



MARINO ASSOCIATES, LLC
SPECIALIZING IN CONSULTING AND EDUCATION



LEAN SUPPLY CHAIN MANAGEMENT SELF-ASSESSMENT

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INTRODUCTION TO LEAN SUPPLY CHAIN MANAGEMENT SELF-ASSESSMENT

Everyone is talking about Lean Supply Chain Management. However few companies truly understand the path to excellence in Lean Supply Chain Management.

Attached is a typical checklist for a company starting, or implementing, Lean Supply Chain Management.

Prior to starting any Lean Supply Chain Management program, a baseline needs to be established. This Lean Supply Chain Management checklist will provide your baseline measurement. This process, not only will help your company define where you are, but more importantly, will help you define where you want to go.

What's important, about any measurement system, is that it must become an "expression of the contract" that management wants with its workers. Most systems (whether manual or computerized) are designed to control people. Lean Supply Chain Management is designed to let people control processes. These measurements should help your company and its people prioritize and drive their change process.

This handout is divided into sections:

- ◆ Questions
- ◆ Scoring Worksheet
- ◆ Question Definition

1. Please read and complete the assessment.
(Our office will total your score if you don't have time.)
2. Send the completed assessment back to our office and we will evaluate your score based on companies that we have worked with that have had Lean Supply Chain Management successes.

Good luck with your Lean Supply Chain Journey. Don't forget to have fun along the way!

Dan Marino
Senior Partner
Marino Associates, LLC.

A. Organization and Structure

- 1. Company and suppliers work together and understand the importance of building long-term manufacturing/supplier relationships.**

If programs are in place, and result in long term relations being established with key suppliers based on their ability to meet manufacturing needs, (cost, quality and deliverability), the score is HIGH. If limited key supplier programs are in place, or are in place with only a few suppliers, the score is MEDIUM. Otherwise, the score is LOW.

- 2. Top management has documented a Supply Chain Vision.**

If there is a universal understanding of top management's vision of Supply Chain Management that is known by all functional areas, the score is HIGH. If more than half of all functional areas have an understanding the vision, the score is MEDIUM. If the vision and missions are not shared or they do not exist at all, the score is LOW.

- 3. Clear SCM objectives have been communicated to employees and key suppliers.**

If clear goals and objectives are documented as to how they relate to the organization's mission, principles and overall manufacturing strategies, and this information has wide-dissemination and departments are organized to maximize SCM efficiencies, the score is HIGH. If documentation exists, but is limited in visibility, the score is MEDIUM. Otherwise, the score is LOW.

B. Business Systems Environment

- 4. Value mapping is used extensively as a means to identify non value added activities.**

If there is evidence of continuous and formal efforts to eliminate non-value added activities, the score is HIGH. If there is some attempt with a formal system, the score is MEDIUM. If there is no attempt to eliminate non-value added activities, or if the attempts are random, the score is LOW.

5. The External information networks and communication systems between customers and suppliers are reliable.

If sharing information from your ERP system you are sharing data that is 100% accurate and reflects the current business rules and processes that meet the business plan and revenue plan. If utilizing a portal or 3rd party software package this data must be 100% accurate and must interface with all other systems seamlessly.

6. Sharing of information occurs between suppliers and internal departments without the direction of upper or mid management.

If sharing of information occurs without the direction of upper or mid management, the score is HIGH. If sharing of information occurs when mid management gets involved the score is MEDIUM. Otherwise the score is LOW.

7. There is Enterprise-Wide Systems Integration.

If all parts of the organization work within and share the same enterprise system the score is HIGH. If the majority of the organization works within and shares the same enterprise system, the score is MEDIUM. Otherwise, the score is LOW.

8. The internet is a primary enabling tool for customers and suppliers communication.

If with the support and development of the IT department in the areas of internet communications such as the use of portals etc, internet communications is encouraged and developed for all major customers and suppliers, the score is HIGH. If internet communications are continually being increased and customers and suppliers are being added, the score is MEDIUM. If not work has been done in this area, the score is LOW.

- 9. In order to meet future process improvement targets, the kind and amount of technology, training, and education is well understood so targets goals can prioritized.**

If there is a clear understanding and documentation of the technology, training and education requirements of the organization; knowledge of where we are, where we are going and when we are going to get there, the score is HIGH. If there is limited understanding of these requirements but no clear understanding of where we are or where we are going with technology, training and education, the score is MEDIUM. Otherwise, the score is LOW.

