

Emerging Importance of Supply Chain Attitudes

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The nature of relationships within supply chains and understanding the dynamics of interactions between the supply chain members are key factors in today's globalised economy, where speed, efficiency and flexibility in the flow of goods and information are crucial. Improving the efficiency of supply chains and managing their inherent risks has become one of today's most pressing economic challenges, directly affecting not only the competitiveness of companies but also the achievement of sustainability goals.

To better understand those relations among companies, a deeper understanding of the attitudes of the different supply chains is inevitable. This paper is the inaugural work towards this research. Analysing attitudes towards relationships within supply chains is a critical aspect of understanding interactions between companies and the performance of networks. Digital transformation, depth of customer integration, relationship engagement, and efficiency in joint problem-solving are factors that have a significant impact on supply chain flexibility and performance.

To achieve sustainability and resilience, companies need to adopt adaptive and proactive strategies that can address environmental, social and economic challenges and anticipate and respond to future market changes. The projected aim is to understand the attitude of the organisation as an independent entity, not as an attitude generated by the individuals of the management.

1. Introduction

Studying the nature of corporate relationships in supply chains is key to a deeper understanding of economic dynamics and market forces. Given the broad spectrum of interactions between a company and its customers, whether through dependencies, dominant positions or mutually beneficial collaborations, the nature of relationships significantly influences the efficiency, flexibility and innovation capacity of supply chains. In such a complex system, where relations between economic actors change dynamically, understanding power balances, dependencies, and strategic alliances is essential to reap competitive advantages and address unexpected market challenges. Therefore, particular attention needs to be paid to the relationship dynamics inherent in supply chains, their impact on corporate strategies and the macro- and microeconomic implications of interactions between companies and their customers.

The current research focuses on the attitudes of supply chains as the projected attitude of the management. The proposal of this research is to suggest a new approach to attitudes. As a result, the behaviour of supply chains could be better predicted in different scenarios.

2. Literature review

In a critical analysis, Chen Qian et al. (2020) reviewed the 100 most recent scholarly, English-language publications dealing with the quality of interfirm relationships, taking into account the overlap of research on the quality of supply chain management and interfirm relationships (Qian et al., 2020). The study employs a novel categorisation scheme derived from the conceptual framework of supply chain management and aims to contribute to the existing supply chain management literature by providing insight into the correlations between supply chain performance and quality of customer-supplier relationships from the perspective of relationship quality researchers.

The analytics were conducted through content, frequency and contingency analysis, evaluating how the three dimensions of relationship: quality–informational, operational and connectivity dimensions and three types of

supply chain performance: financial and market, operative and relationship performance is reflected in the current interfirm relationship quality research and how researchers connect these dimensions to each other. Qian et al. (2020) provide an in-depth analysis of the role of quality of intercompany relations (RQ) within the field of supply chain management, especially embedded in the SCM framework. The research examines the role of different dimensions of RQ and their influence on supply chain performance from the perspective of RQ scientists, highlighting differences in perspectives between buyers and suppliers.

