

International Journal of Economic Studies and Management (IJESM)

ISSN 2789-049X

Int. J. Econ. Stud. Manag. 5, No.4 (OCTOBER-2025)

The theoretical foundations of Supply Chain Management: A critical analysis

Théories et fondements du supply chain management : Une analyse critique

Dr EL GOMRI Rabii

Centre de Recherche en Transport et Logistique.

Institut Supérieur de Transport et de la Logistique (ISTL) Maroc.

Abstract:

Supply Chain Management (SCM) is an integrated and cross-functional approach to inter-organizational management. Current logistical trends require companies to enhance their ability to manage complex and evolving supply networks. Accordingly, SCM provides a managerial framework for flow coordination through complementary paradigms. For several years, the theoretical approach underlying this multi-level management model has been narrowly confined to a limited number of distinctive theories. This study aims to provide a critical examination of the theoretical foundations underpinning the SCM paradigm by offering an updated and analytical perspective. The findings highlight the need to complement traditional explanatory theories of SCM with new, dynamic, and integrative approaches.

Keywords: Supply Chain Management, logistics, theoretical foundations of SCM, SCM theory, critical approach.

Digital Object Identifier (DOI): <https://doi.org/10.5281/zenodo.17335960>

Introduction

In today's competitive landscape, markets are becoming increasingly international, dynamic, and customer-oriented. Consumers now demand greater variety, higher reliability, improved quality, and superior service. In addition to heightened competition across most industries, several emerging trends have reshaped consumption patterns and customer behavior. First, customer expectations have significantly increased (Rahimi & Kozak, 2017). Modern consumers are more value-conscious, demand faster delivery, and incorporate ethical and environmental considerations into their purchasing decisions (Hmoui et al., 2019). They are also better informed, highly connected, and possess a deeper understanding of market dynamics and product value. Furthermore, consumers increasingly expect high-value offerings tailored to their specific needs and a wide array of options.

Simultaneously, organizational and societal realities are undergoing rapid and profound transformations, resulting in continuous and accelerated socio-economic change. Technological advances are giving rise to product innovations and improvements across manufacturing processes (Kahn, 2018). The resulting competitive environment demands low-cost, high-quality products with a broad and adaptable range of features.

These developments have led to significant shifts in industrial and commercial strategies (Bentalha et al., 2019). The current context requires firms to master the management of multiple types of flows (Roques, 2015), prompting strategic and managerial adaptations. To meet current and future demands, organizations must break down internal silos at two complementary levels (Vedel & Kokshagina, 2021). Internally, they must adopt more transversal and flexible structures. Externally, they must cultivate cross-functional relationships with suppliers and customers. This has led to the emergence of a new managerial vision aimed at integrating the collective interests of all entities within the supply chain (Gereffi, 2019), marking a shift away from the traditional paradigm of fragmented, individual improvements toward a more coordinated and systemic decision-making model.

Globalization has further intensified the challenges associated with market internationalization. Several factors contribute to this evolution, including innovation, environmental imperatives, and the extended lifespan of goods and services. Moreover, in connection with strategies of organizational refocusing, the rise of outsourcing practices requires continuous control of flows involving multiple interconnected actors with divergent interests. This context calls for deep and structured reflection on the governance of material and informational flows (Fabbe-Costes et al., 2018).

Contemporary management increasingly depends on organizations' ability to sustainably minimize waste while maintaining adequate levels of flexibility and productivity (Duarte & Cruz-Machado, 2018). As a result, companies must integrate flow management by analyzing

key parameters such as lead times, inventory levels, and information systems within different managerial paradigms (Ayadi (2009).

Supply Chain Management (SCM) represents a managerial vision encompassing the coordination of material, informational, and financial flows to deliver value to the various stakeholders connected to the focal firm. It is an intertwined and interrelated set of strategic, financial, and operational decisions,

involving activities that span from input flows to output flows (Geunes & Chang, 2008; Egret, 2013). SCM embodies a managerial framework for inter-organizational competition, aiming for overall performance optimization across the entire value chain (Livolsi, 2009).

The theoretical evaluation of SCM's foundations has been a relatively neglected task by researchers. Indeed, many contributions rely on relatively basic theoretical frameworks to explain the conceptual underpinnings of SCM. The most commonly mobilized theories include agency theory, transaction cost economics, the resource-based view (RBV), and network theory.

This raises the following questions:

What are the theoretical foundations of Supply Chain Management, and how can one introduce a critical approach to their evaluation?

In this research, we explore the theoretical and conceptual foundations of Supply Chain Management, its origins, various forms, and objectives. The adopted methodological approach will involve an analysis of the foundations of critical theory and managerial critique. Ultimately, both traditional and critical theoretical frameworks will be examined through the lens of prevailing managerial and theoretical perspectives.

1. Theoretical Framework: Conceptual and Theoretical Boundaries of SCM

1.1 Concepts and Approaches in SCM

The conceptual origins of Supply Chain Management (SCM) remain unclear and contested (Croom et al., 2000). Its development appears to have originated in the domains of physical distribution and transportation. Cooper et al. (1997) note that SCM emerged around 1982 when Keith and Webber highlighted the inefficiencies of functionally siloed organizations. Since then, the concept has gained substantial interest, largely due to its ability to reconcile operations related to procurement, transportation, and warehousing (La Londe & Masters, 1994).

