"How customer´s size influence the link between supplier´s marketing efforts and relationship strength: An empirical study in a B2B context"

Abstract

Understanding how B2B firms perceive interactions with suppliers is key to improve the efficiency of marketing efforts as well as the B2B customer satisfaction. However, most of the research on interactions has been based on B2C rather than on B2B. Therefore, drawing from Social Exchange, this research aims to investigate the role of interactions with sales representatives and service reliability, and their impact on long-term relationship strength. Understanding possible variations among these vital aspects of a B2B relationship allows providers to better tailor their strategies and to build long-lasting partnerships with their B2B customers.

Besides, it is crucial to consider different factors based on the B2B customers' characteristics and the size of a company represents a fundamental characteristic in B2B customer segmentation. Companies of different sizes have unique needs, priorities, resources, and expectations from their service providers, thereby directly affecting the provider's approach taken in the development of the relationship. Therefore, our research also considers potential differences related with the size of the B2B customer.

Based on a sample of 2,175 B2B customers, our data identify very relevant insights relate with the relevance of a set of elements that show the provider marketing efforts and the long-term relationship strength. Both theoretical and managerial implications are also discussed.

Keywords: Social Exchange Theory (SET), reciprocity, relationship strength, professional counselling, sales representativeness, service reliability, firm size, B2B context.

1.-Introduction

The study of business-customer relationships is one of the topics that has traditionally aroused more interest in the field of marketing. The pioneering works of Ford (1980), Gummensson (1987) or Grönroos (1994) established the foundations of the relational paradigm, based on the experience observed in B2B contexts (Lasrado et al. 2023). But interestingly, once the B2C context assumed these principles based on satisfaction, communication, cooperation, commitment, and trust (Morgan and Hunt, 1994), there have been many more works that have taken as reference this B2C context compared to the B2B.

In an environment defined by the establishment, development and management of relationships, the principles that define the Social Exchange Theory (SET) are very useful to understand appropriate dynamics among the participants of such relationships. This theory, whose origin is established in the field of sociology and social psychology, has obvious applications in economics, business, management, and marketing, among others. It is based on the works of Homans (1958), Thibaut and Kelley (1959), Gouldner (1960), Blau (1964), Ekeh (1974) or Cook and Emerson (1978). SET explains the processes of stability and social change as a dynamic of negotiated exchanges between people, so that all relationships are defined by a cost-benefit analysis and by comparison with other alternatives. Therefore, in economic terms, it refers to how individuals interact in an exchange process.

The use of this theory as a reference in empirical studies has been common. In fact, many authors still use it to establish their conceptual bases. For example, recent works by Gao et al. (2023) and Ferm and Taichon (2021) for researches focused on B2C relations; Kim and Kim (2021) and Urbonavicius et al. (2021) in the study of interactions in social networks; Pugh et al. (2018) and Arnold et al. (2019) for human resources management relations in the commercial field; Uysal et al. (2022) for the effect of AI on consumer satisfaction; or Tan and Saraniemi (2023) for exchanges between individuals in blockchain environments.

In a B2B context, literature (e.g., Casidy and Lie, 2023; Tran et al., 2022; Tóh et al., 2022; Gillan et al., 2021; Ruz-Mendoza et al., 2021) stands out. However, there are still important gaps in the literature in understanding how different elements of firm-customer interaction can affect the relationship strength in B2B contexts (Lasrado et al., 2023). Therefore, our research takes as reference the following research question:

RQ1: *How can suppliers build a strong long-term relationship with B2B customers?*

We consider professional counselling, sales representatives’ interactions, and service reliability as supplier marketing efforts. We also aim to differentiate our database of customers between small, medium-size, and large companies. The size of a B2B customer can significantly impact the dynamics of the relationship between the provider and a customer (Polo-Redondo and Cambra-Fierro, 2007). For instance, companies of different size may have completely distinct needs, and one of the reasons refers to the complexity of the decision-making processes. In larger organizations, decision-making processes are often more complex and involve multiple stakeholders (Cambra-Fierro and Polo-Redondo, 2008). Also, there could be differences in the power dynamics. Power imbalances could influence negotiation leverage or dependency levels (Polo-Redondo and Cambra-Fierro, 2008). These arguments allow us to propose a second research question:

RQ2: *Depending on size, what element is most important for each type of company?*

Therefore, drawing from SET, this study aims to examine the differences between professional counselling, sales representatives' interactions, and service reliability, and their impact on long-term relationship strength. Understanding possible variations among these vital aspects of a B2B relationship allows providers to better tailor their strategies and to build long-lasting partnerships with their B2B customers. Besides, the study also analyses potential differences related with the B2C customers´ size. To meet these objectives, the second section shows the conceptual bases and hypotheses that make up the causal model of reference. The third section presents the empirical study and the results obtained. The final part of the chapter discusses the main theoretical and practical implications of the study.