C. Customers

- 10. There is a reporting system in place to notify upper management of customer issues needing resolutions**

If there is a documented and active reporting system in place to notify upper management of customer issues needing resolutions, the score is HIGH. If there is a documented system in place but it is not actively used, the score is MEDIUM. Otherwise the score is LOW.

- 11. The latest techniques in VMI, Consignment, and Kanban are in place for customers.**

If the latest techniques in VMI, Consignment, and Kanban are used whenever possible with key customers, the score is HIGH. If some of these are used or are used with a limited number of customers, the score is MEDIUM. Otherwise, the score is LOW.

- 12. Customers receive release schedules directly from the planning system.**

If release schedules are actively used and on a regular basis by the A suppliers the score is HIGH. If release schedules are only sometimes used or not used on a set schedule and with only a few suppliers, the score is MEDIUM. If no release schedules are used the score is LOW.

13. Frequent proactive communication is established with all key customers. (Demand Management)

If weekly communication is made to all key customers reviewing backlog, inventory position, and next 13 week demand, the score is HIGH. If regular communication exists, but there is no formal process, the score is MEDIUM. Otherwise, the score is LOW.

14. Customer satisfaction is routinely measured and analyzed to identify areas for improvement.

If customer satisfaction is routinely measured, analyzed to identify areas for improvement, and action is taken, the score is HIGH. If customer satisfaction is measured, analyzed to identify areas for improvement, but limited action is taken, the score is MEDIUM. Otherwise, the score is LOW.

15. Customer visits occur to maintain a good understanding of each other's needs: quality, quantity and deliverability. (Supply Chain Management.)

If there are frequent visits with key customers and documentation shows that there is a good understanding of each other's needs, the score is HIGH. If there are only occasional visits or there is not a demonstrated understanding of each other's needs, the score is MEDIUM. Otherwise, the score is LOW.

16. The total inventory of supplies between suppliers and customers is being continually reduced. (VMI)

If customers and suppliers are working together to continually reduce the total level of inventory liability between their operations and the level of inventory liability has decreased over time, the score is HIGH. If customers and suppliers are working together to reduce inventory, but the level of inventory liability is continually reduced, the score is MEDIUM. Otherwise, the score is LOW.

D. Suppliers

17. There is a detail plan to reduce the overall number of suppliers

If an aggressive program is in place and significant reductions have been made in the number of suppliers, 10 % each year, the score is HIGH. If the program is not aggressive or is only some reductions have been made, less than 10 % each year, the score is MEDIUM. If no program is in place and or if the number of suppliers is increasing or staying the same, the score is LOW.

18. An approved supplier list is utilized by Purchasing and Engineering.

If a documented and continuously updated approved supplier list is utilized by purchasing and engineering, the score is HIGH. If an approved supplier list exists, but is not continuously updated, the score is MEDIUM. Otherwise the score is LOW.

19. Clear responsibilities have been documented between the supplier, schedulers, and buyers.

If there is clear concise documentation that explains the roles and responsibilities for each function and this is continuously reviewed and updated, the score is HIGH. If there is documentation that explains for two of the three functions, the score is MEDIUM. Otherwise, the score is low.

20. Long term relationships are being sought with suppliers for the purpose of improving quality and lowering costs.

If strong relationships with suppliers are continuously sought and currently exist then the score is HIGH. If some relationships exist but no formal systems exist to continuously add to this, then the score is MEDIUM. If there is no commitment to developing long term relationships, the score is LOW.

21. The latest techniques in VMI, Consignment, and Kanban are in place for suppliers.

If the latest techniques in VMI, Consignment, and Kanban are used whenever possible with key suppliers, the score is HIGH. If some of these are used or are used with a limited number of suppliers, the score is MEDIUM. Otherwise, the score is LOW.

22. Suppliers often participate in analyzing the company's product to lower cost, make improvements, or achieve lower response time.

If there is a formal program in place by the company to review products for lower cost, make improvements, or achieve lower response times, and the major suppliers are encouraged to participate in this process, the score is HIGH. If formal plans exist and suppliers are often brought in, the score is MEDIUM. If no formal plans exist, or suppliers are not encouraged to participate, the score is LOW.

