SUPPLY CHAIN MANAGEMENT: THE PURSUIT OF A CONSENSUS DEFINITION

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Supply chain management (SCM) is a discipline in the early stages of evolution. It has long been recognized that a discipline or branch of knowledge (e.g., SCM, chemistry) is defined through scientific inquiry, and the experiences of those practicing and researching in the discipline (Kaplan 1964; Popper 1959). New knowledge is constantly processed by those in the discipline to determine discipline definition; scope and boundaries; elements and functions; relationships between elements and functions; relationships with other disciplines; direction and evolution; and significance. As Robert Bartels (1976) stated, “In the development of a scientific discipline, those who make contributions to the body of thought reach stages where they consider the character of what they have done.”

Since the term SCM first appeared in the literature more than twenty years ago (Oliver and Webber 1982), numerous academics, practitioners, and professional organizations have offered definitions. In fact, an Internet search (Google) for “supply chain management definition” in January 2005 yielded 2,360 possible sources. These SCM definitions are a disparate set of descriptions. Some definitions offer a narrow, functionally based perspective (e.g., “SCM is the management and control of all materials and information in the logistics process from acquisition of raw materials to delivery to end user” (CSX World Terminals 2004). Others define SCM broadly e.g., “SCM is the integration of business processes from end user through original suppliers that provides products, services, and information that add value for customers” (Lambert 1994).

Academics have attempted to provide some structure to SCM by re-examining previous SCM definitions and offering more complete SCM definitions that include scope, functions, and relationships. Bechtel and Jayaram (1997) classified more than 50 existing SCM definitions into five schools of thought and identified functional and process areas covered. In addition, a useful framework for SCM analysis was developed. Cooper, Lambert, and Pagh (1997) provided a valuable
review of 13 early SCM definitions; a solid argument that SCM and logistics are not identical; and a conceptual framework for SCM consisting of three components—business processes, management components, and supply chain structure. Finally, Mentzer et al. (2001) classified more than 20 SCM definitions, which led to the assertion that previous definitions attempted to define two concepts—SCM and supply chain orientation (SCO)—with one definition. The study presented an SCO definition; identified SCO and SCM antecedents and SCM consequences; and provided a single encompassing SCM definition and model. Despite these efforts, no consensus has been reached regarding a definition of SCM.

The lack of SCM definition consensus is not surprising given the age of the discipline. This sentiment was echoed by Ballou, Gilbert, and Mukerjee (1999), "As with any new descriptive term for a field of management, there initially will be a lack of consensus as to its definition and consistency in its application." While the current status of the SCM definition is expected, it is not desirable.

A definition conveys fundamental character, is designed to settle a thing in its compass and extent, and removes obscurity or misunderstanding (American Heritage Dictionary of the English Language 2000). A consensus definition of SCM should provide clarity regarding what SCM is and what it is not. A clear definition of SCM is imperative for understanding the concept, achieving acceptance of key elemental functions, and applying SCM in practice and research (Cooper, Lambert, and Pagh 1997; Mentzer et al. 2001). Therefore, SCM definition research efforts must continue. One research effort called for by Mentzer et al. (2001) was posed as a question: "How prevalent is SCM?"

This paper begins with the results of a Council of Supply Chain Management Professionals (CSCMP, formerly the Council of Logistics Management) survey of its members' views of SCM. More importantly, the authors prescribe actions for academics and practitioners to take to ultimately lead to a greater understanding of SCM and a consensus SCM definition.

SURVEY BACKGROUND AND METHODOLOGY

SCM definition research to date provides a solid foundation of SCM knowledge and a variety of conceptual frameworks. However, these various definitions have not been "tested in the marketplace." While it is important for academicians to bring clarity to the SCM definition debate through this type of research, practitioners must also play an active role in the ongoing review of SCM and its evolution. They bring an important, pragmatic perspective that is vital to the establishment and corroboration of a consensus depiction of SCM and its boundaries.

An opportunity to assess the practitioner perspective was generated by CSCMP during an initiative to formalize their definition of SCM. A CSCMP member online questionnaire regarding the role, definition, and boundaries of SCM was developed by the authors, pre-tested and revised, and approved by CSCMP leadership. An e-mail request with a hyperlink to the Internet survey was distributed to 6,422 CSCMP members. The original request and follow-up reminder e-mail
generated 744 usable responses, a participation rate of 11.6%. Figure 1 reveals that the participation rate by type of organization represents a satisfactory cross-section of CSCMP membership.

