


Evaluation of competition strategies applied in logistics management during the pandemic process: A research on logistics companies in Istanbul

Pandemi sürecinde lojistik yönetiminde uygulanan rekabet stratejilerinin değerlendirilmesi: İstanbul'daki lojistik firmaları üzerine bir araştırma

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Abstract

This study aims to determine the changes in the changing competition, growth, and customer strategies within the scope of the logistics management of the COVID-19 process that affects the whole world. The study will be carried out in the form of an interview, and it will be evaluated how the changes in the supply chain processes during the pandemic process reflect on the competition, growth, and customer strategies business basis. According to the results, recommendations will be made to companies operating in the logistics sector in parallel with the changes in competition, growth, and customer strategies. The study results include the need for speed, digitization, improving the quality of customer relationships, working from home, and expanding e-commerce to create a competitive advantage.

Keywords: Logistics, Supply Chain Management, Strategic Management

Jel Codes: L99, M19

Öz

Bu çalışmanın amacı, tüm dünyayı etkisi altına alan COVID -19 sürecinin lojistik yönetimi kapsamında değişen rekabet, büyüme ve müşteri stratejilerinde meydana gelen değişimleri belirlemektir. Çalışma görüşme şeklinde gerçekleştirilecek olup, pandemi sürecinde tedarik zinciri süreçlerinde yaşanan değişimlerin iş bazında rekabet, büyüme ve müşteri stratejilerine nasıl yansıdığı değerlendirilecektir. Elde edilen sonuçlara göre rekabet, büyüme ve müşteri stratejilerindeki değişimlere paralel olarak lojistik sektöründe faaliyet gösteren firmalara önerilerde bulunulacaktır. Çalışma sonuçları, rekabet avantajı yaratmak için hız, dijitalleşme, müşteri ilişkilerinin kalitesinin artırılması, evden çalışma ve e-ticaretin genişlemesi gerekliliğini içerir.

Anahtar Kelimeler: Lojistik, Tedarik Zinciri Yönetimi, Stratejik Yönetim

JEL Kodları: L99, M19

Introduction

One of the most important topics in 21 st century is competition. Firms strategically focus on increasing their market share in a competitive area. Furthermore, firms must redesign their supply chain activities to achieve strategic competition in logistics. Strategic competition provides in improves the performance of the logistics functions.

COVID-19 completely changed the firms' critical supply chain strategy for improving competition. Additionally, according to the customer's expectations, firms focus on responsiveness and flexibility to support logistics functions. The competitive strategy illustrates having a well-managed supply chain and high profit. Therefore, through processes such as product development, distribution systems, and operation facilities, firms need to create a flexible network. Furthermore, to manage decisions, firms must perform initial decisions according to customers' requirements. On the other hand, agility constitutes a competitive advantage for logistics organizations.

The motivation for the research has been raised from the need to determine the strategies for the logistics companies for future needs, especially of the gained experiences during the pandemic.

The aim of this study is to evaluate competition strategies applied in logistics management during Pandemic Process and making research on logistics companies in Istanbul. Participants were selected from people between the ages of 30-45 who have worked in the logistics industry for at least five years. No gender difference was observed.

The following research questions have been developed:

RQ1: To what extent has e-commerce affected competitive strategies during the pandemic?

RQ2: How did digitalization affect management strategies during the pandemic?

RQ3: How did the pandemic affect the strategies in the logistics industry?

So, a questionnaire has been designed to measure the effects of the pandemic. The situation has been scrutinized first, and then questions have been constructed to be answered face to face. Reliabilities have been calculated. Answers were categorized according to keywords, and a figure regarding the frequencies of the answers revealed the change between pre-and-post periods of a pandemic. Finally, answers were categorized in the resultant and discussed in conclusion.

Novelty and the study's contribution involve the visualization of the needs in a single snapshot and able to determine flexible solutions for the logistics industry.

