

Journal of Production, Operations and Systems Management

e-ISSN: 1984-2430



Responsible Editor: PhD Hermes Moretti Ribeiro da Silva

Received: 09/12/23 Approved: 17/12/2023

INDUSTRIAL AND SERVICE MARKETING STRATEGIES: CONCEPTUAL FRAMEWORK TO ANALYZE THE IMPACTS OF B2B RELATIONSHIP IN CNC MACHINES SEGMENT

ESTRATÉGIAS DE MARKETING DE SERVIÇOS INDUSTRIAIS: ESTRUTURA CONCEITUAL PARA ANALISAR OS IMPACTOS DO RELACIONAMENTO B2B NO SEGMENTO DE MÁQUINAS CNC

ABSTRACT

Ricardo Veloso Ribeiro¹ Éderson Luiz Piato² Márcio Lopes Pimenta³ Marcelo Fodra⁴



Purpose: The objective of this study is to propose a conceptual framework on the relationship between the strategic elements of service marketing and industrial marketing elements.

Methodology/Approach: A multi-case study was conducted on four multinational manufacturing companies of machinery and equipment, leaders in the segment in which they operate, and nine business customers, with full participation of 29 professionals. The research was developed analyzing the services' marketing strategies and their impact on the relationship, commitment, trust, price, cooperation and brand value, from the perspective of manufacturers and client companies.

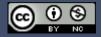
Findings: The results showed that replacement items prices act directly on the relationship and the perception of the manufacturer's commitment to customers. Commitment and trust can be achieved through transparent and accurate communication, generating greater cooperation between the parties, which contributes to the long-lasting relationship.

Research limitations: The limitations of this study are the reduced number of buyers, in addition to the difficulties of access to large factories.

Practical implications: The study explores the concepts of marketing strategies and marketing B2B. This research proposes a framework on the relationship between the strategic elements of service marketing and industrial marketing elements.

Originality/ Value: There are few academic studies that demonstrate the influence of marketing strategies services in industrial exchanges (B2B). This paper developed a conceptual framework on the relationship between the strategic elements of service and industrial marketing elements, offering nine propositions for future studies.

Keywords: Service Marketing Strategy; Product-Service System (PSS); B2B relations; Industrial Marketing.



RESUMO

Objetivo: O objetivo do presente estudo é propor um quadro conceitual sobre a relação entre os elementos estratégicos do marketing de serviços e os elementos do marketing industrial.

Metodologia/Abordagem: Foi realizado um estudo de casos múltiplos em quatro empresas multinacionais fabricantes de máquinas e equipamentos, líderes no segmento em que atuam, e nove empresas clientes, com a participação integral de 29 profissionais. A pesquisa foi desenvolvida analisando as estratégias de marketing de serviços e seu impacto no relacionamento, comprometimento, confiança, preço, cooperação e valor da marca, sob a ótica dos fabricantes e das empresas clientes.

Resultados: Os resultados mostraram que os preços dos itens de reposição atuam diretamente no relacionamento e na percepção do comprometimento do fabricante com os clientes. O comprometimento e a confiança podem ser alcançados através de uma comunicação transparente e precisa, gerando maior cooperação entre as partes, o que contribui para o relacionamento duradouro.

Limitações da pesquisa: As limitações deste estudo são o número reduzido de compradores, para além das dificuldades de acesso às grandes fábricas.

Implicações práticas: O estudo explora os conceitos de estratégias de marketing e marketing B2B. Esta investigação propõe um quadro sobre a relação entre os elementos estratégicos do marketing de serviços e os elementos do marketing industrial. Originalidade/Valor: Existem poucos estudos acadêmicos que demonstrem a influência das estratégias de marketing de serviços nas trocas industriais (B2B). Este artigo desenvolveu um quadro conceitual sobre a relação entre os elementos estratégicos do marketing de serviços e os elementos do marketing industrial, oferecendo nove proposições para estudos futuros.

Palavras-chave: Estratégia de Marketing de Serviços; Sistema Produto-Serviço (PSS); Relações B2B; Marketing Industrial.

DOI: 10.15675/gepros.2997

¹ Email: E-mail: veloso-ricardo@hotmail.com; Orcid: https://orcid.org/0000-0001-7700-6978

² Department of Business Administration, Federal University of São Carlos, Rod. Washington Luís, s/n - Monjolinho, São Carlos - SP, 13565-905, Brazil, E-mail: piato@ufscar.br; Orcid: https://orcid.org/0000-0002-6403-3288

³. Email: pimenta@ufu.br; Orcid: https://orcid.org/0000-0003-3899-3274

⁴ Email: marcelo.fodra@ufu.br; Orcid: https://orcid.org/0000-0003-0905-6580

1. INTRODUCTION

Companies execute strategic actions to achieve a competitive advantage, but the results are influenced by the internal and external environment (Varadarajan and Jayachandran, 1999). Firms that seek to discover the needs of clients and provide products and services to meet those requirements have better chances of success than companies that ignore such changes (Farida and Setiawan, 2022; Weihrich, 1982).

Companies targeting production notice the strong competition in manufactured products, especially when they are based on prices. They recognize that margins in the services may be higher than in goods and that loyalty and customer retention can be increased through individualized product and service combinations (Evanschitzky et al., 2011; Zeithaml et al., 2014). With this, many manufacturing companies have expanded their offer value through the delivery of services (Biege et al., 2012).

Several literature terms can be found in this context, which are often used interchangeably, as hybrid products or hybrid offerings, expanded product, product-service systems (PSS), products with included services, solutions (Evanschitzky et al., 2011; Slater and Olson, 2001), and the term "servitisation" (Biege et al., 2012).

The current global economic scenario arises as an opportunity for the development of this research, in which the economic and financial crisis is affecting the performance of various industries and countries (Chang et al., 2023; Colombo et al., 2016; Mirzaei and Kutan, 2016). When companies view the crisis as a threat, they focus on increasing efficiency, cost reduction and reduction of investments (Nason and Patel, 2016); and the reduction of investment directly affects the manufacturers of machinery and equipment companies (ABIMAQ, 2017).

