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# The buying center concept as a milestone in industrial marketing: Review and research agenda

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ABSTRACT

The buying center (BC) has captivated the attention of researchers for >50 years, becoming a central element of organizational buying behavior. While it seems easy to identify the BC participants in any given situation, the marketing literature lacks an integrative framework for examining the nature of BC. The purpose of this study is threefold: (1) to develop a rigorous BC conceptual model; (2) to provide an assessment of the BC state-of-the-art; and (3) to identify key opportunities for future research. Based on a systematic literature review, the descriptive findings indicate a decreasing number of publications since the late 2000s and that top-tier marketing journals have been almost silent since the early 90s. The domain-based findings suggest a three-layer model driving a thorough understanding of the concept, the main stages associated with BC deployment (formation, dynamics, and outcomes), and the contextual factors influencing BC decision-making.

## 1. Introduction

Early studies acknowledged the organizational buying function as a choice process involving several members of a company that, in an active search of alternatives, usually culminates in a satisfactory rather than an optimum buying decision (e.g., Cyert, Simon, & Trow, 1956). It is a complex process dependent on co-existing forces, "many of which do not derive from the actions of those in the purchasing department" (Weigand, 1968, p. 45). The managers involved in a purchase decision are the fundamental constituents of what is called a *buying center* (BC). The seminal work by Robinson, Faris, and Wind (1967) was the first to use the term BC. Since then, it has emerged as a milestone in the organizational buying behavior (OBB) and business-to-business (B2B) marketing literature (e.g., Johnston & Bonoma, 1981a; Osmonbekov & Johnston, 2018; Webster Jr & Wind, 1972). Although its meaning could be simplified to the identification of individuals who participate in the procurement at one or more locations, the reality is much more challenging. Indeed, the conceptualization of the BC has a non-static nature as the members' involvement and decision-making responsibility depends on the buying stage and other socio-organizational factors (Forman, Lippert, & Kothandaraman, 2007).

The BC complexity (i.e., number of managers involved, different roles, multiple responsibilities and impact on performance) have attracted researchers' interest (Mogre, Lindgreen, & Hingley, 2017). BC formation and decision-making are motivated and affected by organizational goals but also constrained by technological, financial, and human resources, and shaped by the roles of individuals, the specific task at each stage of the process, and the type of purchase to be considered (Diva, Vella, & Abratt, 2019). All this has fragmented the extant literature on the BC and there is a need to deepen and rethink the BC knowledge base through additional research inquiries (Ehret, Johnston, & Ritter, 2021).

One alternative to explore how the marketing field has approached the BC domain and how it has evolved over time is to conduct literature reviews (Mora Cortez, Clarke, & Freytag, 2021). Previous efforts have taken the form of qualitative approaches (e.g., Johnston & Lewin, 1996) and meta-analyses (e.g., Lewin & Donthu, 2005). Nevertheless, a lot has happened in purchasing during the last 17 years. In this vein, recent trends (e.g., digital technologies) deserve to be scrutinized, combined, and further developed into a state-of-the-art understanding of the BC (Ehret et al., 2021). Therefore, the present systematic literature review is necessary and timely.

Advances in the literature have provided valuable inputs for those organizations that resort to the BC to capture a greater proportion of

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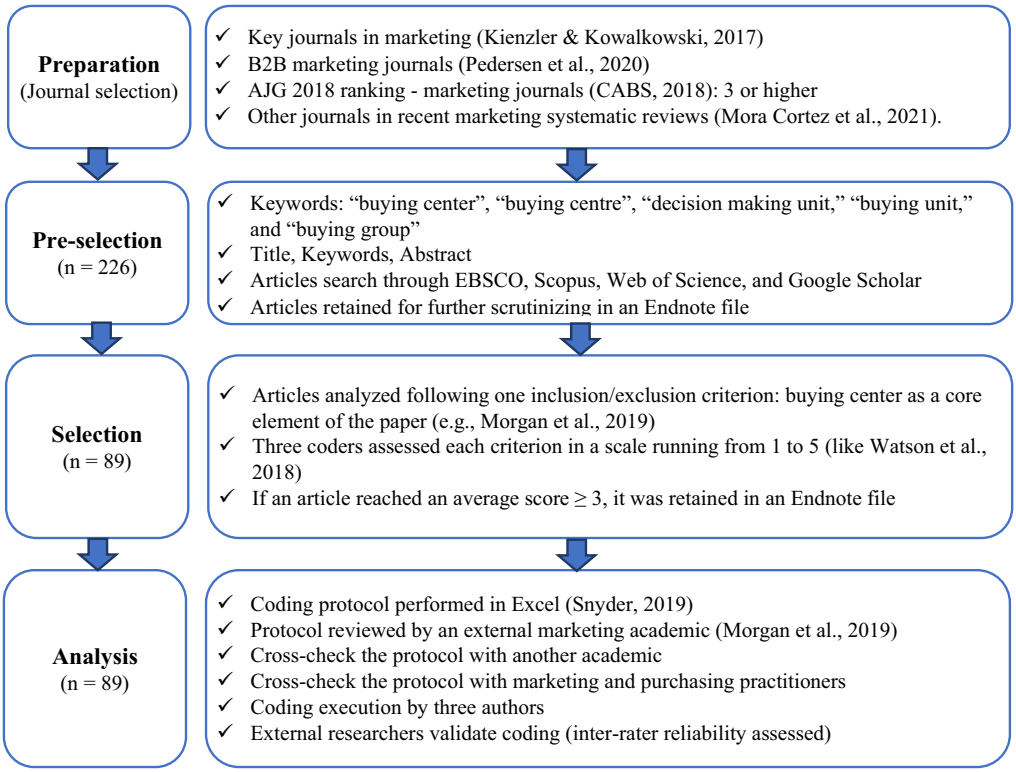


**Fig. 1.** Review process.

value (Töytäri, 2015) and to improve their buying processes and competitiveness in highly specialized and atomized value chains (Lau, Goh, & Phua, 1999). A series of parsimonious inventories, including factors conditioning the decision process and outcomes of industrial procurement has been devised in the field of marketing (e.g., Crecelius, Lawrence, Lee, Lam, & Scheer, 2019; Wood, 2005), but it lacks a critical orientation. Moreover, markets are becoming more turbulent due to servitization, globalization, military conflicts, and consequences of the Covid-19 pandemic, altering OBB (Mora Cortez & Johnston, 2020). These disruptions are instrumental for the BC linkages and decision-making mechanisms (Gustafson, Pomirleanu, Mariadoss, & Johnson, 2021). Therefore, the purpose of the study is (1) to provide an integrative framework of the BC, (2) to assess the state of knowledge in the main aspects of the BC, and (3) to identify opportunities for future BC endeavors (i.e., research agenda) by building on existing gaps. The emerging research questions associated with such a purpose are: (1) Which are the central tenets of the BC research in the marketing field and how are they connected? And (2) What are the future challenges to renewing interest and driving continuity in marketing research on BC?

We address these research questions and provide three meaningful contributions to the marketing literature. First, we show that BC research published in specialized, reputable, and top-tier journals over the past 54 years (1967–2021) has primarily focused on either the formation of the BC or the dynamics for BC decision-making without a higher-order lens and has provided marginal added depth to the initial conceptualization of the BC. The scant integrative research (e.g., Johnston & Lewin, 1996) is dated and the empirical articles do not converge on the usage of functions or roles when operationalizing the BC in their analyses. The absence of a sound conceptualization and operationalization on this topic should be recognized as a relevant gap in the marketing literature.

Second, we develop a comprehensive framework for expanding our current understanding of the BC, ascertaining three theoretical layers (conceptualization, process, context). This new framework facilitates the assessment of the state of knowledge on BC, the establishment of theoretical and practical gaps, and the integration of prior research endeavors to determine themes that have received limited scrutiny. Hence, firm characteristics influence key stages of the BC process: (1) formation, (2) dynamics, and (3) outcomes. Furthermore, BC decision-making affects the firm's outcomes (learning, financial, and structural), which in turn can influence back the firm's features, and it is susceptible to being affected by contextual factors (i.e., technology, branding, and culture).

Third, building on the most interesting findings for scholars and practitioners, we suggest a novel research agenda for further BC studies. Good review papers provide a solid platform for future research to learn about the reviewed domain and extend key insights to new areas (Palmatier, Houston, & Hulland, 2018, p. 2). Hence, we consider contemporaneous events and topics (e.g., sustainability and implications for relationship management) as vital when constructing and prioritizing the directions for a research agenda that is in tune with the times. Furthermore, we pay special attention to inconsistencies that cannot be resolved through the *summarizing* and *revising* tasks conducted during the analysis (Hulland & Houston, 2020).

