



(REVIEW ARTICLE)



Selection and qualification of e-commerce suppliers

Gomes Rickardo ^{1,*} and Santos José Fábio ²

¹ Department of the Euvaldo Lodi Institute (IEL), and Postgraduate Department of the Farias Brito University Center (FBUNI), Fortaleza, Ceará, Brazil. <https://orcid.org/0000-0001-6101-9571>.

² Supply Management from Euvaldo Lodi Institute (IEL), Fortaleza, Ceará, Brazil.

World Journal of Advanced Research and Reviews, 2023, 18(02), 218–223

Publication history: Received on 27 March 2023; revised on 03 May 2023; accepted on 06 May 2023

Article DOI: <https://doi.org/10.30574/wjarr.2023.18.2.0815>

Abstract

With the growth of e-commerce in Brazil year after year, competition increases and entrepreneurs need to be attentive to their competitors and apply the best strategies and innovations to remain in the market. Thus, there is a need for organizations to adopt supplier selection and qualification techniques that provide competitive advantages in the market. Current organizations have sought to make their suppliers strategic partners in their businesses, and this partnership becomes a crucial factor for the growth of their businesses and a win-win negotiation for both parties. The methodology employed for the development of this scientific article was characterized by adopting a qualitative approach, and the research procedure used was a bibliographic study. The overall objective of this research is to demonstrate the importance of a careful selection and qualification of e-commerce suppliers. From the information gathered throughout the research, it became clear that evaluating the performance of suppliers is an essential issue for the development of e-commerce companies, as well as for the organization and optimization of the supply chain.

Keywords: Suppliers; Qualification; Negotiation; Strategies

1. Introduction

The careful selection and qualification of suppliers are crucial for e-commerce companies seeking to stand out in an increasingly competitive market. The relationship between supplier and customer is a priority factor within the industrial strategy spectrum and, at the corporate level, can be classified as a competitive advantage over competitors, since the proposed model provides for the evolution of operational ties over time, supported by two fronts: strategic-philosophical approach and practical evolutions.

Supplier performance evaluation is an important tool for e-commerce companies seeking to ensure the quality and efficiency of their supply chain. This evaluation may include indicators such as delivery time, product quality, and compliance with regulations and standards, among other relevant factors for the company and its customers.

Supplier qualification is an essential step for the success of any important procurement activity. No company wishes to award a procurement contract to a supplier who later fails to meet the technical requirements of the items acquired or becomes financially unstable.

The methodology employed for the development of this scientific article was characterized by adopting a qualitative approach, and the research procedure used was bibliographic research.

* Corresponding author: Gomes Rickardo <https://orcid.org/0000-0001-6101-9571>.

The overall objective of this research is to demonstrate the importance of careful selection and qualification of e-commerce suppliers. The specific objectives are: to discuss the relationship between e-commerce customers and suppliers and to demonstrate the importance of supplier performance evaluation in e-commerce.

This article is organized into four topics. The first is the introduction, in which the objectives of this research were explained. The second develops a theoretical foundation, promoting a discussion among authors who deal with the same theme addressed here. The third topic was reserved for the methodology, and in the fourth and final topic, the final considerations were elaborated.

2. Material and methods

The methodology employed for the development of this scientific article was characterized by adopting a qualitative approach. According to Flick (2018, p. 13), "Qualitative research is a reflective and interpretive process that focuses on understanding the complexities, nuances, and subjectivities of human experience through non-standardized data collection and analysis methods [1]."

The research procedure used was a bibliographic search that aimed to find theoretical references published in books and scientific articles by national and international authors, always seeking to explain, in greater depth, the topics contained in the body of this article in light of pre-existing scientific contributions.

According to Gil (2019, p. 34), "Bibliographic research is a systematic and exhaustive study carried out from secondary sources of information, with the objective of knowing and analyzing what has already been produced on a certain theme, in order to subsidize the construction of new knowledge [2]."

It is known that a good theoretical foundation is a foundation for us to look at the bibliographic data collected and develop our study, going beyond what reality simply shows us. Therefore, the mastery of the researched authors helped in our creativity since, through them, it was possible to know what was produced of importance about our object of study and the advances made regarding it.