The research results found by Colombo et al. (2016) show that large companies face the crisis by expanding the international market and the development of new products and services, stabilizing cash flows, and providing greater visibility to the revenue of the firms (Eggert et al., 2011). Thus, this research aims to analyze the impact of B2B services marketing strategies performed by machine and equipment manufacturers in the relationship with the client companies.

2. LITERATURE REVIEW

2.1 Elements of service marketing strategy

Companies that produce services are different from companies that produce products (Shostack, 1977) and marketing professionals generally consider four basic strategic elements: product, price, distribution, and communication (Lovelock and Wright, 2006), also known as the marketing mix.

However, as the nature of the services involve aspects such as the importance of the time factor and consumer involvement in the production of the service, there is the need to include other strategic elements (Bitner, 1990; Lovelock and Wright, 2006). Table 1 shows the summarized form of a description of the strategic elements of marketing services.

Many service businesses fail when they adopt only the product marketing strategies in their decision-making process (Shostack, 1977), since service marketing problems need solutions for marketing services (Zeithaml et al., 1985). Thus, the strategies developed for goods are not enough (Hoffman et al., 2010; Wouters, 2004; Zeithaml et al., 1985).

 Table 1

 Strategic Elements of Service Marketing

Strategic Elements of Service Marketing	
Product Elements	All components of service performance that create value for customers.
Distribution Place and Time	Management decisions about when, where and how to deliver services to customers.
Process	Particular method of operation or flow of activities, usually involving steps that need to be taken in a defined sequence.
Productivity and Quality	Productivity is the degree of efficiency with which service inputs are transformed into products that add value for the customer.
	Quality is the degree to which the service satisfies customers to meet their needs, desires and expectations.
Human Resource	Professionals and sometimes other clients involved in the production of the service.
Communication	All activities and communication incentives to increase customer preference for a particular service or service provider.
Physical evidence	Visual cues or other tangible clues that provide evidence of quality of service.
Price and other service costs	Cash expenses, time and effort that customers incur when buying and consuming services.

Source: Compiled from Lovelock and Wright (2006).

2.2 Business to business (B2B) marketing

The B2B Marketing refers to the processes that create, plan and execute exchanges between organizations (Moreira et al., 2006). According to Cortez and Johnston (2019), until 1980 the B2B Marketing was related to transaction economics, in the 1980s, industrial marketing was product-oriented, but due to customer behavioral changes, there was a need for reorientation in B2B marketing, starting the relationship approach (Matthyssens and Van den Bulte, 1994). Therefore, B2B Marketing was the first to recognize the need to develop partnership and collaboration with consumers, who buy the result of the service and not just the product (Vargo and Lusch, 2008), engaging in all marketing activities aimed at to establish, maintain and improve the relationship with customers and other partners in a profitable way. The B2B transactions account for a significant share of all revenues in developed and emerging countries in the world (Cortez, 2019).

Relationships form business networks, composed of social, economic (Batt and Purchase, 2004; Hakansson and Ford, 2002) and technological dimensions (Hakansson and Ford, 2002). Another important concept is the brand value. Consumers perceive the value of

the brand, associating it with quality, image recognition, market leadership, credibility, corporate reputation and differentiation (Bendixen et al., 2004; Michell et al., 2001). The importance of the brand varies among buyers and businesses, they must identify brand-sensitive customers and plan their sales pitch to reach these customers (Sharma et al., 2019).

The value of the brand is composed of four components: product performance, distribution performance (order and delivery), support services performance, and company performance (Mudambi et al., 1997). It is related to perceived quality, which is seen as the main variable to create brand value (Bendixen et al., 2004) and as a determining factor for consumer confidence (De Ruyter et al., 2001) and higher firm value (Rahman et al., 2018). Effective brand management helps companies reach foreign markets, through exports (Pyper et al., 2020).

Other important elements in relationship development are the commitment and trust. When together, they bring the feeling of cooperation, which is essential to the success of relationship marketing (Morgan and Hunt, 1994). Confidence occurs when a party believes in the honesty, credibility and integrity of its partner (Coote, et al., 2003; Morgan and Hunt, 1994), that reduces the uncertainties occurring in relational exchanges (Morgan and Hunt, 1994). According to Karampela et al. (2020), interactivity improves the perceived quality of the partner, while responsiveness positively influences commitment.

Various facets of communication influence customer loyalty in a B2B sale (Hossain and Chonko, 2018). Communication has a direct positive influence on commitment and confidence (Coote et al., 2003; Morgan and Hunt, 1994), becoming the key to relationship marketing (Coote et al., 2003). However, the key point in communication is not the volume or frequency, but its accuracy, relevance and timeliness (Coote et al., 2003). In industrial transactions, communication can be composed of product catalogs, websites, advertising, trade shows and sales staff (Bendixen et al., 2004; Balaji et al., 2017).

As stated, personal relationship, product and service credibility and cost-benefit analysis are crucial for the consumer to remain in the relationship (De Ruyter et al., 2001). The relationship marketing is used in the study of exchange relations, being commonly studied in relations with the customers of the company and its suppliers (Neumann and Laimer, 2019). However, it must be considered that in relationship marketing, results are achieved through long-lasting and profitable relationships with customers (Coote et al., 2003; Filiatrault et al., 1996; Grönroos, 1994; Matthyssens and Van Den Bulte, 1994).

2.3 Conceptual framework and relationships

According to the theoretical background explained in the previous topic, a conceptual framework of the strategic elements of B2B marketing services is presented in Figure 1 and explained below.

The relationship can affect the product, since the relationship between supplier and customer helps the development of personalized products and services (Hakansson and Ford, 2002; Matthyssens and Van Den Bulte, 1994), reducing uncertainties in the exchange process. (Hakansson and Östberg, 1975).