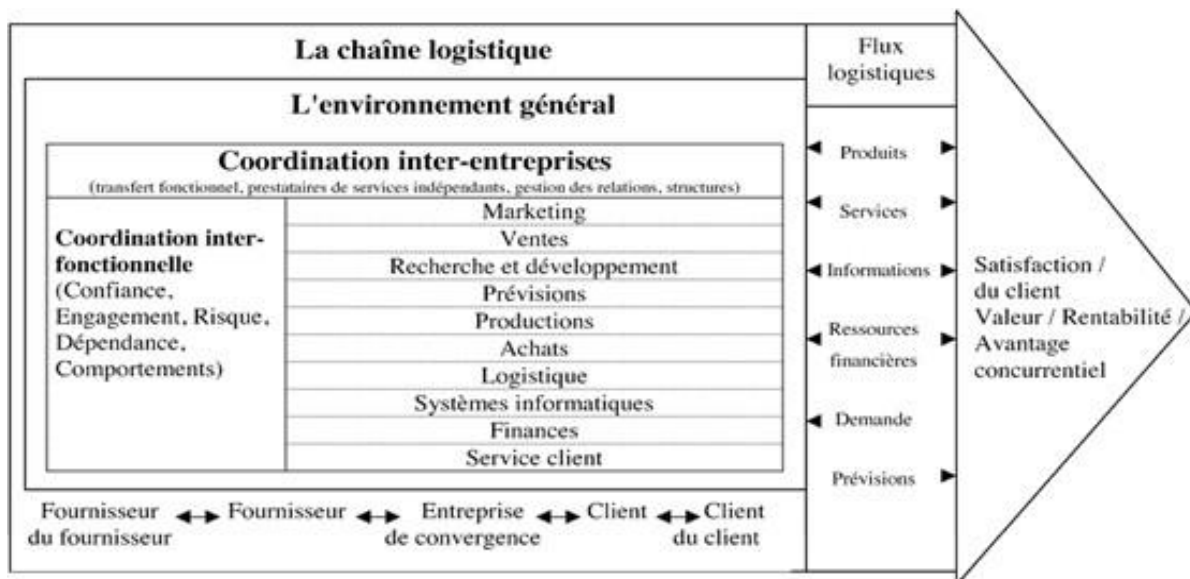
Concurrently, an abundance of studies and literature reviews has contributed to shaping a common understanding of SCM, clarifying its scope, functions, and defining relationships (Gibson et al., 2005).

In the early 21st century, SCM experienced a significant surge in academic and practical attention. However, a consensus among scholars on its definition has yet to be reached. For instance, Bechtel and Jayaram (1997) identified over 50 different interpretations of SCM. Cooper et al. (1997) categorized SCM into 10 distinct groups and identified 13 major approaches. Burgess et al. (2006) proposed 22 possible definitions based on the analysis of over one hundred articles. Finally, Stock and Boyer (2009), in what Hoa Vo and Bironneau (2011) describe as a “race to escalation,” consolidated 166 different approaches based on an examination of 173 potential definitions of SCM.

The **International Center for Competitive Excellence (ICCE)** defines Supply Chain Management (SCM) as “the integration of key business processes from end users through original suppliers that provides products, services, and information to customers” (Cooper et al., 1997).

The definition proposed by **Mentzer et al. (2001)** has served as a foundational reference for numerous subsequent managerial studies. They define SCM as “the systemic, strategic coordination of the traditional business functions and tactics across these business functions within a particular company and across businesses within the supply chain” (see Figure 1).

Figure 1: A Model of Supply Chain Management (SCM)



Source : Mentzer et al., 2001, p. 19

The term **Supply Chain Management (SCM)** has been described by various authors as a **management philosophy**, the **implementation of a management philosophy**, or a **set of management processes**. As a **philosophy**, SCM extends the concept of partnership into a multi-organizational effort to manage the entire flow of goods. As the **implementation of a management philosophy**, it requires the execution of various logistical activities. It involves an internal managerial vision complemented by continuous coordination with external stakeholders (Beaulieu et al., 2018; Torset, 2018). Finally, as a **process**, SCM manages relationships, information, and the flow of materials with the aim of enhancing customer service and creating value.

Accordingly, six core approaches can be identified, each emphasizing different aspects found in the various definitions of SCM:

(a) The existence of a chain that integrates the flow of materials and information from the origin of the process to the final consumer (Croom et al., 2000);

- (b) An "integrated logistics" approach, highlighting the interconnection of physical distribution processes (Bechtel & Jayaram, 1997);
- (c) An integration-based view that redefines the organizational structure and leads to the formation of "virtual organizations";
- (d) An emphasis on **information** to underscore the critical role of information flows;
- (e) A focus on **procurement and purchasing** (Tan, 2001).
- (f) A focus on **logistics and transportation** (Tan, 2001).

To manage the supply chain effectively and efficiently, a conceptual framework was proposed by **Lambert and Cooper (2000)**, comprising **three interdependent components**.

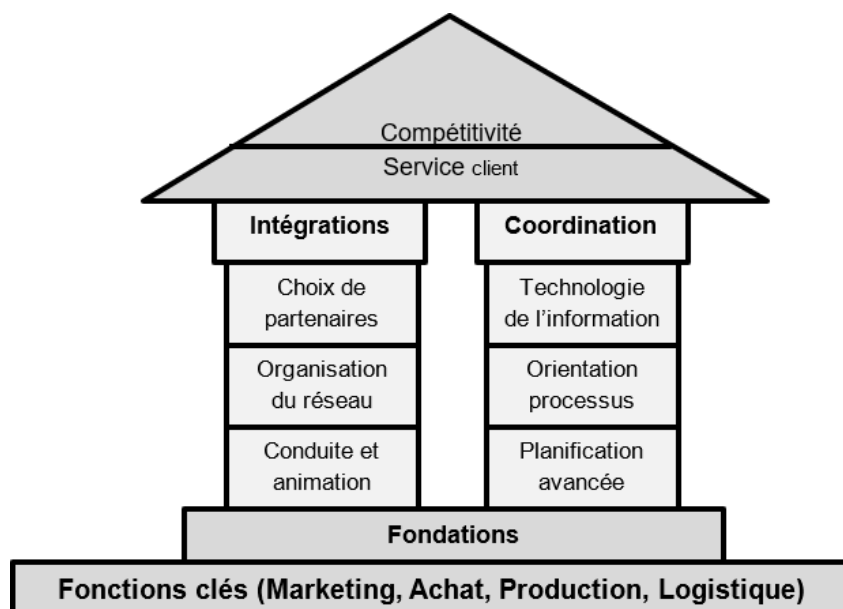
This model can be analyzed through its components (Morana, 2003). The **relational structure** comprises three levels of relationships: first, the identification of supply chain members; second, the evaluation of network-specific organizational dimensions; and finally, the determination of the organization's level of integration.

The second component addresses the **management processes** of the supply chain. There exists both **unilateral and multilateral dynamics** in how each member firm engages in supply chain processes within a coherent and comprehensive framework (Hmioui & Bentalha, 2021).

The final component encompasses various **supply chain management activities**.

Focusing specifically on **activity coordination**, Stadtler (2000) conceptualizes SCM as the **integration of activities** aimed at enhancing competitiveness and satisfying demand (see Figure 3). This represents an **intermediate position** between organizational independence and full vertical integration (El Ouardighi, 2008).