Literature review

In the literature, among the logistics companies under the post-pandemic competition strategy, the transportation (maritime, road etc.) part of logistics has been discussed. However, the number of studies dealing with all the administrative parts covering storage, distribution, production, inventory management and order management within the scope of supply chain management is few. Evaluating the competitive strategies of the supply chain as a whole during the pandemic process is to fill the gap in the literature. 'Looking at the reliance of the Malaysian economy on maritime sectors, it was certain that the pandemic would have serious implications on individuals and organisations.' (Menhat, Zaideen, Yusuf, Salleh, Zamri., 2021). 'Recently, the COVID-19 pandemic has affected freight transport as a crisis' Gonzales, Camarero-Orive, Cancelas, Guzman., 2021). 'The unpredictable spread of the COVID-19 pandemic has caused massive global disruption, with significant economic, environmental, and social consequences worldwide, including freight transport by road' (Gonzales. et al., 2021). 'Response to the COVID-19 pandemic has had tremendous effects on the global economy and social life, and it has significantly disrupted transportation systems across the world' (Adanu, E. K., Brown, D., Jones, S., & Parrish, A.2021).

'The emergence of the COVID-19 pandemic, which hit almost all over the world, resulted in the joints of life such as education and the economy experiencing paralysis, which resulted in schools being closed, many companies reducing production activities, and many even being laid off. As a result, the economy impacts individuals, families, macro and micro companies, and the economies of all countries worldwide.' (Budiansyahusep, Y., Sudrajat, A., Sâri, O. Y., Saefudin, N., Dora, M. Y., & Sakti, W. I., 2021).

Acar and Zehir (2009) analyzed the impact of logistics capabilities and operational efficiency factors in competitive strategy practices. Their research determined that enterprises that develop their logistics capabilities and implement a competitive strategy increase their performance directly and positively.

In his study, Chan (2005) investigated the relationship between Competitive Strategy and production logistics based on causal analysis. According to the obtained results, it was determined that there is an important relationship between Competitive Strategy and the system performance of production logistics.

Laari, Toyli, and Ojala (2017) refined the competitive strategy approach in their study. They used a data set comprising 128 production companies, 110 trading companies, and 144 logistics companies in Finland. They examined external green supply chain strategies along with the layers of the supply chain in terms of logistic users and providers. The results highlight the need to understand the role of competitive strategy in green supply chain adoption, both in the academic and business field.

Liu and Atuahene-Gima (2018) evaluated the utility of competition strategies and market-based assets to help an innovating company deal with dysfunctional competition and improve innovation yields. According to data obtained in a survey conducted with the executives of 282 Chinese high-tech companies, cost leadership is at the forefront, and customer focus and creative marketing are at the forefront. This will provide better performance in product innovation in competitive environments with a lack of high-level functionality, and the differentiation and competitor orientation will have less impact.

Anwar and Shah (2021) examined the impact of every dimension of entrepreneurship orientation and each overall competition strategy (differentiation and cost leadership) on the performance of emerging SMEs (financial and non-financial). The findings from the empirical study show that innovation, proactivity, and risk-taking significantly improve financial performance while trivializing non-financial performance. Differentiation and cost leadership strategies significantly improve SMEs' financial and non-financial performance.

Danyluk (2019) examined the types of competition between businesses that affect logistics activities. In this direction, it has investigated the reasons, conditions, and consequences of this developing growth strategy by examining the dynamics surrounding the expansion of the Panama Canal, which was opened to ship traffic in June 2016. As a result, competitive strategies developed to attract the next generation of large-sized vessels between North American ports. The study determined that the partial variability and geographical specificity increase competition for variable production and logistics activities and makes logistics-oriented development a particularly risky growth strategy for cities.

Qin, Liu, and Tian (2020) developed an analytical model to investigate the phenomenon of logistics service sharing in the e-commerce platform. In this context, they examined the balance mode by considering the comparative effects of logistics service sharing and the interaction of competitive strategies in the e-commerce platform. The findings were obtained because the study provided executable management information for the vendors in the platform's e-commerce market.

Garnette and Permana's (2020) studies aim to determine the strategies of logistics enterprises operating in Indonesia with the PT XYZ model and develop suggestions in this direction. In this way, suggestions have been developed for logistics companies to reach standards that can compete in the international arena.

Esmizadeh and Mellat Parast (2020) conducted a systematic literature review to examine various logistics network designs and evaluate their performance in terms of cost, quality, delivery, flexibility, and durability. In this way, they assessed the strengths and weaknesses of each logistics design for different operational strategies. As a result, they determined that logistics systems have traditionally been designed to minimize costs and that businesses should balance different competitive strategies to evaluate multiple competing priorities, such as cost and service quality in logistics systems.