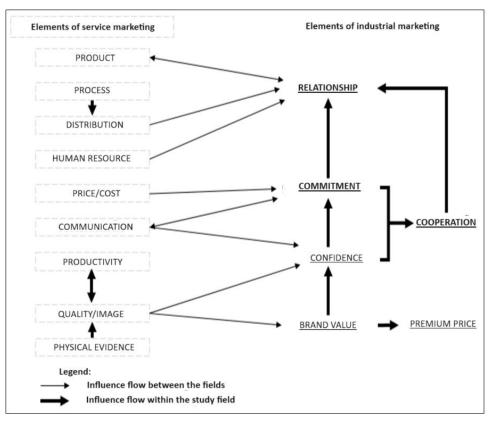
The processes refer to perform its service mode and comprise from manufacturing to service distribution procedures (Sarquis, 2009; Kotler and Haye; Bloom, 2002). Service meetings in the service delivery are opportunities for the company to develop customer relationships (Sarquis, 2009) and its configuration directly affects the service experience (Lovelock and Wright, 2006; Sarquis, 2009). So, customer experience with the service consists on the performance of the service and the delivery characteristics of the service, so badly elaborated processes usually cause slow delivery of the service and poor quality (Lovelock et al., 2011).

The interactions between employees and customers, which occur during the process of



production/service delivery that are known as moments of truth (Gummesson, 1987; Grönroos, 2004), affecting satisfaction and intention of future consumer purchases (Sergeant and Frenkel, 2000). Larger investment in human resources, especially in front-line employees, positively affects customers (Schlesinger and Heskett, 1991).

Figure 1Conceptual framework on the elements of the marketing strategies of B2B services



Source: Compiled from Bendixen et al., (2004); Biege et al., (2012); Coote et al., (2003); Duncan and Moriarty (1998); Grönroos (1994) (1996) (2004); Gummesson (1987); Kauppinen-Räisänen and Grönroos (2015); Kotler et al., (2002); Lovelock et al., (2011); Lund and Marinova (2014); Magrath (1986); Matthyssens and Van Den Bulte (1994); Michell et al., (2001); Morgan and Hunt (1994); Mudambi (2002); Mudambi et al. (1997); De Ruyter et al., (2001); Rust and Chung (2006); Sarquis (2009); Storbacka et al., (1994).

Companies that build relationships with their clients must focus on communication, because communication is the activity that connects people and is the basis for relationship building (Duncan and Moriarty, 1998), exercising a direct positive influence on commitment and confidence (Coote et al., 2003; Morgan and Hunt, 1994). Thus, communication becomes the key to relationship marketing (Coote et al., 2003). There are indications that, under certain conditions, digital communication offers advantages in B2B relationships (Murphy and Sashi, 2018).

Goodman and Dion (2001) also identified in their study of distribution channels that the quantity and quality of communication and trust positively affects the development of the distributor's commitment to the manufacturing company. Thus, it can be seen that there is mutual influence between communication and commitment and that communication can also affect confidence.

In services, productivity and perceived quality are phenomena that cannot be separated. Improving productivity can bring impacts on perceived quality; hence both must be managed in an integrated manner (Grönroos and Ojasalo, 2004; Grönroos, 2004). This service is modeled

by extending the tangible characteristics, in which consumers can more easily understand the nature of the service (Bitner, 1992; Lovelock et al., 2011; Shostack, 1977).

Perceived quality is seen as the main variable to create brand value (Bendixen et al., 2004) and as a determining factor for consumer confidence (De Ruyter et al., 2001). The value of the brand is another important concept, as consumers perceive brand value, companies also relate strong brands with perceived quality, image recognition, market leadership, credibility, corporate reputation, and differentiation (Bendixen et al., 2004; Michell et al., 2001), contributing to financial performance of the firm (Liu et al., 2017; Guenther and Guenther, 2019). The brand can increase buyer confidence (Mudambi, 2002) and the price premium can be used through the brand strength (Bendixen et al., 2004).

Given that, it can be seen that there is mutual influence between quality and productivity. The physical evidence, in turn, can also affect the quality of service; quality can affect the value of the brand and trust; and the value of the brand, as well as affecting the trust, also enables the price of premium application.

3. METHODOLOGY

This research has a qualitative approach, which considers the existence of dynamic relationship between the real world and the subject (Prodanov and Freitas, 2013). The chosen research strategy was a multiple case study because it has distinct advantages and disadvantages when compared to the single case projects, for example, the evidence from multiple cases is considered more convincing (Yin, 2001).

To build theories, a case study is used to apply the replication logic instead of the sampling logic, thus, the units of analysis can be chosen by literal replication (Voss et al., 2002). So, we opted for the literal replication, seeking similar results on the marketing strategies of industrial services in companies that possess the following characteristics: (a) machinery and equipment manufacturers that have manufacturing facilities and/or services department and/or technological centers in the state of São Paulo; (b) companies that develop strategies directed at least three elements of marketing services; (c) companies that develop relationship strategies with customers; (d) medium or large companies; and (e) company accessibility to participate.

Considering the replication logic (Yin, 2001), in this work, more than 20 companies were contacted by phone and e-mail. Among them, four participated. The selection of client companies considered the following criteria: (a) customers who used pre-service or company of aftermarket manufacturer in less than 24 months from the beginning of the field research; (b) companies that maintain a relationship with the manufacturer of machinery and equipment; and (c) company accessibility to participate.

Due to the confidentiality of information, the names of the machine manufacturers and its clients will not be revealed. They will be called manufacturers A, B, C and D and their respective customers as 1, 2 and 3, depending on the number of client companies in the survey. As an example, the manufacturers of the client companies are A1, A2 and A3. Manufacturers A and C managed three business customers to participate in the research, Manufacturer B achieved two client companies and Manufacturer D could only manage one client company.

3.1 Data collection

Data can be obtained through interviews, document analysis, personal interviews, observation and observation of physical artifacts (Gil, 2002; Voss et al., 2002). The data collection methods used at this work were: interviews; collection of documents; and direct observation.

Interviews were conducted with machinery and equipment manufacturers and with

professionals from the marketing, sales, human resources, projects, and technical assistance departments. 60-minute interviews were conducted with commercial customers with the professional maintenance, manufacturing engineering and management departments, totaling 23 interviews, with the participation of 29 professionals.

The interviews were recorded with the interviewees' consent for later transcription, using Express Scribe Transcription Software v 5.9 © NHC Software. As a data collection instrument, the semi-structured script developed by the researcher based on the literature review was used. The questions are open and directed to the departments surveyed, some were used for several departments, others only for specific departments. Two scripts were created, one for the machinery and equipment manufacturer and the other for commercial customers of these manufacturers.