**FIGURE 1**

**TYPE OF ORGANIZATION**  
**CSCMP MEMBERSHIP** versus survey participants

<table>
<thead>
<tr>
<th>Type</th>
<th>2004 Membership</th>
<th>Survey Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturer</td>
<td>36.1</td>
<td>33.6</td>
</tr>
<tr>
<td>Logistics Service Provider*</td>
<td>24.9</td>
<td>20.5</td>
</tr>
<tr>
<td>Consultancy</td>
<td>11.3</td>
<td>16.7</td>
</tr>
<tr>
<td>Education</td>
<td>6.8</td>
<td>10</td>
</tr>
<tr>
<td>Merchandiser</td>
<td>5.9</td>
<td>7.9</td>
</tr>
<tr>
<td>Technology</td>
<td>5.3</td>
<td>5.2</td>
</tr>
<tr>
<td>Other</td>
<td>9.6</td>
<td>6.1</td>
</tr>
</tbody>
</table>

*Logistics Service Provider category consolidates the following CSCMP type of business categories: 3PL service providers, carriers, and warehouse/distributor.


**SURVEY RESULTS AND DISCUSSION**

A primary issue that helps frame the SCM definition challenge is the perceived role of SCM within the organization. Existing definitions do not portray SCM consistently. Some definitions focus on strategy while others focus on activities, processes, or some combination of the three. Thus, it was important to ask CSCMP members how they primarily view the role of SCM within an organization.
A strong majority of the respondents indicated that SCM involves both strategy and activity (see Table 1). A much smaller percentage of respondents viewed the role of SCM as purely strategic or activity focused. Statistical analysis using the Pearson chi-square test of independence ($p = .041$) and crosstab analysis revealed that differences existed between the respondents based on organization type. Specifically, the academicians had a greater tendency to view SCM strictly as an overriding strategy than did the other respondent groups and a lower tendency to view SCM as a combination of strategy and activity.

**TABLE 1**

**PERCEPTIONS OF SCM**

<table>
<thead>
<tr>
<th>Primary Role of SCM within an Organization</th>
<th>Percent of Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>A combination of strategy and activity</td>
<td>72.6</td>
</tr>
<tr>
<td>A strategy that transcends individual functions</td>
<td>15.6</td>
</tr>
<tr>
<td>A corporate function or activity</td>
<td>9.0</td>
</tr>
<tr>
<td>Something else</td>
<td>2.7</td>
</tr>
<tr>
<td>No response</td>
<td>0.1</td>
</tr>
</tbody>
</table>

Given this widely held view of SCM’s role within organizations, any SCM definition must include both strategic elements and key activities if it is to gain a consensus level of acceptance. The results also suggest that academicians must be cautioned against embracing a myopic, strategy-only view of SCM. Instead, academicians must adopt the broader perspective of their practitioner colleagues when seeking to examine, develop, and revise SCM definitions.

Another goal of the research was to gain insight into CSCMP members’ perceptions regarding the activity boundaries of SCM. Given the wide agreement among existing definitions that SCM clearly involves procurement, manufacturing, and logistics activities (e.g., Coyle, Bardi, and Langley 2002; Mentzer 2000; Simchi-Levi, Kaminsky, and Simchi-Levi 2003), the research targeted six activities that are often associated with SCM. Table 2 provides insight into CSCMP members’ perceptions regarding the relationships between SCM and these activities.
### Table 2

<table>
<thead>
<tr>
<th>Activity</th>
<th>Percent of Responses Encompassed by SCM</th>
<th>Percent of Responses Influenced by SCM</th>
<th>Percent of Responses Minimally Impacted by SCM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supplier &amp; Customer Collaboration</td>
<td>80.8</td>
<td>17.6</td>
<td>1.6</td>
</tr>
<tr>
<td>Information Technology</td>
<td>49.7</td>
<td>47.2</td>
<td>3.1</td>
</tr>
<tr>
<td>Marketing</td>
<td>39.4</td>
<td>46.5</td>
<td>14.1</td>
</tr>
<tr>
<td>Finance</td>
<td>32.4</td>
<td>57.4</td>
<td>10.2</td>
</tr>
<tr>
<td>Sales</td>
<td>32.4</td>
<td>55.4</td>
<td>12.2</td>
</tr>
<tr>
<td>Product Design</td>
<td>24.3</td>
<td>47.0</td>
<td>28.6</td>
</tr>
</tbody>
</table>

Table 2 indicates that each of these six activities plays some role in SCM, according to the respondents. However, only one of the six — collaboration — was widely identified by the respondents as a key component of SCM. Information technology is another important activity, with half of the respondents identifying it as an activity clearly within the boundaries of SCM. The other four activities were cited by a plurality of respondents as influenced by SCM, but not within its boundaries.

These results indicate that collaboration with suppliers and customers should be included in any definition of SCM. However, broadening the definition to specifically include the others activities may not be appropriate, especially if the goal is to reach a high level of consensus.