Dos Santos et al. (2021) aimed to propose a conceptual framework for integrating a maturity model developed in their study into supply chain (SC) strategy. The results show that a maturity model can be a parameter and guide for improving the capabilities of processes, resources, and activities to meet the RS strategy and the reach of the competitive strategy.

Singh et al. (2022) modelled the effect of spatial clustering on various dimensions of inter-firm competition among port logistics firms using Porter's three-force model (leadership, differentiation and differentiation cost) (in their study). As a result, they determined that when logistics firms are clustered spatially, competitive competition between firms increases significantly, and this effect increases when they are clustered around the connection point. This study, therefore, expanded the meaning of clustering from a geographical entity to a more useful functional structure to reflect inter-firm dependencies.

Strategic competition in logistics

Over time, customer segments have been rapidly influenced by the covid-19 process. Furthermore, companies have integrated their processes in a more sustainable, more accurate planning, fast decision-making, innovative and easy-to-adapt manner to provide a competitive advantage in line with the expectations of their customers. "Organizations need to be aware of the trade-off among different competitive priorities if they intend to address multiple competitive priorities such as cost and service quality in their logistics system. (Esmizadeha & Parast, 2021)

However, the emergence of COVID-19 has increased the need for electronic commerce. As a result, the competitive environment in logistics companies has increased. 'With the globalization of products, e-commerce in the agri-supply chain has been trending, even in pre-COVID-19 times. After spreading the coronavirus disease, a significant percentage of the physical market stopped and converted into e-commerce portals. Different small and large retailers have started e-commerce portals. E-commerce is successfully Sustainability trending, even in the post-COVID-19 situation, because it offers retailers low risk in terms of inventory loss, price declination, and bargaining loss' (De & Singh, 2022)

Supply chain activities mostly depend on market competition. Indeed, in the market, many organisations create different implementations for the final customer. Additionally, some approaches, such as product variety, reducing lead time, outsourcing, and using digital applications, create a competitive strategy for logistics organizations.

There has been growing attention for logistics organizations to maximize operational performance transparency. In the traditional supply chain model, the importance given to information sharing among suppliers, retailers, manufacturers, and wholesalers has increased. Especially with the pandemic process, the processes have become more transparent, thanks to the importance of instant information sharing between stakeholders. The biggest contribution of this has been the reduction of supply time in the supply chain and the reduction of transportation costs. In addition, a proactive approach to risks occurring in the supply chain has become easier. As a result, a strategic competitive advantage was achieved by providing a flexible and agile structure.

The relationship between transparency and competition strategy enables closer relationships with customers and the processes in the supply chain to be more integrated. In addition, social responsibility awareness and environmentally friendly approaches are the results of a transparent structure. Planning sustainable resources in purchasing, transportation, and storage provide a competitive advantage for logistics companies during COVID-19.

Competitive strategy and logistics

In markets where alternatives for consumers on a global scale are increasing day by day, enterprises need solid competitive strategies to survive. A competitive strategy is planning short-term and long-term activities to obtain a competitive advantage. In addition, it is involved by following up on the efforts of their competitors, assessing their strengths and weaknesses, and comparing the competitors and their operational policies and practices. This strategy must be strong against the market's competitive pressures, solidify the enterprise's position, and be customer oriented. When determining Competitive Strategies, enterprises must first select the goals and what actions they will use to achieve these goals, implementation policy, and competitive dynamics (Zerenler, 2007; Özçelik, 2016; Öztürk, 2018; Porter, 2010).

Since logistics requires all processes to be interconnected, digitalization plays a key role for businesses in gaining a competitive strategy. 'Digitalization of logistics and the supply chain is an important tool for logistics resilience in such situations, but digitalization poses certain challenges for developing countries. (Gupta, H., Yadav, A. K., Kusi-Sarpong, S., Khan, A. S., & Sharma, S. C 2022).

According to Porter (1992), the sustainability of competitive advantage depends on the sources of the superiority of the enterprise. In addition, Porter (1986) emphasizes that competitive power analysis impacts organisations that prioritize a differentiation strategy. The competitive strategy model developed by Michael Porter (1985) is the most common in the literature. This model is an important parameter for competitiveness and economic development in all economic platforms, from the enterprise market to the general national economy. According to the model, the factors affecting the decision mechanisms of the enterprises to gain competitive advantage in the sector are listed as new company threats, bargaining power of suppliers and buyers, and the threat of substitute products or services. Porter divided competitive strategies into three categories: cost leadership, differentiation, and differentiation focus.