For data triangulation, several documents of manufacturers were analyzed, such as internal magazines, catalogs, promotional materials (flyers and leaflets), websites of the companies and direct observation. Direct observations on the manufacturer were carried out by means of visits to sales offices, technical assistance projects, spare parts, training, HR and through visits to customers along with the manufacturer seller.

3.2 Data analysis

The analysis was performed using triangulation data and partial application of content analysis techniques. Content analysis consists of the following steps: pre-analysis; exploration of material and processing of results and interpretation (Bardin, 2011). Content analysis was performed with the aid of 12 MAXQDA software.

Initially, the documents were organized, selecting those that would be submitted to analysis with the MAXQDA 12 software. Afterwards, the documents were read, codes and categories were obtained for further analysis. Categorization is used to classify the set of data elements and combine them using predefined criteria (Bardin, 2011).

For the analysis of the content of the data collected, in the machinery and equipment manufacturers, 14 documents were analyzed, 116 codes were created and distributed in 15 categories, which showed a total of 1,054 sections or segments extracted from the documents.

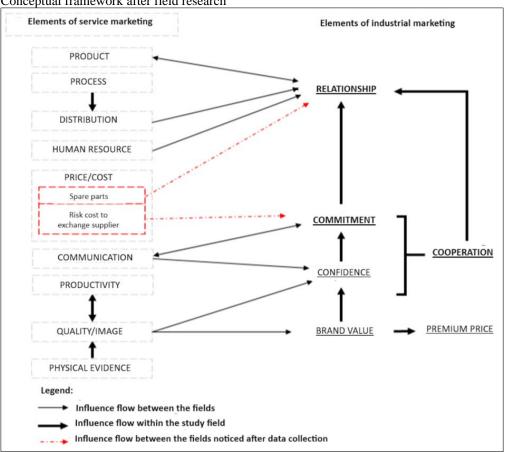
While for data content analysis of the client companies, 87 codes were created and distributed in 14 categories, which consist of the total of 831 segments extracted from the documents. The MAXQDA 12 software makes it possible to check intersections between the various categories, so it allows to identify the possible relationships between categories.

4. RESULTS AND DISCUSSION

4.1 Analysis of the conceptual framework of the proposed relations

This topic aims to investigate the relationship between service elements used in marketing strategies of machinery and equipment manufacturers with industrial marketing, as shown in Figure 2. The framework remains with the relationships observed in the literature review with the addition of field research results, changing the price and cost elements. This change occurred because the client companies report that the spare parts service and some repair services of certain components may affect the relationship between the companies. The foundations found in the field research that support the conceptual framework are presented in the following topics.

Figure 2
Conceptual framework after field research



Source: Based on the field research data and Bendixen et al. (2004); Biege et al. (2012); Coote et al. (2003); Duncan and Moriarty (1998); Grönroos (1994) (1996) (2004); Gummesson (1987); Kauppinen-Räisänen and Grönroos (2015); Kotler et al. (2002); Lovelock et al. (2011); Lund and Marinova (2014); Magrath (1986); Matthyssens and Van Den Bulte (1994); Michell et al. (2001); Morgan and Hunt (1994); Mudambi (2001); Mudambi et al. (1997); De Ruyter et al. (2001); Rust and Chung (2006); Sarquis (2009); Storbacka et al. (1994).

4.1.1 Product and relationship

Client companies reported that the product affects the relationship between the parties. The equipment affects the number of failures, influencing the relationship. But, for the interviewees, the service is seen as a differential when choosing the equipment supplier. This agrees with Grönroos (1996), that the added value influences the relationship between customer and supplier.

The product cannot cause problems if you buy the equipment and maintenance given you constantly have to dismiss (...). Company A1.

(...) if I had not got the service I have and their efficiency, I would not buy, because I bought a machine in a year, another year another machine (...). Company C3.

These are aligned with the perspective of manufacturers, as in the interview excerpts.

- (...) the customer does not like me, nor our company, the customer likes that the machine (the CNC) generates money to him. Manufacturer A.
- (...) if it does not have a well-done post-sale, it will inevitably be a single sale and that we do not want. So, I think we must be very careful with it (...). Manufacturer C.

Manufacturers seek to develop new services that meet the needs of their customers, according to D1. Thus, the relationship between the parties can affect the product's features,

agreeing with Hakansson and Ford (2002) and Matthyssens and Van den Bulte (1994).

(...) which it is an offering that made him actually go to a discussion between us, because the service did not exist, and we needed the service and they have developed it. Company D1.

In view of the literature review and the data collected, we noted that there is mutual influence between the component product and the relationship, justifying the first exploratory proposition of this study:

P1: There is a mutual influence between the component product and the relationship.

4.1.2 Process, distribution and relationship

The way the manufacturers provide their products and services can affect their relationships with customers. Many customers report the importance of care, especially in the speed to respond to the need for technical assistance. This agrees with Lovelock et al. (2011).

- (...) in the case of maintenance for example: customer service, they have a service line that I think it is great, you call and have an immediate care, solutions are fast, and that's what we need (...). Company A3.
- (...) of course you can, you call the service and it does not come, you ask for help and it does not come, this business is very truncated (...) 'No, it's not under warranty then (...)' (...). Company B2.
- (...) not leave the client unattended with the machine for a long time, provide the best service at the best possible time. Manufacturer C.

D1 automaker points out that the term of the manufacturer's response does not affect the relationship, given they already have the entire production system set to not depend on failures from suppliers, as highlighted by the respondent.

Look, I think it does not affect us because we prepare to not need, to not be affected by it (...) if we depended on, it would affect enough. It is an important point for those that need. Company D1.

The maker, in turn, points out that, to maintain the closest relationship to the client, it uses the distribution through its own sales force:

(...) it is hard, but when you win, it makes a good sale and wins a lot of money for the company, however, it does not, in our view, have customer loyalty, does not bring a closer relationship with the customer, the seller cannot create that link (...) consultant, he cannot be a consultant (...). Manufacturer A.

As seen, it can be said that the process can affect distribution, changing the relationship between machine manufacturers and their customers. Thus, the second proposition arises:

P2: The process can affect the distribution, and the distribution may affect the relationship between machine manufacturers and their customers.