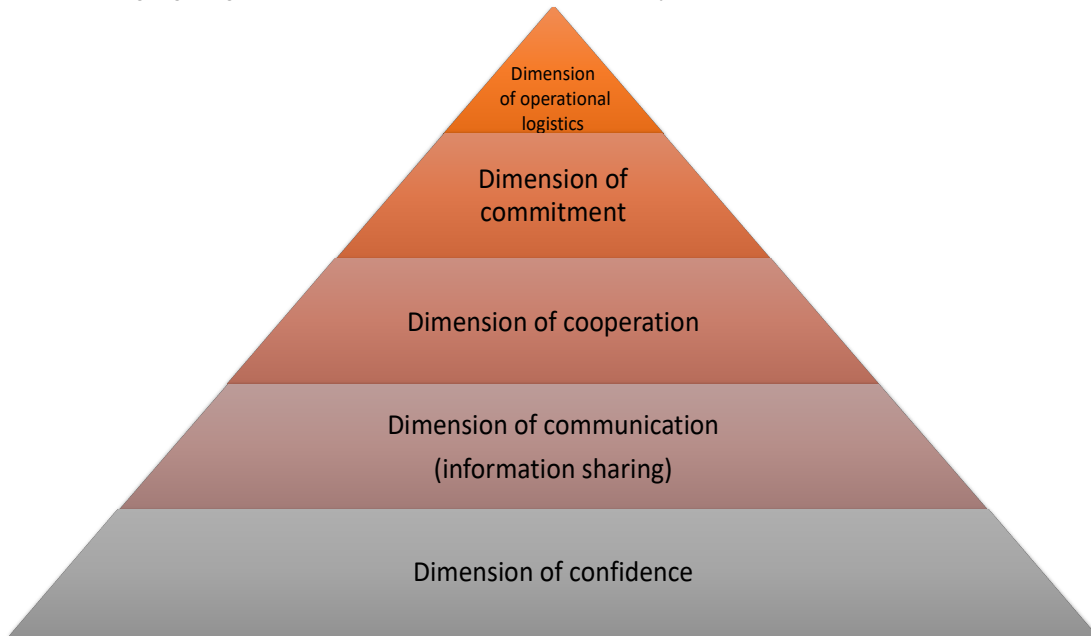


Figure 1: Relational dimensions within the supply chain

The most important dimensions: confidence, communication, cooperation, commitment and operational logistics in the supply chain are illustrated in Figure 1. Confidence plays a key role in the supply chain by facilitating cooperation and coordination between different stakeholders. It reduces perceived risks and uncertainties in supply chain operations, increasing the willingness of parties to share information and cooperate. Trust also affects the resilience of supply chains, enabling more adaptable and resilient responses to unexpected disruptions (Singh et al., 2021). Confidence and commitment are key factors in the success of information sharing and cooperation between the stakeholders in the chain. In complex supply chain systems, effective communication promotes process transparency and improves collaboration between different departments. The prominent role of the relational dimension can also be established based on older research (Wieland and Wallenburg, 2013). This dimension forms the basis for trust, commitment and long-term orientation between companies, which is critical to improving supply chain performance and building sustainable competitive advantage.

The positive impact of the relational dimension on relationship performance as the intention to maintain relationship continuity underscores the strategic importance of relational relationships in the supply chain. Wieland and colleagues also found that communicative and cooperative relationships have a positive impact on resilience, while integration has no significant impact, and that improved resilience, achieved by investing in agility and growth, increases supply chain customer value. The indirect impact of the information dimension on performance, in particular through the relational dimension, underlines the importance of information exchange and sharing in fostering trust and commitment between companies. This underpins information integration as the first stage of integration between supply chain partners and highlights the role of high-quality communication in establishing strategic relationships between companies. The impact of the operational dimension on performance varies, challenging companies to understand the direct and indirect impacts of operational cooperation on financial performance. The differences between the operational dimension and financial performance highlight the need for careful consideration of the costs and benefits of cooperative activities (Zeng et al., 2013). Returning to Qian et al.'s research, the authors explore differences in customer and supplier perspectives on relationship-driven financial performance, pointing out that buyers and suppliers evaluate the impact of the relational dimension on their financial performance in different ways. This finding has important

implications for supply chain management practices, highlighting the complexity of managing relationships between different actors.

All of these are important contributions in the field of supply chain management, as they highlight the complex correlations between the quality of relationships between companies and supply chain performance. The quality of relationships, especially the relationship dimension, has a direct impact on supply chain performance, underpinning the importance of relationship building and management in supply chains. An integrated approach to relational, information and operational dimensions is needed to improve supply chain performance. To improve the quality of interfirm relationships, companies should focus on building trust, increasing transparency, and improving operational efficiency (Qian et al., 2020). The results of the presented studies also show that a better understanding and management of the relationship dimension in supply chain management can be the key to improving financial and operational performance. This means companies need to proactively manage relationships, considering both their own perspectives and those of their partner, to achieve long-term sustainable benefits. The theme also sets out new directions for research into the quality of relationships between supply chains and companies, emphasising the importance of integrated approaches and considering the wider context.