2.-Theoretical framework and hypotheses development

As recognized by Cambra-Fierro et al. (2018), SET helps to explain the relational interdependence that develops over time through customer-firm interactions. According to SET, every interaction generates a social exchange that builds a customer opinion (Venkatesan et al., 2007). This theory explains the reciprocity principle (Bagozzi, 1995, Bowman and Narayandas, 2001, De Wulf et al., 2001) and identifies the conditions under which people feel obliged to reciprocate behaviors when they receive benefits from others.

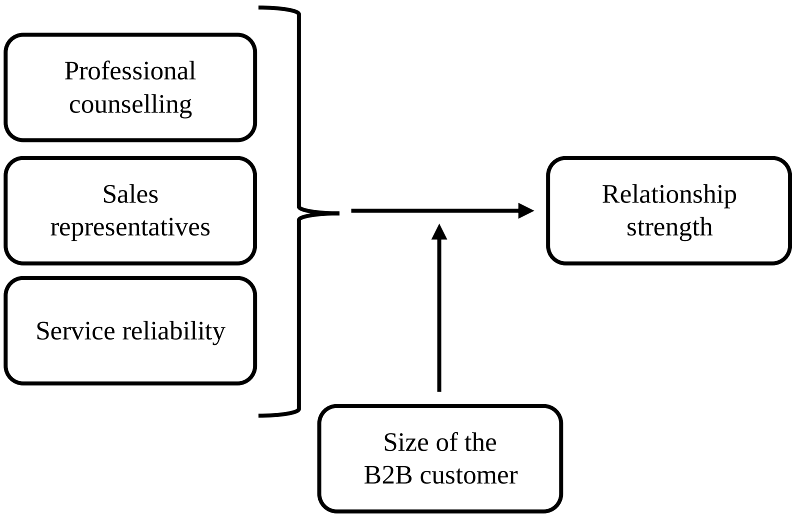
For the purpose of our research, the reciprocity principle refers to the recognition of the provider's efforts during a commercial relationship that will lead to customer gratitude as a compensation for those efforts (Gouldner, 1960). Customers may feel intrinsic psychological pressure to reciprocate after receiving a benefit, and that failing to give back can lead to discomfort or even guilt (Dahl et al., 2009). As Palmatier et al. (2009) comment, the logic behind the reciprocity approach relies on generating a sense of tradeoff for the provider's efforts and then, the customer's behaviors can be motivated by a commitment to reciprocate the provider's efforts. Most individuals are driven to reciprocate when they have been taken good care of by the other side in a relationship (Groth, 2005). Interactions, then, require a bidirectional exchange—that is, something has to be given and something has to be returned. Investments made by one party in a relationship generate the desire to reciprocate (Bagozzi 1995).

Therefore, customers who value the investment made by the company may reciprocate by having positive relational perceptions toward the firm or loyal behavior (Ruz-Mendoza et al., 2021). According to SET, feelings such as trust, gratitude, obligation and loyalty do not always arise on their own (Cambra-Fierro et al., 2019). This means that social exchange is vital for relationship strength.

From the above arguments, this study analyzes how different elements that define the marketing effort that companies make towards their customers in a B2B context can determine the strengthening of a business relationship. In a B2B context, given the specific characteristics that define it, the establishment of lasting relationships is essential to understand the success of both customers and suppliers (Polo-Redondo and Cambra-Fierro, 2008). Aspects such as a generally more concentrated supply and demand, the specific needs of customers, or a more rational and professional purchasing process that fits the objectives of the organization explain the importance of such a durable approach.

In our model (see figure 1 below), the marketing effort is explained from the professional counselling, sales representatives, and service reliability. Professional counselling is defined as the providers´ advice that use to result in the product/ service configuration (Aichner and Gruber, 2017). Sales representatives are the touchpoints that the customer has with the sales representatives (Arndt et al., 2020). Finally, service reliability represents the attainment of desired outcome level and ability to control variance in outcomes through elimination of unwanted variances in attributes of product/ services (Oly-Ndubisi, 2012). Literature (e.g., Cambra-Fierro et al., 2021) suggests that positive perceptions of these variables can lead to customer satisfaction and relationship strength. Besides, as RQ2 proposes, size may influence the intensity of the causal relationships proposed in the model (see figure 1 below).