4.1.3 Human resource and relationships

Gummesson (1987) and Grönroos (2004) claim that interactions between customers and suppliers are known as the moment of truth. It is in this interaction that customers point out that the relationship can be affected by the attitudes of the front-line team of machine manufacturers.

Front-line employees represent the manufacturer and are expected to commit to performing the service with quality and punctuality. There are reports of behaviors of employees trying to justify those diagnosing problems are not their responsibility, causing discomfort to customers:

They want to justify and excuse their responsibility. Company B2.

I think this is a trend in the whole company, but this ends up being negative. Grab a



problem, you have to accept, if it is a situation that has not much to do at least give a coherent answer, not a superficial answer. Company D1.

That's it, 'no, that is going wrong because you are working wrong'. (...) the relationship does not end because maybe the equipment is good (...) it is to escape the LIABILITY, not accept (...). Company B2.

Likewise, customers reported that divergences in employee behavior can influence the relationship. According to company C1, the employee who is performing the service and does less than the minimum commitment expected by the customer will not provide any other service within the company, as in the interviewed speech, contrary to Bitner (1990).

- (...), if the technician come to work and come here, give a 'slap' on the machine and walk away, (...), understood? I do not let him go the next day, if he comes here. You will have to come another day. Because I think it's a disregard because the other is urgent, but mine is too. Company C1.
- (...) then we have a little stress, right, a person comes and says 'that I cannot do because of this variable that exists in the process'. In the following week, for example, there comes another coach, picks up and do the job. So, I think that this manufacturer's vision to point out a few things and suddenly does not meet our needs, (...), but from the moment that one comes and says he cannot solve it, another comes the following week and solves (...). Company D1.

The client reported that D1 finds it difficult to point out the manufacturer's employees who do not meet their expectations regarding the services provided, claiming that a new service may be affected by the relationship between the manufacturer's employees and the customer's employees:

(...) what is the problem that the customer feels? If I get to the manufacturer and say so and so, 'look, this one here did this and that', this person will come after me to deal again. So, I create a relationship problem with it (...) We did not (...), usually do not expose, because in the future we will certainly have a relationship with him again. Company D1.

Human resources are an important part of the services provided by manufacturers, but their presence contributes to the instability of service quality (Shostack, 1984). For Gummesson (1987), the quality of the relationship depends on the consumer and the service provider, therefore, interactions affect the satisfaction and intention of future purchases from corporate customers (Sergeant and Frenkel, 2000), arising the third proposition:

P3: The human resources can affect the relationship between machine manufacturer and its customers.

4.1.4 Price, cost, commitment and relationship

The price of the service charged by the manufacturers is the same used by the market. The surveyed customers report that this does not influence the relationship between the parties, as stated by the interviewees.

- (...) actually you do a competition with several manufacturers, where the service is included in the memorial and the guy who has the best price will provide, then the service share price does not (...) do not have this differential (...), the X manufacturer's service is cheaper than the manufacturer B offers, no matter, it is the body of work that has (...). Company B1.
- (...) Now, if the guy comes here, he charges 220 reais and is here three hours, leaves and it is tidy, it's not expensive, not expensive. The equipment that is at cost/time machine. Company B2.

However, spare parts prices and repair of specific components, such as in the case of the



Company B2, may affect the intent of future equipment purchases, according to excerpts of the interviews.

At the time the manufacturer charged me 40,000 Reais for a CPU, I do not think

- (...) it has no justification for so much money, because you may have something, a change, but the technology is not so different, huh? (...) else where the business unfeasible. And it makes you think twice before having a device (...). Company C1.
- (...) I think in this case it ends up being expensive. You think how the total cost of this maintenance will come out. No, but it is expensive, spindle maintenance is expensive. It is expensive (...). I can have a market option with spindle giving me this then he will have problem. Company B2.

This information is in line with the results of the research by Mudambi et al. (1977) and Bendixen et al. (2004), which point out that the purchase decision is affected by the price.

The Company D1 said that, due to the expertise of the Manufacturer D and because the manufacturer has considerable market share in its market, it becomes difficult to break the relationship with it, as the interviewee affirmed. This meets what was highlighted by De Ruyter et al. (2001):

(...) Today, I think that to break with the manufacturer you would have to close the plant. Because the "D" manufacturer has a reasonable portion of market share and technology application (...). Company D1.

In this way, Morgan and Hunt (1994) and De Ruyter et al. (2001) state that costs by ending the relationship can positively affect the commitment of companies. However, Company D1 officials point out that they have often felt that Manufacturer D was not committed to their business, because of the attitudes of some service providers, according to the interviewees.

I think it's just really so, the part to understand us as a customer, because what happened there (...) we thought (...) like, the manufacturer was our client, not us their client. This was an issue we had (...). Company D1.

The elements point out that the commitment of machinery and equipment manufacturers can be adversely affected when they exercise a high degree of technological dependence. The price of some services and parts can affect the relationship, but the costs of technical support services do not affect the relationship between the parties, creating the propositions:

- P4: The commitment of machinery and equipment manufacturers can be adversely affected when they exert a high degree of technological dependence.
 - P5: The price of some specific services and spare parts can affect the relationship.
- P6: The costs of technical support services do not affect the relationship between the parties.

4.1.5 Communication, commitment and trust

For Duncan and Moriarty (1998), communication connects people and is the basis for building relationships. According to Coote et al. (2003), as the main factor in generating trust and commitment between the parties.

Thus, it is necessary to keep customers informed about the progress of troubleshooting equipment failure. According to Coote et al. (2003) and Morgan and Hunt (1994), transparency in communications transmits security to the customer and wins the trust of those involved.

(...). The client needs to know what we are doing, he cannot do without information, this is simple. He needs to know: 'Look, the problem, I don't have the solution now, I'm talking to Germany. I see, I see this. We have to keep you informed (...). Manufacturer C.

So it's like, no you do not have the information, it will take time to have that information he is asking for, but make it clear, as speak, tell him already, how much more so

transparent (...) and give answers to him, positive or negative responses, it does not matter, I think that it brings enough customer confidence for us. Manufacturer B.

