What is SCM? And, Where is It?

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SUMMARY

This article provides insight on the evolution and emergence of the supply chain management (SCM) concept and shares conclusions about the future of SCM from the perspective of educators, researchers, and practitioners. Based on a survey of SCM educators, the article seeks to delimit the scope or domain of SCM and how the boundaries have changed and continue to change. This is done by contrasting four perspectives on SCM versus purchasing: traditionalist, relabeling, unionist, and intersectionist.

INTRODUCTION

Supply chain management (SCM) remains a topic of considerable interest among supply practitioners and academicians. Academic journals are being created or renamed; business schools are offering SCM programs; professors are altering their titles and research interests. This flurry of activity, across multiple business disciplines, makes the scope of SCM unclear. Guided by a recent survey of educators and careful review of an academic journal, this article seeks to delimit the real meaning and scope of SCM. The article is organized into the following sections: introduction and overview, definitions of SCM from the literature, perspectives on the SCM versus purchasing issue, survey results from ISM educators, content analysis of *The Journal of Supply Chain Management*, and finally, implications of the results for research and practice are offered.

WHAT IS SCM?

The Institute for Supply Management™ (ISM), founded in 1915, serves more than 49,000 member professionals. Its mission is "to educate, develop, and advance the purchasing and supply management profession." The ISM *Glossary of Key Purchasing and Supply Terms* (2000) defines SCM as "the identification and management of specific supply chains that are critical to a purchasing organization's operations." Recently, ISM's chief executive officer, Paul Novak, C.P.M., A.P.P. (1999), stated: "Purchasing, or more accurately, supply chain management, can and should play a vital role in managing the supply chain process as it pertains to suppliers."

Like ISM, leading texts in purchasing and supply present SCM as having an upstream focus. For instance, Monczka, Trent, and Handfield (1998) defined SCM as "an organizational concept whose primary objective is to integrate and manage the sourcing, flow, and control of materials using a total systems perspective across multiple functions and multiple tiers of suppliers." They also claimed the "concept of managing a supplier's suppliers is often referred to as supply chain management." Similarly, Leenders and Fearon (1997) suggested SCM "often is used to refer to the purchasing department's efforts to develop better, more responsive suppliers."

Later in their book, Leenders and Fearon (1997) defined SCM as "a systems approach to managing the entire flow of information, materials, and services from raw materials suppliers through factories and warehouses to the end customer." Christopher (1998) defined SCM as "management of upstream and downstream relationships with suppliers and customers to deliver superior customer value at less cost to the supply chain as a whole." Other authors also discuss SCM in terms of both upstream and downstream relationships (Handfield and Nichols 1999; Lambert and Cooper 2000).

In 1997, two new journals, *Supply Chain Management: An International Journal* and *Supply Chain Management Review*, published inaugural issues. Two other journals, *Interfaces* and the *Journal of Marketing Theory and Practice*, put out special (SCM) issue "calls for papers."

Also in 1997, Michigan State University (MSU) merged procurement, production, logistics, and marketing into a new academic department: Marketing and Supply Chain Management. At MSU, "the Supply Chain Management Program integrates topics from manufacturing operations, purchasing, transportation, and physical distribution into a unified program" (www.bus.msu.edu 2000). The following year, Arizona State University (ASU) formed a Supply Chain Management Department. At ASU, SCM "focuses on globalization and information management tools which integrate procurement, operations, and logistics from raw materials to customer satisfaction." The SCM curriculum includes courses in Traffic and Logistics Management, Purchasing and Supply Management, Materials Management, Productivity and Quality, and Purchasing and Logistics Strategy (www.cob.asu.edu 2000).

PURCHASING VS. SCM

Four conceptual perspectives on purchasing versus SCM — traditionalist, relabeling, unionist, and intersectionist — are described briefly below, and diagrammed in Figure 1.