## 2. Method

The critical evaluation provided by this review follows the systematic approach (e.g., Mora Cortez et al., 2021; Snyder, 2019). *A systematic* (rather than ad hoc) *approach helps to ensure that the body of literature reviewed is as comprehensive as possible* (Hulland & Houston, 2020, p. 28). Thus, a key element is to apply organized, transparent, and replicable procedures at each step of the process (Palmatier et al., 2018). We follow the common guidelines for successful reviews using four phases: (1) designing, (2) conducting, (3) analyzing, and (4) writing the review (for more details, see Snyder, 2019). As a starting point, we screened the meaningfulness of conducting a systematic review of the BC concept with a panel of 15 experienced B2B marketing scholars, obtaining a 4.2 average score on a 5-point scale running from 1 (not at all) to 5 (totally). Therefore, the topic seems to be of interest to B2B marketing scholars.

Systematic reviews are categorized into (1) domain-based, (2) method-based, and (3) theory-based (Palmatier et al., 2018). This manuscript follows a domain-based review of the BC concept aiming to scrutinize, summarize, and expand the body of literature on the BC domain (Palmatier et al., 2018). The review process is guided by best practices aimed at providing an overview that enables integration of the current knowledge on BC (Fig. 1). The selected approach resembles the suggested tasks of *summarizing* and *revising* (MacInnis, 2011), because our study emphasizes how to reconcile and then extend past research in the BC domain in a meaningful, conceptual way (Hulland & Houston, 2020).

### 2.1. Preparation

Following a similar rationale to Kienzler and Kowalkowski (2017), we have targeted peer-reviewed marketing journals. The search included the most influential journals in strategic marketing (Morgan, Whitler, Feng, & Chari, 2019): *Journal of Marketing* (JM), *Journal of Marketing Research* (JMR), *Journal of the Academy of Marketing Science* (JAMS), *Marketing Science* (MS), *Journal of Retailing* (JR), and *International Journal of Research in Marketing* (IJRM). It also included B2B marketing journals: *Industrial Marketing Management* (IMM), *Journal of Business and Industrial Marketing* (JBIM), *Journal of Business-to-Business Marketing* (JBBM), and *Journal of Business Market Management* (JBMM).

To broaden the set of high quality journals, those marketing journals ranked equal or above 3 by the Chartered Association of Business Schools are included (CABS, 2021): *European Journal of Marketing* (EJM), *International Marketing Review* (IMR), *Journal of Advertising* (JA), *Journal of Advertising Research* (JAR), *Journal of Consumer Psychology* (JCP), *Journal of Consumer Research* (JCR), *Journal of Interactive Marketing* (JINTM), *Journal of International Marketing* (JIM), *Journal of Public Policy and Marketing* (JPPM), *Marketing Letters* (ML), *Marketing Theory* (MT), *Psychology and Marketing* (PM), and *Quantitative Marketing and Economics* (QME). Finally, the *Journal of Business Research* (JBR) was incorporated because of its relevance in marketing strategy research (Kienzler & Kowalkowski, 2017). Textbooks, editorials, conference papers, practitioner papers, and working papers were thus excluded from the search and the summary tables. We also dismissed review articles to avoid data duplication.

### 2.2. Pre-selection

This step included definition of the search approach and the databases. The key search words were: “buying center”, “buying centre,” “decision making unit,” “buying unit,” and “buying group.” Like prior B2B systematic reviews, we selected the title, abstract, and keywords as main areas to execute the search (e.g., Mora Cortez, Gilliland, & Johnston, 2019) in leading electronic databases (like Watson, Wilson, Smart, & Macdonald, 2018): ABI/INFORM, EBSCO, ProQuest, Scopus, and Web of Science. A cross-validation on the journals’ website search mechanisms was also applied. In addition, we conducted a Google Scholar search to identify any papers that used the keywords, including the main text, in the selected outlets.

The study timeframe starts with the Robinson et al. (1967) publication and culminates with the initial development of this manuscript (March 2021). We refuted the idea of starting the timeframe based on previous agglomerative efforts in the literature. On the one hand, Johnston and Lewin (1996) conducted a review to integrate the literature on the broader OBB theory, missing a granular level of analysis regarding BC. On the other hand, Lewin and Donthu (2005) performed a meta-analysis on BC structure and involvement, limiting discussion to those particular areas and solely accounting for the statistical aggregation of quantitative findings. Therefore, the initial sample lies within the 1967–2021 period (i.e., from its emergence to current times), allowing an exhaustive coverage of the BC domain. This procedure generated 226 articles published online, whose bibliometric details were transferred to an Excel file.

### 2.3. Selection

Articles *selection* involved the three authors who initially analyzed the 226 papers assessing the centrality of “buying center” in every document. It is important to identify all empirical evidence that meets the established research-goal criteria (Snyder, 2019). After a careful reading of the full text, the authors rated the documents to estimate the centrality of BC, that is, whether it plays a key role in the argumentation (Pedersen, Ellegaard, & Kragh, 2020). For evaluation purposes, the authors coded the articles from 1 (not at all) to 5 (totally) as a measure of centrality (adapted from Watson et al., 2018). Those papers with an average score equal or higher than 3 were included in the review.

Although results were consistent among the authors, whenever there were divergent scores (i.e., standard deviation $>1$), the selection of disputable articles was resolved via open, thorough discussion. The inter-rater reliability analysis was assessed with the proportional reduction of loss method, reaching a satisfactory level of 0.77 (Rust & Cooil, 1994). The result was 89 articles in the final sample for further analysis and review (see Web Appendix A).

### 2.4. Analysis

The final step is the *articles analysis,* which required a protocol for coding, summarizing, and reviewing the papers. An Excel document was created to code (1) main concepts, (2) purpose of the study, (3) relation to BC, (4) argumentation approach (i.e., single theory, multiple theories, atheoretical), (5) paper categorization (i.e., conceptual, quantitative, qualitative, mixed method), and (6) key findings. One senior marketing scholar coded a randomly selected sample of five articles using the initial protocol, suggesting a higher specification on the data analysis approach for empirical papers that were either quantitative (e.g., regression, analysis of variance [ANOVA], structural equation modeling [SEM]) or qualitative (e.g., grounded theory, case study, ethnography). To ensure the trustworthiness of the revised protocol, a marketing researcher reviewed 10 randomly selected articles. The expert indicated high validity of the protocol. We also discussed the protocol with 15 managers in both marketing and procurement. Overall, researchers and managers agree with the final proposed protocol.

The author team (separately) coded the 89 selected articles. As customary, the few coding disagreements were settled through structured debate sessions. To enhance the trustworthiness of the coding, two independent B2B marketing scholars from an R1 U.S. university in the Carnegie Classification of Institutions of Higher Education coded the raw data of eight randomly selected articles, reaching an adequate inter-rater reliability (proportional reduction of loss method) of 0.80 (Rust & Cooil, 1994). The coding outcomes were like those of the authors, with just minor differences in the writing style (e.g., word selection). The final coding scheme, therefore, supports the validity and reliability of our findings.

## 3. Descriptive analysis of the sample

### 3.1. Publications over time and editorial evolution

The scope and versatility of the BC is reflected in the literature by a regular stream of publications, with an average of 1.78 manuscripts per year since its first appearance. Interestingly, the first BC manuscript was published by Webster Jr and Wind (1972) in *JM*, 5 years after its introduction in the marketing field. This pivotal event was followed by Kiser, Rao, and Rao (1975) in *IMM*, supporting the idea of *JM* and *IMM* as agenda setters in the mainstream and specialized (B2B) literature, respectively. There is an important divergence of publications per year across the different type of journals (top-tier, reputable, B2B). Indeed, the BC domain has gained attention in B2B journals over time, while

**Table 1**
Sample overview by journal and period.

| Journal | Group | 1972–1989 | 1990–2008 | 2009–2021 | Total (n) | Total (%) |
|---|---|---|---|---|---|---|
| IMM | B2B | 10 | 12 | 5 | 27 | 30.3% |
| JBIM | B2B | 1 | 8 | 6 | 15 | 16.9% |
| JBBM | B2B | 0 | 3 | 1 | 4 | 4.5% |
| JBMM | B2B | 0 | 1 | 1 | 2 | 2.2% |
| JBR | Reputable | 7 | 3 | 1 | 11 | 12.4% |
| IJRM | Reputable | 1 | 1 | 3 | 5 | 5.6% |
| EJM | Reputable | 3 | 3 | 0 | 6 | 6.7% |
| ML | Reputable | 0 | 1 | 0 | 1 | 1.1% |
| JAMS | Top-tier | 1 | 1 | 1 | 3 | 3.4% |
| JCR | Top-tier | 2 | 0 | 0 | 2 | 2.2% |
| JMR | Top-tier | 1 | 0 | 0 | 1 | 1.1% |
| JM | Top-tier | 9 | 3 | 0 | 12 | 13.6% |
| Total | | 35 | 36 | 18 | 89 | 100% |

Note: The journals not included have not published papers with BC as a central theme.

losing it in reputable and top-tier journals.

