

Georgia Southern University

Digital Commons@Georgia Southern

Association of Marketing Theory and Practice
Proceedings 2014

Association of Marketing Theory and Practice
Proceedings

2014

The Transformation of the Supply Chain Manager

Dave McMahon

Pepperdine University, dave.mcmahon@pepperdine.edu

Stephen A. LeMay

University of West Florida, slemay@uwf.edu

Jeffery A. Periatt

Auburn University, Montgomery

Follow this and additional works at: https://digitalcommons.georgiasouthern.edu/amtp-proceedings_2014



Part of the [Marketing Commons](#)

Recommended Citation

McMahon, Dave; LeMay, Stephen A.; and Periatt, Jeffery A., "The Transformation of the Supply Chain Manager" (2014). *Association of Marketing Theory and Practice Proceedings 2014*. 29.
https://digitalcommons.georgiasouthern.edu/amtp-proceedings_2014/29

This conference proceeding is brought to you for free and open access by the Association of Marketing Theory and Practice Proceedings at Digital Commons@Georgia Southern. It has been accepted for inclusion in Association of Marketing Theory and Practice Proceedings 2014 by an authorized administrator of Digital Commons@Georgia Southern. For more information, please contact digitalcommons@georgiasouthern.edu.

The Transformation of the Supply Chain Manager

Dave McMahan

Pepperdine University

Stephen A. LeMay

University of West Florida

Jeffery A. Periatt

Auburn University Montgomery

ABSTRACT

This research examines the transformation of the job of supply chain manager. This involves an analysis of the activities of this position, the competencies needed, what the job requires, and the training that is needed. Suggestions on how to develop and provide training are discussed. This research was funded by CSCMP.

INTRODUCTION

The inventory/material control function is in the middle of a major transformation. Activities are being combined with warehousing, purchasing and customer service activities. There is an increasing reliability upon and dependence on technology. Furthermore, having solid interpersonal skills is becoming more of a necessity than a nicety. Sitting at the top of this function is the supply chain manager. For the organization to perform well and be competitive, it is critical to understand what is taking place and what is needed at this position (Ellinger, Hyunju, Magnus, Adams, Hofman, & O'Marah 2012). Such transformations have happened before, so it is critical monitor how the roles change over time (see Armistead and Mapes 1992).

One reason that this and other supply chain related transformations challenge our understanding and management skills is simple: the domain of supply chain management keeps shifting. It is inherently cross-functional, trans-national, and difficult to define (Lambert, Garcia-du-Dastugue, and Croxton 2008; Manuj and Mentzer 2008; Skjoett-Larsen 1999). Other logistics and supply chain related jobs are undergoing similar transformations (McMahan, Periatt, LeMay, and Carr 2007).

To better understand this transformation, we undertook a multifunctional, multi-organizational job classification study, the first of its kind. We took a sample of logistics jobs and established a baseline for evaluating job changes in the future as well as for current job requirements and training needs. In this article, we deal specifically with our findings on the supply chain managers. In context of these dramatic transformations, we were mindful that the results of this research not only tell what supply chain managers should do and should know, but also what they should know not to do—that is, the strategies and approaches to avoid (Godsell and Van Hoek 2009).

Through interviews and detailed surveys, we attempted to put the job classification findings for supply chain managers into a broader context. Our findings should help lead to a better understanding of these jobs, the people who perform them, and what organizations need to do to prepare people for this work.

The article is divided into three parts. The first part features the methodology used in the study. The second part is a description of supply chain managers, their competencies, job requirements, and training needs. This is followed by our conclusions.

METHODOLOGY

We gathered data using formal interviews, informal interviews, and the Common Metric Questionnaire (CMQ), a structured survey questionnaire for job classification. From 43 logistics organizations, we received 632 responses to the Common Metric Questionnaire (CMQ). The sample was a selected convenience sample. The 43 organizations included manufacturers, asset-based third parties, non-asset-based third parties, retailers, and financial institutions. Companies ranged in size from 15 to more than 100,000 employees. We visited 65 sites in 20 states to gather data. We also conducted 35 formal interviews with top managers and more than 200 informal interviews with managers, supervisors, and operating employees. In addition, 192 companies responded to the descriptive survey sent to them by the researchers.