Traditionalist

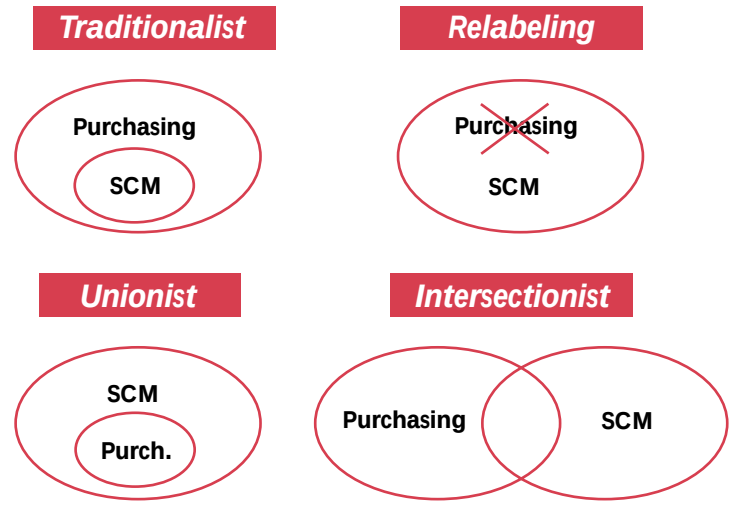
Traditionalists conceive SCM as a strategic aspect of purchasing, with emphasis on supplier development, and partnerships with first- and second-tier suppliers. An educator with this perspective may add an SCM chapter to the purchasing and supply management text, and/or insert an SCM lecture into the purchasing management course. A corporate purchasing department might hire "supply chain analysts" to study second-tier supplier relationships.

Relabeling

Relabelers simply change the name of purchasing to SCM. For instance, Giunipero and Brand (1996) suggested "purchasing has already evolved to supply management in many cases, and to SCM in certain other cases." Tan, Kannan, and Handfield (1998) described an evolution of purchasing into "supply base integration," which they roughly equated to SCM. Note that relabeling narrows the scope of SCM, since in this view SCM equals purchasing. Interestingly, purchasing is not the only field to be relabeled SCM in the literature. Other areas enjoying this distinction include logistics (Leenders and Fearon 1997) and marketing channels (Cooper and Ellram 1993). In practice, purchasing managers would be retitled "supply chain managers," with no change in job description.

Figure 1

FOUR PERSPECTIVES ON PURCHASING VS. SCM



Unionist

This perspective sees purchasing as part of SCM; SCM completely subsumes purchasing. In the extreme, SCM subsumes much of the traditional business school curriculum, including logistics, marketing, operations management, purchasing, etc. According to LeMay et al. (1999), "supply chain managers are similar to purchasing managers," with the key difference being that supply chain managers "have greater decisionmaking authority." While Tan et al. (1998) argued for three key components of SCM (purchasing, quality management, customer service), Stock and Lambert (2001) suggested SCM involves eight business processes: customer relationship management, customer service management, demand management, order fulfillment, manufacturing flow management, procurement, product development/commercialization, and returns. To implement the unionist vision of SCM, it is likely that reporting relationships within the firm will have to be altered.

Intersectionist

Giunipero and Brand (1996) hinted at this idea with the following statement: "SCM is … a broad strategy which cuts across business processes both within the firm and through the channels." Croom, Romano, and Giannakis (2000) discussed a number of subject areas

associated with SCM, such as purchasing, logistics and transportation, marketing, organizational behavior, strategic management, best practices, etc. The intersection concept is that SCM is not the union of logistics, operations, and purchasing. Rather, it includes elements from all of these disciplines. SCM coordinates cross-functional efforts across multiple firms. An intersectionist firm could implement SCM as a staff function, providing companywide research and consulting support.