Among the contributions that will be researched, the works of authors such as Alves (2020), Machado (2020), and Lima and Martins (2021) stand out.

3. Literature Review

3.1. Relationship between Customers and Suppliers in e-Commerce

The relationship between supplier and customer is a critical factor within the industrial strategy spectrum. At the enterprise level, it can be classified as a competitive advantage over competitors, as the proposed model predicts the evolution of operational ties over time, supported by two fronts; strategic-philosophical approach and practical evolutions.

Vargas-Sánchez, Pereira, and Godoy (2020, p. 48) state that "the relationship between suppliers and customers is a critical success factor for companies, especially in the automotive industry, where interdependence is high. Managing this relationship can bring benefits such as cost reduction, increased quality, and collaborative innovation [3]."

In this quote, the authors affirm that the relationship between supplier and customer is critical to the success of companies, particularly in situations where interdependence is high. They also highlight that managing this relationship can bring several benefits, such as cost reduction, increased quality, and collaborative innovation.

Regarding the partnership between suppliers and customers, it is possible to divide the concepts that address this partnership into four levels of development: conventional approach, quality improvement, operational integration, and strategic integration.

The careful selection and qualification of suppliers are fundamental for e-commerce companies that seek to stand out in an increasingly competitive market. The choice of reliable and quality suppliers is crucial to ensuring customer satisfaction and the success of the business as a whole. In this sense, it is essential to establish clear selection criteria that take into account not only the price but also the quality of the products, delivery time, production capacity, and flexibility to meet specific demands, among other factors relevant to the company and its customers. Additionally,

supplier qualification should be a constant concern, with periodic evaluations of performance and compliance with applicable business standards and regulations [4].

Optimal relationship with the supplier is expected, aiming to guarantee the satisfaction of adequacy needs with a minimum of receipt inspection, thus avoiding the use of corrective actions.

"Supplier management seeks to create an optimal relationship with the supplier to ensure the satisfaction of adequacy needs with a minimum of receipt inspection, avoiding the use of corrective actions [5]".

The authors affirm that supplier management seeks to create an optimal relationship with the supplier, aiming to ensure the satisfaction of adequacy needs with a minimum of receipt inspection, avoiding the use of corrective actions. For a better understanding, let us define two types of purchases: those that are incorporated into the company's products and those that do not, such as supplies and office equipment, for example.

The focus is to achieve a standard of service within this partnership through a series of activities within the relationship between the parties that must be followed, such as (I) pre-contract planning, (II) supplier aptitude, (III) selection of the same, (IV) total purchase cost, (V) joint planning, and (VI) mutual cooperation between the client and the supplier during contract execution.

It is worth noting that the proposed model is not only concerned with costs and values to evaluate supplier performance but also seeks to measure aspects related to quality and time. The development of a purchasing strategy contributes to the success of the relationship between sellers and buyers, adding quality to products and services. Additionally, it reinforces the commitment of departments to the involved processes and can also generate greater effectiveness in purchasing management and competitiveness [6].

Corrêa (2014) presents a comparative framework for selecting suppliers, as shown in Figure 1 below [7]:

