offer the possibility of facing these sudden changes without incurring harsh consequences in case of delay or difficulty in carrying out the agreed services. Managers are also trying to digitize this negotiation approach through the use of Smart Contracts that are very flexible and customizable. These instruments permit the regulation of relationships in a logic of If/then cause consequences. They are codified through artificial intelligence systems that guarantee the correctness of the interaction, and they can tailor the conditions for each party leading to an increased level of trust in the deal (Warrington and Caldwell, 2000).

It is then interesting to observe that the dimensions identified in our framework are all interrelated, and thus, managers can strongly increase or reduce the overall value generated in the management of business relationships. For instance, better coordinating the digital flow of communication and information has a positive impact on efficiency by accelerating the selling process and providing granular and contextualized data that allows companies to adapt and to quickly generate a better customer experience across all touchpoints and e-businesses. Coordination also allows people to free up resources they can then dedicate to increasing the digital trust in business relationships. Similarly, when digital trust improves actors may be keener in sharing data which, in turn, is another important condition in enabling coordination.

6. Conclusions

COVID-19 has redefined the way in which B2B companies create business relationships, giving a primary role to digitalization. Our study contributes to the recent debate which states that the COVID-19 pandemic has led to rethinking the way companies create and maintain business relationships, particularly considering the increased use of digital tools (Rangarajan et al., 2021; Crick and Crick, 2020; Hartmann and Lussier, 2020). It sheds light on the drivers of such new relational approaches that have, up to now, remained ambiguous (Hadjikhani and Lindh, 2020).

In this paper, we developed a conceptual framework to understand how B2B firms should rethink their internal and external processes to develop a new hybrid form of business interactions in the economic scenario affected by the COVID-19 pandemic. Our study analyzes this new form of relationship by identifying the dimensions and subdimensions created within it and, therefore, trying to organize a very fragmented debate and support it with empirical evidence. It became evident that, while much literature is dedicated to discussing the potentialities and use of technologies in B2B (Drummond et al., 2020; Bharadwaj and Shipley, 2020), the attention should instead be placed on the underlying relational processes which are supported by technologies. This is because they are the ones that allow for relational logic to be maintained even in a digital environment of interaction. The framework developed indicates the main drivers that increase the possibility to create and maintain business relationships in a digital mediated environment and to face the complications caused by the pandemic.

The study has some limitations. First, the study is exploratory. We have built our categorization and extracted the relative dimensions analyzing the state-of-the-art technology at the moment of our research, but we are still in the middle of the COVID-19 pandemic, and we do not have a complete vision of this phenomenon yet, we are strongly convinced that the B2B market will continue to evolve in the following months. For this reason, future studies would be useful in widening our discussion with new insights from different stages of this pandemic scenario. This would allow us to have a complete understanding on the topic. Second, we have only studied the sales and marketing perspective, while it would be relevant to compare it to the buyer's perspective and analyze gaps in how the transformation caused by COVID-19 has been endured. Third, having chosen a sample of Italian companies for the analysis could cause a lack of generalizability of the results, notwithstanding the Italian companies chosen for the analysis have a strong multinational vision of conducting business deals and building relationships abroad. Finally, given that our sample includes companies from different industries, future studies could explore if the industry has any effect on the framework proposed or if there are other contextual conditions which influence the relevance and structure of the dimensions we identified.

7. Managerial implications

The research that we have conducted has an important and practical significance considering we have elaborated a categorization that redefines the relational digital B2B approach in the COVID-19 era. It is a practical tool for B2B firms to understand what dimensions should be exploited in the process of maintaining and establishing business interactions with other players and to obtain advantages considering the complications of the pandemic.

With the advent of COVID-19, the entire business perspective has greatly changed leading to the acceleration of business processes as in the case of digital transformation that for many B2B companies have dramatically increased. There is an urgency for profound cooperation between human and digital values.

Digital is heavily stressed in this study. Technology can offer possible solutions in this difficult situation. It can guarantee new markets, as offered by e-commerce or virtual marketplaces. It can also provide new forms of communication with stakeholders like those provided by social media or new forms of digital negotiations as in the case of Smart Contracts and blockchain. Through our study, we have also shown that digitalization is not only about the digitizing of resources (Leinwand and Mahadeva, 2021) but also that there is a more complex context to be considered in building a relationship focused view in light of transformation. For this reason, the role of CRM is becoming more crucial for coordination as it provides the flexibility needed in the management of business relationships, both with customers and other players in the company ecosystem. Furthermore, CRM generates benefits in terms of effectiveness, as it allows businesses to simplify processes by automating repetitive tasks and interacting with more clients to optimize the quality and the level of relationships that human professionals intend to foster.

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However, technology is only a tool and becomes useless without human interaction or the capacity and culture to properly use it. For this reason, B2B companies need to invest in human capital in the marketing and sales forces. Sales professionals have become more fundamental and complex figures that need to develop particular skills linked more to so-called "hard skills" such as knowledge in the marketing field, accounting and data analysis. At the same time, they need to increase their ability to create and solidify trusting relationships with their customers. In fact, in this very complicated social perspective, in which the pandemic is making in-person socialization more complicated, customers and interlocutors need players with soft skills that are empathetic and available to support them in every situation with a high level of problem-solving skills. We have also demonstrated that the playing field for salespeople has widened after the COVID-19 boost to digitalization. It now includes contractual aspects which cannot be fully delegated to lawyers as they include more relational aspects that are only known by those managing the business relationships.

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