Examining the sample, we distinguish three periods in the selected timeframe (Table 1). During the first era (1972–1989), articles established the *conceptual bases* of the BC and the first empirical analyses. In contrast with other periods, top-tier publications are particularly active (e.g., *JM*). The second era (1990–2008) reflected the *consolidation* of the BC, particularly in the field of industrial marketing (*IMM* and *JBIM* account for more than a half of publications). This period fostered new approaches and greater richness in the nuances of the domain. During the last era (2009–2021), BC research declined, but it offered the chance to *explore new horizons*, namely the role of new technologies, the impact of branding, and cultural effects on the BC, among others. Overall, the number of BC manuscripts has decreased since the late 2000s, especially in reputable and top-tier journals. In this vein, we highlight the negative trend for top-tier journals since the early 90s. This is consistent with Kleinaltenkamp (2018), who indicated that premier marketing journals focusing on B2B settings is only 5–10%. Thus, our article represents a humble endeavor to revitalize BC research in mainstream marketing outlets and sustain the current interest in specialized outlets.

### 3.2. Type of research design

Scholars apply diverse research designs to study BCs. The results show the dominance of quantitative papers (63.6%) analyzing specific factors of the BC, but also empirically studying complex theoretical models. The second prevailing research design is the conceptual approach (23.9%) followed by qualitative design (8%) and mixed methods (4.5%) – those conducting both qualitative and quantitative approaches.

Comparing research designs by period is customary. A cross-analysis of the three time periods and the research design type shows a significant association between the variables (*Likelihood ratio* = 16.26, df = 6, $p < 0.05$). In particular, the different tendencies are (1) conceptual research moving from 31% of the publications in 1972–89, through 17% in 1990–2008, to 22% in 2009–21; (2) quantitative research accounting for 69% of the publications in 1972–89, 69% in 1990–2008, and 44% in 2009–21; (3) qualitative research, constituting 0% of the publications in 1972–89, 8% in 1990–2008, and 22% in 2009–21; and (4) mixed method research accounting for 0%, 6%, and 11% of the publications, respectively. Due to the nuanced nature of the BC and the uniqueness derived from the context, we support the upward trend identified for qualitative studies. Moreover, we encourage scholars to adopt *process-based* theorizing because understanding the BC concept requires explicit emphasis on temporality (Narus, 2017).

### 3.3. Theoretical foundation

Building on Morgan et al. (2019), the categorization of the manuscripts' theoretical foundation is threefold: (1) atheoretical, (2) single theory, and (3) multiple theories. Being labeled theoretical (i.e., using single or multiple theories) indicates that the manuscript purposively anchored the conceptualization in a well explained theory or framework (Mora Cortez et al., 2021). The main theoretical corpus identified in 40 articles is OBB theory (44.9%), either applied in a general manner or focused on the BC. However, most of the manuscripts do not acknowledge OBB as a theory per se, which might have precluded developing a more thorough understanding of the BC and influenced the publication downturn in reputable and top-tier journals. In addition, 30 manuscripts (33.7%) do not state a compelling theoretical corpus, limiting the potential association of the BC with new blocks of theory or fresh ideas that could play a boundary-spanning role for its conceptual development.

The reviewed literature also offers multiple theories that facilitate analysis of the BC domain from different perspectives. Among the most prominent are *Network Theory*, *Contingency theory*, *Information Processing Theory*, *Role Theory* and *Leadership Theory*. These theories are especially relevant because they can complement the OBB foundations to better understand roles, influence routines, the adaptation of the BC formation to different buying situations and the context, and even information flows.

A cross-tabulation of the type of journal (top-tier, reputable, specialized) and the use of theory indicates no relationship between the variables (*Likelihood ratio* = 0.929, df = 2, $p > 0.10$). Nevertheless, the specific journals in each group may diverge. For example, while IMM, JBIM, and JBMM theoretical manuscripts fluctuate from 50% to 60% of representativity, 100% of JBBM manuscripts build on theory. Furthermore, a non-parametric analysis indicates a positive correlation ($r = 0.258$, $n = 89$, $p < 0.05$) between the time periods and the use of theory. Hence, there is an increase in the use of theory for BC manuscripts over time.

### 3.4. Authorship

As one research question deals with driving the continuity of marketing research in the BC, we assessed the authorship of the sample. The rationale is that successful BC scholars could guide novice researchers thinking of developing a BC related project. The results suggest that 164 different authors are involved in the BC domain, but only 25 scholars (15.24%) participated in more than one project. The scholars who demonstrate the highest interest in the BC topic are: (1) Wesley J. Johnston (8 articles) and Yoram Wind (4 articles). Other authors such as Bonoma, Thomas, Lilien, Morris, Dawes, Hult, Herbst, Alex Zablah or Brown have published 3 articles, some providing very specific contributions (e.g., branding or leadership) on the BC.

In addition, a non-parametric analysis was conducted to evaluate the association between the papers with authorship involving the top 25 scholars in the BC domain and the CABS journal ranking. The Spearman's correlation denotes that those manuscripts with the select group of scholars as authors are more likely ($r = 0.180$, $n = 89$, $p < 0.10$) to be

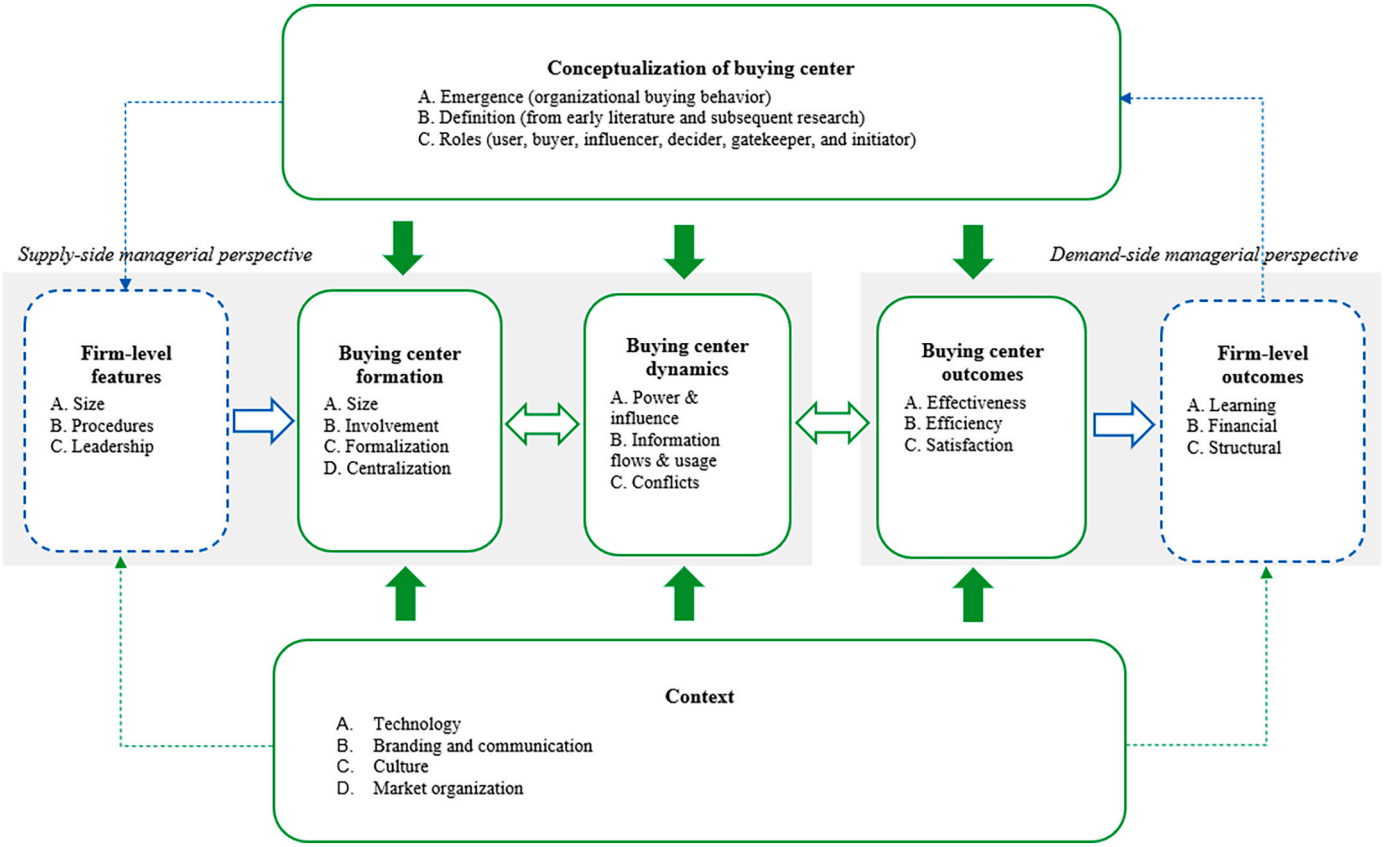


**Fig. 2.** Emerging BC framework.

published in top-tier journals (i.e., *JM*, *JMR*, *JCR*, *JAMS*) than manuscripts with authors that only participated in one BC project. Thus, novice or no-previous experience BC researchers could partner up with these select scholars to develop high-potential articles.