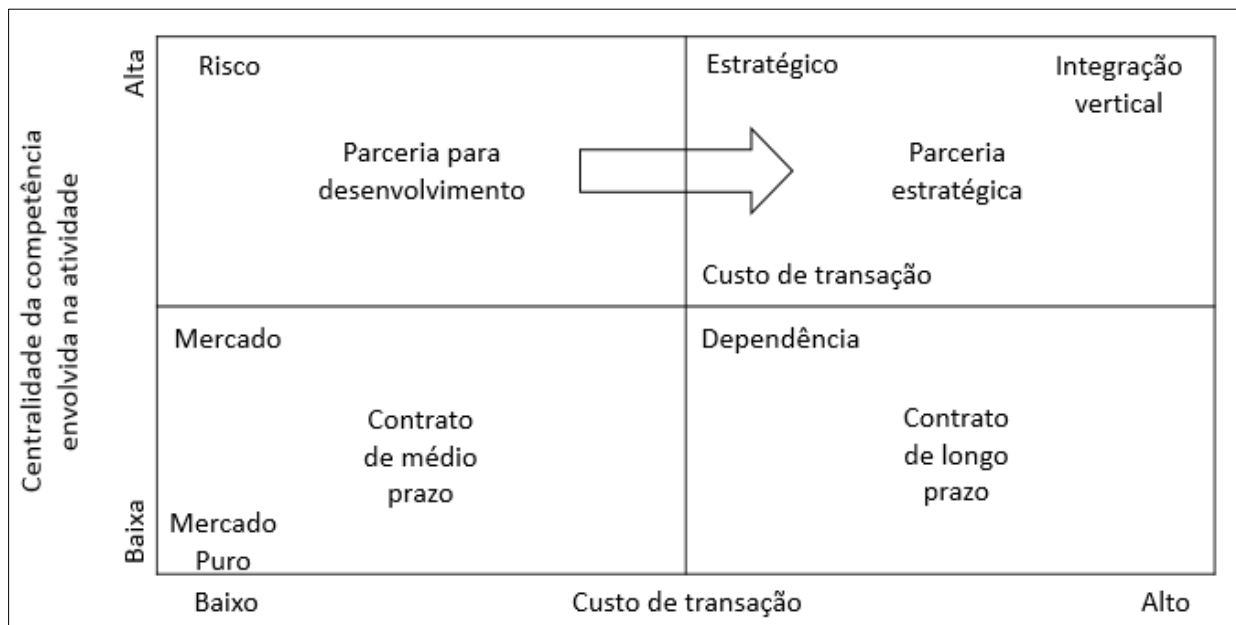


Figure 1 Suppliers Segmentation and Types of Relationship

Source: [7]

In the quadrants of Figure 1, the arrangement of supplier selection is observed, with four positions mentioned and arranged as follows:

- Market - refers to suppliers and types of relationships that are easy to find/deal with. It is not of great relevance and is therefore considered less strategic;
- Strategic - refers to partners with whom interdependence is high, and there is a flow of confidential information exchange. These suppliers usually require a long-term supply contract and have information on confidential products or services. The relationship is considered close and of great importance in the

strategic structure of the company; • Dependence - often, the supply of certain inputs is related to a few or even a single supplier. Although there may not always be a direct impact on sources of competitive advantage, these suppliers can be of great importance, as they hold a specific input or service; • Risk - refers to partners that are risky, as they are either not yet definitively developed, or there is not yet a relationship that is understood as healthy.

This quadrant is transitional, usually in search of a more strategic definition of supply. In light of the above, we realize the importance of the supplier selection and qualification process for competitive advantage in supply chain strategies, the success of the business as a whole, and the satisfaction of customers and partners.

3.2. Performance Evaluation of e-Commerce Suppliers

Corrêa (2014) suggests that the segregation of suppliers should be based on transaction cost, meaning that the higher the frequencies and costs involved in the relationship, the greater the analysis criteria should be. Data collection about suppliers is an essential practice for organizations that want to improve the performance of their supply chain. Data collection allows the creation of an evaluation structure that can be used to measure supplier performance and identify areas for improvement [7].

When collecting data about suppliers, organizations can evaluate various aspects such as the quality of products or services provided, punctuality of deliveries, compliance with norms and regulations, adherence to deadlines and agreements, and environmental sustainability, among others.

Based on these evaluations, organizations can make strategic decisions such as selecting new suppliers, renegotiating contracts, investing in improvements or training of existing suppliers, and so on. Ballou (2006) reinforces this statement by claiming that supplier evaluation is essential for the company's supply chain structure as it contributes to strategically qualifying suppliers [8]. When it comes to the strategic factor within supplier performance evaluation, Slack (2009) asserts that supplier evaluation can act on internal and external changes that may occur [9].

Supplier performance evaluation is an important tool for e-commerce companies that seek to ensure the quality and efficiency of their supply chain. This evaluation can include indicators such as delivery time, product quality, and level of compliance with norms and regulations, among other factors relevant to the company and its clients.