23. Plans are in place with major suppliers, with clear priorities for attaining operational excellence to improve quality, response time, total cost and inventory turns.

If documented, formal plans exist for each major supplier, with clear priorities for attaining operational excellence to improve in identified areas of quality, response time, total cost and inventory turns, the score is HIGH. If formal plans exist for most major suppliers, the score is MEDIUM. If no formal plans exist, or only a few suppliers are identified, the score is LOW.

24. Suppliers receive release schedules directly from the planning system.

If release schedules are actively used and on a regular basis by the A suppliers the score is HIGH. If release schedules are only sometimes used or not used on a set schedule and with only a few suppliers, the score is MEDIUM. If no release schedules are used the score is LOW.

25. Certification programs are in place for suppliers

If there is a formal certification program in place and every supplier must go through a certification process the score is HIGH. If all suppliers are not required to go through the certification process the score is MEDIUM. If there is no formal program in place or less than 50 % of suppliers have gone through the certification process, the score is LOW.

26. Rough cut capacity planning is used to validate changes in the MPS before MRP is run.

If rough cut capacity planning is a capability that is used to validate changes in the MPS before MRP is run and allows for the evaluation of the changes on the supply chain, the score is HIGH. If rough cut capacity planning is used, but not for the purpose of evaluating the effects on the supply chain, the score is MEDIUM. Otherwise, the score is LOW.

27. Future plans (manufacturing volumes and new products) are routinely shared with key suppliers resulting in confirmation of the supplier's ability to meet projected requirements.

If future plans, (manufacturing volumes and new products), are routinely shared with key suppliers, and this process results in knowledge of the supplier's ability to meet the projected requirements, the score is HIGH. If occasionally future plans are not shared with key suppliers or informed key suppliers fail to reliably confirm their capability to meet the plans, the score is MEDIUM. Otherwise, the score is LOW.

28. Suppliers conform to specifications (quantity, quality and due date) when received and require no further testing or inspection by the user.

If 98 % of the last three months of supply orders conform to specification when received and require no further testing, the score is HIGH. If 85 % to 97 % of the supplier's orders do not conform to specifications, the score is MEDIUM. Otherwise, the score is LOW.

29. Supplier visits occur to maintain a good understanding of each other's needs: quality, quantity and deliverability. (Supply Chain Management.)

If there are frequent visits between the key suppliers and users and documentation shows that there is a good understanding of each other's needs, the score is HIGH. If there are only occasional visits or there is not a demonstrated understanding of each other's needs, the score is MEDIUM. Otherwise, the score is LOW.

30. The total inventory of supplies between suppliers and customers is being continually reduced. (VMI)

If customers and suppliers are working together to continually reduce the total level of inventory liability between their operations and the level of inventory liability has decreased over time, the score is HIGH. If customers and suppliers are working together to reduce inventory, but the level of inventory liability is continually reduced, the score is MEDIUM. Otherwise, the score is LOW.

E. Training and Education

31. All levels in the organization have been educated on Supply Chain Management.

If training was provided to educate people at all levels of the organization, on Supply Chain Management, the score is HIGH. If SCM training took place but did not include all levels of the organization or did not include all parts of the organization, the score is MEDIUM. If no or limited training took place the score is LOW.

32. Key Suppliers and Customers have been educated on Supply Chain Management.

If there is a defined education and training program and evidence exists indicating that all key suppliers and customers have been trained in SCM, the score is HIGH. If there is a defined education and training program but not all key suppliers and customers have been trained, the score is MEDIUM. Otherwise, the score is LOW.

33. Continuing education training program are in place

If assessments are frequently made to determine what topics of education and training are necessary to improve operations, break new ground in excellence, improve understanding in areas of weakness, and the identified topics appropriate to their jobs are frequently covered with employees, the score is HIGH. If assessments are made, but people do not receive training to extend their skills and knowledge in lean excellence, the score is MEDIUM. Otherwise the score is LOW.

F. Performance Measurements

34. A process is in place to forecast and accommodate future needs for new or revised customer product specifications.

If a formal process is in place and used to forecast and accommodate future needs for new or revised customer product specifications, the score is HIGH. If a formal process is in place, but limited in use, the score is MEDIUM. Otherwise, the score is LOW.