The Manufacturer B also points out that trust is earned by the amount and quality of information, thus, the manufacturer should be assertive in its promises, corroborating Goodman and Dion (2001).

- (...) a very personal opinion of mine, (...) I think that for me it is what most makes the customer satisfied and confident in what you are doing in your service, you are paying for it, because the answer is always negative, that is, 'I am not what you need (...)', but did not leave the customer waiting too long, because then he starts to be suspicious, he no longer has that confidence (...). Manufacturer B.
- (...) and be assertive in the promise also 'I'm sending you this today,' that date comes and you do not send, 'I will send you this on another date' (...) you better not answer, you were ready to respond, but you were not assertive in the promise, then these two factors I think they bring the customer to trust us (...). Manufacturer B.

Therefore, the manufacturer must promise what it can accomplish, otherwise the confidence gained may be affected, according to the interviewees.

And do not promise something you should not, of course. So, I think we have great confidence in the market, the market believes in us rightly so. Manufacturer C.

(...) the issue of trust, maintain exactly what has been agreed, so to speak (...) maintain the posture ... for us to maintain this good relationship, and also provide for the supplier all the information needed to develop the project ... suddenly not come up with a new information in the middle of the project. Company B1.

The commitment can be demonstrated by meeting the needs of customers, especially in projects where the fulfilling schedules may reflect the commitment of the manufacturer, as the interviewees affirm.

- (...) there are other cases you also have the needs he has... you have to show him that you are committed, you've stood in his place, this fact is putting on the customer's shoes, it shows you are committed to it, 'I'm working with what you really need' (...). Manufacturer B.
- (...) what happens, in the first step after the guy catches a request is we ask for a schedule on how it will meet the request, on what date it will be the project to see if it is meeting our key dates (...), so the first thing is to send you a schedule and you check it on that schedule on dates, (...), so you see the commitment with our needs (...). Company B1.

For De Matos and Rossi (2008), positive word of mouth communication is mainly influenced by consumer commitment, followed by: perceived value, quality, reliability, satisfaction and loyalty. Brown (2005) shows that satisfaction, commitment and identification affect word of mouth intention and behavior. The attitudes of customer C1 report that the good relationship with the manufacturer provides word of mouth communication. For Luo, Baker and Donthu (2019), word of mouth recommendations are important to brand managers to identify which types of brands and products are able to offer the most value to the consumer.

(...) because we even sell machine for them (...) I think the relationship that we have, the staff is coming to see the machine, you can buy, we stick up for them. Company C1.

Therefore, one can verify that there is mutual influence between communication and commitment and that communication can also affect the confidence of clients of machine and equipment manufacturers, arising the exploratory propositions:

- *P7: There is mutual influence between communication and commitment.*
- P8: The communication can also affect the confidence of the clients of machine and equipment manufacturers.



4.1.6 Quality, image, physical evidence, productivity and reliability

Confidence can be achieved indirectly through the physical evidence used by the manufacturers. As the image of the service is modeled by extending the tangible characteristics, in which consumers can more easily understand the nature of the service (Bitner, 1992; Lovelock et al., 2011; Shostack, 1977), companies' clients include the technology engaged in the manufacture of equipment and the staff can convey confidence, according to the interviewees.

First, for you to meet the customer is the trust he has in the manufacturer, we know the maker, he has visited ... everyone knows the manufacturer for a long time, so that confidence shows when observing the factory, the technological conditions that they use there to produce the equipment and everything, so there is confidence that the manufacturer brings (...). Company A3.

(...) else is a matter of structure, it has a well-structured engineering, a structure of the company itself, well defined, that it will give you the condition of trusting you will have a good product. Company B1.

As highlighted in the literature review, the perceived quality is seen as the main variable to create brand value (Bendixen et al., 2004), as a determining factor for consumer confidence (De Ruyter et al., 2001).

Customers emphasize that, due to their structure and quality in their products and services, manufacturers obtained significant images in the market and, therefore, can use different prices, according to the interviews, in line with Mudambi (2002) and Bendixen et al. (2004), respectively.

(...) we have clients to whom we lost projects in the past... continue fighting, fighting, fighting ... and we were there and (...) took the order. And then after they saw our level of service, as far to the right turnkey, they looked and spoke 'my hopes are there, these guys have a different structure, they are more expensive, (...), he is charging 5% more, but I'll pay because it has structure (...) it is different (...). Manufacturer B.

With the above speech, it can be seen that there is mutual influence between quality and productivity; the physical evidence, in turn, can also affect the quality of service; quality can affect the value of the brand and trust; and the value of the brand, as well as affecting the trust also enables the premium price application. This, thus, draws up the following exploratory proposition.

P9: The quality can affect the value of the brand and trust; and the value of the brand affecting the trust also enables the premium price application.

5. CONCLUSION

This research aimed to analyze the influence of the elements of service marketing strategy aspects of industrial marketing, using a conceptual framework based on the literature. As a result, a conceptual framework was obtained through the literature review and validated by the data collected during field research.

Many manufacturers reported the importance of making the customer well informed about what is happening, even if the answer was negative. Leaving the customer unanswered may affect the customer's trust and, therefore, it can affect the relationship between the companies. This information was also highlighted by client companies, having reported that communication has a strong presence in the relationship, emphasizing transparency, response speed, and assertiveness in information.

The price strategy developed by manufacturers is the same as for products; however, the market price prevails, and all surveyed manufacturers work with time-technical value

consistent to the market. Customers pointed out that the service price does not affect the relationship between the companies. However, the prices charged in the spare parts service is seen by customers as something that could be improved and, therefore, it shows that some items that are easily accessible on the market are sold with higher values by manufacturers.

Even with the various contributions highlighted in this work, it has some limitations, such as the limited number of customers of some manufacturers, as well as difficulties in having access to large companies, such as automakers. Another limitation was the only interview in the B1 business process department since it was not possible to access the maintenance department. For future research, we suggest the quantitative analysis of the conceptual model to verify the propositions raised in this work.