Figure 2: The Supply Chain Management House



Source: Stadtler (2000, p. 10)

Thus, the coordination of this 'SCM House' requires several decisions of various types .

The SCM encompasses several centralized activities coordinated by a single decision-making center due to the overall nature of the operational process. It requires, simultaneously and continuously, the management of operations with partners and the execution of several logistical activities:

- Procurement: In certain sectors, materials account for nearly two-thirds of the costs of manufactured products.
- Production: Manufacturing and transforming inputs into outputs.
- Storage: Requires the management of space, transfers, and risks (Szostak, 2018).
- Transportation: Distinguishing between the transportation of materials, supplies, and finished products.
- Sales: The final stage of delivering products and services to customers.

1.2. Objectives and stakes of SCM

Supply Chain finds its legitimacy in satisfying the interests of several partners. The SCM's stakes (Baglin et al., 2001) are:

- ❖ Costs: SCM aims to optimize an integrated cost encompassing coordination and control costs;
- ❖ Quality: This is a prerequisite for being competitive. This quality is broken down into two perspectives (Hines, 2004): product quality (value level) and process quality (process reliability).
- ❖ Lead time: This is the time interval between a customer's request and the delivery of the product. This time includes the supplier's operations, the company's internal tasks, and even coordination tasks between chain members. It is a critical variable in supply chains because, regardless of the company's performance in terms of quality or flexibility, it is bound to disappear if it ignores the lead time factor (Houssaini, 2009);
- ❖ Flexibility: Represents the company's ability to respond quickly and effectively to demand fluctuations. It presents itself in two forms: volume (quantitative variation in demand) and product mix (qualitative modification of the production schedule). There are four levels of flexibility in SCM (Stevenson and Spring, 2009): flexibility related to external elements of the company, flexibility related to supply chain design; flexibility achieved through relationships within the supply chain, and flexibility gained through information sharing;
- ❖ Delivery: Delivery performance depends on its speed. It is a key competitiveness criterion, especially for services (Muilerman et al., 2005), and must be complemented by the regularity of deliveries. Real-time knowledge of sales status could lead to improved supplier relationship planning (Fulconis and Paché, 2011);
- ❖ Reverse logistics control: This involves issues related to product returns, material reuse, and recycling. Mastery of reverse logistics is currently considered a means of preserving market share and a source of competitive advantage (Brach and Brusset, 2014).

Thus, there is an important conceptual foundation of SCM. Regarding the theoretical aspect, several works view SCM as a cross-cutting model involving the mobilization of multiple complementary theoretical contributions."

2. Research Methodology

Critical theory is a relatively old school of philosophical thought. Its creation can be traced back to the tradition of the Enlightenment and the Age of Enlightenment. Its focus is on analyzing social conditions,

critiquing the use of power, and changing established traditions and institutions. Thus, and unlike traditional approaches to social theory, which aim to explain and understand social status, critical theory is more oriented towards the development of a more humane, rational, and just society. This critical theory is based on an interrogative view of social phenomena, analyzing normative values (Habermas, 1987). Actors are guided by their own visions in a subjective and partial approach. In this sense, social theory should not be limited to reporting reality but should go beyond the obvious and subjective judgments towards a deep understanding of established social situations and organizational realities.

Thus, several schools and currents of thought adopting a post-positivist vision have claimed a normative insufficiency in traditional approaches, especially positivist ones. These criticisms mainly concern the adoption of explanatory tools from the natural sciences. Indeed, these authors present social and organizational reality as an intrinsically complex and contagious element and consider management sciences as particular and specific elements. For this reason, management sciences are seen as having idiosyncratic and normative dominants in social manifestations. This leads to the rejection of a direct transposition of tools from the exact sciences and also to a particular consideration of the tools and methods adopted.

In management sciences, critical developments and approaches have propelled more interpretive and controversial work on social conditions (Scherer, 2008). These critical management studies (Critical Management Studies) can be dated alongside the publication by Alvesson and Willmott (1992). They encompass research analyzing contradictions and power conflicts with a process-oriented rather than structural perspective (Chanlat, 2013). They encourage the argumentative analysis of organizational structures and cultures and the links between these structures and organizational control mechanisms (Willmott, 1993). Following this path, critical authors consider organizations as components produced by human perception, which is why it is important to change established structures and normative and traditional thinking mechanisms in order to liberate thinking and adopt an action-oriented and voluntaristic view of organizations.

By resorting to critical theory, our objective is to provide a contemporary theoretical foundation for SCM, ranging from standard theories to new contemporary approaches to SCM.

3. Results and Discussion: Critical Theoretical Foundations of SCM

3.1. Traditional Theoretical Foundations of SCM

For many years, it was assumed that the field of SCM lacked sufficient theoretical foundations. This led to a simplified conceptualization of supply chains. Indeed, theory could be useful in updating some of the complexity that characterizes supply chains and SCM (Bentalha, 2022). Without a base of effective organizational relationships, any effort to manage the flow of information or material or financial flows throughout the chain is likely to be fruitless (Pohja, 2019). Thus, there are fundamentally two traditional questions related to the theoretical foundations of SCM: first, how to structure a supply chain when it is perceived as a collaboration between institutions? (Agency theory and transaction cost theory). Secondly, what is needed to manage such a unique structure? (Resource theory and network perspective).

3.1.1. Agency Theory

The agency relationship is a contract linking a person (the principal) who engages an agent to perform an operation. It is a form of delegation of decision-making power from the principal to the agent.

In this perspective, the company is a contract node between the providers of production factors and the clients (Brun, 2006). Given the separation of ownership and control of economic activities between the agent and the principal, various agency problems can arise, such as information asymmetry, goal divergence, differences in risk aversion, uncertainty of outcomes, self-interested behavior, and bounded rationality. Information asymmetry is likely to alter the contractual relationship between the actors and promote the emergence of opportunistic behavior (Boissinot, 2010).

Thus, by creating contracts with supply chain partners that balance rewards and penalties, the potential misalignment between the actors can be mitigated (Narayanan and Raman, 2004). Stock (1997) argues that agency theory can also help managers understand the behavior of supply chains by highlighting the following issues:

- The development of inter- and intra-organizational relationships;
- The maintenance of complex relationships between suppliers and customers;
- The dynamics of risk sharing, capital expenditures, power, and conflicts between intermediaries in the channels;
- The identification of the costs and benefits of supply chain integration.