Figure 1: Causal model



3.-Methodology and results

Data is based on a longitudinal random sample for 48 months facilitated by a multinational firm specialized in B2B insurances. The collaborating firm provided a random sample of 2,175 B2B customers drawn from their extensive customer database. This sample is characterized by its varied profile, encompassing a broad spectrum of sectors and industries. Therefore, data was obtained in the form of a panel dataset, signifying the inclusion of information from the same customers throughout the specified timeframe. Within the entire sample, small companies accounted for approximately 13%, medium-sized companies constituted 32%, and large companies represented around 55%. To measure each variable, we have taken as reference the scales of measurement that are collected in the works that we have used to define each of them. Once the validity of the data has been confirmed, a regression system was used.

When analyzing panel data, two commonly used approaches involve fixed effects and random effects estimations (Harris et al., 2008). These methods offer valuable insights into the dynamics of longitudinal data, enhancing our understanding of the factors influencing observed patterns over time. While both methods are consistent, the fixed effects (FE) estimator is generally considered less efficient due to its higher variance, in contrast to the random effects (RE) estimator, which is acknowledged for its greater efficiency (Snijders, 2005).

To determine the most suitable estimator for each context, researchers typically employ the Hausman test as a diagnosis test. The test outcome guides the choice of estimator based on the data. Specifically, if the null hypothesis is not rejected, indicating a preference for RE, while rejecting the null hypothesis suggests a preference for FE (Baltagi and Liu, 2016). In our analysis, the Hausman test results indicated a preference for random effects ($p > .05$), supporting the idea that, in this dataset, the efficiency gains of the RE model outweigh those of the FE model. Consequently, we have utilized the RE estimation to test the model. The results of the empirical analysis for each type of B2B customer—small, medium-sized, and large—are presented individually in Table 1.

Table 1: Results (coefficient, p-value)

Relationship strength	Small B2B customers	Medium-sized B2B customers	Large B2B customers
Professional counselling	**0.249 (0.031)**	**0.189 (0.048)**	0.018 (0.088)
Sales representatives	**0.167 (0.037)**	0.129 (0.257)	0.026 (0.366)
Service reliability	**0.274 (0.024)**	0.041 (0.057)	**0.246 (0.042)**
Cons.	**3.136 (0.000)**	**6.541 (0.000)**	**6.467 (0.000)**

$p<0.05$

In terms of R2, we obtained the following values:
-For small companies: 0.2002 (within), 0.3947 (between), 0.3335 (overall).
-For medium companies: 0.1090 (within), 0.2465 (between), 0.1431 (overall).
-For large companies: 0.1144 (within), 0.2734 (between), 0.1622 (overall).

These findings indicate discrepancies in the effectiveness of marketing efforts on the long-term relationship depending on the B2B customer business size:

-Regarding the impact of professional counseling, results indicate that it exerts a positive and significant impact on long-term relationship strength in the case of small B2B customers ($\beta = .249$, $p < .05$) and medium-sized B2B customer ($\beta = .189$, $p < .05$). However, no significant effect was found for large businesses.

-Concerning the impact of sales representatives, our findings show that they only exert a positive and significant effect on long-term relationship strength only for small B2B customers ($\beta = .167$, $p < .05$), while in the case of medium-sized and large businesses, no significant effect was found.

-Last but not least, as regards service reliability, result demonstrate a significant positive influence on long-term relationship strength for both small ($\beta = .274$, $p < .05$) and large businesses ($\beta = .246$, $p < .05$). On the other hand, no significant effect was found in the case of medium-sized businesses.

4.-Discussion

The signs of the coefficients of the regressions show that the causal relations are positive in all cases, as pointed out by the work of Cambra-Fierro et al. (2021). However, for a confidence level of 95% ($p>0.05$), data reveal that for small businesses every aspect of the B2B relationship is relevant. Since they may lack internal expertise and resources, smaller companies can rely on external advice from their providers in order to make informed decisions. Thus, professional counseling can be highly valuable. Sales representatives and their interactions with small business can be also critical. The attention and support received from sales representative can be effective to address specific needs, while encouraging a sense of importance and commitment. Service reliability can be just as important for small companies. Consistent and timely service may set the foundation for long-lasting relationships with their providers.

Medium-sized companies often have more internal resources but may still benefit from professional counseling, especially in specialized or complex decisions. The provider should aim to offer this complementary expertise. Even though interacting with sales representatives and service reliability can be relevant, medium-sized business can be more focused on other aspects of the sales process and the service, thus reducing their relative importance.