## 4. Domain-based analysis of the sample

The emerging integrative framework followed an inductive content analysis approach (e.g., Watson et al., 2018). This procedure entails an iteration between the raw data (i.e., reviewed manuscripts) and the emerging framework. The resulting model (Fig. 2) helps to synthetize the literature while favoring cohesion of the analysis (Watson et al., 2018). The practical utility of the framework was evaluated by a panel of 18 B2B marketing and sales practitioners in three different countries, obtaining an 8.6 average score on an 11-point scale running from 0 (not at all) to 10 (totally).

The framework portrays three layers (conceptualization, process, and context). First, the literature discusses the *conceptualization of the BC*, including (1) the conceptual emergence from OBB theory, (2) the BC definition, and (3) the roles (user, buyer, influencer, decider, gatekeeper, and initiator). It establishes the scope and the potential participants in the BC. Second, we acknowledge that BC formation usually occurs in a single organization, noticing three *firm-level features* that influence its characteristics and functioning: (1) size, (2) procedures, and (3) leadership. Then, the *BC formation* is semi-organically developed and displays the following aspects: (1) size, (2) involvement, (3) formalization, and (4) centralization. Once the BC has been established, the *BC dynamics* affecting the group decision-making are: (1) power and influence, (2) information flows and usage, and (3) conflicts. Next, with the potential selection of none, one, or more suppliers, the *BC outcomes* result in: (1) effectiveness, (2) efficiency, and (3) satisfaction. Finally, the group-level outcomes lead to *firm-level outcomes*: (1) learning, (2) financial, and (3) structural. These outcomes influence back the general conceptualization of the BC and might affect the firm-level features (e.g., a purchase decision with negative financial consequences may affect the firm size). The whole BC process is influenced by (1) technology, (2) branding and communication, (3) culture, and (4) market, which we clustered as the *context*. The influence on the BC functioning of the different elements integrating the framework is explained in the next sections.

It is worth noting that among those five process-related elements included in the central layer, there exist a different managerial perspective (see Fig. 2). On the one hand, firm-level features, buying center structure and buying center dynamics are more associated with the supply-side perspective. Suppliers aim to understand how customers organize and take their decisions to improve their effectiveness and, subsequently, to achieve a higher downstream market. On the other hand, the buying center outcomes and the firm level outcomes are especially relevant from the demand side. The buying company is interested in analyzing its operational performance to improve its functioning. This duality in the managerial perspective underlies in some reviewed papers, and its analysis should be considered to correctly target future research in terms of the unit of analysis and the perspective applied in the study.

### 4.1. Conceptualization of BC

The first element included in the framework seeks to understand the BC roots, its origin, but also what it is and what kind of participants it is possible to identify in this organizational structure. Those issues are essential in order to comprehend its scope and functioning, not only from the supplier-side but also from the buyer managerial perspective.

#### 4.1.1. Emergence

The emergence of the BC is intimately connected with OBB theory, an extensive research field that has marked B2B marketing literature over recent decades (Narus, 2017). OBB theory adequately describes the multiphase, multi-person, multi-department, and multi-objective tasks of industrial buying, characterized by its length, complexity, and objectivity (Johnston & Chandler, 2012). Since its foundation (e.g., Robinson et al., 1967; Sheth, 1973; Webster Jr & Wind, 1972), OBB theory has established the basis for investigating the buying endeavor in B2B settings. This approach stands out in popularity due to its simplicity, intuitive appeal, and its relatively detailed and testable propositions (Anderson, Chu, & Weitz, 1987), allowing new knowledge to be created in the field through the integration of previously isolated themes.

Procurement involves an active search for alternatives, assessing the consequences and potential problems of each option (Johnston & Lewin, 1996). The BC emerges as the set of organizational members who are involved in and influence the purchase process (Webster Jr & Wind, 1972). Since its irruption, the BC has become a key concept in the B2B marketing field (Wind & Thomas, 2010) because of its incidence not only for buyers but also for sellers (Garrido-Samaniego & Gutiérrez-Cillán, 2004). However, it demands a thorough understanding of OBB, a research field characterized by combining rather static firm-level features with the dynamic nature of procurement tasks (Bachkirov, 2019). The decreasing OBB research efforts and the advent of the digital era are two major challenges to consider in future BC research (Narus, 2017).

#### 4.1.2. Definition

The BC is defined as the network of participants (managers) who are involved in the buying process (Robinson et al., 1967), either in routine or non-routine purchase decisions (Webster Jr & Wind, 1972). From this definition, researchers studied the buy phase, related tasks, participants' characteristics and roles, and formal and informal influences (Johnston & Lewin, 1996). Role analysis became central in the literature as BCs can change depending on the type of purchase, involving multiple persons in a multi-stage process in industrial buying (Johnston & Bonoma, 1981a). Marketers also gradually understood the significance of the BC as a main unit of organizational purchasing (Pae, Kim, Han, & Yip, 2002) and the importance of identifying its members (Choffray & Lilien, 1978; Osmonbekov, Bello, & Gilliland, 2002).

However, the BC's composition and functioning are dynamic and complex, making it a fluid concept that requires an iterative, cyclical analysis (Forman et al., 2007; Ghingold & Wilson, 1998). In essence, the BC is a communication network (composed of managers and relationships) dependent on factors that are internal and external to the focal firm (Johnston & Bonoma, 1981a). Nevertheless, the definition has not evolved very much, and many challenges remain because of its multidisciplinary nature (Jennings & Plank, 1995). The BC members have different motivations and perspectives, with confusing responsibilities as they make decisions in an ever-changing world (Tellefsen, 2006).

#### 4.1.3. Roles

Originally, Webster Jr and Wind (1972) identified distinct roles in the BC, namely influencers, deciders, buyers, users, and gatekeepers. Influencers know the characteristics of the different suppliers/offerings and their opinions affect the buying decisions; deciders are legitimized to decide on the available options; buyers have the responsibility to negotiate with and to inform the decision to sellers; users are the reason why the organization buys as they will receive the purchase; and gatekeepers control the information flow and largely determine which vendors have the chance to sell (Bachkirov, 2019; Lau, Razzaque, & Ong, 2003). Next, the literature emphasizes the role of initiators, individuals who recognize a certain need in the company (Dadzie, Johnston, Dadzie, & Yoo, 1999), which can be fulfilled by acquiring a product or service (Bonoma, 2006). Therefore, management of expectations, and integration of different managers with divergent backgrounds and access to different types of information create situations where BC members might have distinct preferences (McNally, 2002; Sheth, 1973).

### 4.2. Firm-level features

The reviewed papers suggest that the characteristics of the firm directly condition the structure of the BC. It is affected by the size, but also by other intangibles that define the managerial approach in the firm, namely the type of predominant leadership or the bureaucracy associated to internal procedures. Those elements are detailed next.

#### 4.2.1. Size

The organizational size directly influences the make-up of the BC in terms of members and roles (Wind & Thomas, 1980). A small company does not usually possess a formalized purchasing function (Wind & Robertson, 1982). Vertical and lateral involvement also vary among different-sized firms (LaForge & Stone, 1989). Indeed, when a company is small, top managers tend to be more involved when buying decisions become more complex (Bello & Lohtia, 1993). More recently, Howard and Doyle (2006) could not identify any direct correlation between the size of the firm and the degree of formality in the BC, while Brown, Zablah, Bellenger, and Donthu (2012) found a positive moderating effect of the firm size on the brand sensitivity under complex purchases for smaller firms. Pedeliento, Andreini, Bergamaschi, and Salo (2019) noticed that firm size clearly determines end users' involvement in the purchasing decision. More research is needed to better understand its effects, issues that are especially interesting for suppliers.

#### 4.2.2. Procedures

Organizational buying is a decision-making process involving individual, social, organizational, and environmental variables, within a complex set of interpersonal interactions, sentiments, and activities, either task (buying-related) or non-task (Webster Jr & Wind, 1972). After analyzing decision-making, different authors provided relatively simple decision rules for purchasing (e.g., Choffray & Lilien, 1978), concluding that the process depends on the newness of the item bought, the extent of the information needed, and the importance given to new alternatives (Anderson et al., 1987). Decision rules include precedence and prior positive experience for repurchases and modified purchases, and balancing the risk of having too few suppliers or too many and a greater workload. While early buying models tried to account for the steps in a linear fashion, no consensus was achieved due to the decisional complexity (Vyas & Woodside, 1984). Buying behavior is not only affected by the purchase complexity, but by the firm's organization and general operation (Lewin & Donthu, 2005), buy-class (Zablah, Brown, & Donthu, 2010), and new digital tools that can modify buyer-seller communication (Gustafson et al., 2021; Osmonbekov & Johnston, 2018). Consequently, the literature is migrating to a circular view on how buying decision-making affects the procedures taken (Vieira, de Almeida, Agnihotri, & Arunachalam, 2019).