Additionally, performance evaluation can be an opportunity to identify possible problems in the relationship with suppliers and seek solutions to improve performance and the quality of products or services offered. For the evaluation to be effective, it is important that the company establish clear evaluation criteria that are objective and measurable, and that involve the participation and feedback of the evaluated suppliers [10].

Table 1 The most recommended evaluation criteria by authors in the first column and their corresponding sources in the second column. This survey demonstrates how much this topic - Supplier Evaluation - is researched worldwide.

Criteria for Evaluation	References
Product and service quality	Mukherjee <i>et al.</i> (2021, p. 06) [14]
Price and cost-effectiveness	Özkan <i>et al.</i> (2020, p. 98) [15]
Delivery punctuality	Chandra <i>et al.</i> (2021, p. 68) [16]
Compliance with norms and regulations	Alves <i>et al.</i> (2020, p. 13) [17]; Lima <i>et al.</i> (2021, p. 100) [18]
Innovation and development capacity for new products	Li <i>et al.</i> (2020, p. 243) [19]
Environmental sustainability	Simões <i>et al.</i> (2016) [20]
Reliability and commercial relationship	Alves <i>et al.</i> (2020, p. 13) [17]; Liao <i>et al.</i> (2022, p. 18) [11]

Most Indicated Supplier Evaluation CriteriaSource: [11]

Supplier qualification is an essential step to ensure that companies acquire the right products and services, of the right quality, and within the right timeframe. This can be achieved through rigorous supplier evaluation and the establishment of clear selection criteria, which take into account factors such as experience, technical and financial capability, performance history, and compliance with regulatory and environmental standards [12].

In addition to checks on technical capability and financial viability, the qualification process typically involves a range of other examinations, including previous delivery performance and the ownership structure of the supplier's business [13].

Evaluating a supplier's performance history in terms of delivery time for products or services is important to ensure that they can reliably and efficiently meet the company's needs. Analysis of this past performance can help identify potential problems and risks in the supply chain.

According to Silva (2021, p. 45),

The evaluation of supplier performance history is an essential process in supply chain management, as it allows for the identification of potential problems and risks in the relationship between the company and its suppliers. This analysis may include the time to respond to orders, the quality of products or services delivered, and compliance with standards and regulations, among other relevant factors for the company. Furthermore, the evaluation of performance history can help in the selection of reliable and quality suppliers, contributing to the continuous improvement of the entire supply chain [12].

Thus, it can be seen that supplier performance evaluation is a crucial factor for the growth of e-commerce companies and for the organization and structuring of the supply chain. In addition, monthly supplier performance indicators can be created, and feedback provided to suppliers to contribute to continuous improvement.

4. Conclusion

The aim of this article was to demonstrate the importance of selecting and qualifying suppliers for the growth of e-commerce companies that seek to stand out in an increasingly competitive market. The study highlighted that a good relationship between supplier and customer is a priority factor within the spectrum of industrial strategy and can be classified as a competitive advantage over competitors.

Based on the information gathered throughout the research, it became clear that evaluating supplier performance is an essential issue for the development of e-commerce companies, as well as for the organization and optimization of the supply chain. This evaluation can involve the creation of monthly performance indicators, allowing for feedback to be provided to suppliers and enabling the pursuit of continuous process improvement. Finally, this study does not aim to conclude discussions regarding the process of selecting and qualifying suppliers, but rather to serve as another source of research that can encourage further investigations on the topic discussed here.

Compliance with ethical standards

Acknowledgments

The authors would like to thank Ana Zuleika Mendes Bastos Tavares Education and Careers II Analyst at the Euvaldo Lodi Institute - IEL/CE and IEL Coordinator of the MBA in Supply Management and, also, Professor M. Sc. Rosilda do Rocio do Vale Coordinator of Postgraduate Courses at Faculdade da Indústria and Instituto Euvaldo Lodi (IEL) for all the attention given.

Disclosure of conflict of interest

The authors assure that there is no conflict of interest with the publication of the manuscript or an institution or product mentioned in the manuscript and/or important for the result of the presented study.

