



Leveraging Supply Chain Leadership for Dynamic Capabilities and Organisational Resilience

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ABSTRACT

Organisational resilience has been identified as one of the critical factors in developing sustainable supply chains. To date, extant research discusses the role of dynamic capabilities in enhancing organisational resilience, particularly in developing and reconfiguring internal and external resources to address the changing business environment. Unfortunately, little attention has been paid to exploring the impact of buying firms' leadership (or supply chain leadership) on the existing relationships between dynamic capabilities and organisational resilience. As a firm's performance has a significant impact on its entire supply network (in both upstream and downstream orientations), the responsibility to improve organisational resilience could be extended to the buying or focal firms, particularly during unprecedented times such as the pandemic. This study aims to propose a conceptual framework for examining the impact of dynamic capabilities and organisational resilience. In general, this study suggests that dynamic capabilities (adaptive, absorptive, and innovative capabilities) have a significant impact on organisational resilience. Furthermore, this study proposes that supply chain leadership moderates the relationship between dynamic capabilities (adaptive, absorptive, and innovative capabilities) and organisational resilience. It is expected that this study will facilitate discussions on the need to deepen the comprehension of supply chain leadership and its influence on dynamic capabilities and organisational resilience. The study contributes to the existing literature by addressing the gaps between supply chain leadership, dynamic capabilities, and organisational resilience domains.

Keywords: dynamic capability, organisational resilience, supply chain leadership, buyer-supplier relationship, governance

INTRODUCTION

Organisational resilience (OR) refers to the ability of a firm to anticipate potential risks and adapt to disruptions [1]. The ability of a firm to develop OR is crucial as it determines the survival of the firm and its supply chain partners. The ability of a firm to leverage resilience cultivates its capability to adapt unexpected events including the pandemic, natural disasters and economic crises. Nonetheless, OR allows firms to cope with competitive business environment and ensure their survival in the industries [2]. In general, OR is conceptualised as the ability of a firm to recover from or cope effectively to external changes. OR also reflects organisational capabilities to continuously manage equilibrium in a dynamic business environment by controlling the resources and absorbing an economic impact without changing the ecological structure [3].

Recent environmental turbulence including the pandemic and economic disruptions has forced firms to revisit their organisational strategies and action plans. The current phenomenon has also changed firms' actions and behaviour, where a new set of change management perspectives and capabilities must be developed and scrutinised to remain competitive in the market [4]. Furthermore, in the current uncertain business environment, firms have to leverage on their dynamic capabilities (DCs) to improve their OR [1]. Extant studies found that the understanding of DCs in a firm facilitates business resilience in times of crisis and turbulence. The notion of DCs suggests an approach where an opportunity or threat once sensed, it should be seized to reconfigure the business activities [5]. Subsequently, the business activities should embrace new market demands and must be transformed to adapt with the rapid changes in the industry. These capabilities support business entities not only in adapting to the existing or new business environment, but also fostering innovation and collaboration with their supply chain partners and stakeholders.

Nevertheless, DCs are prerequisite in the current business environment as firms have to be adaptable to the uncertainty and the rapid changes of business practices. Firms must be able to adapt with the new normal and the restructuring of new business practices has to be carried to ensure business continuity [6]. In the same vein, DCs will offer firms to the ability of exploring new opportunities and market segments. Firms have to be agile and must develop emergent strategies for sustainable business operations [7]. These are consistent with existing literature such as [8] and [9], who found that firms who leverage on their DCs survive and recover better from crises.

As the current business environment is characterised by demand uncertainty and intense competition, the relationship with supply chain partners is extremely critical. The development of supply chain partners (particularly upstream suppliers) is crucial in ensuring competitiveness and business survival [10], [11]. A close relationship between firms and their supply chain partners across business practices and networks has a significant contribution towards product development, technological innovation and business operations. These activities are expected to drive towards better performances of all parties in the supply networks. Within this context, extant literature suggests that leadership from the supply chain partners (also known as supply chain leadership (SCL)) is needed to orchestrate business activities and improve competitiveness [12]–[15].

The proposition of inter-organisational collaboration and management in supply chain environment through a leadership perspective is not a new notion. Previous studies postulate that supply chain partners have the responsibility to orchestrate supply chain activities as the performance of suppliers (or downstream partners) will directly influence buying or focal firms. Hence, supply chain leaders should embrace their role to supervise and govern supply chain networks. Previous studies have also highlighted the importance of SCL from various domains including channel leadership, governance mechanisms, and institutional pressures [16]–[23].