3. Attitudes of relationships within the supply chain

Analysing attitudes towards relationships within supply chains is a critical aspect of understanding interactions between companies and the performance of networks. Digital transformation, depth of customer integration, relationship engagement, and efficiency in joint problem-solving are factors that have a significant impact on supply chain flexibility and performance. Attitudes towards relationships between companies in supply chains are critical to an in-depth understanding of network interactions and performance. Analysis of attitudes contributes to identifying key factors for cooperation dynamics and mutual success within supply chains. Positive attitudes among supply chain participants promote effective communication, building trust and resolving conflicts, which fundamentally affect network performance (Ratna Achuta and Aditi Vivek, 2020). Analysing these types of relationships allows companies to better understand how to improve their relationship strategies and what methods they can use to improve the efficiency of their supply chain. An analysis of attitudes towards relations within supply chains shows the extent to which these attitudes influence cooperation between networks and the flow of information. Creating a collaborative environment where attitudes encourage open communication and mutual support increases synergies between companies and helps optimize business processes. According to Ratna Achuta and Aditi Vivek (2020), the quality of relationships between companies has a decisive influence on the overall performance of the network, which supports the importance of positive attitudes in interactions.

It is clear that maintaining an attitude of positive relationships is essential for effective supply chain management, as they have a direct impact on chain performance. Research on the effectiveness of supplier relationships found that companies can benefit from shared risk sharing, access to additional resources, reduced business costs, and increased efficiency, as well as improved financial performance and competitive advantage over time (Osei and Asante-Darko, 2022). This supports the claim that maintaining positive relationships is essential for effective supply chain management. Companies should, therefore, be proactive in developing and maintaining positive attitudes, which include sharing constructive feedback, constantly seeking opportunities for collaboration, and committing to common goals. Such relationships allow companies to react more flexibly to market changes, improve risk management and increase their competitive advantage.

Cultivating positive relational attitudes in supply chains helps build long-term partnerships, enabling companies to create sustainable business models that support growth and innovation. Analysis and development of attitudes of relations between supply chain participants is a key step in optimising the performance of networks, which contributes to business success and strengthening market position.

This shows that research in supply chain management is increasingly recognising the importance of relationship engagement and customer integration in improving performance as well. Relationship engagement between companies fundamentally influences supply chain efficiency, but this impact is not directly impacted but through integration with customers. In this context, two critical dimensions of relationship engagement and customer integration should be looked at, which indirectly improve supply chain performance. Identifying and understanding these dimensions enables companies to strategically increase their relationship dynamics and integration processes, helping to improve overall supply chain efficiency.

3.1 Customer integration in the supply chain

The importance of depth of customer integration in supply chain performance is increasingly becoming a part of corporate strategies. Close customer integration creates opportunities for companies to build deeper, value-based relationships with their customers, which can lead to long-term partnerships. The development of

partnerships is associated with the strengthening of mutual trust, which is essential for the successful functioning of business relationships. This trust not only facilitates smoother business transactions but also allows parties to share information more openly, which fosters innovation and joint growth. The advantages of long-term partnerships include the fact that customers become active participants in product development and service processes, contributing directly to innovation (Aslam et al., 2023). This collaboration not only leads to better customer needs but also gives organisations the opportunity to discover and exploit new market opportunities. Customer integration, therefore, directly contributes to improving supply chain performance, increasing the value of the supply chain to end users.