The final objective of the research was to gauge reaction to proposed CSCMP definitions of SCM and to investigate whether a consensus SCM definition could be reached. Table 3 presents the two potential definitions developed after a yearlong initiative by a CSCMP committee tasked with establishing the organization’s official definition of SCM. Participants in this effort included representatives from the practitioner, academic, 3PL/carrier, consulting, research, and media/publishing communities (Council of Logistics Management 2003).
TABLE 3
SCM DEFINITIONS DEVELOPED BY CSCMP COMMITTEE

**Alternative A** – “Supply Chain Management encompasses the planning and management of all activities involved in sourcing and procurement, conversion, and all Logistics Management activities. **Importantly,** it also includes coordination and collaboration with channel partners, which can be suppliers, intermediaries, third-party service providers, and customers. **In essence,** Supply Chain Management integrates supply and demand management within and across companies.”

**Alternative B** – “Supply Chain Management encompasses the planning and management of all activities involved in sourcing and procurement, conversion, demand creation and fulfillment, and all Logistics Management activities. **Thus,** it also includes coordination and collaboration with channel partners, which can be suppliers, intermediaries, third-party service providers, and customers. In essence, Supply Chain Management integrates supply and demand management within and across companies.”

Note: Primary differences between alternatives are underlined for emphasis.

The survey participants rated each definition according to how well it depicted their perception of SCM using a seven-point Likert scale (from 7 = very accurate depiction to 1 = very poor depiction). Both definitions were viewed as accurate depictions of SCM. A paired samples t-test (p = 0.043) indicated that Alternative B (mean = 5.59, std. dev. = 1.33) was statistically higher rated than Alternative A (mean = 5.46, std. dev. = 1.19). While the result was statistically significant, the mean rating difference (0.1304) did not indicate an overwhelming preference among the CSCMP members.

Ultimately, CSCMP adopted Alternative A as the organization’s official definition of SCM. This definition reflects the survey participants’ belief that SCM is a combination of strategy and activity, and does encompass collaboration. While Definition B generated slightly stronger support, the higher rating was not consistent with the participants’ perceptions of the role of marketing and sales in SCM (less than 40% indicated either activity is encompassed by SCM). Hence, the “demand creation and fulfillment” terminology was not included in the CSCMP definition.

These research results contribute important insights of key stakeholder groups and communities in the ongoing debates over what SCM is, what it includes, and how the discipline is defined. While the new CSCMP definition reflects these current perspectives, only time will tell if it becomes the consensus definition of SCM. Clearly, the field will continue to evolve and continued examination of SCM definitions and boundaries is needed. Academicians and practitioners both need to play a role in this process, as discussed in the next section.
AN AGENDA FOR GREATER SCM UNDERSTANDING

The discipline of Supply Chain Management is going through a normal maturation process of reaching consensus agreement on what is included, and what is not included, in the discipline. The result of this maturation process is an evolving definition of SCM. Witness the fact that, although CSCMP has adopted an “official” definition of SCM, their alternate definition was slightly preferred by their own members. This does not make one definition “right” and the other one “wrong” – it merely means CSCMP adopted a definition that is a starting point for additional discussion by practitioners and academics in the discipline. Again, this is a normal evolutionary process for a discipline. Should “demand creation and fulfillment” be included in the definition of SCM? For that matter, should other business functions (such as finance, product management, etc.) be included? These are questions for the discipline to examine on an on-going basis as the discipline matures.

Both academics and practitioners should play a vital role in this maturation process. Academics should continue a program of research that examines what SCM is and is not. This will require on-going investigations via case studies that examine SCM processes, field interviews that tap the richness of what practitioners believe is involved in SCM, and surveys that provide a wider verification of conclusions reached in the first two types of studies. Through this programmatic examination of what is and is not included in SCM, academics should continue to publish different theoretical models of SCM and its impact on firm performance. Debate and analysis of these findings will help the discipline evolve the definition of SCM.

Practitioners should not be passive in this maturation process by simply participating in the academic studies just mentioned. Rather, practitioners should be an active voice -- at conferences, in trade publications, and in the professional journals – on their experiences in the practice of SCM. Only through adding their experiences to the body of SCM knowledge can the discipline as a whole consider what SCM is and is not.

Corporation will contribute to these debates by adopting SCM philosophies, resulting in either performance enhancement or detriment for the company and their supply chain partners. As various SCM philosophies are (and are not) successful, SCM professionals will further evolve their concepts about the nature of SCM.

Finally, professional associations play a key role in the maturation of SCM by (as CSCMP has done) adopting “official” definitions of SCM, and regularly reassessing their viability. In the 10 years before CLM changed its name to CSCMP, the organization annually reviewed its definition of “logistics” and revised that definition five times. Again, this continual examination and revision of the definition and scope of its discipline is a normal and appropriate role for a professional association. We sincerely hope CSCMP, and other professional associations related to SCM, will continually listen to the voices of SCM academics and practitioners, and the performance of corporations practicing SCM, to continue to evolve our understanding and definition of SCM.
NOTES


Bartels, Robert (1976), The History of Marketing Thought, Columbus, OH: GRID, Preface.


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