REFERENCES

- Abimaq. (2017). The Brazilian Association of Machinery and Equipment. *Informaq newspaper*, v. 207, p. 6.
- Balaji, MS.; Roy, SK.; Lassar, WM. (2017). Language divergence in service encounters: revisiting its influence on word-of-mouth. *Journal of Business Research*, 72 (1), 210-213.
- Bardin, L. (2011). Content Analysis, (trans.) STRAIGHT. São Paulo ALA Editions, 70.
- Batt, PJ, & Purchase, S. (2004). Managing collaboration Within networks and relationships. Industrial Marketing Management, 33 (3), 169-174.
- Bendixen, M., Bukasa, KA, & Abratt, R. (2004). Brand equity in the business-to-business market. *Industrial Marketing Management*, 33 (5), 371-380.
 - Biege, S., Lay, G., & Buschak, D. (2012). Mapping service processes in manufacturing companies: industrial service blueprinting. *International Journal of Operations & Production Management*, 32 (8), 932-957.
- Bitner, MJ (1990). Evaluating service encounters: the effects of physical surroundings and employee responses. *Journal of Marketing*, 69-82.
- Bitner, MJ (1992). Servicescapes: The impact of physical surroundings on customers and employees. *Journal of Marketing*, 57-71.
- Brown, TJ, Barry, TE, Dacin, PA, & Gunst, RF (2005). Spreading the word: Investigating antecedents of Consumers' positive word-of-mouth intentions and behaviors in a retailing context. *Journal of the Academy of Marketing Science*, 33 (2), 123-138.
- Chang, L., Mohsin, M., & Iqbal, W. (2023). Assessing the nexus between COVID-19 pandemic—driven economic crisis and economic policy: lesson learned and challenges. *Environmental Science and Pollution Research*, 30(9), 22145-22158.
- Colombo, MG, Piva, E., Quas, A., & Rossi-Lamastra, C. (2016). How high-tech entrepreneurial ventures cope with the global crisis: Changes in Product Innovation and internationalization strategies. *Innovation and Industry*, 23 (7), 647-671.



- Coote, LV, Forrest, EJ, & Tam, TW (2003). An investigation into commitment in non-Western industrial marketing relationships. *Industrial Marketing Management*, 32 (7), 595-604.
- Cortez, RM.; Johnston, WF. (2019). Marketing role in B2B settings: evidence from advanced, emerging and developing markets. *Journal of Business & Industrial Marketing*, n. 34 (3), pp. 605-617.
- Cortez, RM. (2019). B2B marketing renaissance in business school. *Journal of Business & Industrial Marketing*, 34 (8), pp. 1839-1849.
- De Matos, CA, & Rossi, CAV (2008). Word-of-mouth communications in marketing: a meta-analytic review of the antecedents and moderators. *Journal of Academy of Marketing Science*, 36 (4), 578-596.
- De Ruyter, K., Moorman, L., & Lemmink, J. (2001). Antecedents of commitment and trust in customer-supplier relationships in high technology markets. *Industrial Marketing Management*, 30 (3), 271-286.
- Duncan, T., & Moriarty, SE (1998). The communication-based marketing model for managing relationships. *The Journal of marketing*, 1-13.
- Eggert, A. Hogreve, J. Ulaga, W., & Muenkhoff, E. (2011). Industrial Services, product innovations, and firm profitability: The multiple-group latent growth curve analysis. *Industrial Marketing Management*, 40 (5), 661-670.
- Evanschitzky, H., Wangenheim, FV, & Woisetschläger, DM (2011). *Service & solution innovation*: Overview and research agenda.
- Farida, I., & Setiawan, D. (2022). Business strategies and competitive advantage: the role of performance and innovation. *Journal of Open Innovation*: Technology, Market, and Complexity, 8(3), 163.
- Filiatrault, P., Harvey, J. & Chebat, JC (1996). Service quality and service productivity management practices. *Industrial Marketing Management*, 25 (3), 243-255.
- Gil, CA (2002). How to design research projects. São Paulo, 5 (61), 16-17.
- Goodman, LE, & Dion, PA (2001). The determinants of commitment in the distributor-manufacturer relationship. *Industrial Marketing Management*, 30 (3), 287-300.
- Guenther, M. & Guenther, P. (2019). The value of branding for B2B service firms The shareholders' perspective. *Industrial Marketing Management*. 78 (11), 88-101.
- Grönroos, C. (1994). From marketing mix to relationship marketing: Towards a paradigm shift in marketing. *Asia-Australia Marketing Journal*, 2 (1), 9-29.
- Grönroos, C. (1996). Relationship marketing logic. Asia-Australia Marketing Journal, 4 (1), 7-18.
- Grönroos, C. (2004). *Marketing*: management and services. Elsevier / Campus.



- Grönroos, C., & Ojasalo, K. (2004). Service productivity: Towards a conceptualization of the transformation of into economic results in services inputs. *Journal of Business Research*, 57 (4), 414-423.
- Gummesson, E. (1987). Lip service to neglected area in services marketing. *Journal of Services Marketing*, 1 (1), 19-23.
- Gummesson, E. (2005). Qualitative research in marketing: Road-map for the wilderness of complexity and unpredictability. *European Journal of Marketing*, 39 (3/4), 309-327.
- Håkansson, H., & Ford, D. (2002). How shouldn't companies interact in business networks? *Journal of Business Research*, 55 (2), 133-139.
- Håkansson, H., & Östberg, C. (1975). Industrial marketing: An organizational problem? *Industrial marketing management*, 4 (2-3), 113-123.
- Hooper, D., Coughlan, J. & A. Mullen, M. (2013). The servicescape an antecedent to the service quality and behavioral intentions. *Journal of marketing services*, 27 (4), 271-280.
- Hossain, M. T.; Chonko, L. B. (2018). Relational communication and illusionary loyalty: moderating role of self-construal. *Industrial Marketing Management*, 69, pp. 221-234.
- Karampela, M.; Lacka, E. & McLean, G. "Just be there". (2020). European Journal of Marketing, v. 54 (6), pp. 1281-1303.
- Kauppinen-Räisänen, H., & Grönroos, C. (2015). Are service marketing models really used in modern practice? *Journal of Service Management*, 26 (3), 346-371.
- Kotler, P., Hayes, T., & Bloom, PN (2002). *Marketing professional services*: innovative strategies to boost its activity, its image and its profits. Manole, São Paulo [Links].
- Liu, Y., Foscht, T., Eisingerich, AB. & Tsai, H. (2018). Strategic management of product and brand extensions: extending corporate brands in B2B vs. B2C markets. *Industrial Marketing Management*, 71 (1), 147-159.
- Lovelock, C. & Wright, L. (2006). Services Marketing and Management. Sao Paulo. Hail.
- Lovelock, C., Wirtz, J. & Hemzo, MA (2011). *Marketing services*: people, technology and strategy. Sao Paulo.
- Lund, DJ, & Marinova, D. (2014). Managing revenue across retail channels: The interplay of service performance and direct marketing. *Journal of Marketing*, 78 (5), 99-118.
- Luo, A., Baker, A. & Donthu, N. (2019). Capturing dynamics in the value for brand recommendations from word-of-mouth conversations. *Journal of Business Research*, 104, 247-260.
- Magrath, AJ (1986). When marketing services, 4 Ps are not enough. Business Horizons, 29 (3), 44-50.
- Matthyssens, P. & Van den Bulte, C. (1994). Getting closer and nicer: partnerships in the supply chain. *Long Range Planning*, 27 (1), 72-83.