References

- [1] Flick, U. (2018). An introduction to qualitative research. 6th ed. Porto Alegre: Bookman Editora.
- [2] Gil, A. C. (2019). How to develop research projects. 6th ed. São Paulo: Atlas.

- [3] Vargas-Sánchez, A.; Pereira, T.; Godoy, A. S. (2020). The impact of supplier relationship management on innovation in Brazilian automotive industry companies. *Revista de Administração Contemporânea*, 24(1), 46-62. on-line ISSN: 1982-7849.
- [4] Rocha, M. A. (2021). *E-commerce: Strategies for success in digital business*. Rio de Janeiro: Editora FGV.
- [5] Santos, E. T. dos. (2020). *Process mapping: tool to support Army aviation administration*. (Academic work). Specialization in Military Sciences. Officer Training School. Rio de Janeiro: EsAO.
- [6] Bowersox, D. J. (2014). *Supply chain logistics management (4th ed.)*. Porto Alegre: AMGH.
- [7] Corrêa, H. L. (2014). *Supply chain management and logistics: The essential*. São Paulo: Atlas.
- [8] Ballou, R. H. (2006). *Supply Chain Management/Enterprise Logistics (5th ed.)*. Porto Alegre: Bookman.
- [9] Slack, N. (2009). *Production management (3rd ed.)*. São Paulo: Atlas.
- [10] Machado, F. A. (2020). *Business logistics: Strategies for supply chain management*. São Paulo: Atlas.
- [11] Liao, S. H., Hu, D. C., Chung, Y. C., & Huang, A. P. (2021). Risk and opportunity for online purchase intention – A moderated mediation model investigation. *Telematics and Informatics*, 62, 101621. ISSN: 0736-5853. <https://doi.org/10.1016/j.tele.2021.101621>.
- [12] Silva, J. A. (2021). *Supply management: Best practices and innovative strategies*. São Paulo: Editora Atlas.
- [13] Peruzzi, P. Y. (2022). *Mapping of the supplier and material qualification process*. (Undergraduate thesis, Environmental Engineering), São Paulo State University Júlio de Mesquita Filho. Sorocaba: UNESP.
- [14] Mukherjee, A., Carvalho, M., & Zaccour, G. (2022). Managing quality and pricing during a product recall: An analysis of pre-crisis, crisis and post-crisis regimes. *European Journal of Operational Research*, 307(1), 406-420. ISSN: 0377-2217.
- [15] Özkan, P., Süer, S., Keskinoglu, İ. K., & Kocakoç, İ. D. (2020). The effect of service quality and customer satisfaction on customer loyalty: The mediation of perceived value of services, corporate image, and corporate reputation. *International Journal of Bank Marketing*, 38(2), 384-405. ISSN: 0265-2323. <https://doi.org/10.1108/IJBM-03-2019-0096>.
- [16] Chandra, B., Chatterjee, K., & Pahari, S. (2021). Development of supplier selection criteria using the fuzzy Topsis and fuzzy Vikor methods. *International Journal of Fuzzy Systems*, 23(1), 67-78. ISSN: 1562-2479.
- [17] Alves, A. C. A., Belchior, R. A. R., & Costa, P. R. P. (2020). Supplier management: Systematic literature review and proposal of a performance evaluation model. *Revista de Administração, Contabilidade e Economia*, 19(1), 9-28. ISSN: 2179-4936.
- [18] Lima, F. C., Martins, V. P., & Prado, L. A. do. (2021). Supplier management systems: Systematic literature review and multi-case study. *Revista Gestão & Tecnologia*, 21, 94-119. ISSN: 2177-6652.
- [19] Li, J., Zhou, R., & Wang, Z. (2020). Supplier evaluation and selection with QFD and DEA: A case study in the heavy machinery industry. *IEEE Access*, 8, 240-251. eISSN: 2169-3536.
- [20] Simões, W. L., Yuri, J. E., Guimarães, M. J., Santos, J. E. D., & Araújo, E. F. (2016). Beet cultivation with saline effluent from fish farming. *Revista Brasileira de Engenharia Agrícola e Ambiental*, 10(1), 62-66.