Although extensive research has been carried out on DC and OR, no single study exists in the literature that adequately describes the stakeholder impact on both domains, particularly from the perspective of supply chain governance. Nevertheless, despite the recent emerging interest in the SCL concept, extant studies focus on the performance of the focal firms and little emphasis has been devoted towards the upstream suppliers. This study aims to propose a conceptual framework of the integration between three main variables in improving firms' sustainability. To achieve the objective of this study, the following questions have been formulated:

1. Do dynamic capabilities have a positive influence on organisational resilience?
2. Does supply chain leadership have a positive influence on the relationship between dynamic capabilities and organisational resilience?

The proposed conceptual framework aims to contribute to the existing literature by integrating the DCs, SCL, and OR concepts, and examining their impact on stakeholders, particularly upstream suppliers. The framework will highlight the interplay between these three variables and the positive influence they can have on improving firms' sustainability. Furthermore, this study will provide insight into the role of SCL in enhancing the relationship between DCs and OR. Finally, this study will shed light on the impact of the integration between DCs, SCL, and OR on stakeholders, particularly suppliers, which has received little attention in the existing literature. Overall, the proposed conceptual framework aims to provide a better understanding of the dynamics of the supply chain and the role of different stakeholders in improving firms' sustainability.

LITERATURE REVIEW AND PROPOSITIONS DEVELOPMENT

Organisational Resilience

Organisational resilience (OR) is the ability of a firm to recover after disruptions such as economic issues, pandemics, or natural disasters. Firms that are characterised with high resilience capability are able to adjust timely and adapt to new circumstances to address dramatic changes [24]. The notion of OR begins with the understanding that business processes must be preserved for firms to survive unexpected events. In simpler terms, OR is demonstrated through three fundamental capabilities that are embedded in organisational systems, namely, the ability to remain stable, the ability to retain its function, and the ability to change or adapt [25]. In general, OR can be defined as:

... “a firm’s ability to effectively absorb, develop situation-specific responses to, and ultimately engage in transformative activities to capitalise on disruptive surprises that potentially threaten organisation survival” [1, p.244]

Furthermore, OR is a capability to embrace disruptions and unexpected events through strategic and operations management with assistance of organisational resources (financial

and non-financial) [24]. To date, the concept of resilience is closely associated to the capability and ability of a firm to return to a pre-disturbance state after a disruption. OR has been identified as an antecedent towards organisational performance and a strong predictor of firms' competitive advantages [26].

OR emphasises on survival, adaptability, recovery and development under disruptive situation. OR allows firms to absorb changes and develop situation-specific responses to minimise or mitigate the impact of disruptions [27]. OR promotes transformative activities that facilitate agility and flexibility in addressing rapid changes of business environment. Furthermore, the recent pandemic situation has led towards restructuring of firms' strategic objectives and visions to address new working environment and global supply chain regulations [6]. OR also allows firms to quickly adapt to disruptions while preserving their business activities and safeguarding people, assets, and market segments. In general, OR can be characterised as the ability of a firm to sustain its balance and to avoid shocks, which contribute significantly to business continuity and survival.

In general, OR refers to an organisation's ability to recover from disruptive events and continue its operations. It is drawing upon the notion that firms' ability to withstand and bounce back from adversity, such as natural disasters, economic downturns, or cyber-attacks, will determine their sustainability and survival in the industry. Nonetheless, OR is important as it enables firms to continue their operations and maintain their competitive advantage in the face of disruption.

Dynamic Capabilities: The Dynamic Capability and Resource Based-View Perspectives

The Dynamic Capability Theory (DCT) is a prominent organisational theory in supply chain and operations management [5]. Dynamic capability (DC) refers to a firm's ability to develop, design, and source new products in response to changing market environments [28]. DCT suggests that firms should integrate, build, and reconfigure their internal and external resources to address rapidly changing business environments and customer demands. DCs allow firms to modify or enhance their ordinary capabilities, contributing to better organisational performances. DCT has evolved from the Resource-Based View theory, which suggests that firms should constantly revisit their resources, routines, products, and services to ensure their survival in the industry [29].

Extant studies have highlighted that business survival depends on firms' ability to leverage their resources and knowledge, which their management can acquire, analyse, and utilise to the advantage of the firms [29]. Similarly, firms' ability to grow depends significantly on how they manage their internal and external resources efficiently. [30] developed DCT to explain firms' abilities to deploy their available resources to respond to challenges in the ever-changing environment. The theory postulates that rather than depending solely on a firm's resources to gain a competitive advantage in the market, firms should continuously explore the business environment and subsequently acquire and deploy their resources towards new business opportunities [30]. DCT is closely associated with market orientation, market innovation, and strategic capability.