- Michell, P., King, J., & Reast, J. (2001). Brand values related to industrial products. *Industrial Marketing Management*, 30 (5), 415-425.
- Mirzaei, A., & Kutan, AM (2016). Does bank diversification Improve output growth? Evidence from the recent global crisis. *International Review of Finance*, 16 (3), 467-481.
- Moreira, JCT (2006). *Business to Business Marketing*: how to compete in organizational markets. São Paulo: Saraiva.
- Morgan, RM, & Hunt, SD (1994). The commitment-trust theory of relationship marketing. *The Journal of Marketing*, 20-38.
- Mudambi, S. (2002). Branding importance in business-to-business markets: Three buyer clusters. *Industrial Marketing Management*, 31 (6), 525-533.
- Mudambi, SM, Doyle, P., & Wong, V. (1997). An exploration of branding in industrial markets. *Industrial Marketing Management*, 26 (5), 433-446.
- Murphy, M.; Sashi, CM. Communication, interactivity, and satisfaction in B2B relationships. (2018). *Industrial Marketing Management*, n. 68, pp. 1-12.
- Nason, RS, & Patel, PC (2016). Is cash king? Market performance and cash During the recession. *Journal of Business Research*, 69 (10), 4242-4248.
- Neumann, J. L.& Laimer, C. G. (2019). Proposed application of the relationship marketing in interorganizational relations. *Brazilian Journal of Marketing*, v. 18 (1), pp. 118-131.
- Prodanov, CC, & de Freitas, EC (2013). *Methodology of Scientific Work*: Methods and Techniques of Research and Academic-2nd Edition Work. Publisher Feevale.
- Pyper, K.; Doherty, AM.; Gounaris, S.; Wilson, A. (2020). Investigating international strategic brand management and export performance outcomes in B2B context. *International Marketing Review*, 37 (1), pp. 98-129.
- Rahman, M.; Rodríguez-Serrano, MA.; Lambkin, M. (2018). Brand management efficiency and firm value: an integrated resource based and signalling theory perspective. *Industrial Marketing Management*, 72 (1), pp. 112-126.
- Rust, RT, & Chung, TS (2006). Marketing models of service and relationships. *Marketing science*, 25 (6), 560-580.
- Sarquis, AB (2009). *marketing strategies for services*: how service organizations shall establish and implement marketing strategies. Atlas.
- Schlesinger, LA, & Heskett, JL (1991). Breaking the cycle of failure in services. MIT Sloan *Management Review*, 32 (3) 17.
- Schneider, B., Godfrey, EG, Hayes, SC, Huang, M., Lim, BC, Nishii, H, ... & Ziegert, JC (2003). The Human Side of Strategy: Employee Experiences of Strategic Alignment in a Service



- Organization. Organizational Dynamics, 32 (2), 122-141.
- Sergeant, A., & Frenkel, S. (2000). When the customer contact employees satisfy customers? *Journal of Service Research*, 3 (1), 18-34.
- Sharma, P.; Sengupta, RN.; & Lichtenthal, JD. (2019). Facets of business-to-business brand equity: mixed methods approach. *Marketing Intelligence & Planning*, 37 (7), pp. 754-769.
- Shostack, GL (1977). Breaking free from product marketing. *The Journal of Marketing*, 73-80. Shostack, GL (1984). HBR.
- Slater, SF, & Olson, MS (2001). Marketing's contribution to the implementation of business strategy: An empirical analysis. *Strategic Management Journal*, 22 (11), 1055-1067.
- Storbacka, K., Strandvik, T., & Grönroos, C. (1994). Managing customer relationships for profit: the dynamics of relationship quality. *International Journal of Service Industry Management*, 5 (5), 21-38.
- Varadarajan, PR, & Jayachandran, S. (1999). Marketing strategy: an assessment of the state of the field and outlook. *Journal of the Academy of Marketing Science*, 27 (2), 120-143.
- Varadarajan, R. (2010). Strategic marketing and marketing strategy: domain, definition, key issues and foundational premises. *Journal of the Academy of Marketing Science*, 38 (2), 119-140.
- Vargo, SL, & Lusch, RF (2008). From goods to service (s): Divergences and convergences of logics. *Industrial Marketing Management*, 37 (3), 254-259.
- Voss, C. Tsikriktsis, N., & Frohlich, M. (2002). Case research in operations management. *International Journal of Operations & Production Management*, 22 (2), 195-219.
- Weihrich, H. (1982). The TOWS matrix—A tool for situational analysis. Long range planning, 15(2), 54-66.
- Wouters, JP (2004). Customer service strategy options: A multiple case study in a B2B setting. *Industrial Marketing Management*, 33 (7), 583-592.
- Yin, RK (2001). Case study: Design and Methods / Robert K. Yin. Trad. Daniel.
- Zeithaml, VA, Bitner, MJ, & Gremler, DD (2014). *Marketing Services*-: The Company with Customer Focus. AMGH Publisher.
- Zeithaml, VA, Parasuraman, A., & Berry, LL (1985). Problems and strategies in marketing services. *The Journal of Marketing*, 33-46.