35. Overall customer and supplier shipping costs are decreasing over time.

If there is a formal program in place to measure shipping costs for both customers and suppliers, and both cost are shown to be decreasing over time and well as total cost decreasing over time, the score is HIGH. If cost is shown to be decreasing only in one of these areas, the score is MEDIUM. Otherwise, the score is LOW.

36. There is a customer report card program in place.

If supplier report cards are used aggressively, for all suppliers, often resulting in improved performance the score is HIGH. If supplier report cards are used for some but, not for all suppliers, the score is MEDIUM. If a supplier report card system is not in place the score is LOW.

37. The average lead time for all products is continuously reduced.

If a formal plan is in place to track lead times and 80 % of these lead times have continuously dropped, the score is HIGH. If lead time averages stay about the same, the score is MEDIUM. If lead times are growing worse on the average or if there is no formal plan in place to track lead times, the score is LOW.

38. Days on hand inventory measured through the Supply Chain

If there is a formal plan in place that tracks Days on hand inventory for all key suppliers and customers, the score is HIGH. If the plan does not track inventory for all key suppliers and customers or if it tracks only certain key products, the score is MEDIUM. Otherwise the score is LOW.

39. Key suppliers track the performance of sub suppliers.

If there is a documented plan in place that is regularly reported on by key suppliers of the performance of their sub supplies, the score is HIGH. If this tracking is done for some suppliers, but not all key suppliers, the score is MEDIUM. Otherwise the score is LOW.

40. Inventory turns are continuously improving for all key suppliers and customers.

If there is a formal plan in place that tracks inventory turns overall or within product lines and the inventory turns have shown continuous improvement, the score is HIGH. If inventory turns on average or across the product lines have stayed about the same the score is MEDIUM. If inventory turns are not measured or are growing worse the score is LOW.

41. On-time deliveries are measured, tracked, and show dramatic improvement.

If there is a formal plan in place that carefully measures and tracks without fail, on time deliveries, and dramatic improvements, (90% or better), have been made, the score is HIGH. If a formal plan is in place and some improvements have been made, the score is MEDIUM. If this measurement is not used, the score is LOW.

42. The percentage of the sales orders shipped complete shows constant improvement.

If a formal system is in place to aggressively track and monitor sales orders shipped complete, and there is constant improvement in the number of sales orders shipped complete, the score is HIGH. If the number of sales orders shipped complete is not substantially improving, the score is MEDIUM. Otherwise, the score is LOW.

43. Order-to-cash cycle time is tracked and shows continuous improvement.

If a formal system is in place that identifies and tracks cycle time for all key milestones in the Order to Cash cycle, and continuous improvements are made in the total order to cash cycle time, the score is HIGH. If some improvements are shown, but overall total improvement is not continuous, the score is MEDIUM. Otherwise, the score is LOW.

G. Product Design and Development

44. The concept of concurrent engineering is used wherever practical.

If concurrent engineering is encourage and actively used wherever practical, the score is HIGH. If concurrent engineering is used limitedly, the score is MEDIUM. Otherwise, the score is LOW.

45. Suppliers and customers are allowed to participate in design of new products

If suppliers and customers are allowed and encourage to participate in the design of all new products and they provide most useful insight in the design of new product, the score is HIGH. If suppliers and customers are encourage to participate in the design of some new product but not all, the score is MEDIUM. If suppliers are not considered in the design of new product the score is LOW.

46. Target Costing is in place during new product introduction

If a process of target costing has been developed and is in place for all new product introductions, the score is HIGH. If target costing is used for some, but not all new products, the score is MEDIUM. Otherwise, the score is LOW.

47. Product design criteria maximize ease of manufacturing. New product introduction ridged business rules.

If product design criteria address maximizing ease of manufacturing (i.e. low part count, use of standard parts, ease of assembly, etc.), and is broadly applied, the score is HIGH. If manufacturing issues are addressed on an infrequent basis, the score is MEDIUM. Otherwise, the score is LOW.

H. Quality

48. Records are available to substantiate an adequate supplier quality rating system.

If a formal and documented supplier quality rating system is in place and a quality rating has been assigned to every supplier, the score is HIGH. If documentation exists by supplier for all key suppliers, the score is MEDIUM. Otherwise, the score is LOW.