In organisational studies, DCs are critical as it acts as the core or foundation of a firm in reconfiguring its competencies in a volatile environment [28]. In the context of operations research, capabilities are important because organisational capability influences competitive

strategy and the structure of a firm [31]. The foundation of these capabilities consists of skills, processes, procedures, organisational structures, decision rules, and distinct disciplines that motivate and promote the detection (sensing) and capture (seizing) opportunities to reconfigure (transforming) their capabilities [29]. The proposal of appropriate actions and strategies for firms in times of crisis and their effectiveness are based on their unique firm capabilities (including adaptive, absorptive, and innovative capabilities) [5].

Adaptive Capability:

Adaptability refers to the ability to respond, regulate, and react readily to changing conditions [32]. In organisational studies, adaptation is the process and outcome by which firms use deliberate decision-making to create business integration and coordination. Moreover, adaptive capability is the ability to analyse and synthesise complex information in the changing environment in a way that leads to insight, collaboration, and innovation [6]. Adaptive capability has also been identified as the ability of firms to recover from crises by moderating their effects and mitigating the disturbances through coping mechanisms [8]. Adaptive capacity allows firms to exhibit self-organisation in recovering from unexpected situations or phenomena.

In general, adaptive capability encompasses a firm's capacity to learn, innovate, and enhance its processes, products, and services based on shifting market demands and emerging technologies. For a firm, having adaptive capability is critical for remaining competitive and relevant in a constantly evolving business landscape [9]. Furthermore, adaptive capability and organisational resilience are interlinked, with the former enhancing the latter by enabling organisations to anticipate and prepare for potential disruptions.

When firms possess high adaptive capability, they are better equipped to respond to changes in customer demand, supply chain disruptions, or regulatory changes [5], [30]. They can quickly adapt to changing circumstances and maintain their operations, thereby increasing their resilience to disruptions. On the other hand, organisations with low adaptive capability may struggle to respond to disruptions, taking longer to recover and resume their operations.

Apart from enhancing organisational resilience, adaptive capability can also help firms proactively manage risks and opportunities. By being adaptive, firms can identify potential risks and opportunities early and take proactive steps to mitigate or exploit them. Moreover, adaptive capability fosters innovation and creativity. Firms that encourage experimentation and learning can develop new products, services, and business models, keeping them ahead of the competition [33]. This further increases their resilience by enabling them to respond better to shifting market demands and emerging technologies.

Overall, adaptive capability is crucial for firms that aim to remain competitive and resilient in a rapidly changing business environment. Organisations that invest in developing their adaptive capability are more likely to succeed in the long term and achieve their strategic goals. Hence, this study proposes that:

Proposition 1: Adaptive capacity has a positive influence on organisational resilience.

Absorptive Capability:

Absorptive capability is the ability of a firm to acquire, assimilate, and utilise knowledge from external sources, such as customers, competitors, suppliers, and other stakeholders [26]. This is crucial for firms to identify new opportunities, anticipate changes in the market, and stay ahead of the competition. In today's fast-changing business landscape, the inability to absorb and apply new knowledge and ideas from the environment can lead to falling behind the competitors and losing market share.

Research on dynamic capabilities emphasises the significance of absorptive capability in a firm. By building absorptive capability, firms can learn from their successes and failures, adopt new technologies and strategies, and ultimately identify new opportunities, develop new products and services, and create new business models [34]. It also enables firms to continuously learn from their environment and improve their performance over time. Strong absorptive capability enables firms to make strategic decisions based on data and evidence, which is essential for long-term success [35]. It also promotes collaboration and partnerships with other firms, leading to new opportunities for growth and innovation, as well as increased knowledge sharing and learning [36].

Overall, absorptive capability is critical for firms that want to stay competitive, innovate, and grow. Investing in absorptive capability can help firms achieve their strategic goals, succeed in the long term, and enhance their resilience to external shocks and disruptions such as economic downturns, natural disasters, technological advancements, and changes in the competitive landscape. Hence, this study proposes that:

Proposition 2: Absorptive capacity has a positive influence on organisational resilience.