CMQ–Description and Administration

The CMQ boasts a validation database of over 100,000 observations on 8000 job families. The CMQ is comprised of more than 3000 items, although each respondent was likely to address only a subset of that total. Responses to the CMQ reveal critical knowledge and skills for job performance, the frequency with which these skills are used, and the ways in which skills and knowledge were obtained. The responses also show job activities, such as attending meetings, lifting heavy objects, and interacting with people inside and outside the firm. These results fall into four domains, 80 dimensions, and 17 second-order factors. This detailed questionnaire helps determine competencies, job requirements, and training needs for each job family in the analysis. Questionnaire items also cover demographics, job basics, and knowledge requirements.

Data Analysis

The data were analyzed using the Common Metric System (CMS), a proprietary system coupled with the CMQ. CMS clusters the data into job families based on the responses the researchers selected for inclusion in the analysis. Initially, seven a-priori job families or clusters were identified: senior management, logistics information systems, warehousing, material and inventory control, transportation, purchasing, and customer service. Three researchers assigned each response to these fields with a first-time classification interrater correlation of .95. Researchers then worked with the exception responses to achieve consensus, ultimately producing an inter-rater correlation of 1.00.

The pre-classified responses were then included in a cluster analysis by job family. A job was

retained in a classification only if its joint correlation with the other responses was .70 or higher. In this way, researchers were able to classify all 632 observations into 22 job families: one for broad responsibility senior management, two for logistics information systems; six for warehousing, four for transportation, two for purchasing, three for customer service, and four for material and inventory control. In this article, we focus on the supply chain managers.

Supply Chain Managers Job Description

The job of supply chain managers is to coordinate and manage the supply chain. Supply chain managers are involved in every aspect of decision making. Supply chain managers usually have final decision authority.

Supply chain managers spend much time in meetings. They are in daily contact with employees working on the production floor up to the executive suite. While they have responsibility to manage the process from raw material to ultimate consumers, their primary focus is on internal processes. Supply chain managers rely on interpersonal skill and formal authority to reduce total logistics costs. They receive information about regulatory constraints and customer desires and transform this information into strategies designed to propel the firm forward.

Supply chain managers' offices are usually located adjacent to the manufacturing floor. They spend a great deal of time in meetings exchanging information and making decisions. They are likely to meet with customers, regulatory officials, and operations personnel. Supply chain managers' stress is the result of having to make decisions that affect the firm's short and long-term performance. Establishing production methods, factory layouts, equipment and human resource needs are all made by supply chain managers.

Supply Chain Managers Competencies

The skills needed to perform this job reflect the supply chain manager's position at the top of this functional area. They also reflect changes in organizational level. The increased importance on creating a seamless manufacturing process from raw materials to consumer requires a shift in focus. The competencies that emerged from the data analysis tie directly to knowledge or job activities that respondents identified as crucial to job performance. These competencies, collectively, distinguish this job from the jobs in the database and other jobs in the study.

Apply project management techniques and coordinate production resources to increase organizational and supply chain efficiency. Supply chain managers' primary role is to manage the manufacturing process. Their success influences the other supply chain members' perceptions about the firm's competence and future prospects. They manage this process by assuring that vital information is collected and routed through them. Supply chain managers' role is to develop strategies that guide daily operations. They must be able to take care of the ecosystem while helping keep the trees healthy. Supply managers must quickly sum up the situation and make the best decision possible.

Use supervisory and employee development skills to build and maintain an efficient managerial workforce. Supply chain managers are required to assess the talents of the people

they manage. Weaknesses need to be identified and strategies developed to provide the necessary training. Developing employees has become more difficult because of the reduction in the number of mid-level positions as a result of the flattening of the organization. Supply chain managers are in a unique position, because all logistics functional areas are usually represented in the plant. Effective supply chain managers take advantage of this variety and assign responsibilities based on their assessment.

Organize, coordinate, and manage meetings to exchange information and training necessary to assure development of a common knowledge base and help their decision making. Supply chain managers' meetings are designed to integrate operations with the firm's objectives. Presenting information, evaluating options, resolving disputes and making decisions are the primary functions performed at these meetings. These functions do not require everybody to be present. Supply chain managers must decide whose presence is necessary and invite only those individuals. Controlling attendance like this will reduce interruptions as issues tangent to the meeting's purpose are less likely to be brought up. This reduction increases the meeting's perceived relevance and reduces participant boredom.