The literature on SCM using agency theory has focused on the existence of substantial goal conflicts between principals and agents, uncertainty regarding the triggering of a risk, or when evaluating behaviors is difficult (Eisenhardt, 1989). The agency theory's view of the relationship between a faultless principal and an imperfect agent is also debatable. As Perrow (1986) pointed out, agency problems (adverse selection and moral hazard) are not limited to the agency side of the relationship but also exist on the principal's side. The increased complexity of extended networks of principals and agents is another issue not well articulated in classical agency theory. The 'Hydra factor,' as Adams (1996) called it, is a feature of the multiple agency relationship and has ultimately dominated many environments and discussions surrounding SCM. The existence of many principals and agents makes balancing information and controlling behavior more difficult. The measurement tools used by agency theory also need to be considered. The explanatory power of agency theory, particularly regarding the dynamics of relationships, still provides a consistent foundation for understanding behavior surrounding contractual relationships, whether implicit, legal, or not within the supply chain.

3.1.2. Transaction Cost Theory

Agents appear to have limited rationality accompanied by decision-making opportunism. Transaction cost theory relates to the institutional arrangement preferred by economic agents as one that minimizes transaction and production costs (Williamson 1994). SCM relationships are thus represented as a hybrid governance mode between markets and hierarchies (Rindfleisch and Heide, 1997). It analyzes intra- and inter-organizational conventions, their associated costs, and the appropriate governance mode. Thus, as shown by Guillouzo and Thépaut (2004), the hybrid form allows for the establishment of a lasting partnership with specific assets. The aim of this approach is to minimize uncertainty and costs. This explanation is widely used in decisions related to manufacturing or purchasing in supply chains. Furthermore, this theory encompasses both prior costs, such as establishing the logistics network, and subsequent costs, such as control costs.

Several studies on logistics have mobilized this theory. Examples include the outsourcing of logistics activities (Clarke, 1995), buyer-supplier relationships (Mikkola, 2003), and the restructuring of supply

chains (Croom, 2001). It is applicable for analyzing partnerships, such as the relationship between equipment suppliers and automobile manufacturers (Ait El Kadi, 2018), outsourcing decisions based on several constraints (Bouchriha and Ladet, 2002), or more broadly, between logistics partners handling various materials within a systemic and global approach (Williamson, 2008).

3.1.3. Resource-Based Theory

It addresses the competitive advantages related to a company's possession of heterogeneous resources and capabilities. 'Core competencies are collective learning within the organization, particularly the way to coordinate various production skills and integrate multiple technology flows' (Prahalad and Hamel, 1990). Most research in SCM has focused on procurement, Logistics and supply chain management operations. The primary objective was to study how resources can be effectively utilized to improve supply chain performance (Esper and Crook, 2014).

Most SCM research that has emphasized the resource concept has focused on procurement, logistics, operations, and overall supply chain management as key performance factors. While resource-based theory focuses on resource allocation, its use in SCM is more oriented towards describing how a company distributes and combines its resources effectively to achieve superior organizational performance (Hansen et al., 2004). It is the study of resource allocation and deployment that is more important than a simple summation or juxtaposition of these resources. The way resources are managed and deployed can create different results and performance levels for organizations that possess comparable resources. Essentially, interorganizational relationships create flows that utilize resources and are also a potential source of greater competition. The effective and efficient application of resources to processes, procedures, and capabilities is just as important as the resources themselves (Sirmon et al., 2007).

Moreover, resource theory particularly exploits informational resources in supply chain management (Barratt and Oke, 2007). This relationship is specifically oriented towards the dissemination of information between different partners in the logistics network. This is crucial in the context of interorganizational and integrated management. Thus, it carries an implicit assumption in many decisions related to the supply chain. The global expansion of the company's resources requires the trust and commitment of partners, whose establishment and maintenance are supported by means of information dissemination and communication.

3.1.4. Network Perspective

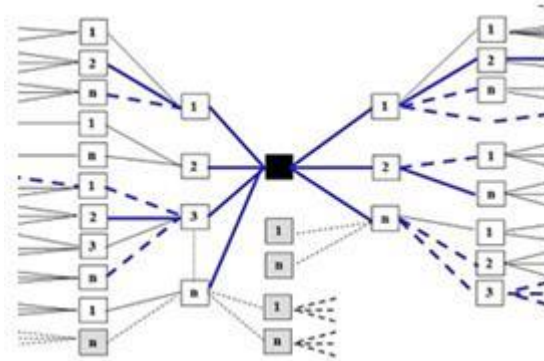
The network perspective is widely discussed in the context of logistics network analysis (Paché and Paraponaris, 2006). For many authors, it is within the very definition of SCM that the network of organizations constituting it is embedded (Carbone and Meunier, 2006).

The network is a mythical form of organization (Pesqueux, 2004) that offers an alternative to traditional forms such as markets or hierarchies. It is thus conceived as a challenge to the integrated firm (Barbant and Chanut, 1989). This structure is characterized by its own logic (Powell, 1990) and its cooperative mode of operation.

Networks are debated in several works as having a descriptive nature and have mainly been applied in SCM to map activities, actors, and resources within a chain. Several researchers focus on long-term trust relationships between chain members. This trust forms the foundation of the chain's agility and flexibility (Scott et al., 2003). A stable network is characterized by the existence of a 'central firm connected upstream and downstream to a carefully selected number of partners,' while a dynamic network is composed 'of components along the value chain assembled contractually, to be a unique

project or product, and then disassembled to become part of a new value chain for the next productive project' (Miles and Snow, 1992). Supply chains are often graphically represented as a schematic network illustrating the relationships between its elements. This approach is akin to the 'focal' vision of the supply chain (Meurier and Paché, 2018) with a hub that connects the parts of the network.

Figure 3 : The supply chain as a stable network.



Source : Lambert et al., 1998, p. 7

By applying the foundations of these four theories to SCM to explain its functioning, researchers assume various prerequisites, as well as a strategy for integrating processes, structure, and management elements, which would lead to cost reduction and increased customer satisfaction. It is important to note that most studies emphasize that SCM cannot be explained by a single theoretical framework. Moreover, in the context of socio-economic and institutional points, the underlying theories of SCM tend to focus on interorganizational phenomena, as SCM is applied within and between organizations.

After examining different approaches to supply chain management, it can be stated that the organization of functions within the supply chain may vary depending on the business context. Thus, it is crucial to provide a critical reading of the theoretical foundations of SCM.