#### 4.2.3. Leadership

BC functioning is affected by the nature of the leadership (Backhaus, van Doorn, & Wilken, 2008; Webster Jr & Wind, 1972). It can affect the decision-making process in terms of centrality (Johnston & Bonoma, 1981b) or individual influence on choice (Kohli, 1989; Krapfel Jr., 1982). The type of leadership (transactional vs. transformational) also influences purchasing outcomes and performance (Hult, Ferrell, & Schul, 1998; Hult, Ketchen, & Chabowski, 2007). The transactional type (path-to-goal) improves decision-making with frequent users (Hult et al., 1998), while the transformational type positively moderates the relationship between BC functioning and a firm's performance (Hult et al., 2007). Leadership is also key to achieving more socially responsible buying decisions after providing an adequate organizational context (Drumwright, 1994). Leadership is extremely relevant as it affects relationships and task development, communications, negotiating skills, power, and procedural control (Tellefsen, 2006). A main

challenge for further research is to study the effect of leadership in highly fragmented supply chains, networks, and ecosystems to better understand the responsibilities in these new organizational structures.

### 4.3. BC formation

This element refers to the BC itself, that is, how it is organized and how it works. It depends on the number of persons participating directly or indirectly in the decision-making, either the number, departments involved, stability in the participation, or centralization. Those issues, very relevant from the supplier perspective, are core in the BC marketing literature.

#### 4.3.1. Size

The literature suggests that the BC ranges from two to seven managers (Osmonbekov & Johnston, 2018). This number is dependent on buying characteristics and the requirements of the company. The purchase situation and phase directly affect the size of the BC (McWilliams, Naumann, & Scott, 1992). Complex decision-making calls for more information, assessment, and analysis, and demands more personnel (Howard & Doyle, 2006); but the more participants, the longer the decision-making time (Dadzie et al., 1999). Furthermore, the procedures and rules can increase the paperwork and the number of managers needed (Dawes, Lee, & Dowling, 1998). Thus, the higher the purchasing formalization and complexity, the larger the BC size (Crow & Lindquist, 1985; Osmonbekov et al., 2002). The BC size can evolve with new technologies (e.g., artificial intelligence) and analytical software, potentially changing staff requirements, suggesting avenues for further research linking BC size and the use of technology.

#### 4.3.2. Involvement

The influence of a BC member is associated with a rich set of BC variables (Johnston & Bonoma, 1981b) - vertical and lateral involvement, extensivity, connectedness or size - that can vary throughout the purchasing process (Ghingold & Wilson, 1998). Vertical involvement refers to the number of management levels participating in a purchasing decision, whereas lateral involvement is the number of departments (Johnston & Bonoma, 1981b). Recently, task involvement was added to this set of variables, considering the participation of users instead of experts or professionals with referent power during acquisitions (Pedeliento et al., 2019). Involvement in the BC is clearly related to other structural and behavioral features (Garrido-Samaniego & Gutiérrez-Cillán, 2004; Wood, 2005). The more individuals participating in the process, the lower the perceived influence and the greater the difficulty to identify BC members (Dadzie et al., 1999). Therefore, new participants and roles, particularly in new complex products and solutions, may open the gameboard.

#### 4.3.3. Formalization

BC formalization is defined as the extent to which rules, policies and procedures are formally prescribed (Johnston & Bonoma, 1981a; Osmonbekov & Johnston, 2018), required to be adhered to (Lau et al., 1999), or standardized (Dawes et al., 1998. Formalization affects the number of participants (Johnston & Bonoma, 1981a), the members' influence on selection (Dawes et al., 1998), and it is directly related to purchase importance (Lau et al., 1999). Formalization becomes higher under turbulent environments, also demanding the participation of senior managers (Morris, Hansen, & Pitt, 1995). Evidence also confirms a clear correspondence between organizational and BC levels of centralization and formalization (Wood, 2005). Contrary to centralization, formalization increases success in turbulent contexts (Hult et al., 2007). Furthermore, along with task interdependence and environmental uncertainty, formalization is directly linked to gatekeeper control behavior (Lau et al., 2003). Digital tools are also expected to decrease formalization and complexity of purchasing operations (Lau et al., 2003; Osmonbekov et al., 2002; Osmonbekov & Johnston, 2018). Similarly, the relationship between newness of a buying situation and formalization has contradictory empirical evidence, suggesting that novel purchases require less formalization and time (Lau et al., 1999), and the opposite, i.e., more dedicated time (Howard & Doyle, 2006). These inconsistencies call for more empirical evidence, opening room for future studies.

#### 4.3.4. Centralization

Social network analysis provides a rich basis for the definition and measurement of centralization (Dawes et al., 1998). Network centrality refers to the degree of an agent's power concentration and its ability to control information flows (Spekman & Johnston, 1986). While network centrality is a structural characteristic determining a person's degree of influence (Johnston & Bonoma, 1981a, 1981b; Ronchetto, Hutt, & Reingen, 1989; Wood, 2005), centralization is the degree of authority, responsibility, and power concentration within the BC (Garrido-Samaniego & Gutiérrez-Cillán, 2004; Johnston & Bonoma, 1981a, 1981b). Time constraints, novelty, or uncertainty are commonly linked to more centralization, formalization, and complexity (Lau et al., 1999). For instance, centralization is positively related to uncertainty (McCabe, 1987) and negatively related to consensus during the procurement of innovations (Robertson & Wind, 1980). Centralization is also positively related to organizational size (Lau et al., 2003), and yet in situations of organizational downsizing, centralization tends to increase (Lewin, 2001). In a decentralized but formalized buying organization, managers hold less potential to control information, but have more manifest influence on supplier selection (Dawes et al., 1998). Decentralized BCs in large and market-oriented firms tend to offer better relationships to small-sized suppliers (Crecelius et al., 2019). Overall, centralization is a polyhedric phenomenon that still needs further investigation to understand how decisions are taken.

### 4.4. BC dynamics

Dynamics refer to the pure negotiation activity by or with the BC. It means identifying the power and influence of the different participants, but also the existing roles and the usage and flows taken by information. The comprehension of those processes can facilitate the supplier approach to the buyer, and how to organize the communication efforts. Conflict management is another important issue in the dynamics because incongruencies or misunderstandings can appear during the negotiations and should be mitigated before any agreement.

#### 4.4.1. Power and influence

The study of power and influence initially had two different streams, one determining the influence of certain positions or departments (e.g., Hult et al., 1998), and another emphasizing the different sources of power from individual roles (Webster Jr & Wind, 1972) and their influence upon other members (e.g., Kohli, 1989). Thus, individual influence on organizational buying is determined by the manager's formal rank, and a set of measures of his or her informal network, e.g., centrality, distance from the reference group and distance from the organizational boundary (Ronchetto et al., 1989). Expert and reinforcement power are significant determinants of influence; expert power is related to influence in large, cohesive BCs without time constraints, while reinforcement power is associated with small, not very cohesive and time-pressured BCs (Kohli, 1989). Thus, the influence strategies should be congruent with the power base held by BC members (Farrell & Schroder, 1999). These strategies could be classified according to their coercive intensity, task orientation and instrumentality, and are correlated with the type of power during interaction: information, expert, reinforcement or legitimate (Venkatesh, Kohli, & Zaltman, 1995). These findings support the general idea that influence is related to power and how power is deployed (Pedeliento et al., 2019). The exercising of power among BC members can affect mood, emotions, and communication styles, which have not been explored by extant research.

#### 4.4.2. Information flows and usage

Information management is critical to generate knowledge in pursuit of a right purchase decision, but it requires time and energy (Cyert et al., 1956). For instance, buy-classes were originally identified by task newness and information needs (Anderson et al., 1987). But the complexity is higher because the required information is both objective (such as company or product specifications) and subjective (such as expectations, situational factors, conflict resolution phenomena, and even members' perceptual distortion; Sheth, 1973). Thus, an effective usage of marketing resources entails understanding how a company buys and who is involved during the process (Lilien & Wong, 1984). Although all relevant information for purchasing belongs to the BC, its distribution may be unbalanced among its members (Krapfel Jr., 1982). Particularly in large organizations, certain sub-groups of individuals with special interest will interact and feed information and recommendations prior to the final decision (Howard & Doyle, 2006). This information-based risk-reduction process is also accomplished by informal influences within and from outside the buying organization, e.g., in trade shows (Henthorne, LaTour, & Williams, 1993). Information processing generates affectual and cognitive responses, based on the environmental and individual conditions of BC members (Gilliland & Johnston, 1997). The evolving nature of information exchange through time, the multiplicity of channels, forms, and participants is not completely understood in existing research due to its dominant conceptual and cross-sectional approach.

#### 4.4.3. Conflicts

The BC is usually composed of managers working in different departments who participate in several buying activities, entailing time-consuming tasks and meetings (Tellefsen, 2006). Herein lies the main source of conflicts as those managers need to invest time, possessing divergent perspectives due to their different backgrounds, priorities, and interests (Johnston & Lewin, 1996; Wood, 2005). The perceptual differences in attributes are a main source of conflict, and managers should deal with this to increase process efficiency (Martin, Daley, & Burdg, 1988). However, under such plural circumstances, the literature indicates that conflicts are almost inevitable, resulting in internal discussions (Lau et al., 1999; Sheth, 1973). In this vein, extant research also provides instruments to measure conflict (e.g., Morris, Berthon, & Pitt, 1999).