SURVEY OF ISM EDUCATORS

Survey Methods

A selection of leading texts in purchasing and supply management (Leenders and Fearon 1997; Monczka et al. 1998) and SCM (Handfield and Nichols 1999) were studied to develop an initial list of topics, techniques, etc., in purchasing and SCM. A list of 43 "purchasing activities" from a survey of ISM member purchasing managers provided further guidance (Birou, Fawcett, and Magnan 1998). Working independently, the researchers created lists of topic/ technique items. Combining these lists yielded over 120 items. This list was trimmed to 88 survey items, through discussion and consensus of the research team. Appendix A reveals the final set of survey items.

During spring 2000, the survey was mailed to 180 ISM educator members. ISM provided a mailing list of 273 members. A total of 93 names were deleted from this list, mainly cases with no university or college address. As a response incentive, survey respondents were invited to write their names on their responses — and be entered in a drawing for $300. An e-mail follow-up was conducted, with addresses drawn from school Web sites. In the summer, a second mailing was sent to all non-respondents. This procedure yielded 42 usable surveys and 20 disqualified recipients, usually educators indicating they were retired or unable to complete the survey. Thus, the effective response rate was 42/160 or 26.3 percent.

Table I

ITEMS FOR WHICH SCM > PURCHASING

Item	t-statistic	p-value
Distribution Requirements Planning (DRP)	9.12	0.000
Channel Management	7.80	0.000
Logistics Provider Development	6.41	0.000
Third-Party Logistics (3PL)	6.34	0.000
Reverse Logistics	6.00	0.000
Supply Chain Management (SCM)	5.24	0.000
Logistics Provider Selection/Evaluation	5.13	0.000
Enterprise Resource Planning (ERP)	4.72	0.000
Systems Approach	4.67	0.000
Logistics Management	4.63	0.000
Facility Location	4.48	0.000
Efficient Consumer Response (ECR)	4.46	0.000
Bullwhip Effect	4.13	0.000
Cross-Docking	3.88	0.000
Customer Service	3.76	0.001
Transportation	3.63	0.001
Disintermediation	3.61	0.001
Warehouse Management Systems (WMS)	3.52	0.001
Cycle Time Reduction	3.39	0.002
Information Technology	3.35	0.002
Teamwork	3.17	0.003
Point-of-Sale (POS)	3.15	0.003
Warehousing	3.14	0.003
Core Competence	3.14	0.003
Time-Based Competition	2.93	0.006
Governance Structure	2.90	0.006
Inventory Management	2.81	0.008
Strategic Management	2.78	0.009
Flexibility	2.77	0.009

1. H_o: SCM importance – Purchasing importance = 0.
2. Listed in descending order by t-statistic.

Survey Results

Experience of the respondents, as purchasing/SCM educators, ranges from three to 40 years and averages 16.6 years. All of the respondents are members of ISM, and 36.6 percent are also members of APICS–The Educational Society for Resource Management. While 39 percent of these educators have taught graduate-level purchasing management courses, 85.4 percent have taught purchasing management at the undergraduate level. On the other hand, only 31.7 percent and 51.2 percent of the respondents have taught SCM courses at the graduate and undergraduate levels, respectively. The schools employing these educators have an average of 67.6 students enrolled in purchasing/SCM programs. Finally, the number of students enrolled in these programs ranges from zero to 320.

Table I lists 29 survey items the ISM educators rated significantly more important (at the 0.01 level) for SCM compared to purchasing. Note items pertaining to downstream/outbound logistics (e.g., DRP, channel management, ECR, POS) appear on this list. Traditional logistics functions (e.g., facility location, customer service, transportation, warehousing, and inventory management) and specific logistics techniques/tools/topics (e.g., logistics provider development, third-party logistics, reverse logistics, logistics provider selection/evaluation) are also prominent on the SCM list. Apparently, ISM educators perceive a close link between SCM and logistics.