- **Cost leadership strategy:** This strategy includes offering a product that meets the needs of the customer profile determined in a broad targeted market. In this framework, the enterprise determines strategies to produce and distribute its goods or services by realizing its costs at the lowest level compared to its competitors (Kaya, 2013: 110).
- **Differentiation strategy:** This strategy involves creating a value that will differentiate the product or service and make it perceived as unique by the buyer (Efil, 2010:53). In this direction, approaches such as giving importance to quality, process innovations, product innovations, and system innovations and privileged talent support are adopted (Eren, 2013: 280).
- **Differentiation focus strategy:** This strategy focuses on that unit by choosing a specific unit from the product-market units of the enterprise (Kaya, 2013:114). In focusing strategies, the business specializes in a certain market segment or region and concentrates all its strategic tools on this focus market. The business's marketing activities and the service's adaptation according to the determined customer segment are expressed as excluding other segments. The cost-focus strategy, on the other hand, involves being advantageous in terms of cost in the target segment of the enterprises compared to the competitors in the market.

In general, these strategies, which are implemented to provide competitive advantage and to be sustainable in the business market, are defined within the framework of two basic parameters: strategic scope and strategic power (Porter, 2010; Kırmızı, 1998; Tanwar, 2013; Ülgen & Mirza, 2014).

Apart from the strategy model developed by Porter, one of the most accepted models is the model developed by Prahalad and Hamel (1990). According to this model, the competitive strategy takes an approach that emphasizes flexibility, continuous learning, and getting experiences from mistakes. The model's most important strategic development element is determining the enterprise's competencies and objectives. The enterprise's competencies include quality customer service, differentiation, and adaptability to different areas. At the next stage, after determining competencies, the scope of their application areas, market analysis, and customer expectations are determined, and predictions about the sector are foreseen. The strategic intent created following these predictions should cover the goals and vision of the enterprise.

Another model in competition strategies is the "New Time Strategy" by Adrian Slywotzky (1996). According to this model, the classical understanding of competition is expressed as "tunnel vision". According to this model, enterprises should further expand the boundaries of the sector in which they are involved and develop competitive strategies to renew them. The focus of these developed strategy systems is based on customer demands. Considering these demands, the most appropriate products and services should be determined, and the most effective and competent practices should be applied. In an ever-changing global world, enterprises should be renewed according to changes and developments and develop new business designs within the strategy framework. They should always take customer priorities into account.

The operational excellence strategy aims to achieve cost leadership, facilitate strategy operations, reduce costs, manage business actions, and have quick and mass production processes. The product leadership strategy aims to develop a culture of enterprises improving the quality of the product offered to the market. Corporate disciplines developed by the strategy include product, talent, and research portfolio management, marketing, and teamwork. Finally, the customer intimacy strategy aims to combine customer information and intimacy of enterprises with operational flexibility to enable product personalization, meeting special requests, and rapid response to requests.

In the Competitive Strategy model developed by Grant (1998), an approach to resources that mainly covers human resources is adopted. These resources include financial, physical, human, and organizational capital. According to this model, the system consists of resource analysis, evaluation of capabilities, analysis of resources and capabilities that provide profitability, determination of strategy, and enrichment of business resources and capabilities (Grant, 1998).

Rapid developments globally, increasing competition among enterprises, and providing quality consumer requirements, efficient and minimal cost delivery of materials, products, or services to the end-consumers make the logistics services and the sector important. Competition in logistics has required companies to improve their quality and reliability. The logistics sector has a significant share in providing both value advantage and efficiency advantage in the activities carried out by enterprises from production to consumer. Within this context, the most crucial goal of the logistics sector is to provide quality and low-cost services between supply practices, production, the distribution system, and the market. These goals are the most important determinants of competition strategies in the logistics sector. As shown in Figure 1, the logistics process is a process between material and information

flow, and resources, supply, activities, distribution, and customer factors should be considered within the framework of these two parameters when determining Competitive Strategies (Christopher, 1998).

