

Driving a Lean Steering Committee

Jd Marhevko, Global VP, AQ and Warranty Systems

ASQ Fellow, Shainin Medalist, CMQ/OE, CSSBB, CQE, Crain's, STEP **Delphi Technologies**

Arvind Srivastava, Consultant at SAF-Holland

SSMBB, CQA, Joe Lisy & William Liberman Awardee, IATF 16949 Lead Auditor

Delphi Technologies





Learning Objectives



Across this time, we will...

- 1. Understand how a steering committee can be effectively utilized in any type of organization
- 2. Learn how to align key business strategies when developing lean system objectives
- 3. Understand how to leverage leading indicator metrics to proactively manage outcomes
- 4. Increase our ability to more effectively implement lean systems in our organization



Leading On the Edge





You are all leaders in this room...

- Set the example
- This type of committee can work for many types of functions...Quality, Maintenance, IT, HR, etc
- Share and show the results
- You must show how you are relevant to your business



Steering Committee DMAIC





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|----|--------------|---|---|------------------------|
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| | \mathbf{v} | | | $\mathbf{\mathcal{C}}$ |

Identify the committee's External/Internal customer needs

Measure

Identify committee's performance targets

Analyze

Analyze/Plan on how to leverage the committee to meet the targets

Improve

Execute the plan. Use tools to fit the process(es)

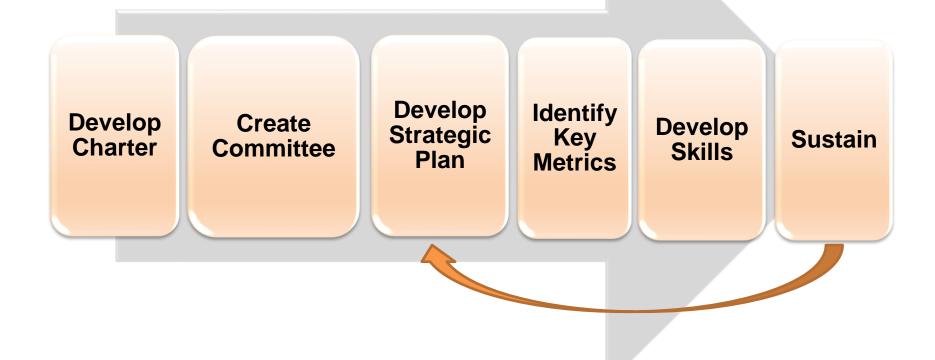
Control

Sustain gains. Enable accountability

Steering Committee Flow Chart







Committee's Charter



Scope: Enterprise-wide Lean Management System (LMS)

Objective: To effect a systematic LMS to meet business needs

& exceed competitor performance

Key Actions: DMAIC

Define: Conduct business-wide baseline analysis. Identify key areas of focus by using strategic planning. Insure horizontal and vertical goal alignment

Key Actions: DMAIC



Measure: Identify key metrics & leading indicators. Improve on metric calibration and effectiveness. Use a transparent approach to meet the objectives

Analyze: Conduct effective system reviews

Improve: Engage employees in the executive of effecting improvement. Share before/after results. Review and improve upon the LMS skills of the council. Benchmark others

Control: Sustain gains. Share successes/lessons



Assessment, Mission/Vision





Assessment: Identify what type(s) of assessments of the current situation are needed: LMS Status Tool, Personnel Skills, Effectiveness of Metrics, etc.

Mission: To effectively support the Company in attaining its strategic objectives by using LMS systems to meet and exceed internal and external customer expectations of delivery, quality and cost

Vision: To be viewed as Company Champions of the LMS Implementation



Consistency/Challenges





Consistency of Approach: Grow education base. Leverage Committee for execution of LMS. Share lessons; internally and externally. Transition from an education to application platform

Challenges: Identify current issues that need to be overcome

Economies of Scale: Align team monthly, conduct Face to Face planning sessions, leverage an Intranet and Visual Operating System (VOS), etc



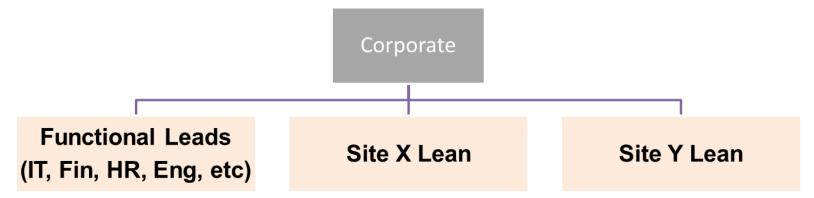
Committee Members





Factors to consider:

- Culture, Locations, Globalism
- Breadth/depth of LMS execution (pilot, enterprise)
- Internal implementation, consultant support, etc.
- LMS skill levels

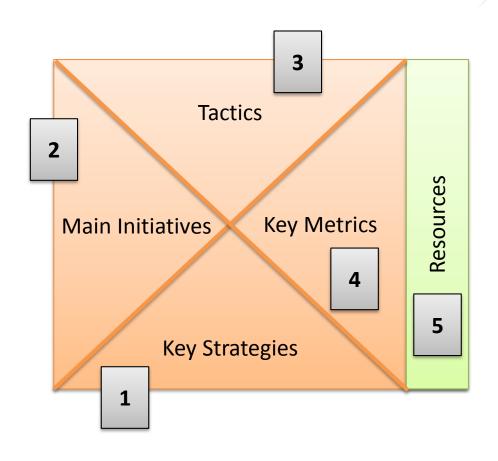


Create An Aligned Strategic Plan





- 1. Review business strategies. Examples:
 - Increase margin
 - Develop new products
 - Grow sales revenue
- 2. Develop aligning QLMS initiatives
- 3. Determine tactics
- 4. Identify key metrics
- 5. Identify who is to do what





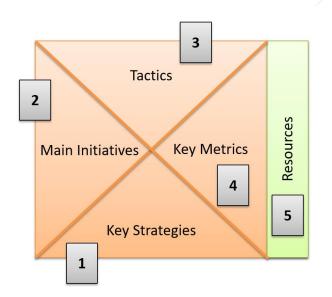
"X-Matrix" How It Looks





Level II Matrix - Year: BU/Site/Location

| 2a Develop improved NPI process | 1b Implement Lean Material Flow | 1a Implement Lean Value Stream Mapping | 2a1 Reduce NPI Lead Time 1a1 Rationalize Products Tactics To Achieve Initiatives Key Initiatives Key Strategies/ Objectives | Margin | NPI Lead Time | Tom | Sue | Mary | |
|---------------------------------|---------------------------------|--|---|--------|---------------|-----|---------------|---------------|-----|
| | • | • | 1. Increase Margin by 5% | • | | | Reso | urces | |
| • | | | 2. Develop 5 New Products | | | • | Prima Supp | ary Ow ort | ner |