3.2. Towards a Critical Approach to SCM Theories

The theories presented earlier are not the only possible or conceivable theoretical foundations. Indeed, these approaches provide only a partial understanding of the 'reality' (Camman, 2009) of SCM approaches. However, there is a significant simplification of this reality with the sustained and unconditional attachment to the four theoretical currents presented earlier. Many authors have traced other complementary theoretical foundations of SCM. The goal is to find research working with theoretical foundations by questioning critical foundations or radical reflexivity (Camman, 2019).

Although SCM has existed for more than 30 years, it still lacks a socio-economic theoretical base that can be used to explain and understand this particular form of interorganizational arrangement. Recently, several researchers have presented contributions that enhance our understanding of the concept of interorganizational management of different product and/or information flows (Halldorsson et al., 2007).

Thus, there is a prominent place for strategic management since logistics management is a strategic field of action. This is a vision marked by the continuous search for stakeholder satisfaction throughout the supply chain (Fabbe-Costes, 1997). Also, the links between strategy and structure, embodied by discussions on contingency variables, complement environmental and structural analyses of supply chains (Salaun et al., 2018). Currently, research on intra- and interorganizational knowledge management and its impact on SCM structure (Ruel, 2018, and Ruel, 2019) discusses analyses from the perspective of the strategic alignment of logistics actors.

Additionally, another possible and somewhat marginalized theoretical framework is based on the relationship between logistics network actors and neo-institutional and sociological theories. These currents have the advantage of integrating cultural and cognitive approaches into logistics organizational realities (Livolsi, 2009). Indeed, the analysis of institutions as structures that create individual and collective social stability is crucial in SCM.

We can also mention social capital theory (Avery and Swafford, 2009), game theory, and structuration theory (Camman, 2019). As an illustration, game theory presents an opportunity to explain geographic specializations in supply chains and incorporates a partnership view of the divergences between logistics actors. It integrates the rationality of actors and the presence of information within an interactive and dynamic framework. Based on strategic possibilities, this theory offers the opportunity to study various possible choices and seek solutions based on an optimal equilibrium in the sense of Nash. Furthermore, the theory allows for the study of logistical decisions from a cooperative or non-cooperative perspective of the actors.

Value-based approaches stipulate an interpretation of future perceived value (Z  roual et al., 2011). It is an immediate understanding of customer needs throughout the supply chain. It is far from a specific issue of optimal resource allocation but rather the continuous management and balance of all the links in the supply chain. The initial choice of logistics networks and the stability of these organizational forms therefore rely more on their ability to create value for all the logistical links in the chain and the different network partners. This value remains relatively subjective and partial, but the creation of value in the market and the exchange of value conditions the survival and development of the logistics network. Thus, defining and measuring the capacity of the logistics network to create value is a key theoretical vision in the theoretical foundations of the critical approach to supply chains.

Chaos theory is largely developed from mathematics and the physical and natural sciences. Chaos theory attempts to explain apparent disorder in a very ordered way. The basis of the theory asserts that things are not truly random but simply complex. Many seemingly random events can be represented by a simple calculation that, when iterated many times, produces complex results (Wheatley, 1999). A supply chain is a complex system that involves multiple entities encompassing activities of goods movement and value addition from raw materials to final delivery. The name 'chaos' may be misleading to some, as they associate chaos with total randomness. The equations of chaos do not reveal randomness but, on the contrary, produce complex patterns (Burns, 2002). To structure the supply chain, it is necessary to understand the demand patterns, service level requirements, distance considerations, cost elements, and various other factors impacting the network design. It is easy to see that these factors are highly variable by nature and that this variability must be taken into account during the supply chain design process. Moreover, the interaction of these complex considerations can have a significant impact on the outcome of the structure (Stapleton et al., 2006).

Analyzing the chaotic effects in SCM can help understand the mechanisms for reducing external shocks or study the effects of these phenomena on the focal company in the logistics network or on the different levels of logistics partners in a global value network.

SCM is also a specific form of management and work. It is also a key concept in the analysis of power and the embedding of management. Some choices related to the size of the logistics network or the nature of partnerships can be explained based on the leaders' desire to embed themselves in organizational structures. Finally, another theoretical avenue of explanation can be explored by analyzing the contribution of the risk-based approach (Ouabouch, 2016) and the resilience of the supply chain (Haouari et al., 2010).

Table 3 summarizes the main theoretical currents that can be considered for studying the theoretical foundations of SCM.

Thus, several approaches and determinants are present in supply chains and in the management of these value chains. It is crucial to broaden the theoretical contours explaining SCM to incorporate new approaches that can offer broader visions of interpretation and analysis of logistical phenomena.

Conclusion and Perspectives:

Supply chain management outlines an integrated vision of interorganizational management. It provides a managerial foundation for controlling flows through new paradigms. The theoretical approach adopted to explain SCM has been limited for many years to certain specific theories. These include agency theory, transaction cost theory, network theory, and resource theory. These theories offer an initial and important foundation for explaining the theoretical contours of phenomena related to logistics management and explaining the limits and scope of supply chains. However, these theories do not provide a global vision of the phenomenon studied, given the existence of several other complementary and current approaches.

The goal is to offer a critical reading of the theoretical foundations underlying the supply chain management paradigm within an updated and critical framework. It is essential to complement traditional explanatory theories of supply chain management with new, additional, and dynamic approaches.

The work carried out provides a theoretical foundation for future research aiming to study the theoretical contours of supply chain management and explain the various phenomena related to logistics paradigms. By expanding the envisioned theoretical vision, it is possible to integrate a series of new theories offering varied perspectives for analysis. The advantage of this approach is to rekindle the theoretical debate on the integrative and holistic nature of supply chains, and consequently, offer a new theoretical foundation for supply chain management.

Prospective possibilities exist, whether in terms of broadening the selected studies, validating theoretical frameworks through empirical research, or analyzing other theoretical avenues. Indeed, this work seems to serve as a theoretical foundation for future deepening aimed at giving SCM theories a theoretical and managerial renewal (Alla et al., 2022). Expanding discussions on the theoretical contours of SCM is an important vision in defining and redefining SCM, given the various environmental and organizational changes related to logistical themes.