3.2. Further advantages of customer integration

In addition, customer integration helps create tailor-made solutions, which increases customer satisfaction and loyalty. Through personalised approaches, companies are able to create unique value that sets them apart from their competitors. This differentiation is essential in today's competitive market, where customers expect ever higher levels of service and product (Ruzo-Sanmartín et al., 2023). However, increasing the depth of customer integration also comes with challenges, including integrating information systems, managing cultural differences, and maintaining continuous communication. However, despite the challenges, deep customer integration offers significant benefits that outweigh initial investments and efforts. Successful integration allows companies to better understand and meet the needs of their customers while improving their own internal processes and efficiency. Examining the correlation between relationship engagement and customer integration highlights how these dimensions can help companies manage and optimise their supply chains more effectively. Research has shown that increasing relationship engagement, especially through integration with customers, has a positive impact on supply chain performance (Akhtar et al., 2023).

This suggests that companies should not only invest in developing their relationships but also continue and actively strive for closer integration with customers as a key strategy. Further research on the impact of relationship engagement and customer integration on supply chain performance will enable the development of strategies aimed at deepening collaboration and increasing the efficiency of integrated supply chains. This type of integration helps to use resources more efficiently, improves customer service, and increases competitiveness. In this context, relationship engagement and customer integration are not only part of corporate strategy but also essential elements of successful supply chain management.

4. Today's dominant, competitive distribution chains

One of the fundamental prerequisites for developing a competitive supply chain is what characteristics a dominant supply chain has and how these contribute to gaining and maintaining a competitive advantage. Dominance in the context of the supply chain means that the chain can effectively integrate and optimise all processes from suppliers to end users, maximising value creation and reducing costs. Dominance in the supply chain has changed over time. Each participant in the supply chain, including second and third-tier suppliers, may exert some degree of dominance over one or more participants in the chain. This dominance is variable in nature, and supply chain management strategies can influence or inhibit the dominance of dominant participants (He et al., 2023).

The key to building a dominant supply chain is comprehensive management of processes, smooth information flows, and effective application of risk management strategies. This includes technological innovations such as the application of data analytics and artificial intelligence in inventory management, as well as resource optimisation at all levels of the supply chain. The depth of integration, which means close collaboration between suppliers and customers, is also a key element, as it promotes supply chain resilience and responsiveness to market changes. A dominant supply chain also enables rapid delivery to the market of high-quality products and services, which is essential for achieving customer satisfaction and loyalty. In addition, a dominant position allows companies to manage supplier negotiations more efficiently and achieve better prices, which directly improves profit margins and competitiveness. To maintain a competitive advantage, the dominant supply chain must remain innovative and adaptable at all times, ready to respond effectively to market dynamics and changes in consumer demand. This includes integrating sustainability aspects, which is becoming increasingly important in consumer decisions and corporate responsibility.

Extending dominance over companies' relationship characteristics is a critical element in supply chain management. The appearance of the character in business relationships has complex effects. The scientific study of dominant relationship dynamics in supply chains is fundamental to the development of the theory and practice of corporate strategic management. Dominance as a strategic tool allows companies to optimise their operational processes, increasing the overall efficiency of the supply chain. These efficiency gains translate into a significant acceleration of the speed of decision-making processes and refinement of operational coordination, enabling companies to respond more agilely to market changes and manage internal resources more efficiently.

Another dimension of the positive effects of dominance is the strengthening of negotiating power, which directly contributes to optimizing the company's profit margin and consolidating its market position (Arora and Brintrup, 2021). In addition, deeper supply chain control resulting from dominance improves transparency and enables companies to develop more effective risk management strategies. This level of control and transparency increases companies' ability to anticipate and proactively address potential disruptions and risks in supply chains.

At the same time, challenges related to the relationship characteristics of dominance cannot be ignored. Overly managed relationships can be counterproductive, as they can become a source of conflict between actors in the supply chain, undermining the development and maintenance of mutual trust. This type of environment can limit openness to innovation and creative solutions, slowing down companies' ability to adapt to rapidly changing market conditions. In addition, maintaining dominant relationships can reduce corporate flexibility and increase the risk of over-dependence on suppliers, which can make the company vulnerable to supply chain disruptions. The examination of sustainability and adaptation issues related to dominant relationships is of paramount importance for the development of corporate strategy. Companies must continuously evaluate their relationship strategy and its consistency with global business trends, including sustainability expectations. The integration of sustainability is not only done in the spirit of social responsibility but is increasingly appearing as a fundamental expectation in consumer decisions, directly influencing the market position and competitiveness of companies.