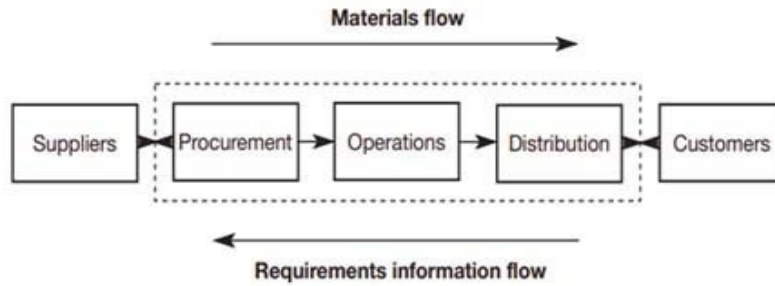


Figure 1: Logistics Management Process

Source: (Christopher, 1998)

For logistics companies to be successful and maintain their sustainability in an increasingly competitive environment, the generic competitive strategies implemented by businesses to reduce labour, transportation, and stock costs, measure employee performance. It also needs to be evaluated customer satisfaction and invest in warehouses, shelving systems, storage, information processing, and software systems, vehicle fleet renewal, product diversity, and contract sales transactions (Laari, Töyli, Ojala, 2018).

Methodology

Increasing electronic commerce with the pandemic has also increased the need for logistics. Thus, logistics companies understood they needed to develop their management strategies in an increasingly competitive environment. The reason for choosing logistics companies in this study is to examine the changing competitive conditions in the logistics sector, where the demand is the highest and most intense.

The interview method will be used to evaluate logistics organisations' competition strategies during the pandemic. The reason for choosing the interview method is to give flexibility to the answers given to the questions. This way, respondents will be less constrained. Also, this method aimed to categorize answers rather than questions. The questions were prepared considering the experiences gained from the preliminary interviews and impressions before the survey design.

For the reliability of the test, the "test-retest" method has been applied (Middleton, 2022). The questionnaire was repeated after three weeks, and the Spearman correlation coefficients were calculated. Coefficients were observed to be changed between 0.80 and 0.98 with the p-values less than 0.05, which were all significant at $\alpha=0.05$. Those results confirm the reliability of the whole study.

Limitations of the survey have been organized with only the randomly selected logistics companies in Istanbul because the logistics operations in Turkey have been controlled from Istanbul. Thirty-five firms have been selected randomly from the first 50 companies, which perform nearly the 75% of the total. Participants consist of middle or senior managers.

According to the answers given by the participants after the interview, it will be evaluated to what extent the competition strategies they apply in electronic commerce change the company's performance. Furthermore, the results will be evaluated on how the companies affect their costs and customer satisfaction due to the increasing demand for electronic commerce in the pre-and post-pandemic period, and solution-oriented criticisms will be made.

Table 2: Interview Questions and Related Studies**Interview questions**

Question	Related Reference
1. Which management strategies has your company implemented pre- and post-pandemic period?	(Smite et al.,2022)
2. How were logistics operations affected by your competitive strategies?	(Raj et al., 2022)
3. How has the competitive strategy you implemented after the pandemic, especially in storage, distribution, and inventory management, affected your costs?	(Sumarliah, et al., 2021)
4. What competitive strategies do you apply to increase your market share in electronic commerce?	(Reardon et al., 2021)
5. What are the consequences of competition strategies you apply during the pandemic that positively impacts your company?	(Torres Montoya et al., 2021)
6. How do you evaluate the management strategies you implemented in logistics operations before the pandemic?	(Raj et al., 2022)
7. Have you used digital technologies in competitive strategy during the pandemic?	(Bettiol et al.,2021)
8. How have competitive strategies you implemented in logistics operations changed your customer satisfaction during the pandemic?	Schleper et al.,2022)
9. How have your new competitive strategies impacted supply chain agility?	(Raj et al., 2022)
10. Which different competitive strategies are you aiming to implement in electronic commerce in the period after the pandemic process?	(Orji et al., 2022)

Results

According to the interview, ten questions are asked of the participants. Participants were selected from people between the ages of 30-45 who have worked in the logistics industry for at least five years. No gender difference was observed. According to the participants' answers, it was observed how the changing conditions in the logistics sector after the pandemic affected the competitive strategy. Considering the answers given by all companies to the first question, some participants stated that they communicated with customers, customer visits, and the service they provided transparently to customers in the pre-pandemic period. For example, customers allowed their cargo to be seen whenever they wanted to load it.