Bibliography :

- 1) Alla, L., Bentalha, B., & Bouhtati, N. (2022). Assessing Supply Chain Performance in the Covid 19 Context: A Prospective Model. In 2022 14th International Colloquium of Logistics and Supply Chain Management (LOGISTIQUA) (pp. 1-6). IEEE.
- 2) Alvesson, M., & Willmott, H. (1992). On the idea of emancipation in management and organization studies. *Academy of management review*, 17(3), 432-464.
- 3) Avery, S. L., et Swafford, P. M. (2009). Social Capital Impact On Service Supply Chains. *Journal of Service Science (JSS)*, 2(2), 9-16, <https://doi.org/10.19030/jss.v2i2.4282>
- 4) Ayadi, S. (2009). Externalisation et création de valeur au sein de la « Supply Chain » : l'entreprise étendue. *La Revue des Sciences de Gestion*, 236(2), 85-93. doi:10.3917/rsg.236.0085
- 5) Baglin G., Bruel O., Garreau A., Grief M. et Van Delft C. (2001). *Management industriel et logistique*, 3^{ème} édition, Economica, Paris.
- 6) Barbant J.C. & Chanut P. (1989). Les réseaux créateurs de richesses, *Annales des Mines/Gérer et comprendre*, 15(1), 16–27.
- 7) Barratt, M., et Oke, A. (2007). Antecedents of supply chain visibility in retail supply chains: A resource-based theory perspective. *Journal of Operations Management*, 25(6), 1217-1233. <https://doi.org/10.1016/j.jom.2007.01.003>
- 8) Beaulieu, M., Rebolledo, C., Roy, J. et Landry, S. (2018). La recherche-action dans le domaine du supply chain management: Quelles conditions clés ?. *Revue française de gestion*, 277(8), 61-76. doi:10.3166/rfg.2019.00293.
- 9) Bechtel, C., et Jayaram, J. (1997). Supply Chain Management: A Strategic Perspective. *The International Journal of Logistics Management*, 8(1), 15–34.
- 10) Bentalha, B. (2022). Green transportation Balanced scorecard model: a fuzzy-delphi approach during COVID-19. In *Computational Intelligence Techniques for Green Smart Cities* (pp. 107- 127). Cham: Springer International Publishing.
- 11) Bentalha, B., Hmioui, A., & Alla, L. (2019). The digitalization of the supply chain management of service companies: a prospective approach. In *Proceedings of the 4th International Conference on Smart City Applications* (pp. 1-8).
- 12) Berry D., Towill D.R. et Wadsley N., (1994), Supply Chain Management in the Electronics Products Industry. *International Journal of Physical Distribution & Logistics Management*, 24(10), 20-32.
- 13) Burgess, K., Singh, P. J., & Koroglu, R. (2006). Supply chain management: a structured literature review and implications for future research. *International Journal of Operations & Production Management*, 26(7), 703–729. doi:10.1108/01443570610672202

- 14) Burns, J.S. (2002), "Chaos theory and leadership studies: exploring uncharted seas", Journal of Leadership and Organizational Studies, Vol. 9 No. 2, pp. 42-57.
- 15) Camman C., (2009). Le pilotage des démarches de supply chain management: une approche constructiviste, Acte de la Conférence Annuelle de l'Association Internationale de Management Stratégique, Grenoble.
- 16) Camman, C. (2019). Quelles potentialités de/pour la critique en supply chain management?. *Logistique & Management*, 27(1), 55-67.
- 17) Carbone V., et Meunier C. (2006), Supply chain management : portée et limites. L'apport des théories des réseaux, Actes de la 15^{ème} conférence de l'AIMS, Genève, 13-16 juin.
- 18) Carbone V., et Meunier C. (2006), Supply chain management : portée et limites. L'apport des théories des réseaux, Actes de la 15^{ème} conférence de l'AIMS, Genève, 13-16 juin.
- 19) Chanlat, J. F. (2013). Les études critiques en management. Un rappel historique. *Communication. Information médias théories pratiques*, 31(1).
- 20) Clarke J. (1995). Pourquoi externaliser les prestations logistiques ? *Logistique & Management*. 3(1), 59-66. Doi:10.1080/12507970.1995.11516613.
- 21) Cooper, M. C., Lambert, D. M., & Pagh, J. D. (1997). Supply Chain Management: More Than a New Name for Logistics. *The International Journal of Logistics Management*, 8(1), 1-14. doi:10.1108/09574099710805556
- 22) Croom, S. (2001). Restructuring supply chains through information channel innovation. *International Journal of Operations & Production Management*, 21(4), 504-515.
- 23) Croom, S., Romano, P., & Giannakis, M. (2000). Supply chain management: an analytical framework for critical literature review. *European Journal of Purchasing & Supply Management*, 6(1), 67-83.
- 24) Duarte S., Cruz-Machado V. (2018) Exploring Linkages Between Lean and Green Supply Chain and the Industry 4.0. In: Xu J., Gen M., Hajiyevev A., Cooke F. (eds) *Proceedings of the Eleventh International Conference on Management Science and Engineering Management. ICMSEM 2017. Lecture Notes on Multidisciplinary Industrial Engineering*. Springer, Cham. 1242-1252. https://doi.org/10.1007/978-3-319-59280-0_103
- 25) Egret P. (2013), Synchronisation des flux physiques et financiers : mise en évidence de l'échec du déploiement d'un ERP au travers d'une étude de cas. *Gestion et management*. Thèse en vue de l'obtention du Doctorat ès Sciences de Gestion, Université Nice Sophia Antipolis.
- 26) Eisenhardt, K.M. (1989), "Agency theory: an assessment and review", *The Academy of Management Review*, Vol. 14 No. 1, pp. 57-74.