Innovative Capability:

The ability to innovate has become a crucial factor for the long-term sustainability of any company. Those who can adapt to shifting market demands and innovate are more likely to thrive and succeed in the long run. Innovative capability refers to a firm's capacity to create, develop, and implement new products, services, processes, or business models [9]. This is a critical attribute for businesses that aspire to remain competitive and responsive to their customers' changing needs. With the rapid pace of technological advancement and the intensifying competition, failure to innovate can result in businesses being left behind and becoming irrelevant.

The significance of innovative capability for business survival lies in its capacity to help companies stay competitive. In the globalised marketplace of today, businesses face fierce global competition. To maintain a competitive edge, firms must continuously develop new products and services that differentiate them from their competitors [37]. This necessitates an innovative business practice that values experimentation, risk-taking, and creativity [6]. Furthermore, innovative capability is crucial not only for staying competitive but also for driving growth and expansion into new markets. By creating new products and services, businesses can reach out to fresh customer segments and diversify their revenue streams. This can assist in lowering reliance on a single product or market, which can be risky in competitive markets [38].

Innovative capability can also improve a firm's operational efficiency and decrease costs. By creating new processes and systems, businesses can streamline their operations, automate repetitive tasks, and decrease errors [33]. This can assist in increasing productivity and profitability, which is essential for long-term survival. Innovative capability also plays a critical role in mitigating risk. Firms that do not innovate and adapt to changing market conditions are more likely to encounter significant disruptions, such as shifts in customer preferences, economic downturns, and technological disruptions [28]. By fostering innovative capability, businesses can better anticipate and respond to these risks, minimising their impact on their operations and long-term goals.

Overall, innovative capability is critical for business survival in the dynamic business environment of today. By remaining competitive, driving growth, enhancing operational efficiency, and mitigating risk, firms can build a strong foundation for long-term success [33]. To build their innovative capability, firms must foster a culture of innovation, promote collaboration, invest in research and development, adopt new technologies, and create a diverse team. By doing so, businesses can increase their chances of survival by staying competitive, driving growth, enhancing operational efficiency, and mitigating risk [31]. Hence, this study proposes that:

Proposition 3: Innovative capacity has a positive influence on organisational resilience.

Supply Chain Leadership

In recent years, research on leadership has expanded beyond the traditional focus on individual leaders within a single firm to include the inter-organisational setting [39]. This emerging field has led to the development of the concept of supply chain leadership (SCL). While SCL is based on classical leadership theories, it differs in that it places greater emphasis on the organisational leadership concept rather than the role of an individual leader within a single firm [40]. Essentially, SCL is concerned with how a firm can influence another firm at the inter-organisational level. This has led to a growing body of literature exploring the role of SCL in shaping supply chain relationships and enhancing overall performance. Notably, several studies have examined the impact of SCL on factors such as trust, collaboration, and innovation within supply chains. Overall, the concept of SCL offers a valuable framework for understanding the role of leadership in shaping inter-organisational relationships and driving success within supply chains.

As mentioned earlier, the concept of SCL is primarily focused on the leadership behaviours of firms and is based on classical leadership theories as identified by scholars such as [41]–[43]. Its primary aim is to assess a firm's ability to influence the performance, behaviours, and actions of other members within the supply chain, as discussed in studies by [17], [44]–[46]. Moreover, the scope of SCL goes beyond the boundaries of individual firms to encompass the entire supply network, as highlighted in research by [12]. As such, firms that adopt the SCL approach are expected to demonstrate their leadership style to all members within their supply chain, including upstream suppliers and downstream service providers [47]. Essentially, the SCL concept proposes that a firm should act as a supervisor or orchestrator of its supply chain in order to enhance its performance and overall success.

The concept of SCL is anticipated to have a moderating impact on the connection between dynamic capabilities and organisational resilience. An effective SCL approach can improve an organisation's resilience by developing dynamic capabilities, which can enable the firm to respond swiftly and adapt to unforeseen disruptions [48]. A supply chain leader who prioritises a culture of innovation and continuous learning can assist its supply chain members in acquiring the necessary skills and knowledge to react appropriately to new challenges and prospects [39], [49]. This approach can lead to a more flexible and adaptable supply chain that is capable of responding promptly to the changing demands of the market, enhancing overall organisational resilience.