Among the answers given, it was stated that a more comprehensive and wider study was started in the field of e-commerce with the strategic methods applied by their companies after the pandemic. However, with the positive effect of the company's work, it was stated that the workflow processes were defined as faster and more functional. Another company has not observed that the electronic commerce in which they work in their home office continues and progresses due to the orientation to the virtual network in this process. Another firm is that the digitalization process highly influences its working models. Online tools have announced 30% of external stakeholder promotions.

Another participant stated that they continue their meetings online, even though they are not very involved in processes such as working from home, because they are interested in health logistics. Apart from these, he stated that they did a lot of work in terms of both material and measure due to the pandemic process in the hospital, and as a result, COVID-19 floors were opened, and staff employment increased. In the answers to the second question, company x stated that its logistics operations positively affect its competitive strategy and are more trust oriented. It has also enabled customers to reach more audiences by sharing in digital environments in their communities.

Among the answers given to the second question, the answer given by another company explained that their competitive strategies do not negatively affect their operations due to being a corporate company.

In addition, another company stated that, in parallel with the previous company, its competitive strategies had developed positively after the more active use of electronic commerce in the logistics operation service network. In addition, they have transformed into the potential to provide more service in less time. Another firm, considering the situation in terms of costs, stated that the increasing serious costs caused the manufacturers to add logistics companies to their structure.

On the other hand, a company engaged in health logistics talked about the supply of patients and stated that it is a part of this health tourism, and they also supply medicines and devices. In the answers to the third question, one firm stated that the costs did not increase much, while another stated that the costs increased. Another company that answered the third question stated that all competitive strategies reduced the costs at a high rate in the logistics operations they developed and continued during the

pandemic period. In addition, the expense study carried out in the active e-commerce system determined that the costs decreased noticeably.

Another company has announced that they carry out free storage and handling processes of the products transported by the customer in their warehouses. They also stated that they not only give the best price for the products bought from anywhere in Turkey to the customs destination abroad but also ensure customer satisfaction and safe transportation by keeping the distribution costs at a minimum. Another company official said that he bought a lot of masks that had a storage process. Then, when the person wants to procure the product, they demand what is right from the hospital's system, and after this process, everyone is given the necessary products.

Among the answers to the fourth question, the company representative Although it is a sector that provides face-to-face services, small outpatient clinics can be held online. Moreover, it works meticulously on the advertisements of corporate communication units. Apart from these, he stated that with the pandemic, home health services processes were established to serve patients at home. Among the answers to the fourth question, it has been observed that many participating companies have not yet switched to electronic commerce during the pandemic. However, regarding the fifth question, it was observed that the competitive strategies implemented by most participant company officials during the pandemic positively affected their companies.

In addition, the answer given by the company was that they made more promotions, especially using digital tools and that they provided our promotions, especially by reaching distant geographies at a higher frequency. Finally, they stated that they implemented faster and less costly organizations using digital tools. On the other hand, another company wanted to ensure the company's annual budget and money flow in this period. Additionally, the company provided its turnover flow instead of making a profit in the works; they sometimes took projects at a loss for serious competition.

On the other hand, some companies stated that they were adversely affected. For example, a company has experienced serious problems with cost-oriented customers. It was stated that price and cost increases that are not under their control are not accepted. Among the answers given to the sixth question, they could have done the agility, quick decision-making, and adaptive style we have shown now. Among the answers to the sixth question, some companies stated they could do agility, quick decision-making and adaptation in the pre-COVID -19 situation. They stated that they saw that the company had entered a process where they had to adapt to the speed and development of e-commerce, especially by introducing quick commerce logic into their lives and taking faster action.

In the seventh question, in the answer given by one of the companies, they stated that they took digital technologies to the centre during the pandemic period. As a result, it has conserved Customer Relationship Management, and the capacity of performance of the operations and human resources have been increased for the organizations.

Another company replied that Digital technology is very important for advertising and accurate and quality service. He stated that competitive advantage is achieved after this sector's follow-up and supply of devices and new inventions. Among the answers to the seventh question, their company has had three main strategies for the last five years. They are investing in people, sustainability, and digitalization. Therefore, they stated that the pandemic shows how well they are on the right track.