Table II lists six survey items rated significantly more important for purchasing compared to SCM. It is no surprise to see several traditional purchasing activities (RFQ, contracts, supplier selection/evaluation) on this list. Other items reflect specific purchasing tools (e.g., procurement cards, learning curve). For the remaining 53 survey items, there were no significant differences in importance between purchasing and SCM. This large number of items implies that a significant amount of relabeling may be occurring in purchasing/SCM education. What was purchasing is now SCM. Still, the three sets of items — 29 for which SCM > purchasing, six for which purchasing > SCM, 53 for which SCM = purchasing — supports the intersection perspective. SCM has some unique content, purchasing retains some unique content, yet there is substantial overlap between the two areas.

Table II

ITEMS FOR WHICH PURCHASING > SCM

Item	t-statistic	p-value
Request for Quotation (RFQ)	-8.12	0.000
Procurement Cards	-5.74	0.000
Contracts	-4.94	0.000
Learning Curve	-3.71	0.001
Purchasing	-3.55	0.001
Supplier Selection/Evaluation	-2.93	0.006

1. H_o: SCM importance – Purchasing importance = 0.
2. Listed in descending order by |t-statistic|.

Table III reveals top 10 lists of important techniques/tools/topics for SCM and purchasing. Only two items appear on both top 10 lists: partnering and e-commerce. Note "SCM" is ranked the most important topic for an SCM course. This item was included on the survey as a validity check — i.e., if "SCM" failed to appear high on the SCM list, validity of the data would be questionable. The second most important SCM item, logistics management, indicates a close connection between SCM and logistics in the minds of ISM educators. The following four top 10 SCM items relate to technology: e-commerce, WWW/Internet, IT, and ERP. Finally, the inclusion of customer service on the SCM lists suggests that ISM educators have an upstream-*and*-downstream view of SCM. This is contrary to the ISM definition of SCM, as well as definitions found in leading purchasing and supply management textbooks.

"Purchasing" is the most important item on the purchasing list. Like the SCM item noted above, this serves as a validity check. The following five items on this list relate specifically to dealing with suppliers: supplier

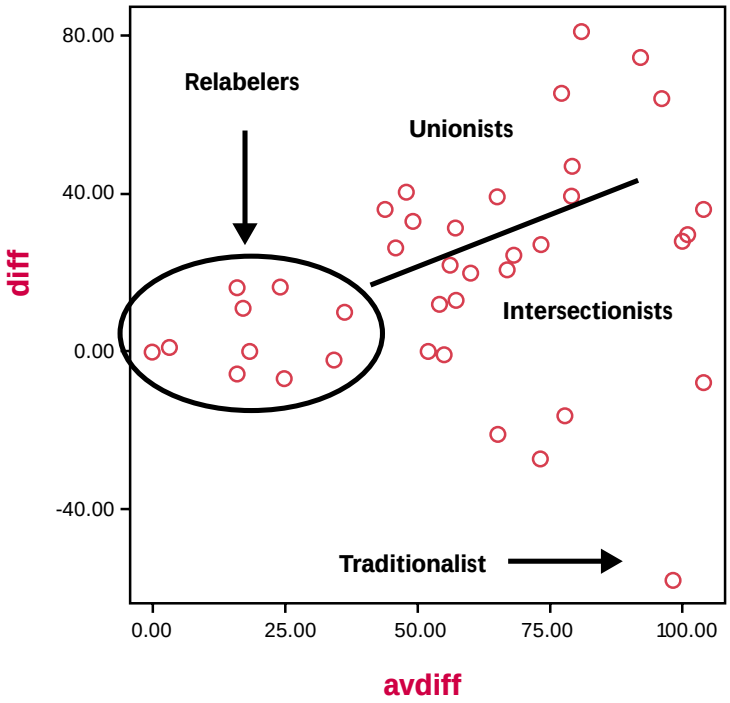
Table III

TOP 10 LISTS: SCM AND PURCHASING

Rank	SCM	Purchasing
1	Supply Chain Management (SCM)	Purchasing
2	Logistics Management	Supplier Selection/Evaluation
3	**Partnering/Partnership/Alliances**	Supplier Development
4	**E-Commerce**	Negotiation
5	Cycle Time Reduction	**Partnering/Partnership/Alliances**
6	Customer Service	Early Supplier Involvement (ESI)
7	WWW/Internet	Contracts
8	Information Technology (IT)	**E-Commerce**
9	Globalization	Outsourcing
10	Enterprise Resource Planning (ERP)	Total Cost of Ownership (TCO)
		Supply Management