49. Production problem data is recorded, reviewed daily at the workplace and a process is in place to resolve those problems that impact the effectiveness of the operation. (CCAR)

If formal systems are in place to identify, record, and summarize daily production problems at each workplace and a process is in place to review and resolve those that impact the effectiveness of the operation, the score is HIGH. If production problems data is collected but is handled in an informal manner, the score is MEDIUM. Otherwise, the score is LOW.

**50. Waste reduction programs are in place and progress is documented and visible throughout the organization.
(MUDA – 7 WASTES)**

If broad based waste reduction programs are in place, waste levels are tracked and made visible throughout the organization, and these programs show an improvement trend, the score is HIGH. If limited waste reduction programs exist, and levels show an improvement trend, the score is MEDIUM. Otherwise, the score is LOW.

SCORING MATRIX INSTRUCTIONS

1. Total bottom of each checklist (section A-H) apply all totals to the self-assessment scoring worksheet.
2. Post totals from all sections A-H onto scoring worksheet
3. Total Low, Medium, and High vertical columns. Put totals on line I.
4. Multiply line I. times the weight number on line J.
 - Zero points are given for questions rated Low.
 - 1 point is given for questions rated Medium.
 - 2 points are given for questions rated High.
5. For line K, add across and total the medium and high point scores to arrive at a grand total.

LEAN SUPPLY CHAIN MANAGEMENT SELF-ASSESSMENT SCORING WORKSHEET

Congratulations. You have rated your department, or company, as to its level of Lean Supply Chain thinking. The following matrix will provide a sound scoring process.

SCORING

	COLUMN TOTALS			
		Low	Med	High
A.	Totals from section A			
B.	Totals from section B			
C.	Totals from section C			
D.	Totals from section D			
E.	Totals from section E			
F.	Totals from section F			
G.	Totals from section G			
H.	Totals from Section H			
I.	Total all pages			
J.	Points	Times 0	Times 1	Times 2

**Grand
Total**

K.	Totals	0		
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<u>Class</u>	<u>Score</u>	<u>Summary</u>
A	85-100	Approaching Best in Class (Congratulations)
B	75-84	Moving towards lean SCM but significant gaps exist in some areas.
C	65-74	Serious gaps exist in key areas.
D	Less than 65	A company-wide focus, on Lean SCM is needed.

CLASS A

LEAN SUPPLY CHAIN MANAGEMENT

CLASS LEVEL	QUALITATIVE CRITERIA	QUANTITATIVE CRITERIA
A	<ul style="list-style-type: none"> ◆ The entire company embraces continuous improvement. ◆ All functions are educated and trained. ◆ Top management is involved, not just supportive. ◆ The supply chain is under control. ◆ The information database provides the basis for rapid decision-making. ◆ Communication is open and honest. ◆ Productivity showing dramatic improvement. ◆ Customers rate you very high in price, delivery, and quality. ◆ Inventory, profits and customer service are “Best in Class”. ◆ Employee satisfaction is very high. ◆ Business rules are highly developed in all areas. 	85 – 100%
B	<ul style="list-style-type: none"> ◆ Many departments embrace supply chain management. ◆ Most of lean supply chain focus is on the suppliers. ◆ Many employees are educated and trained. ◆ Value mapping the value chain is in process. ◆ Communication is starting to improve. ◆ The company is seeing measurable improvement in inventory, profits, productivity, and customer service. ◆ Employee commitment, motivation and morale are improving. 	75 – 84%
C	<ul style="list-style-type: none"> ◆ Some improvement exists in “pockets”. ◆ Education & training is limited to a few key individuals. ◆ Improvement is meeting with significant resistance. ◆ There is no formal, organized, approach to lean supply chain management. ◆ Business rules are unclear. ◆ The customer cannot yet “feel” the improvement. ◆ To most people in the company – “nothing is really much different.” ◆ Bottom line is not seeing the results. 	65 – 74%
D	<ul style="list-style-type: none"> ◆ Some procurement improvement, but lead by management. ◆ Measurable improvements in inventory, productivity, profits, or customer satisfaction are not apparent. ◆ Employees do not understand lean supply chain management, and are not committed to the process. ◆ Employee satisfaction is low. <ul style="list-style-type: none"> ● Low morale ● High turnover 	Less than 65