Finally, large corporations usually benefit from well-structured procurement processes, which diminishes the need for professional counseling. In the same vein, interactions with sales representatives tend to be more streamlined and less personalized, thus reducing their importance for the overall relationship. However, service reliability represents a top priority for larger companies. Any disruptions can potentially present substantial consequences, making reliability imperative.

From a theoretical perspective, the general results confirm the ideas of the literature specialized in relationship management. As proposed in SET, we see that once the customer perceives some effort on the part of the supplier, as reciprocal behavior the customer shows willingness to strengthen the relationship with that supplier (e.g., Casidy and Lie, 2023; Gao et al., 2023). However, the results confirm the need to segment the customer base based on variable such as size. The needs of each type of customer may differ and, from a practical point of view, to improve the efficiency of marketing efforts it is interesting to know which element to pay more attention to depending on the type of customers firms are interacting.

Despite the interest of this study, we must recognize a number of limitations. The results are based on a single sector. In addition, the model presents a small number of variables. As proposals for future research, it would be interesting to expand the number of variables of the model and replicate it in other B2B contexts. Other variables such as the B2B customer's industry, the B2B customer's tenure with the provider, or if they had or not any critical incidents with the provider in the past could also influence in the links proposed in the causal model. However, the exploratory nature of the model and the results obtained justify its relevance both academically and for B2B business practice.

References

Aichner, T., Gruber, B. (2017). Managing customer touchpoints and customer satisfaction in B2B mass customization: a case study. *International Journal of Industrial Engineering and Management*, 8, 131-140.

Arndt, A., Khoshghadam, L., Evans, K. (2020). Who do I look at? Mutual gaze in triadic sales encounters. *Journal of Business Research*, 111, 91-101.

Arnold. T., Grewal, D., Motyka, S., Kim, N., Sharma, A., and Srivastava, R. (2019). Store manager–store performance relationship: A research note. *Journal of Retailing*, 95, 144-155.

Bagozzi, R. (1995). Reflections on relationship marketing in consumer markets. *Journal of the Academy of Marketing Science*, 23, 272-277.

Baltagi, B., Liu, L. (2016). Prediction in a generalized spatial panel data model with serial correlation. *Journal of Forecasting*, 35, 573-591.

Blau, P. (1964). *Exchange and power in social life*. New York: Wiley.

Bowman, D., and Narayandas, D. (2001). Managing customer-initiated contacts with manufacturers: The impact on share of category requirements and word-of-mouth behavior. *Journal of Marketing Research*, 38, 281-297.

Cambra-Fierro, J., Polo-Redondo, J. (2008). Long-term orientation of the supply function in the SME context: reasons, determining factors and implications. *International Small Business Journal*, 26, 619-646.

Cambra-Fierro, J., Melero-Polo, I., and Sese, J. (2018). Customer-firm interactions and the path to profitability: A chain-of-effects model. *Journal of Service Research*, 21, 201-218.

Cambra-Fierro, J., Polo-Redondo, Y., Trifu, A. (2021). Short-term and long-term effects of touchpoints on customer perceptions. *Journal of Retailing and Consumer Services*, 61, 102520.

Cambra-Fierro, J., Gao, L., Melero-Polo, I., and Sese, J. (2019). What drives consumers' active participation in the online channel? Customer equity, experience quality, and relationship proneness. *Electronic Commerce Research and Applications*, 35, 100855.

Casidy, R., and Lie, D. (2023). The effects of B2B sustainable brand positioning on relationship outcomes. *Industrial Marketing Management*, 109, 245-256.

Cook, K., and Emerson, R. (1978). Power, equity and commitment in exchange networks. *American Sociological Review*, 43,721-739.

Dahl, D., Honea, H., and Manchanda, R. (2009). Three Rs of interpersonal consumer guilt: Relationship, reciprocity, reparation. *Journal of Consumer Psychology*, 15, 307-315.

De Wulf, K., Odekerken-Schröder, G., and Iacobucci, D. (2001). Investments in consumer relationships: A cross-country and cross-industry exploration. *Journal of Marketing*, 65, 33-50.

Ekeh, P. (1974). *Social exchange theory: the two traditions*. London: Heinemann Educational.

Ferm, L., and Thaicon, P. (2021). Customer pre-participatory social media drivers and their influence on attitudinal loyalty within the retail banking industry: A multi-group analysis utilizing social exchange theory. *Journal of Retailing and Consumer Services*, 61, 102584.

Ford, D. (1980). The Development of Buyer-Seller Relationships in Industrial Markets. *European Journal of Marketing*, 14, 339-353.

Gao, L., de Haan, E., Melero-Polo, L., and Sese, J. (2023). Winning your customers’ minds and hearts: Disentangling the effects of lock-in and affective customer experience on retention. *Journal of the Academy of Marketing Science*, 51, 334-371.