Figure 2

SCM VS. PURCHASING: ISM EDUCATORS' PERCEPTIONS



diff = sum(SCM_i - PUR_i), for i = 1 to 90
avdiff = sum|SCM_i - PUR_i|, for i = 1 to 90

selection/evaluation, supplier development, ESI, outsourcing, and supply management.

Two indices were created to position purchasing educators in terms of their perceptions on SCM and purchasing management content. The first index, *avdiff*, is the sum of the absolute value of differences between importance for SCM and importance for purchasing, across all survey items [i.e., avdiff = sum |SCM_i – $purchasing_i$|, for i = 1 to 90]. Purchasing educators with low avdiff scores are "*relabelers*," since they perceive relatively little difference between purchasing and SCM. The second index, *diff*, is the sum of the differences between importance for SCM and importance for purchasing, across all survey items [i.e., diff = sum(SCM_i – $purchasing_i$), for i = 1 to 90]. Purchasing educators with high diff scores are "*unionists*," since they perceive a relatively large difference between SCM and purchasing, generally in favor of SCM. To the contrary, large negative diff scores reveal "*traditionalists*," since they perceive large SCM/purchasing differences, generally in favor of purchasing. Finally, those purchasing educators with high avdiff scores but low diff scores are "*intersectionists*." Like the unionists, these educators see substantial differences between SCM and purchasing. However, in the intersectionist view, the differences are more balanced, neither in favor of SCM nor purchasing. Some topic/technique items are tilted toward SCM (e.g., channel management or distribution requirements planning), while others lean toward purchasing (e.g., RFQ or procurement cards).

Figure 2 reveals a variety of positions on the SCM versus purchasing issue. A considerable number of ISM educators responding to the survey are relabelers, perceiving relatively little difference between purchasing and SCM. However, there are also notable groups of unionists and intersectionists, along with at least one (purchasing) traditionalist.

Table IV

PREFERRED RESEARCH METHODS

Method	Mean	Std. Deviation
Survey	4.21	1.09
Interview	3.74	1.38
Archival/Secondary Data	3.49	1.25
Case Study	3.40	1.56
Simulation/Modeling	3.00	1.48
Focus Groups	2.71	1.41
Experiments	2.09	1.65

Research Interests and Methods

The survey also asked purchasing educators to list their top three research interests and to rate the importance of seven research methods for pursuing those interests. The most prevalent research interests were: SCM, buyer-supplier relationships/supplier development/team building, performance measurement (total cost of ownership, benchmarking), and e-commerce. Table IV summarizes survey respondent ratings of the various research methods. Note that survey research is far and away the preferred method. ISM educators, as researchers, appear to be biased toward quantitative approaches rather than qualitative approaches such as case study. An additional analysis of SCM research follows, in the form of a *JSCM* literature study.

JSCM LITERATURE STUDY

ISM publishes a quarterly journal, *The Journal of Supply Chain Management: A Global Review of Purchasing and Supply (JSCM)*. The journal was titled *International Journal of Purchasing and Materials Management (IJPMM)* through 1998, then its name was changed to *JSCM* in 1999. According to the editor, there were three theses behind the title change:

> "First, it reflects the increasing emphasis on supply chain management as an overarching paradigm for research in purchasing and supply. Second, it preserves purchasing and supply as the historical foundation for the *Journal* and as the platform for the *Journal's* view of supply chain management. Finally, it continues to highlight the global nature of supply chain management in both the manufacturing and non-manufacturing sectors" (Carter 1999).