The main source of conflict are the communication barriers between departments (Barclay, 1992). Understanding the perceptual differences may enable the development of appropriate programs to reduce conflicts among multidepartment participants (Kiser et al., 1975). The leadership may provide relational support to overcome situations of confusion or neglected behaviors, acting as intermediaries and showing good negotiating skills (Tellefsen, 2006). Any solution will demand compromise from all involved parties or the leadership of one member to make the decision (Kohli, 1989; Garrido-Samaniego & Gutiérrez-Cillán, 2004), and it will influence the satisfaction and the disposition to repurchase (Austen, Herbst, & Bertels, 2012). New technologies can improve the coordination among departments through more objective instead of more political information processing (Osmonbekov & Johnston, 2018) or increase conflict by introducing more confusion to attend to different "thought worlds" and decreasing the speed of knowledge conversion (Gustafson et al., 2021). This is a never-ending area of research as new sources of conflict can emerge, namely, new positions and roles, disruptive innovations, or new digital tools for decision-making.

### 4.5. BC outcomes

The results of the BC are an under-emphasized field of research, which has only recently been dealt with by literature. In this category it is possible to identify papers studying the improvement in effectiveness in decision-making favored by the BC, but also the gain in efficiency and the effect on satisfaction with the decisions taken. Those issues are particularly relevant for buyers to assess the pertinence and functioning of the BC.

#### 4.5.1. Effectiveness

The impact of purchasing in the firms' competitiveness fostered the analysis of effectiveness (Lau et al., 1999), which relates to making the right decision. Driving effectiveness involves different perspectives to determine the best suppliers to satisfy a need (Wind & Thomas, 1980). Performance measurement systems were identified early on as an important issue to improve effectiveness and to motivate procurement staff (Anderson & Chambers, 1985). The information should flow to favor better market intelligence and more effective decision-making (Lewin & Donthu, 2005). In this regard, unless for routine decisions, it is advisable to choose multiple rather than single informants to make more reliable decisions (Wilson & Lilien, 1992). The more participative BCs usually perform better, although they need clear evaluation systems (Backhaus et al., 2008). Remarkably, interdisciplinary BCs are valuable when time pressure is high, requiring a high level of management support to deal with uncertain decisions (Lau et al., 1999). From the marketer's perspective, the sales effectiveness demands analysis of the characteristics of BC members and their needs, especially when targeting technological users (Forman et al., 2007). Information is central to assessing and achieving higher effectiveness through the adaptative nature of marketing strategies (Ghingold & Wilson, 1998) and the digital economy provides promising opportunities through the Internet-of-Things (Osmonbekov & Johnston, 2018) and social media (Gustafson et al., 2021). Effectiveness refers to a better understanding of the whole buying-selling process, providing the required information to the involved parties, fulfilling validity and reliability thresholds as well as reducing the perceived risks.

#### 4.5.2. Efficiency

Organizational buying influences the costs of design, manufacturing, and communication of the final product (Johnston & Bonoma, 1981b; Lau et al., 1999). Therefore, its efficiency is closely related to how purchasing minimizes the use of resources and time, and it should not be underestimated (Möller, 1985). The role of individuals is emphasized in BC efficiency. More efficient managers do exert direct influence on supplier selection, but without controlling interpersonal information (Dawes et al., 1998). An active BC member must master the detail of the decision-making and should provide a framework to guide the deliberation process (Tellefsen, 2006). This framework should consider the multiple trade-offs between, e.g., users who seek prompt delivery, high service, and customization, and buyers who seek the minimum transaction cost and the lowest price (Dadzie et al., 1999; Pedeliento et al., 2019). Digital tools can contribute to efficiency through faster cycle times in buying and lower expenditures (Osmonbekov et al., 2002). The better connectivity (via online networks) leads to better information at a reduced cost that can enhance efficiency through evidence-based decision-making and changes in the buying process and tasks (Osmonbekov & Johnston, 2018). The junction of effectiveness and efficiency is focused on the pricing of selected suppliers. Excessive concern over efficiency might obliterate effectiveness. Surprisingly, extant literature is scant on the relationship between reverse auctions (efficiency tool) and BC effectiveness. From the marketers' point of view, the dispersion of BC members throughout the company and the perceptual differences on vendor attributes all hinder an efficient approach (Brown et al., 2012; Kiser et al., 1975). The sooner the BC composition is approached, the higher the efficiency in resource allocation (Garrido-Samaniego & Gutiérrez-Cillán, 2004; Wood, 2005). Remarkably, no study examines the possibility of maximizing the efficiency of both seller and supplier.

#### 4.5.3. Satisfaction

Customer satisfaction is particularly important for industrial markets where long-term buyer-seller relationships are essential. The interaction of salespeople and how a supplier handles customer-related processes

directly affect B2B customer satisfaction (Homburg & Rudolph, 2001). Indeed, the satisfaction regarding a purchase decision directly influences the intention to repurchase (Austen et al., 2012). However, managers should understand the differences among managers in the BC (Forman et al., 2007) and have in mind that satisfaction is not a linear function since negative judgments have a stronger impact on repurchase intentions and conjoint satisfaction than positive ones (Austen et al., 2012). Thus, researchers and marketers should reconsider the average approach to measure satisfaction due to skewed negative effects of those dissatisfied members, and buyers may reconsider their buying process in the case of promoting long-term relationship and the adequacy of the BC.

### 4.6. Firm-level outcomes

The BC has multiple effects on the firm, namely the organizational learning achieved after the purchasing process, the direct contribution on the financial results, and direct or indirect consequences in the organization of the company. Those issues where scarcely studied but they are of interests from the buyer perspective.

#### 4.6.1. Learning

An organizational learning (OL) process implies the integration of previous buying experiences in future decisions and expectations, establishing conduct patterns. Learning is accomplished by iterating the decisions from the obtained data (Ghingold & Wilson, 1998), favoring an adaptative behavior over time (Barclay, 1992). OL can result in changes in the firm structure, objectives, and procedures (Howard & Doyle, 2006; Lewin, 2001). Depending on the buying situation or type of decision, BC members may adopt future organizational rules (internal bureaucracy) for certain products or services (Thomas & Grashof, 1982). OL benefits the global coordination of purchasing units and drives better results and a lower cycle time (Hult et al., 1998). Overall, a high level of OL allows firms to scrutinize their purchasing practices continuously and adapt resource allocation (Wood, 2005). Further research could investigate which units learn more from previous purchasing experiences and what prevents other units from learning.

#### 4.6.2. Financial

Procurement effectiveness and efficiency are especially relevant nowadays since most B2B firms are embedded in global supply chains, and the functioning of each member will influence the financial success of others (Hult et al., 2007). A transformational leadership in buying agents, together with the involvement of top managers, can improve value creation and organizational performance in terms of sales and profitability (Pae et al., 2002). In addition, the literature points out that the selection of suppliers affects the cost side of financial performance. For instance, Gustafson et al. (2021) discuss BC decisions as a relevant path to direct (e.g., reducing buying price) and indirect (e.g., reducing information/search costs) cost benefits. Hence, an incorrect purchasing decision can potentially increase cost substantially, putting the survival of the firm at risk.

The sources of financial risk are twofold. On the one hand, the selected suppliers can offer product/services more expensive than the net benefits captured by the firm. On the other hand, the selected suppliers can be unreliable, hindering operations continuity, which negatively influences order fulfillment and sales revenue (Mora Cortez & Johnston, 2020). Finally, when firms have customer-centric structures and robust buying decision procedures, suppliers can achieve enhanced derived demand from customers at the expense of costly value-added services (Crecelius et al., 2019). The firm-level financial performance resulting from the BC decisions research stream is still in its infancy, needing much further attention both conceptually and empirically.

#### 4.6.3. Structural

BC decisions may have a direct impact on the whole organization, as they directly influence its competitiveness (Hult et al., 2007; Pae et al., 2002). The decision-making process and tasks of the BC evolve because of previous experience, implementing deep structural changes (reorganization and restructuring) to improve organizational functioning (Wood, 2005). Those changes may not be evident to suppliers and demand additional efforts for marketers (Garrido-Samaniego & Gutiérrez-Cillán, 2004), but neither to the BC itself in the definition of the right ties with the varying sets of suppliers and internal actors (beyond the BC), especially in situations of foundational change (Chandler & Wieland, 2010). During this process, the information flows across the organizational departments will help share the evidence at hand to improve operational fluency and organizational outcomes (Gustafson et al., 2021). The dynamism of reflection activities and the iterative nature of accepting change are critical for structural improvement (Ghingold & Wilson, 1998).

### 4.7. Context

Finally, some elements exist beyond the firm affecting the BC. Existing literature includes the impact of the technology in decision-making (a promising field of research), but also the branding efforts made by suppliers, the cultural context where the negotiation takes place and the characteristics of the market. Those external conditionings influence the functioning of the BC, and the literature pays attention to them. Interestingly, there are additional topics that the literature could further explore (e.g., number of competitors, value of offerings, transparency in a market).