- 27) El Ouardighi, F. (2008). Le supply chain management : concilier centralisation et indépendance organisationnelle. *Revue française de gestion*, 186(6), 81-88. doi:10.3166/rfg.186.81-88.
- 28) Esper, T. L. and Crook, T. R. (2014). Supply Chain Resources: Advancing Theoretical Foundations and Constructs. *J Supply Chain Manag*, 50(1), 3-5. doi:[10.1111/jscm.12054](https://doi.org/10.1111/jscm.12054)
- 29) Fabbe-Costes N. (1997). L'intervention de la logistique dans la formulation / mise en acte de la stratégie en milieu complexe. Marie-José Avenier (coord.). *La stratégie "Chemin Faisant"*, Economica, 239-267.
- 30) Fabbe-Costes, N. & Lancini, A. (2009). Gestion interorganisationnelle des connaissances et gestion des chaînes logistiques : enjeux, limites et défis. *Management & Avenir*, 24(4), 123-145. doi:10.3917/mav.024.0123.
- 31) Fabbe-Costes, N., Livolsi, L. & Sépari, S. (2018). Supply chain management : Décloisonner pour créer de la valeur. *Revue française de gestion*, 277(8), 13-24. doi :10.3166/rfg.2019.00310.
- 32) Gereffi, G. (2019), Global value chains and international development policy: Bringing firms, networks and policy-engaged scholarship back in. *J Int Bus Policy* 2, 195–210. <https://doi.org/10.1057/s42214-019-00028-7>
- 33) Geunes J., Chang B. (2008). Operations Research Models for Supply Chain Management and Design. In: Floudas C., Pardalos P. (eds) *Encyclopedia of Optimization*. Springer, Boston, MA. 2691-2896, https://doi.org/10.1007/978-0-387-74759-0_467
- 34) Giannakis M. ; Simon R. Croom (2004). Toward the Development of a Supply Chain Management Paradigm: A Conceptual Framework. , 40(2), 27–37. doi:10.1111/j.1745-493x.2004.tb00167.x
- 35) Gibson, B. J., Mentzer, J. T., & Cook, R. L. (2005). Supply chain management: the pursuit of a consensus definition. *Journal of Business Logistics*, 26(2), 17–25. doi:10.1002/j.2158-1592.2005.tb00203.x
- 36) Guillouzo, R., et Thépaut, Y. (2004). Une interprétation de la coopération inter-entreprises en termes de pouvoir informationnel. *La Revue des Sciences de Gestion : Direction et Gestion*, 39, 41-60.
- 37) Habermas, J. (1987). Wie ist Legitimität durch Legalität möglich?. *Kritische Justiz*, 20(1), 1-16.
- 38) Halldorsson, A., Kotzab, H., Mikkola, J. H., & Skjøtt-Larsen, T. (2007). Complementary theories to supply chain management. *Supply chain management: An international journal*, 12(4), 284- 296.
- 39) Hansen, M. H., Perry, L. T., & Reese, C. S. (2004). A Bayesian operationalization of the resource-based view. *Strategic Management Journal*, 25(13), 1279-1295.

- 40) Haouari M., Balambo M.A. & Yao Y. (2010). La pertinence d'une réflexion sur la résilience des supply chains dans un contexte de risques: perspectives pour les supply chains globales. La logistique : clef de la compétitivité des entreprises. Etats des lieux et perspectives, Maroc.
- 41) Hines T. (2004). Supply Chain Strategies: Customer Driven and Customer Focused, Oxford: Elsevier. 408 p.
- 42) Hmioui, A., & Bentalha, B. (2021). Service supply chain management: a literature review. *International Journal of Logistics Systems and Management*, 40(3), 332-353.
- 43) Hmioui, A., Bentalha, B., & Alla, L. (2020). Service supply chain: A prospective analysis of sustainable management for global performance. In 2020 IEEE 13th International Colloquium of Logistics and Supply Chain Management (LOGISTIQUA) (pp. 1-7). IEEE.
- 44) Hoa Vo T.L. et Bironneau L., (2011), Systèmes d'information et gestion globale de la chaîne logistique : un état de l'art. 2ème journée thématique SILOGIN - Système d'information, logistique, innovation, Nov 2011, Nantes, France.
- 45) Houssaini A. (2009). Supply Chain Management et Globalisation des Chaînes de Valeurs : La place du Maroc, Colloque, Logistiqua 2009, Université Qadi Ayyad, EST, Asfi.
- 46) Jones T. et Riley D. (1985), Using inventory for competitive advantage through Supply Chain Management. *International Journal of Physical Distribution and Material Management*, 15(5), 16-26.
- 47) Kahn K.B. (2018), Understanding innovation, *Business Horizons*, 61(3), 453-460, <https://doi.org/10.1016/j.bushor.2018.01.011>.
- 48) La Londe, B. J., & Masters, J. M. (1994). Emerging Logistics Strategies. *International Journal of Physical Distribution & Logistics Management*, 24(7), 35-47. doi:10.1108/09600039410070975
- 49) Lambert, D. M., & Cooper, M. C. (2000). Issues in Supply Chain Management. *Industrial Marketing Management*, 29(1), 65-83.
- 50) Lambert, D. M., Cooper, M. C., & Pagh, J. D. (1998). Supply Chain Management: Implementation Issues and Research Opportunities. *The International Journal of Logistics Management*, 9(2), 1-20. doi:10.1108/09574099810805807
- 51) Livolsi, L. (2009), Le Supply Chain Management : synthèse et propositions, Actes de la XVIIIème Conférence Internationale de Management Stratégique de l'AIMS, 2 au 5 juin 2009, Grenoble
- 52) Meurier, B. et Paché, G. (2018). Capacités dynamiques au sein des chaînes logistiques : Proposition d'une grille de lecture. Les Actes des RIRL 2018. Colloque AIRL-SCM.
- 53) Mikkola, J.H. (2003). Modularity, component outsourcing, and inter-firm learning. *RD Management*, 33(4), 439-454.