Interestingly, after the name change, the *Journal's* "suggestions for contributors" remained the same as before. *JSCM* "publishes articles dealing with concepts from business, economics, operations management, logistics,

information systems, the behavioral sciences, and other disciplines which contribute to the advancement of knowledge in the various areas of purchasing, materials and supply management, and related fields" (Anonymous 1999). Thus, ISM's response to the SCM phenomenon has included re-naming its academic journal.

Literature Study Methods

A three-step procedure was used to study the SCM content in *JSCM*. The *Journal* was analyzed online, via ABI/INFORM. (ABI covers over 1,000 trade, research, and business journals from 1970 to today). Each *JSCM* article on SCM was reviewed and rated/weighted on a 0-to-3 scale to distinguish articles focusing on SCM from those only using the phrase in passing.

Step 1 — Using ABI/INFORM, the appearance of "SCM" in article titles, abstracts and text from 1992 to 2000 was counted.

Step 2 — Each SCM article was rated according to how authors use or refer to SCM, as follows:

0 = Appearance of SCM among references or author notes only.

1 = SCM used to sell the article, or occasionally used without further clarification.

2 = SCM in a headline, or in implications, or in literature review.

3 = The article is primarily about SCM.

By searching for SCM in the text of articles one can learn how it is used by authors, and in what context this is done. This rating of articles is in no way a quality measurement. Rather, the purpose is only to rate the SCM content in *JSCM*.

Step 3 — Content of articles rated 2 or 3 was analyzed for key words in the title, authors' titles, and research methods used. These results offer evidence on the elements of SCM.

Literature Study Results

Table V shows only two articles rated/weighted at the 3 level, i.e., the research identified two *JSCM (IJPMM)* articles that are primarily about SCM. On the other hand, 49 out of 85 articles received a weight of 0, while another 27 articles did little more than pay "lip service" to SCM and received a weight of 1.

Table VI provides some perspective regarding the development of SCM in the academic world. While *JSCM (IJPMM)* authors started declaring SCM research interests as early as 1992, the retitling (relabeling) of professors began later, in 1997. As noted above, this is around the time at least two prominent business schools created SCM departments.

As shown in Table VII, authors from a variety of academic disciplines perform research in SCM. Operations Management, Purchasing, Logistics, and Marketing are all represented among the authors' titles. Thus, SCM presents exciting opportunities for interdisciplinary research collaboration. SCM topics covered in *JSCM* include relationships, green/environmental issues, and the future of purchasing and supply management. Though a variety of methods have been used in SCM research, mail surveys were employed to collect data for half of the articles listed in Table VII. Again, there appears to be a strong preference for quantitative methods, over qualitative methods, in SCM research. This preference is consistent across the various disciplines represented by contributing authors.

Table V

SCM ARTICLES IN *JSCM*, 1992-2000

Year	Total Articles[1]	Weight = 0	Weight = 1	Weight = 2	Weight = 3	Weighted Article Score[2]
1992	1	1	0	0	0	0
1993	2	2	0	0	0	0
1994	3	0	2	1	0	4
1995	4	3	1	0	0	1
1996	10	6	2	2	0	6
1997	11	8	3	0	0	3
1998	14	8	3	2	1	10
1999	19	10	7	2	0	11
2000	21	11	9	0	1	12
Total	85	49	27	7	**2**	47

1. Number of articles with *supply chain management* (SCM) somewhere in the text.
2. Summation of number of articles X article weight.

Table VI

***JSCM*: REASONS FOR 0 SCM CONTENT**

Year	Reference	Author Title	Research Interest	JSCM Interview
1992	0	0	**1**	0
1993	1	0	**2**	0
1994	0	0	0	0
1995	1	0	3	0
1996	3	0	3	0
1997	1	**2**	6	0
1998	2	**4**	5	0
1999	2	**4**	6	2
2000	2	**6**	3	4

1. Articles were weighted 0 if SCM only appeared in the reference list or in an author's title or research interests. Some articles had multiple reasons for 0 weight.
2. In 1999, *JSCM* started publishing interviews with experts in the field.