#### 4.7.1. Technology

The boundary nature of the BC makes it very sensitive to the internal (from the organization but external to BC) and external context factors (Thomas & Grashof, 1982; Mattson, 1988). Among these factors, technology and related turbulence are emphasized in the literature (Pae et al., 2002). For instance, some companies resorted to consultants who directly influenced BC functioning and the range of alternatives during high-tech acquisitions (Dawes, 1996). The BC's adoption and diffusion of technology is also affected by technological turbulence, along with the top-management vertical involvement (Pae et al., 2002), demanding higher levels of trust in both offering and supplier (Homburg & Rudolph, 2001). Interestingly, the technical characteristics may not be the main driver for buying IT solutions, as users pay more attention to short-term work-related consequences than long-term expectations (Forman et al., 2007). Recently, digitalization gained attention by shifting certain communications processes towards a machine-to-machine interface, reducing conflicts, modifying requisites and hierarchy, while increasing coordination, albeit with privacy concerns (Osmonbekov & Johnston, 2018). The impact of social media on each phase of buying decisions (Diva et al., 2019) and the roles most affected by technological change (Raghavan, Jayasimha, & Nargundkar, 2020) were an object of interest, stressing the necessity to further comprehend new managerial realities in a highly voluble context. Herein lies a promising research stream.

#### 4.7.2. Branding and communication

The BC is about managers, and communication occupies an important position (Johnston & Bonoma, 1981a). BC communication flows help understanding, e.g., the lead time to secure an approval. However, employee perception and reality do not always match (LaForge & Stone, 1989). Any communication process should account for both rational and emotional marketing stimuli (Gilliland & Johnston, 1997). Indeed, BC members are sensitive to brand communications (Zablah et al., 2010). For example, trade shows communication contributes to reducing the perceived risk of the BC (Henthorne et al., 1993). Recently, literature suggested that the effect of social media is spreading not only at a personal level but in professional life, affecting information acquisition, and knowledge discovery, sharing and interpretation (Diva et al., 2019; Gustafson et al., 2021). The increasing complexity of products, time

pressure, and the lack of information make the brand an important communication element for decision-making (Homburg & Rudolph, 2001). Brand preference is more relevant for high-competitive intensity settings or high-tech products (Zablah et al., 2010), brand sensitivity is important when perceived risk is either low or high (Brown, Zablah, Bellenger, & Johnston, 2011), and brand information is more used when the offerings under consideration are of low to moderate importance, and when end-customer demand for a brand is high (Brown et al., 2012). However, the perceived branding advantages significantly differ across BC members (Wang, Capon, Wang, & Guo, 2018). Further research could explore the BC member characteristics (e.g., personality, education) that nudge them to be more sensitive to brand communications.

#### 4.7.3. Culture

The cultural context has been important since the irruption of the BC. From communist countries, where hierarchy was high (Woodside, Karpati, & Kakarigi, 1978), to German-speaking countries, where the managerial approach diverges from the U.S. (Backhaus & Koch, 1985). In recent times, the focus was expanded to Southeast Asia, reflecting the dynamism of such markets (Lau et al., 1999; Pae et al., 2002). In a comparison of BCs across different countries, the results inform on the necessity to adapt strategies due to the diverse styles of decision-making (Herbst, Barisch, & Voeth, 2008). Particularly, when dealing with societies other than western ones, marketers should be perspicacious. For instance, in Arabian BCs, "Wasta" is a distinctive phenomenon comparable to other models of informal group influence (e.g., guanxi, jeitinho, blat), including three dimensions: Mojamala (affective component), Hamola (volitional component), and Somah (cognitive component; Bachkirov, 2019). This phenomenon opens a promising research stream to gain new cultural perspectives to the BC beyond the common western approach (Forman et al., 2007). Recent events (e.g., Brexit) call for attention to be paid to global integration and local sensitiveness as opposite forces influencing purchasing. Further research could investigate the challenges faced by multicultural BCs and factors influencing cultural adaptation. Moreover, no study explores private vs. public (setting) cultural differences.

#### 4.7.4. Market organization

As the purchasing department plays a strategic role in modern organizations (Lau et al., 1999), market turbulence and competitive intensity appear as important factors (Pae et al., 2002). In this regard, the market characterization influences the BC formation (involvement and formalization) and its functioning (main attributes considered or trust in information sources; Morris et al., 1995). The market characteristics also affect the effectiveness of different types of leadership in purchase decision-making. While transformational leadership is preferred in turbulent markets, transactional leadership is preferred in stable markets (Hult et al., 2007). As most B2B companies are part of competitive, turbulent markets, researchers should address the societal and industrial trends influencing the BC. Further research could examine the formation of BCs before, during, and after a crisis (e.g., Covid-19; Ukraine conflict). Moreover, does a public health crisis affect BCs in the same way as a financial crisis?

## 5. Research agenda and concluding remarks

Those 50 years of contributions from literature combined with current trends open a wide range of opportunities for future research. Globalization, integration of organizations and sustainability concerns, jointly with the advent of digital technologies and changing roles in companies, lead to emergent areas of analysis. These areas can be approached through new theories, allowing the polyhedric faces of BCs to be examined.

### 5.1. Trends and challenges

#### 5.1.1. The marketing-SCM interfaces: towards an integrative approach

Traditionally, OBB as a marketing arena on the one hand, and supply chain management (SCM) as a subfield of management on the other, have remained two separate fields (Mogre et al., 2017; Sheth, Sharma, & Iyer, 2009). In practice, both functions have numerous parallels (e.g., engaging with agents outside the firm), but above all share "the ultimate goal of facilitating and expediting the exchange process" (Williams, Giunipero, & Henthorne, 1994, p. 30). Not in vain, a special issue of Industrial Marketing Management called for integrating marketing and purchasing to improve B2B firm effectiveness (Ivens, Pardo, & Tunisini, 2009). Similarly, Johnston and Chandler (2012) recommend that purchasing should not only deal with issues of production but also the marketing needs of the firm.

However, there are several reasons for advocating against this view. Internally, companies conceive purchasing and marketing as distinct, unrelated functional areas. While purchasing is aligned with manufacturing and logistics, marketing is associated with demand generation and fulfillment of customer needs (Sheth et al., 2009). Externally, one is set in front of the other as in a mirror (Williams et al., 1994), usually acting with opposing interests in a buyer-supplier relationship. Since the profit earned by a channel actor depends on the value co-created with others (Jaakkola & Hakanen, 2013), different priorities and restrictions might emerge. For instance, SCM practitioners use a Kraljic matrix for profiling suppliers better (Knight, Tu, & Preston, 2014) and classify them according to their capabilities (Rezaei & Lajimi, 2019), whilst marketing managers use BC formation, dynamics, and outcomes to better understand decision-making. This gap hinders the development of a more comprehensive view of firms as blended entities. Thus, the challenge is to redirect OBB theory towards the integration of marketing and SCM, an evolution that will have effects particularly from the buyer perspective but also, subsequently, in suppliers.

#### 5.1.2. Higher-order market structures and value creation

A profound transformation in manufacturing has taken place as planning and innovation have migrated towards higher-order structures of suppliers and complementors related to a focal customer (Cova & Salle, 2008). This phenomenon disrupted linear value chains into multi-stakeholder systems of supply chains, integrators, and distribution channels (Sheth et al., 2009). Those higher-order structures (e.g., networks, ecosystems) emphasize the idea of "value co-creation" (Jaakkola & Hakanen, 2013). Manufacturing and engineering, once the core activity in value creation, were spread into a system where each unit contributes to the marketing tasks around a focal customer (Johnston & Chandler, 2012). In this vein, two arenas represent the increasing complexity in higher-order structures: projects and solutions (Cova & Salle, 2008). Processes for developing customer solutions or projects may transcend a focal customer-supplier dyad, including parties that co-define the problem, co-develop the offerings, and co-create value from a systemic perspective (Biggemann, Kowalkowski, Maley, & Brege, 2013). Thus, the disintegration of companies into higher-order structures has many ramifications for BC functioning, particularly in terms of network governance that could be addressed through social network analysis as a complement to OBB theory. From social network analysis, a firm's social context can be expressed as a structure made of patterns or regularities in relationships among interacting firms (Wasserman & Faust, 1994). BC performance thus depends on the structure of the extended network where it is embedded. While a BC is regarded as a temporary internal social network on its own (Prior & Keränen, 2020), its integration into the external social context of suppliers and partners makes the BC a component within a system.