Gillani, A., Kutalua, S., and Budhwar, P. (2021). Psychological contract breach: Unraveling the dark side of business-to-business relationships. *Industrial Marketing Management*, 134, 631-641.

Gouldner, A. (1960). The norm of reciprocity: A preliminary statement. *American Sociological Review*, 25, 161-178.

Grönroos, Ch. (1994). Quo Vadis, marketing? Toward a relationship marketing paradigm. *Journal of Marketing Management*, 10, 347-360.

Groth, M. (2005). Customers as good soldiers: Examining citizenship behaviors in Internet service deliveries. *Journal of Management*, 31, 7-27.

Gummesson, E. (1987). The new marketing: Developing long-term interactive relationships. *Long Range Planning*, 20, 10-20.

Harris, R., Bradburn, M., Deeks, J., Harbird, R., Altman, D., Sterne, J. (2008). Metan: Fixed and random -effect meta-analysis. *The Stata Journal*, 8, 3-28.

Homans, G. (1958). Social behavior as exchange. *American Journal of Sociology*, 63, 597-606.

Kim, D., and Kim, H. (2021). Trust me, trust me not: A nuanced view of influencer marketing on social media. *Journal of Business Research*, 134, 223-232.

Lasrado, F., Thaichon, P., Nyadzayo, M. (2023). Exploring the role of relationship management and relationship quality in B2B: empirical insights and future research directions. *Journal of Business and Industrial Marketing*, 38, 1055-1086.

Morgan, R., and Hunt, S. (1994). The Commitment-Trust Theory of relationship marketing. *Journal of Marketing Management*, 58, 20-38.

Oly-Ndubisi, N. (2012). Mindfulness, reliability, pre-emptive conflict handling, customer orientation and outcomes in Malaysia's healthcare sector. *Journal of Business Research*, 65, 537-546.

Palmatier, R., Jarvis, C., Bechkoff, J., Kardes, K. (2009). The role of customer gratitude in relationship marketing. *Journal of Marketing*, 73, 1-18.

Polo-Redondo, Y., Cambra-Fierro, J. (2008). Influence of the standardization of a firm's productive process on the long-term orientation of its supply relationships: An empirical study. *Industrial Marketing Management*, 37, 407-420.

Polo-Redondo, Y., Cambra-Fierro, J. (2007). Importance of company size in long-term orientation of supply function: An empirical research. *Journal of Business and Industrial Marketing*, 22, 236-248.

Pugh, H., Brady, M., and Hopkins, L. (2018). A customer scorned: Effects of employee reprimands in frontline service encounters. *Journal of Service Research*, 21, 219-234.

Ruz-Mendoza, M., Trifu, A., Cambra-Fierro, J., and Melero-Polo, I. (2021). Standardized vs. customized firm-initiated interactions: Their effect on customer gratitude and performance in a B2B context. *Journal of Business Research*, 133, 341-353.

Snidjers, T. (2005). Fixed and random effects. In Everitt, B., Howell, D. (eds.) *Encyclopedia of Statistics in Behavioral Science*, 2, 664-665. Wiley.

Tan, T., and Saraniemi, S. (2023). Trust in blockchain-enabled exchanges: Future directions in blockchain marketing. *Journal of the Academy of Marketing Science*, 51, 914-939.

Thibaut, J., and Kelley, H. (1959). *The social psychology of groups*. New York: Wiley.

Tóh, Z., Mrad, M., Itani, O., Luo, J., and Liu, M. (2022). B2B eWOM on Alibaba: Signaling through online reviews in platform-based social exchange. *Industrial Marketing Management*, 104, 226-240.

Tran, P., Gorton, M., and Lemke, F. (2022). Buyers' perspectives on improving performance and curtailing supplier opportunism in supplier development: A social exchange theory approach. *Industrial Marketing Management*, 106, 183-196.

Urbanovicius, S., Degutis, M., Zimaitis, I., Kaduskeviciute, V., and Skare, V. (2021). From social networking to willingness to disclose personal data when shopping online: Modelling in the context of social exchange theory. *Journal of Business Research*, 136, 76-85.

Uysal, E., Alavi, A., and Bezencon, V. (2022). Trojan horse or useful helper? A relationship perspective on artificial intelligence assistants with humanlike features. *Journal of the Academy of Marketing Science*, 50, 1153-1175

Venkatesan, R., Kumar, V., and Ravishanker, N. (2007). Multichannel shopping: Causes and consequences. *Journal of Marketing*, 71, 114-132.