An analysis of the dominant relationship nature of supply chains at the scientific level requires a complex approach that takes into account both the advantages and disadvantages of dominance. Companies need to strategically consider the use of dominance, its potential impact on corporate performance, and relationships with other actors in the supply chain. Such analysis is essential to maintain competitive advantage and long-term corporate success in an increasingly volatile global marketplace.

5. Sustainability issue of supply chain in the era of automation

Research and trends in distribution chains clearly suggest that significant changes are expected in the near future in relation to the transformation of the role of the human factor. Digitalisation and the rise of smart technologies, such as artificial intelligence and machine learning, make it possible to automate processes in distribution chains that previously relied solely on human labour. As a result, the role of people is naturally transformed as the focus shifts more to supervision, decision-making and creative tasks, while routine, repetitive activities are integrated into automated systems. The paradigm shift in logistics and supply chain management, characterised by the rise of data-driven decision-making and machine-to-machine communication, is fundamentally transforming relational attitudes. This has a profound impact on the structural and operational dynamics of supply chains (Agrawal et al., 2024). The central role of data and its analysis makes it possible to objectivise decision-making processes and increase their precision, which also significantly improves the accuracy of forecasts and the reliability of strategic planning. In addition, machine-to-machine communication, thanks to advances in IoT (Internet of Things) and other network technologies, makes it possible to optimise information flow and resource coordination in real-time, reducing delays and errors due to human factors. This type of integrated and automated communication system induces the emergence of new types of relationships between supply chain actors, where the emphasis is on network efficiency and rapid adaptation.

However, despite rapid technological progress and automation, special attention should be paid to the key role of maintaining the human factor. The spread of automation technologies such as artificial intelligence, robotics and data analytics tools will undoubtedly make it possible to increase the efficiency of operational processes and reduce human error. At the same time, human creativity, decision-making ability and strategic thinking are essential for the adaptation and development of supply chains. The crucial role of humans in strategic decision-making lies in their ability to analyse complex, multi-layered problems and apply holistic approaches that go beyond the data perceived by machines. The human brain has the ability to recognise complex relationships, think critically and generate creative solutions, which is essential for tackling unexpected challenges and exploiting new opportunities. Human creativity and innovative thinking are essential in the field of innovation.

Although automation technologies can optimise existing processes, real innovative breakthroughs often come from human intuition and creative problem-solving (Eapen et al., 2023). People are able to go beyond the box, generate new ideas, and put them into practice, which is essential for the continuous improvement of supply chains and the maintenance of a competitive advantage. Relationship building and social interaction are also areas where the human factor is irreplaceable. Business relationships, building trust and networking are not limited to issues of communication tools and protocols but are based on deep human emotions, values and cultural sensitivities. Nurturing human interactions is key to building and maintaining strong, long-term partnerships that support the stability and resilience of supply chains. Thus, automation and technological advances represent significant advances in improving the efficiency and accuracy of supply chains, but the

human factor remains fundamental to strategic decision-making, innovation and networking. The symbiosis between technology and human creativity is essential to ensure the long-term sustainability and competitiveness of supply chains. Therefore, both research and corporate strategies should take into account the creation of an optimal balance of human and technological resources.

6. Conclusions

Relationships between companies become more and more important as competition increases. At the same time, supply chain attitudes will have an increasing impact on sustainability and chain performance. Current research is based on the human factor when it comes to attitudes. In the course of further research, it is pointed out that not only the employees and managers of companies but also other factors play a role in the formation and shaping of attitudes. Future research should not be limited to human factors; a holistic approach is needed. Further research will be needed to understand attitudes and to reassess the role of attitudes, as the human factor within the company is expected to change with the spread of automated systems. This article is the first element of a research project, which will focus on attitudes, more precisely, on the transformation of attitudes.

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