Furthermore, following systems theory, components can be best understood in the context of relationships with other systems rather than in isolation (Checkland & Holwell, 1997). The focus entity (i.e., a firm or its BC) becomes a subsystem within a broader system where it operates

**Table 2**
Research agenda: Domain, research gap and questions.

| Challenge | Research gap | Research Questions (RQs) | Domain | Theoretical lens |
|---|---|---|---|---|
| SCM-Marketing integration (in a focal firm) | As SCM and marketing differs in the purchasing process approach, a greater understanding is necessary to improve coordination and avoid conflict | • RQ1. How should managers deal with the different interests between SCM and marketing?<br>• RQ2. How can the marketing discourse engage SCM members?<br>• RQ3. What tools can facilitate the integration?<br>• RQ4. How should OBB theory evolve to facilitate the SCM-Marketing integration? | Firm-level<br>BC formation<br>BC dynamics<br>*Demand-side* | Systems Theory<br>Evolutive OBB |
| Higher-order structures | The BC increasingly depends on the interplay of different partners working in networks and organized through ecosystems and platforms that requires greater comprehension | • RQ5. How can the BC support the value creation processes through relationship with other partners?<br>• RQ6. How should the configuration and membership of the BC evolve under higher cooperation settings?<br>• RQ7. What type of governance mechanisms should the BC use in the relationship with suppliers and for what circumstances?<br>• RQ8. How do cultural nuances affect higher-order organization of industries/firms and related BCs? | Firm-level<br>BC formation<br>BC dynamics<br>Context<br>*Supply-side* | Social Network Analysis<br>Transaction Costs Theory<br>Governance<br>Relationship Marketing<br>Service-Dominant Logic<br>Socio-Technical Design |
| Digital economy | Digitalization demands new tasks deploying through technical tools during the buying process, increasing the necessity for inter-disciplinary teams | • RQ9. What roles are emerging with the digital economy?<br>• RQ10. What are the best practices for good performing multi-disciplinary groups?<br>• RQ11. What are the main challenges/barriers to integrating the new digital technologies and tools in BC activity?<br>• RQ12. What profile should members of a BC possess to take advantage of digital tools?<br>• RQ13. How can artificial intelligence transform the BC concept? | BC concept.<br>BC formation<br>BC dynamics<br>BC outcomes<br>Context<br>*Supply-demand side* | Role Theory<br>Contingency approach<br>Transaction Costs Theory<br>Ecology of populations<br>Complexity theory<br>Unified Theory of Acceptance and Usage of Technology (UTAUT) |
| Sustainability and BC | Sustainability is gaining importance in a highly monitored environment and is almost absent in BC literature | • RQ14. How can the BC integrate sustainability in the decision-making?<br>• RQ15. What kind of procedures can managers implement to improve traceability and monitoring of the buying process?<br>• RQ16. What should sustainability encompass for the procurement department? | BC outcomes<br>Context<br>*Supply-demand side* | Sustainable development<br>Stakeholder Theory<br>Legitimacy approach<br>Institutional economics |
| Competiti-veness and BC | The BC has a direct impact on firms in terms of profit, sales and market share that still needs to be understood | • RQ17. What characterizes those BCs that performs better?<br>• RQ18. How does BC management influence firm-level outcomes?<br>• RQ19. What methodologies (e.g., ethnography) could improve the analysis of the impact of BC on competitiveness? | BC outcomes<br>Firm-level outcomes<br>*Demand side* | Resource-based View<br>Dynamic Capabilities |

(Johnston, Lewin, & Spekman, 1999). Yet the increasing complexity in the number of elements and the degree to which these are differentiated makes it difficult to plan and predict their actions (Crozier & Thoenig, 1976). In this sense, the BC dynamics might be understood as a complex adaptive system to adjust the firm to an open dynamic system like the market through a multi-level order architecture (Wilkinson & Young, 2002; Wollin & Perry, 2004). To the best of our knowledge, in contrast to SCM literature (e.g., Choi, Dooley, & Rungtusanatham, 2001; Surana, Kumara, Greaves, & Raghavan, 2005), the BC literature has not applied this theoretical framework. Adapting and developing the conceptual background of Complex Adaptative Systems may become a promising future research line where suppliers can embed in higher-order organization with buyers.

### 5.1.3. *Digital economy: effects on BC*

Technology defines not only what is bought but the actions involved in the decision process (Webster Jr & Wind, 1972). A salient aspect of technology within a buying firm are the difficulties associated with its adoption and diffusion. Advanced technology may face difficulties during purchasing if employees consider it difficult to integrate (Johnston & Chandler, 2012). The literature studied technology in relation to purchasing (Dadzie et al., 1999; Dawes, 1996; Howard & Doyle, 2006), as a complex element bringing opportunities and risks in B2B communication processes (Forman et al., 2007; Osmonbekov & Johnston, 2018), or as a context factor creating turbulence (Pae et al., 2002). Nevertheless, the most significant factor influencing an individual's attitude towards innovation (by extension to BC members) is its relative advantage (Woodside & Biemans, 2005). Technological deployments should better establish their advantages, but also address the reluctance to the inferred negative influence of change. Future BC studies require a better integration of OBB phenomena considering not only the acquisition process, but especially its adoption within the organization. This is key in the case of innovative assets called to change the status quo or the current way of doing things at the buying organization. Technology is crucial in an increasingly digitalized world, which calls for an in-depth analysis of its effects on decision-making and business models. More study on a long-sectional basis tracing the stages of the adoption process, such as *innovation sensing*, *need acknowledgement* of highly innovative assets, or their *validation* and *expansion* once a purchase decision is closed is necessary (Iyer & Jayasimha, 2021).

The digitalization and the seamless interconnection of the physical and virtual worlds (Kagermann, Wahlster, & Helbig, 2013) is leading to changes such as supplier base consolidation, the automation of less complex processes and transactions, and a discrimination of cooperation intensity and trust within buyer-seller relationships according to product complexity (Osmonbekov & Johnston, 2018; Veile, Schmidt, Müller,

& Voigt, 2021). Herein, the transaction cost theory, ecology of populations and complex systems theory could provide insightful lenses to further study this topic.

#### 5.1.4. Sustainability: a missing challenge in BC literature

The concept of sustainability has been a key theme in many fields, discussing the convergence and divergence among economic, social, and environmental outcomes (Elkington, 1998). Surprisingly, sustainability is a missing concept in BC literature. Only the pioneering work of Drumwright (1994) acknowledged the roles of socially responsible members, called skillful policy entrepreneurs, towards incorporating non-economic, environmentally responsible factors into organizational buying decisions. Therefore, there is a huge research gap to fill through the adoption of different lenses such as institutionalism, legitimacy, and stakeholders' theory. The identification of paths to improve the sustainability of a whole system can be addressed through life-cycle analysis, accounting for natural environmental harm of different choices and social sustainability metrics of global value chains related to procurement. This challenge should be taken by both supplier and buyer managers because isolated efforts are not enough to solve this global problem.

#### 5.1.5. BC as competitiveness and profit generator

Marketing managers have to deal with colleagues from other departments skeptical about the impact of their activities (Hanssens & Pauwels, 2016). Marketing value disbelief is a major challenge for both practitioners and researchers. The literature has scarcely combined the main research findings and the market performance in its analysis. Thus, there is an important gap regarding how to provide adequate guidelines to improve BC functioning in terms of performance. The Resource-Based View of the firm (RBV) is a valuable theoretical lens to understand those core and complementary resources and capabilities required in a firm (or higher-order structure) to foster better financial results. However, only Hult et al. (2007) resorted to RBV. In this vein, we recommend adopting the dynamic capabilities theory to comprehend how firms are adjusting BC management to the evolving context. The identification of core dynamic capabilities for B2B procurement and their accommodation to different industries and market characteristics would be valuable research directions, particularly for BC managers that have to account to the CEO.

### 5.2. Future research opportunities

Intertwining trends with current gaps in literature, we identify a series of future research opportunities organized in five blocks. Table 2 shows the challenges, research gap and their related research questions, including BC domain and theoretical lens. Due to space limitations, we only introduce the blocks, but the reader should refer to Table 2. Those research questions are translated in a series of testable propositions based on the literature review and research agenda (see Web Appendix B). The first block refers to the integration between purchasing and marketing, influencing firm-level decision-making, the formation of the BC and its dynamics, highly relevant for both the demand side managers. It implies a better understanding of areas of influence of each activity, the identification of common interests and potential sources of conflict and cooperation. This arena requires a systems approach to identify common interests, potential conflicts, and shared tools to enrich OBB theory. The second block includes the cooperation of firms in higher-order structures, an issue that is challenging and especially interesting from the supply-side perspective. Nowadays, value is usually co-created through digital tools, multiple stakeholders, and emerging platforms, driving B2B relationships towards a higher degree of servitization, which requires new BC governance mechanisms. The third block relates to digitalization, and its effect on the formation, dynamics, and outputs of BC that will influence both supply and demand managers. Novel technologies favor the appearance of new roles and multidisciplinary teams to assess alternatives in increasingly multicultural settings. The fourth block is a huge challenge that influences suppliers and buyers nowadays: sustainability. The environmental imperative is a missing link in the BC literature, while it is a common theme in the political and societal agendas. A holistic approach to business should incorporate sustainable development in purchasing decision-making, facilitated by the increased monitoring abilities that have appeared in the digital economy. Finally, the fifth block encompasses the impact of the BC demonstrated by its effect on firms' competitiveness. Further scrutiny of the impact of BC on financial results and the identification of best practices can contribute to a more parsimonious buying system, with special interest for demand side.

## Web Appendix. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.indmarman.2022.10.026.

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