The answer given by another company stated that they allocated a large budget to the development of digital technologies, and this situation increased their competitive advantage by improving customer service during the pandemic period.

When it comes to the eighth question, the answer given by the company representative was that they further strengthened their ties with their value-oriented customers who care about long-term cooperation and partnership. In addition, another firm stated that they further strengthened their ties with their value-oriented customers who seek long-term cooperation and partnership. Finally, another firm stated that due to the serious shrinkage, they are trying to establish closer contact with many of their companies and to make their customer portfolio permanent.

Most of the answers given by the participants to the ninth question were that competitive strategies increase supply chain agility. It has also been stated that it has a positive effect. Many companies today build their supply chain on agility. One of the main reasons for this is that it provides a competitive advantage in the national and international markets.

As for the answers to the tenth question, companies preferred speed, more globalization, efficient inventory management, and more digitalization in e-commerce after the pandemic. That is most

probably because of the long distances and diversification of the services. That shows a willingness the adaptation to the new era as well.

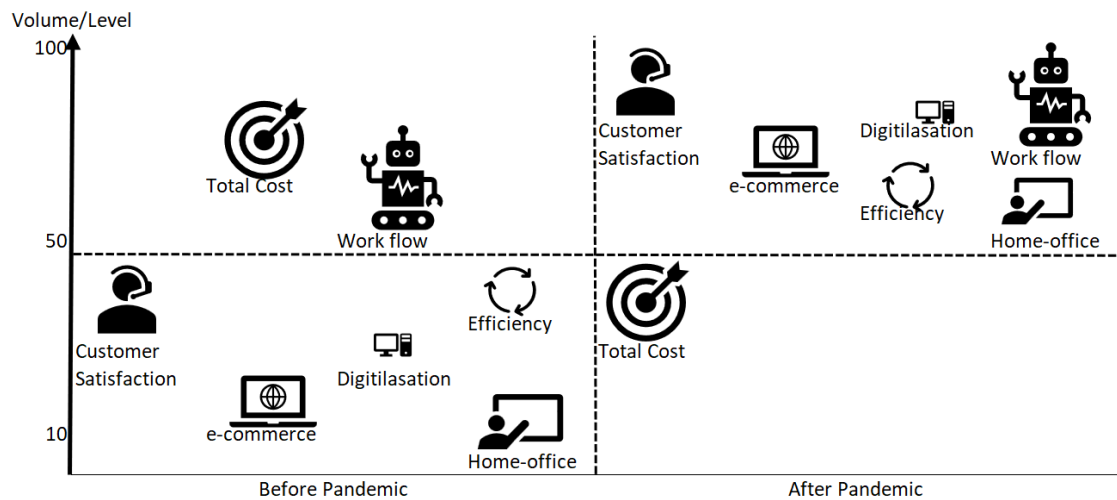


Figure 2. Model of Results

Figure 2 summarizes the questionnaire results concerning the answers to the questions regarding the keywords repeated most frequently. Figure 2 also displays the change in the level of the answers with the same keywords. Results also give the answers to the research questions RQ1, RQ2, and RQ3 much wider than a single answer.

Conclusion

This study discusses how competitive strategies in the logistics sector can change cyclically and the effects of these changes on the sector. The study's practical implications guide the managers in the light of real-life examples. Its managerial implications, on the other hand, will contribute to the theory.

This study includes the competitive strategies implemented by logistics companies during the pandemic period. It is explained in detail in the results section. For further studies, the competitive strategies applied by logistics companies in the post-pandemic period can be investigated, and the results can be compared with the current study. However, since the logistics companies in this study were examined, it also sheds light on the competitive strategies that other logistics companies operating in the sector will implement during the pandemic.

According to the answers given to the participants, they have invested more in digitalization after the pandemic period. Since this is a requirement of globalization, it may have significantly increased investment costs. However, it seems that supply chain performances have increased with digitalization. In addition, this situation has provided a competitive advantage by increasing the performance of the processes. Therefore, customer satisfaction has increased because of the management strategies implemented compared to the pre-pandemic period.

This study includes the pandemic period. Future studies will contribute to determining post-pandemic competitive strategies. In addition, it will contribute to developing competitive strategies in the sector for logistics companies. The next study will determine the changing competitive strategies post-pandemic period, and the results can be compared with the current study.

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