- 54) Miles, R. E., & Snow, C. C. (1992). Causes of Failure in Network Organizations. California Management Review, 34(4), 53–72. doi:10.2307/41166703
- 55) Morana J., (2003). De la logistique au supply chain management, E-thèque.
- 56) Muilerman G.-J., van der Hoorn, T., & van der Heijden, R. (2005). Determining the impacts of time- based logistics strategies in the Dutch food industry. International Journal of Logistics Research and Applications, 8(3), 237–247. doi:10.1080/13675560500238894
- 57) Narayanan, V. G., & Raman, A. (2004). Aligning incentives in supply chains. Harvard business review, 82(11), 94-103.
- 58) Ouabouch L. (2016). Etat de la recherche sur les concepts et les approches méthodologiques de la gestion des risques liés à la supply chain. Revue économie, Gestion et société, 6(1).
- 59) Paché G. & Paraponaris C. (2006). L'entreprise en réseau : approches inter et intraorganisationnelles. Les éditions de l'ADREG.
- 60) Perrow, C. (1986), "Economic theories of organization", Theory and Society, Vol. 15 No. 1, pp.11-45.
- 61) Pesqueux Y. (2004). Un "modèle" de l'organisation réseau ?. in Les réseaux : dimensions stratégiques et organisationnelles, Colette Voisin & Sihem Ben Mahmoud Jouini & Serge Edouard (Eds.), Economica, Paris, 27-43.
- 62) Pohja T.-L. (2019). Some theoretical foundations of Supply Chain Management and Supply Networks: the role of social networks in selecting partners. 20th IMP Group Conference Copenhagen2-4.9.2004. <https://www.impgroup.org/uploads/papers/4572.pdf> consulté le 02/12/2019.
- 63) Powell W. (1990). Neither Market Nor Hierarchy: Network Forms of Organization. Research in Organizational Behaviour, 12(1), 295-336.
- 64) Prahalad, C. K. & Hamel G. (1990). The Core Competence of the Corporation. Harvard Business Review, 68(3), 79-91.
- 65) Rahimi R. et Kozak M. (2017) Impact of Customer Relationship Management on Customer Satisfaction: The Case of a Budget Hotel Chain, Journal of Travel & Tourism Marketing, 34(1), 40-51, DOI: 10.1080/10548408.2015.1130108
- 66) Rindfleisch, A., & Heide, J. B. (1997). Transaction cost analysis: Past, present, and future applications. Journal of marketing, 61(4), 30-54.
- 67) Roques T. (2015). Optimisez votre chaîne Logistique : prévoir la demande, gérer les approvisionnements et les stocks, La Plaine St Denis : Afnor Éditions (Gestion Futée), 100 p.

- 68) Ruel S. (2018). Gestion et mise à jour des connaissances en supply chain management : étude de trois facteurs de contingence structurelle. 12èmes Rencontres Internationales de Recherche en Logistique et Supply Chain Management (RIRL), May 2018, Paris, France.
- 69) Ruel, S. (2019). Du passage d'une contingence structurelle à une contingence comportementale ou de l'intérêt des pratiques de gestion et d'actualisation des connaissances en supply chain. *Logistique & Management*, 1–14. doi:10.1080/12507970.2019.1580620
- 70) Sakhuja, S., & Jain, V. (2012). Service Supply Chain: An Integrated Conceptual Framework. CIE42 Proceedings.
- 71) Salaun V., Fabbe-Costes N. & Fulconis F. (2018). Des logistiques temporaires à “la” logistique temporaire : décloisonner sans dénaturer. Rencontres Internationales de la Recherche en Logistique et Supply Chain Management (RIRL-SCM) les 22-23 mai 2018, Paris, organisé par l'AIRL-SCM à la Cité internationale universitaire de Paris, France. Actes des RIRL-SCM 2018.
- 72) Scherer, A. G. (2008). Critical theory and its contribution to critical management studies.
- 73) Scott B., Burt D.N., Copacino W., Gopal C., Lee H.L., Lynch R.P. & Morris S. (2003). Le défi du Supply Chain Management : Construire des relations, *Logistique & Management*, 11(1), 35-43, DOI: 10.1080/12507970.2003.11516780
- 74) Sirmon, D. G., Hitt, M. A., & Ireland, R. D. (2007). Managing Firm Resources in Dynamic Environments to Create Value: Looking Inside the Black Box. *Academy of Management Review*, 32(1), 273–292. doi:10.5465/amr.2007.23466005
- 75) Solano-Cayama, R.A. (2008). Service supply chain management: A hierarchical decision modeling approach. Thèse. New Jersey Institute of Technology. Disponible sur <https://digitalcommons.njit.edu/dissertations/873>, consulté le 11/02/2020.
- 76) Stadtler, H., (2000). Basics of supply chain management. In:Stadtler, H., Kilger, C. (Eds.), *Supply Chain Management and Advanced Planning—Concepts, Models, Software and Case Studies*, Berlin, 7–28.
- 77) Stapleton, Drew; Hanna, Joe B.; Ross, Jonathan R. (2006). Enhancing supply chain solutions with the application of chaos theory. *Supply Chain Management: An International Journal*, 11(2), 108–114. doi:10.1108/13598540610652483
- 78) Stevenson M., & Spring M. (2009). Supply chain flexibility: an inter-firm empirical study. *International Journal of Operations and Production Management*, 29(9), 946-971. <https://doi.org/10.1108/01443570910986238>
- 79) Stock, J. (1997), “Applying theories from other disciplines to logistics”, *International Journal of Physical Distribution & Logistics Management*, Vol. 27 Nos 9/10, pp. 515-39
- 80) Stock, J. R., & Boyer, S. L. (2009). Developing a consensus definition of supply chain management: a qualitative study. *International Journal of Physical Distribution & Logistics Management*, 39(8), 690–711.

- 81) Szostak, B. (2018). Créativité, innovation et fournisseur, comment créer de la valeur en SCM ? *Revue française de gestion*, 277(8), 171-175. doi:10.3166/rfg.2019.00303.
- 82) Tan, K. (2001). A Framework of Supply Chain Management Literature. *European Journal of Purchasing & Supply Management*. 7(1), 39-48. 10.1016/S0969-7012(00)00020-4.
- 83) Torset, C. (2018). Stratégie et supply chain management, un mariage de raison ? *Revue française de gestion*, 277(8), 181-185. doi:10.3166/rfg.2019.00298.
- 84) Vedel J.P. et Kokshagina O., (2021) How firms undertake organizational changes to shift to more- exploratory strategies: A process perspective, *Research Policy*, 50(1), 104-118, <https://doi.org/10.1016/j.respol.2020.104118>.
- 85) Wang F. (2010). Le supply chain management et la culture : la mise en oeuvre du supply chain management dans le contexte culturel chinois. Thèse de doctorat. Aix-Marseille 2 (École Doctorale Sciences Economiques et de Gestion d'Aix-Marseille), en partenariat avec Centre de recherche en transport et logistique (Aix-en-Provence, Bouches-du-Rhône).
- 86) Wheatley, M.J. (1999), *Leadership and the New Science*, 2nd ed., Berrett-Koehler, San Francisco, CA.
- 87) Williamson O.E. (1994). *Les institutions de l'économie*, InterEditions (traduit de l'américain : *The Economic Institutions of Capitalism*, The University Press New York, 1985).
- 88) Williamson O.E. (2008). Outsourcing: transaction cost economics and supply chain management. *The journal of supply chain management*, 44(2), 5–16.