IMPLICATIONS FOR SCM

The article closes with several implications of the results for purchasing/SCM educators, researchers, and practitioners.

Table VII

***JSCM*: 2S AND 3S: WHO? WHAT? WHEN? HOW?**

Rating	Authors' Titles	Topic	Year	Method
3	Management; OM	**SCM**	2000	Mail survey
3	OM; DS; P&OM	**SCM**	1998	Mail survey
2	IM&SM; Purchasing	Y2K	1999	Mail survey
2	Marketing & Logistics	Relationships	1999	Book review
2	SCM; Management	Green Purchasing	1998	Mail survey
2	D&I; P&OM; OM	Green Supply Chain	1998	Case study
2	PM; OM	Future of P&SM	1996	Mail survey
2	P&LM; OM	Future of P&SM	1996	Roundtable
2	P&MM; OM	Product Life Cycle	1994	Conceptual

OM = operations management; DS = decision science; P&OM = purchasing & OM;
IM&SM = industrial marketing & supply management; D&I = decision & information;
PM = purchasing management; P&LM = purchasing & logistics management;
P&MM = purchasing & materials management.

Implications for Educators

The four perspectives on purchasing versus SCM suggest a variety of responses to the SCM phenomenon by purchasing educators. As the name implies, *relabelers* are likely to teach the same old purchasing management course under a new name: "SCM." *Unionists* could be expected to remove purchasing management from the curriculum — and cover the essentials of purchasing in a new SCM course. Or, they may retain the purchasing management course, and create an SCM course to further develop the cross-functional, interorganizational nature of "strategic" purchasing and related functional areas (e.g., marketing, logistics, production and operations management, information systems, etc.). In the extreme, a unionist might campaign to restructure (and rename) an entire College of Business Administration as the "College of SCM." However, this is a most unlikely response. *Intersectionists* would champion an interdisciplinary SCM major, perhaps with team-taught, cross-functional SCM courses split into modules. These modules may be aligned with traditional functions (e.g., purchasing and marketing) or positioned at functional interfaces (e.g., logistics/marketing). Finally, *traditionalists* would either do nothing at all, or simply add an SCM lecture to the purchasing management course.

A number of interesting research questions remain on integrating SCM into the purchasing group or academic department — and into business schools. Can traditionalists and unionists work together in the purchasing/SCM department? (Recall that the former position SCM entirely within purchasing, while the latter do the opposite.) Traditionalists may resist the opportunity to become "professors of SCM." How should intersectionists go about *selling* SCM to key interface disciplines, such as marketing and operations management? Indeed, is purchasing the right discipline to lead the SCM charge?

The survey results also offer guidance for the educator teaching both SCM and purchasing management. Some topics and techniques seem to be best covered in a purchasing management course (e.g., negotiation and RFQ), while others fit better in SCM (e.g., channel management and DRP). Still other topics and techniques appear at the intersection of purchasing and SCM (e.g., e-commerce). Educators could use the survey as a tool to assist in making each course unique, while showing students the links between SCM and purchasing.

Implications for Researchers

The survey and literature study both found a strong preference for survey (quantitative) research methods over case study (qualitative) approaches, in SCM research. However, SCM is a relatively new phenomenon, with unclear boundaries and few true examples in practice. Thus, case study methods may be more useful than surveys, to further understanding of SCM. Researchers should be encouraged to consider alternative research methodologies to enhance and enrich the SCM body of thought.

Ellram (1996) contrasted survey and case study methods for purchasing and logistics research. While "the survey method places an emphasis on quantitative analysis of a few variables across a large number of observations … the case study method generally emphasizes qualitative, in-depth study of one or a small number of cases." Because SCM involves many variables, the survey method is inherently limited in researching the concept. Yin (1994) defined a case study as "an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident." SCM, a contemporary phenomenon with unclear boundaries, is consistent with Yin's requirements for the successful application of case studies as research tools.