Use decision-making skills to identify how trends affect the supply chain's competitiveness. Supply chain managers must be astute at identifying how environmental conditions, customer wants, and supplier constraints affect the organization's performance. They must exercise decision flexibility because what may seem to be counter-productive may enhance the functioning of the supply chain.

This last competency includes developing the ability to identify and use information that helps in identifying the trends themselves. It may be a simple piece of information like the PMI or the result of a complex analysis; being able to choose what matters is crucial to this competency (Lindsey and Pavur 2005).

This set of competencies should help to understand why top management needs to listen to supply chain managers. Companies often engage in practices that harm shareholder value or customer loyalty, practices that they would avoid if they listened to supply chain managers who possess these competencies. For example, forward selling may make the sales force look good in the short term, but they disrupt the supply chain and may damage future sales. As a second example, management may require excess inventory for holiday sales in a retail environment. These and other practices may be avoided if top management listens to supply chain managers and recognizes what this important group is likely to know (Godsell et al. 2009).

One problem that arises in developing SCM as a strategic weapon is the failure of top management and researchers to clearly identify the key elements of SCM (Deshpande 2012). Yet the competencies identified in this research would seem to lead in that direction. It appears that top managers often ignore—ironically—the importance of the supply chain manager in simply doing his or her job—managing the supply chain.

Supply Chain Managers Job Requirements

The number of job requirements for supply chain managers is staggering. This reflects their

position in the organization. As such, in this section, we narrow the focus to the knowledge and skills necessary to distinguish supply chain managers from other job families. This set of knowledge and skills comes from the job classification questionnaire and includes the knowledge and skills respondents said were widely used and absolutely critical to job performance. Putting together the competencies and job requirements leads directly to the analysis of training needs. They are discussed in the subsequent section.

The following table shows those areas in which the supply chain managers ranked higher than the 75th percentile as compared to the CMQ database of job families. The percentage score represents the number of respondents that said a particular domain is part of their job. The scope score is based upon the total number of activities that is part of that domain as determined by the CMQ. The rarity score is a measure of how unique a particular job family is in relationship to all other job families as it pertains to the domain under examination. It is important not to interpret the scope score as a proxy for uniqueness. As can be seen by the human resource domain, supply chain managers only do 48% of the activities associated with this domain but that puts them in the 95th percentile.

DECISION-MAKING DOMAIN			
<i>Production, Human Resources, Financial and Strategic Decisions</i>	Percentage	Scope	Rarity
Production/operations management	100	55	92
Financial-purchasing and budgeting	91	50	88
Human resources management	91	48	95
Strategic planning-products and services	91	40	80
Financial-investment, cash	18	80	93

The interpretation of the table is that this job family is required to be heavily involved in decision making across multiple knowledge-based areas that are central to the organization's success. Another key finding in this study for supply chain managers is their need to be highly skilled in their interpersonal interactions. This is evidenced by a summary rating rarity score of 97 in the area of meetings and contacts.

Job requirements and competencies for supply chain managers go beyond the technical, a point stressed by the high score for this job on human resources management. But this complex job also demands so-called soft skills, the ability to work with other people, a critical set of emotional capabilities (van Hoek, Chatham, and Wilding 2002).

Supply Chain Managers Training Needs

Due to the escalating complexity of the decisions being made and having less time to make such

decisions, the key training needs for supply chain managers revolve around optimizing their time. First, this job family must not only become proficient with computers but also become experts so as to gain a competitive advantage. This starts with the basics but transitions to a focus on how to retrieve and package the information needed for the different tasks and functions they oversee. This should begin with a solid understanding of how information is entered, processed, and stored in the organization. This will reduce the time needed to retrieve the needed information. This is key in high stress moments when deadlines are critical.

Second, supply chain managers need to learn how to be efficient yet effective with the time they spend with others. Given the number of meetings they conduct, these managers should have formal training in how to conduct effective meetings. Partnered with this should be training in other interpersonal skills areas such as oral and written communication. Since some of these meetings are large, training in public speaking can also yield significant benefits. Lastly, supply chain managers should be given training in stress management techniques. This will help the effectiveness of the above mentioned interactions as well as the day to day functioning of the executive.

