CHAPTER 1
INTRODUCTION
1 INTRODUCTION

This chapter focuses on the importance of supply chain orientation (SCO) and is organized as follows: Section 1.1 gives the basic underlying philosophy of supply chain management (SCM) in the business context. Section 1.2 describes the unpleasant experiences of Indian and global firms owing to poor SCM, which motivated us to explore SCO and its linkages with supply chain performance (SCP). Section 1.3 develops the management context to explore SCO and SCP. Sections 1.4 and 1.5 describe the scope of this study and the organization of the thesis, respectively.

1.1 Overview

SCM is one of the most widely studied areas in operations management. The extant literature suggests that a firm’s SCM has a direct effect on a firm’s performance (e.g. Fisher, 1997; Hult, Ketchen, & Arrfelt, 2007; Mentzer, Stank, & Esper, 2008, Ralston et al., 2015). SCM is an integral element for business success and overall customer satisfaction. Further, it has a crucial role in the societal development process (Carter & Rogers, 2008), because SCM is the driving force behind disaster relief management (Van Wassenhove, 2006), support medical missions (McKone-Sweet, Hamilton, & Willis, 2005) and tackling all kinds of emergencies (Galindo & Batta, 2013). According to Wisner, Tan, & Leong (2015), SCM plays an important role in improving the quality of life and in Cultural Revolution. The Council of Supply Chain Management Professionals has detailed the importance of SCM as shown in figure 1.1.

Mentzer et al. (2001, p. 18) in their seminal paper have defined SCM as “systemic, strategic coordination of the traditional business functions and the tactics across
these business functions within a particular company and across businesses within the supply chain, for the purposes of improving the long-term performance of the individual companies and the supply chain as a whole.” In a nutshell, SCM helps movement of essential resources to people in need, as efficiently as possible.

Figure 1.1: Importance of SCM
(Source: Council of Supply Chain Management Professionals)
SCM has attracted the interest of researchers and practitioners for more than a few decades (Cooper, Lambert, & Pagh, 1997; Stadtler, 2015) because it has severe impacts on the individual and overall SCP. As per the Chief Supply Chain Officer Report (2014) in SCM World, supply chain practitioners must shift their focus away from typical cost cutting, evolving standard operating procedures, distribution management, etc., and must get ready for a new age of holistic SCM (https://www.scmworld.com/research/reports/the-chief-supply-chain-officer-report-2014/).

Figure 1.2 details the SCM perception of 1029 leading global manufacturing firms. The two things that are evident are as follows: 1) to survive and grow in the marketplace, firms need to integrate with their supply chain partners; 2) The role of SCM is changing and a holistic approach is needed to enhance the overall SCP.

![Figure 1.2: SCM Perception](Source: SCM World – The Chief Supply Chain Officer Report, 2014)
According to Mentzer et al., 2001, a holistic approach to SCM is possible only through the adoption of a concept called *supply chain orientation* (SCO). To reap the benefits of SCM, companies must have the SCO. SCO is an antecedent of SCM (Slone, Mentzer, & Dittmann 2007), because SCM entails the implementation of the SCO across all the members of a supply chain. Only when all the member firms adopt and practise SCO can we say that a particular supply chain is managed effectively to enhance the overall SCP. The motivation for performing this study is explained in the next section.