Implications for Practitioners

The challenges to implement SCM will vary, depending on an organization's underlying perspective. A *traditionalist*

corporate purchasing department might hire or train "supply chain analysts" to focus on relationships with second-tier suppliers. With the *relabeling* perspective, a firm's purchasing managers may be retitled "supply chain managers," with no substantive change in job description. Implementing the *unionist* perspective clearly involves the greatest challenges — and resistance to change. It is highly likely that reporting relationships and power distribution within the firm will be altered. Who will report to the top SCM executive? Will this executive come from purchasing or logistics or somewhere else? Finally, a firm adopting the *intersectionist* point of view might implement SCM via creation of a small staff function, providing companywide research and consulting support on SCM matters.

Purchasing professionals have been urged to evolve and adapt their skill sets, in response to SCM (Fuegner 1999). Results of the current study suggest that skills and competencies required in a given organizational context depend on that organization's SCM perspective (relabeling, traditionalist, unionist, or intersectionist). Supply practitioners should understand their organization's concept of SCM, then either design in-house or outsource training programs to develop needed skills. Additionally, practitioners should be willing to suggest alternative SCM perspectives that might contribute further to the goals of the organization. The organization's understanding of SCM has broad implications for supply strategy, planning, organization, performance measurement, and human resources management. Many resource allocation decisions are based on the firm's view of SCM.

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Appendix

THE 88 SURVEY ITEMS*

ABC Analysis (80/20 Rule)
Activity-Based Costing
Automatic Replenishment
Bar Coding
Benchmarking
Bullwhip Effect
Channel Management
Conflict Management
Contracts
Core Competence
Cross-Docking
Customer Service
Cycle Time Reduction
Deregulation
Disintermediation
Distribution Requirements Planning (DRP)
Early Supplier Involvement (ESI)
E-Commerce
Efficient Consumer Response (ECR)
Electronic Data Interchange (EDI)
Electronic Funds Transfer (EFT)
Enterprise Resource Planning (ERP)
Environmental/Green Concerns
Facility Location
Financial Considerations
Flexibility
FOB Origin/Destination
Forecasting
Foreign Trade Zones (FTZ)
Globalization
Governance Structure
Human Resource Management
Information Technology
Inventory Management
ISO 14000
ISO 9000
Just-In-Time (JIT)
Learning Curve
Legal Issues
Logistics Management
Logistics Provider Development
Logistics Provider Selection/Evaluation
Manufacturing
Marketing
Material Requirements Planning (MRP)
Negotiation
Order Processing
Organizational Structure
Outsourcing
Partnering/Partnership/Alliances
Picking & Packing
Point-of-Sale (POS)
Postponement/Speculation
Procurement Cards
Product Life Cycle (PLC)
Productivity
Profitability
Purchasing
Push vs. Pull
Quality Function Deployment (QFD)
Reengineering
Reorder Point Models
Request for Quotation (RFQ)
Retailing
Reverse Logistics
SCOR Model
Single vs. Multiple Sourcing
Statistical Process Control (SPC)
Strategic Management
Supplier Development
Supplier Selection/Evaluation
Supply Chain Management (SCM)
Supply Management
Systems Approach
Teamwork
Third-Party Logistics (3PL)
Time-Based Competition
Total Cost of Ownership (TCO)
Total Quality Management (TQM)
Tracking & Tracing
Transportation
Universal Product Code (UPC)
Value-Added Network (VAN)
Vendor-Managed Inventory (VMI)
Warehouse Management Systems (WMS)
Warehousing
Wholesaling
WWW/Internet

*Each item was rated twice — once on importance for purchasing; once on importance for SCM — on scales from 0 (no importance) to 5 (very high importance).

Abstracts and proposals due November 1, 2002.

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