Furthermore, proficient supply chain leaders can also play a significant role in mitigating the adverse impacts of unexpected shocks on organisational resilience across the supply networks. They can provide clear direction and purpose, communicate proficiently with stakeholders, and develop contingency plans to manage unforeseen disruptions [48]. These leaders can also establish trust and commitment among supply chain partners, which can increase their readiness to adapt and respond to unexpected shocks. SCL can also assist in cultivating a resilient organisational and supply chain culture that fosters the growth of dynamic capabilities. A resilient culture is characterised by an environment that promotes experimentation, learning, and knowledge exchange that supports the supply chain members in their endeavours to acquire new skills and knowledge. Supply chain leaders who prioritise a resilient culture can assist in creating a supply chain environment that is more flexible and responsive to unexpected shocks [50].

It can be concluded that the role of SCL is crucial in moderating the relationship between dynamic capabilities and organisational resilience. Through effective SCL, a firm in the supply networks can develop dynamic capabilities and respond efficiently to unexpected shocks while increasing its resilience. Additionally, SCL can mitigate the negative effects of unexpected shocks and promote a resilient organisational culture that supports the development of dynamic capabilities [49]. By prioritising SCL, firms can adapt to the rapidly changing business environment and remain competitive. Hence, the final proposition of this study is:

Proposition 4: Supply chain leadership moderates the relationship between Dynamic Capabilities and Organisational Resilience

The proposed framework is depicted in Figure 1.

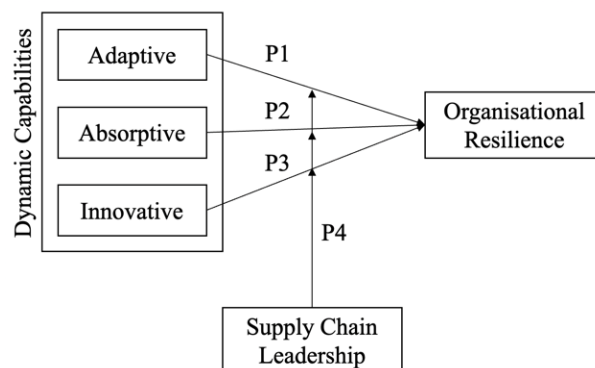


Figure 1: Proposed Conceptual Framework

CONCLUSION

Supply chain relationships and collaboration have become increasingly important in recent economic systems, particularly in developing countries, for fostering OR. While DCs have been identified as a means of achieving OR, the role of stakeholders, especially buying and focal firms, has often been overlooked. The study proposes that SCL is a critical factor in developing OR across the supply network. In specific, this study integrates three key variables in organisational studies, namely dynamic capabilities (DCs), supply chain leadership (SCL), and organisational resilience (OR). The study seeks to demonstrate the positive impact of DCs on OR and the moderating role of SCL in enhancing this relationship.

SCL is a relatively new concept that focuses on how a firm can influence other firms (particularly upstream suppliers) at the inter-organisational level to enhance supply chain relationships and performance. This study proposes firms should act as supervisors of their supply chains to enhance performance and overall success. Moreover, SCL can improve organisational resilience by developing dynamic capabilities and mitigating the negative effects of unexpected shocks. Proficient supply chain leaders can establish trust and commitment among supply chain partners, provide clear direction and purpose, and develop contingency plans to manage unforeseen disruptions. SCL can also help cultivate a resilient organisational culture that fosters the growth of dynamic capabilities. Overall, SCL offers a valuable framework for understanding the role of leadership in shaping inter-organisational relationships and driving success within supply chains.

The propositions presented in this study offer a guide for firms and stakeholders to improve their supply chain relationships and enhance OR. The study highlights the importance of SCL in implementing DCs and achieving OR. Top management in firms can use these findings in the early planning stages of adopting DCs in their supply networks. The proposed integrated framework recognises the current gaps between DCs, SCL, and OR domains. Nonetheless, this research contributes to the emerging literature and offers a conceptual framework for DCs adoption and OR. While previous studies have focused on OR challenges, drivers, and implementation, the discussion on SCL in this domain is limited. This study sheds light on the role of stakeholders and their criticality in improving DCs and OR. SCL is identified as a critical factor in facilitating the transition to resilient firms and supply networks.

The study provides an opportunity to advance our knowledge of SCL implementation, particularly in emerging economies, where the private and public sectors can stimulate economic, social, and environmental sustainability agendas. However, the study has some limitations. Firstly, it is based on a review of past literature, and empirical results are not available. Future research should test the proposed relationships empirically. Secondly, the study focuses on a limited number of DCs, neglecting the roles of other DCs. Finally, the study relies on quantitative methods and future research should employ qualitative methods to develop a more in-depth understanding of the phenomenon.

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