### 1.2 Motivation

SCM has a direct impact on a firm’s performance, for example, the online e-tailer Amazon has outperformed its rival owing to powerful supply chain strategies and its expertise in logistic processes. This has resulted in “smooth-running, integrated operation” (Gibson, et al., 2005, p. 44). If firms do not pay heed to having effective SCM, then the results can be disastrous. In 2007, Mattel corp. had recalled 1.5 million dolls owing to safety concerns related to excess lead paints in parts made by their suppliers. As argued by Gilbert & Wisner (2010), the issue had serious consequences when it was found that the quality assurance measures of their suppliers were not in line with those of Mattel. Liao, Hong, & Rao (2010) argued that the effect of SCM on firm performance has increased in the last 10 years, as a result of heightened competition, increase in outsourcing and high level of global sourcing. Because firm dependence on supply chain partners is increasing, firms must give credence to threats and opportunities that originate from supply chain relationships. This will lead to an improvement in the overall SCP (Defee & Stank, 2005; Slone et al., 2007).
In spite of having a severe and critical impact on SCP, efforts to achieve SCO are not so evident. According to Rick D. Blasgen, President and Chief Executive Officer (CEO) of the Council of Supply Chain Management Professionals, “Barriers to effective supply chain performance many times are due to the misunderstandings of functional leaders, and how they by working together can affect the total company performance.” In the business world, SCM is a neglected area in overall strategy development. Supply chain leaders of corporations such as Coca-Cola, P&G and Walmart always have to struggle with conflicting demands from various functional departments within their organizations. Firms tend to have a silo view on supply chain issues (e.g. cost, speed, price and customization). These crucial issues if unaddressed may eventually affect the firm’s overall SCP (Kauffeld, Michaels, & Mueller, 2013; Zacharia, Sanders, & Fugate, 2014). Therefore, in this study, we examined holistic view of supply chain i.e. SCO. Further, we used SCO and its impact on SCP and aimed to identify the key variables (mediators) that may enable supply chain firms to enhance overall supply chain performance. The management context is developed in the next section to explore the linkages between SCO and the SCP, as seen in the literature.

1.3 Management Context

Mentzer et al. (2001) have explained SCM by defining two concepts with a single term. The system approach of the coordination of supply chains, from the perspective of each and every tactical activity of various flows in a strategic context (SCM as a management philosophy) is known as SCO. The actual execution of this orientation by the various members of the supply chain is the gist of SCM.
SCO is defined as the “the recognition by an organization of the systemic, strategic implications of the tactical activities involved in managing the various flows in a supply chain” (Mentzer et al., 2001, p. 11). Thus, a firm is considered to have SCO only if it can visualize the implications of coordination of various upstream and downstream flows of services and goods (i.e. from the destination to the source and vice versa). Therefore, a firm is not having a SCO if it can visualize systemic and strategic implications only in one direction. As shown in figure 1.3 a, firm lying in the middle may have SCO, whereas the firms on the either side of the manufacturer lack SCO. Further, SCM will exist only if all supply chain members have SCO. Although a single firm with SCO can implement individual, isolated policies for example Just in Time (JIT), Electronic data interchange (EDI), lean etc. SCM will exist only if all these policies and procedures are coordinated (i.e. the strategic orientation) across the entire supply chain (i.e. systemic orientation).

SCO is the antecedent of SCM. This is because SCM entails only the implementation of SCO by all supply chain members. As shown in figure 1.3b, except for the first and last members, all member firms must have SCO.

Figure 1.3 a.: - Direct/1st Order Supply Chain

Figure 1.3 b.: - Extended/2nd Order Supply Chain
The flows of the last and first members are unidirectional, so these players do not have an upstream/downstream orientation. To summarize, SCO is the basic underlying management philosophy, the implementation of which is SCM. This brings us closer to the definition and perception of SCM. SCO advocates that managers require specific behavioural course of action within their organizations. Hence, it is advocated that firms with SCO should build and cultivate cultural elements (e.g. trust, commitment, cooperative norms, organizational compatibility and top management support) to enhance its relationship with supply chain members (Mentzer et al., 2001).