Third, putting systems into place with properly trained people is essential. This requires that the supply chain manager know the systems well enough to be able to select the best people to run those systems. By this skill being in place, the supply chain manager can feel confident delegating tasks and trust that said tasks will be performed properly and on time. This frees up the supply chain manager to focus more on the ecosystem level strategic planning vs. having to take care of a lot of trees. Some of the specific systems that need to be examined are inventory control, warehousing, production management, and operations research.

The manner in which supply chain managers apply their competencies, and thus execute their job requirements may vary according to the role that their companies play in the supply chain (Cook, Heiser, and Sengupta 2011). Consequently, the firm's role in the supply chain must be considered in applying the competencies, prioritizing job requirements, and developing training approaches for these managers.

DEVELOPING A TRAINING APPROACH

There is a consistent pattern found in firms with the best practices in logistics training. They start by developing and communicating a consistent view of the logistics system throughout the organization. One firm developed a map of their logistics system, a map similar to those found in most indoor malls. Each employee received a copy of the map with a 'you are here' star on it. It placed each person's job in the context of the entire supply chain. In some senses, this is the starting point for all internal training. This requires the support of the supply chain manager.

Too many firms fail to put this principle into practice. The logistics organization needs a variety of viewpoints, but the facts of the situation—where you are—should be shared. Employees may not see the same logistics system, but they should have the same facts about the system. This starts from the top. In this instance, we suggest that the supply chain manager has a training responsibility, a responsibility to develop a vision of the supply chain system that is shared and

communicated.

Comprehensive training eases communication which is critical in moments of high stress. If everyone is discussing the same facts about the system, they have a better chance of communicating on key issues, finding an acceptable solution, and making it happen within the deadlines that have been set. Again, this begins at the top of the organization.

Training Sources and Partnerships

Given the complexity of their jobs, it may seem that supply chain managers need to spend all of their time training to do their jobs, with no time left to do the job. This conundrum means that training time should be used wisely. The supply chain manager must assure his/her own training while helping to develop a training and learning culture within the organization. Unfortunately, as with the other job families, these managers acquire much of their knowledge through on-the-job experience.

Without significant investment in actual on the job training (OJT) vs. the traditional on the job experience (OJE), the optimization of this process is highly unlikely. More likely is an increase in stress due to the flattening of the organization and the increased speed of the environment due to globalization and technological advances. Training should focus primarily on two areas. First, focus on the best use of computer resources to optimize the process and the exchange of information. Second, focus on identifying interpersonal weaknesses and developing programs that will strengthen or eliminate the areas of weakness.

Here we will become specific. First, consider internal training programs that relate directly to the tasks at hand. This can be individual tutoring sessions on specific software—taking training on the supply chain management modules offered by SAP, for example—or training in common with other logistics executive. Several executive development programs of note for training logistics executives are: MIT, the University of Tennessee, and Michigan State University.

The supply chain manager should also consider attending the Council for Supply Chain Management Professionals CSCMP Annual Conference. This organization focuses on the education of its membership; it is not a lobbying group or a social group. The annual conference typically has multiple tracks with a wide variety of industry specific presentations. The same is true of other leading organizations in logistics and supply chain management—the American Production and Inventory Control Society (APICS), the Institute for Supply Management, and the American Society for Transportation and Logistics (AST&L). These organizations provide a wide range of resources for training at all levels and should be considered keystones in any logistics training program at the management level.

Colleges, universities, training firms, and on-line training all offer additional possibilities, but require some research to come up with training customized to fit the needs of specific supply chain managers. With this variety of possibilities, it becomes important to measure results and to hold training programs accountable for their results. For an individual supply chain manager, this may demand only that he or she judge the program and give it a rating. But he or she should do so, in written form. Otherwise, it is easy to forget the quality of the program and the degree

to which it delivered what was sought.