SCP is a measure to capture the output of SCM. A supply chain network is a complex and dynamic phenomenon; hence, the choice of appropriate SCP indicators is difficult (Panayides & Lun, 2009). When assessing the performance of a system, qualitative ratings (i.e. “good”, “fair”, “adequate” and “poor”) are unclear and difficult to interpret and apply practically. Thus, quantitative evaluation measures are generally preferred to qualitative measures. Various performance measures are used either because of their historical acceptance or their ease in calculating the measure, owing to data availability. However, the selected quantitative measure might not precisely capture the system’s perspective, and may appear to function similarly to the qualitative measure in the long run. In the SCM context, the selection of appropriate
performance measures is more difficult, because the scope of operations spans multiple organizations, multiple product lines, cross-border geographical locations, etc.

SCM models have primarily relied on the following performance measures:

(1) Cost (Cohen & Lee, 1988; Lee & Feitzinger, 1995; Estampe, Lamouri, Paris, & Brahim-Djelloul, 2013); and


Cost as a performance measure is used to quantify the performance measure say inventory carrying cost, holding costs etc. Customer-based performance measures may include parameters such as fill rate, customizations, stock-out probability and lead time. However there are a few performance measures that have literature support but are not extensively used. These include customer satisfaction (Heikkilä, 2002), supplier-based performance measures (Spekman, Kamauff, & Myhr, 1998), risk management (Jüttner, 2005) and information distribution (Nicoll, 1994). According to another approach proposed by Li et al. (2009) to enhance SCP, manufacturing should link supply chain goals/objectives with clearly defined performance parameters. Overall, the SCP as a construct has been used to capture various cost dimensions, customer responsiveness and a combination of the two.

Research on SCO is limited, and SCO is thus a largely unexamined topic (Schulze-Ehlers et al., 2014). Several authors have studied SCP, but its association with SCO has not been researched extensively.

There are only a few studies that have tried to link SCO with SCP (Min, Mentzer, & Ladd, 2007; Omar, Davis, Sramek, Fugate, & Mentzer, 2012; Patel, Azadegan, &

1.4 Scope

The scope of this study is limited to the following:

1. SCO dimensions: This study is restricted to all the six dimensions of SCO (trust, commitment, cooperative norms, organizational compatibility and top management support).

2. SCP aspects: SCP is restricted to operational performance (fill rate, inventory turnover and return on asset) and customer-focused performance (delivery speed and order flexibility).

3. Mediating variables: Our literature review helped us to identify supply chain integration (SCI) and supply chain agility (SCA) as intervening variables. The mediation effect of SCI and SCA on the SCO-SCP relationship is studied to explain the facilitators and outcomes of the SCO.

4. Indian context: This study is carried out in the Indian context because Indian business practices differ from western business practices. India’s infrastructure, service requirements, government policies and operating environment are some of the prominent challenges in front of Indian business firms. Given the paucity of time we restricted this study to the Indian context;
however, this study can be extended to other developed countries as well to
generalize our proposed theoretical framework.

5. Tangible products: This study is restricted to tangible products such as
computer equipment, apparels and food because the supply chains for these
products are different from the supply chains for services (Fisher, 1997;
Christopher, 1998; Ellram, Tate, & Billington, 2004). The management of
intangible product–oriented supply chains calls for a different approach
compared to the management of traditional product–oriented supply chains.

Our study is focused on tangible product–oriented supply chains.

1.5 Organization of the Thesis

This thesis is organized as follows: Chapter 1 introduced SCO and its effects on SCP
in the supply chain context. Chapter 2 discusses the relevant literature on SCO, two
intervening variables and SCP, and it explores the various dimensions of SCO and
their effect on SCP. Further, it identifies the research gaps and research questions.
Chapter 3 describes the conceptual framework and hypothesis of this study. Chapter 4
presents the research methodology adopted for empirically testing the proposed
conceptual model and hypothesis described in chapter 3. Chapter 5 provides the data
analysis and discusses the results obtained in the framing of the proposed hypothesis
and model. It also provides a higher level of analysis such as mediation, multi-group
and impact performance matrix analysis. Chapter 6 concludes the study. It gives
managerial implications and recommendations to Indian manufacturers, and also
states the limitations and provides scope for future research.