Supply Chain Managers Summary

Supply chain managers are heavily involved in multiple key areas of decision making. The time of relying on formal, coercive authority is passing away. Furthermore, supply chain managers whose meetings are perceived to be a waste of time, who routinely kill conversations, or who are indecisive reduce employee commitment and other supply chain members' confidence in the organization. The transformation of this job family is under way. They must rely on co-workers to carry out their decisions. However, it is difficult to trust fully in the process when most training is via OJE (on the job experience) vs. OJT (on the job training). As such, a critical need in organizations is to make the transition from OJE to OJT. This will not only make the organization more efficient at multiple levels but also free up one of the key decision makers to focus more time on ecosystem level thinking. To aid them in this decision making, supply chain managers must become experts in how to use the information systems available to them. This will not only save time but also build confidence throughout the organization and supply chain.

REFERENCES

- Ellinger, A., Shin, H., Northington, W. M., Adams, F. G., Hofman, D., & O'Marah, K. (2012). The influence of supply chain management competency on customer satisfaction and shareholder value. *Supply Chain Management*, 17(3), 249-262. doi:<http://dx.doi.org/10.1108/13598541211227090>
- Deshpande, A. (2012). Supply chain management dimensions, supply chain performance and organizational performance: An integrated framework. *International Journal of Business and Management*, 7(8), 2-19. Retrieved from <http://ezproxy.lib.uwf.edu/login?url=http://search.proquest.com/docview/1019802885?accountid=14787>
- Cook, L. S., Heiser, D. R., & Sengupta, K. (2011). The moderating effect of supply chain role on the relationship between supply chain practices and performance. *International Journal of Physical Distribution & Logistics Management*, 41(2), 104-134. doi:<http://dx.doi.org/10.1108/09600031111118521>
- Godsell, J., & Remko, v. H. (2009). Fudging the supply chain to hit the number: Five common practices that sacrifice the supply chain and what financial analysts should ask about them. *Supply Chain Management*, 14(3), 171-176. doi:<http://dx.doi.org/10.1108/13598540910954511>
- Lambert, D. M., Garc a-Dastugue, S., J., & Croxton, K. L. (2008). THE ROLE OF LOGISTICS MANAGERS IN THE CROSS-FUNCTIONAL IMPLEMENTATION OF SUPPLY CHAIN MANAGEMENT. *Journal of Business Logistics*, 29(1), 113-IX. Retrieved from <http://ezproxy.lib.uwf.edu/login?url=http://search.proquest.com/docview/212666203?accountid=14787>
- McMahon, D., Periatt, J. A., LeMay, S., & Carr, J. (2007). Developing competent production managers in logistics. *Journal of Global Business Issues*, 1(2), 177-182. Retrieved from <http://ezproxy.lib.uwf.edu/login?url=http://search.proquest.com/docview/223745279?accountid=14787>
- Lindsey, M. D., & Pavur, R. J. (2005). As the PMI turns: A tool for supply chain managers. *Journal of Supply Chain Management*, 41(1), 30-39. Retrieved from <http://ezproxy.lib.uwf.edu/login?url=http://search.proquest.com/docview/235200485?accountid=14787>
- van Hoek, R., I., Chatham, R., & Wilding, R. (2002). Managers in supply chain management, the critical dimension. *Supply Chain Management*, 7(3), 119-125. Retrieved from <http://ezproxy.lib.uwf.edu/login?url=http://search.proquest.com/docview/216864284?accountid=14787>

Skjoett-Larsen, T. (1999). Supply chain management: A new challenge for researchers and managers in logistics. *International Journal of Logistics Management*, 10(2), 41-53. Retrieved from <http://ezproxy.lib.uwf.edu/login?url=http://search.proquest.com/docview/235874327?accountid=14787>

Armistead, C. G., & Mapes, J. (1992). The changing role of supply chain operations managers. *Logistics Information Management*, 5(2), 10. Retrieved from <http://ezproxy.lib.uwf.edu/login?url=http://search.proquest.com/docview/220023736?accountid=14787>

AUTHOR INFORMATION

Dave McMahon is an Associate Professor of Marketing in The Graziadio School at Pepperdine University. He has coauthored one book and numerous articles. His primary interests are in HR logistics, services, and the use of websites by nonprofits.

Stephen A. LeMay is Professor of Marketing and Logistics at the University of West Florida. His work has appeared in many academic journals and trade publications. He has coauthored three books on logistics and supply chains.

Jeffery A. Periatt is an Associate Professor in the Department of Marketing at Auburn University Montgomery. His research interests include psychology and supply chain management.