Sample Committee X-Matrix





| Lev | /el | Ш | Ma | atr | 'ix | - ` | ΥE | AR | R 20XX | | | | | | | | | | | | | | | | | | | | | | | | \bigcirc | 19 |) |
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| | | | | | | | | | 14 | | | | | | | | | | | | | | | | | | | | | | | |] | | |
| | | С | | | | | | | 4.3.b. Conduct annual reviews and training updates on ISO/TS Core Tools by 2Q | | Ш | | | | | • | | • | • | | | | | O C | | | | | | | • | | | | |
| | Ð | | | | | O | | O | 4.3.a. Increase QA personnel understanding & interpretation of product specs by 3Q | • | Ш | • |) | | | • | | | | | | | • | • | • | • | | | | | • | | | | |
| | | • | | O | 0 | | | | 4.2.a. Consolidate all sites to one registrar by 4Q | | Ш | | | • | | | | • | | | | • | | | | • | | | | | • | | | | |
| | (| C | • | | 0 | | 0 | O | 4.1.b. Grow Quality/Lean skills and benchstrength by 15% YOY | | Ш | | | | | • | | • | • | | • | O | | 广 | _ | | | | | | | | | | |
| C |) | | • | 0 | | | | | 41.a Upgrad Tactics (20 | | Ц | | | | | • | | • | • | | | • | \mathbf{c} | 4.3 | En | gine | erir | ng / | Aligi | nme | nt | | | | |
| | (| C | 0 | • | O | | | | 3.1.a. Leveraç | • | • | • | Ш | | | | | | | | | 0 | | 4.2 | O۱ | AS F | xec | cuti | on: | TS | Syst | ems | | | |
| | (| C | | | • | | | O | 2.2.c. Participate in monthly Council reviews | | Ш | | | • | | | | • | • | | | | | | ~. | | | ,,,,, | | . • | 0,00 | • | | | |
| |) | | | O | • | O | | | 2.2.a. Implement Kanban flow plans to reduce DIOH by 20% by 4Q | • | Ш | | | • | • | | | • | Ð | | O | | | 11 | \bigcirc I | /IS E | ·νΔ | outi | 'n. | ΔΡί | ٦P | | | | |
| | | | | | | • | | | 2.1.b. Create action plan to close customer feedback gaps by 3Q | | Ш | | | | | • | | • | | | - | O | | 7.1 | Qi | /IO L | | Juli | JII. | Λι ' | اپد | | | | |
| | | | | | | • | | | 2.1.a. Review and upgrade existing Customer Feedback Process by 1Q | | Ш | | | | | | | • | Ð | | - | O | | 2 4 | NIa | N | חח | lm | مماد | 20.0 | tatio | • | | | |
| |) | (| 0 | 0 | O | | • | O | 1.2.c. Plan, develop, manage and implement automated SPC at appropriate processes | • | П | • | , | | | • | | | | | | | 1 | J. I | INE | W IV | ΚP | Ш | nen | len | tatio | 11 | | | |
| |) | (| \circ | | O | | • | O | 1.2.b. Enable accurate SPC formals to meet 80% audit scores | • | П | • | , | | | • | | | | | 0 | | | | | 10 | | ı. | | | | | | e. | |
| |) | (| 0 | O | 0 | 0 | • | O | 1.2.a. Monthly Management to increase Capable Processes to >85% KPIs | • | П | • | , | | | • | | | | | | | | 2.2 | Le | an/(| on | tını | aı ı | mpr | over | nen | tinte | gration | |
| | | | | | 0 | 0 | | • | 1.1.a. Reduce scrap/rework losses by 50% 4Q | • | | | - | | | • | | | | | 0 | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | 1 | 5 | 1 | 2.1 | Cu | stor | ner | Sa | isfa | ctio | n | | | | |
| | 1 | | _ | | ition | | | | 2nd Level Tactics (To achieve the initiatives) | | | | M | le | tri | CS | | | | 1 | | | | 1.2 | Pro | oces | s C | ont | rol (| (SP | C/KF | PI) | | | |
| iti | a | ti۱ | VE | S | , | | (Id) | | Top | П | П | T | 3 | Т | | Т | П | T | | | | | | 1.1 | Sc | rap/ | Def | ect | Red | duc | tion | | | | |
| 4.3 Engineering Allonment | t.5 Englineering Angrineer | 4.2 QMS Execution: TS Sy | 4.1 QMS Execution: APQF | 3.1 New MRP Implementat | 2.2 Lean/Continual Improv | 2.1 Customer Satisfaction | 1.2 Process Control (SPC/KPI | 1.1 Scrap/Defect Reduction | Initiatives (To Achieve Priorities) YEAR 20xx-xx Strategic Priorities BusinessStrategy | COPQ %COGS | OEE | ОТО | | Lean Savings | БІОН | 8D TTC %KPIs that meet capability | MTBF | TS/ISO Status | Skills Assessment Level | | × | × | × | * * | × | × | × | × | i × | × | × | X X | | | |
| | | • | • | | • | | • | • | Exceed financial income targets: Margin, Cash Conversion, etc. | • | Ш | | • | • | | • | • | | | | Resources | | | | | | | | | | | | | | |
| • | | • | | | • | • | • | • | Increase production/process capacity | | • | • | | • | | • | | | | Ш | Responsible/Accountable Consulting/Support | | | | | | | | | | | | | | |
| | | • | • | • | • | | | | 3. Reduce business c | • | Ш | | | • | • | • | | | | | | | ٠, | Thea | - / |) O | 40 | C1- | -4 | .: | | | | | |
| • | | • | • | • | • | • | • | • | 4. Improve customers Strategies | • | \Box | • • |) | | | • | • | | | \bigsqcup | 1. lm | prov | | Thre | | | | | | | | KPIV | , | | |
| | | | | • | • | | • | • | 5. Grow team skills and talent levels | | IT | | | | | • | | • | • | | 1. Improve upon what we do (reduce PPM/COPE, grow KPIV) 2. Deliver new products/processes well | | | | | | | | | | | | | | |
| • | | • | • | • | | | | | | | | | | | | | | | | | (APQP/OTD/TS/DIOH/RTY) | | | | | | | | | | | | | | |
| | _ | • | • | _ | • | | • | • | 6. Exceed safety/environmental standards | • | 텎 | T | | | | | | | | | | | | | APQ | P/OTD | |)IOH | RTY) | | | ٥, | İ | | |

Leading & Lagging Metrics





If you watch your pennies, your dollars will take care of themselves – Benjamin Franklin

Lagging metrics are usually upper management results. Identify and manage leading metrics that will affect these results.

| Evample Leading Matrice | С | Common Lagging Metrics | | | | | |
|---|---|------------------------|------|--------|--|--|--|
| Example Leading Metrics | | PPM | COPQ | Margin | | | |
| OEE: Operational Equipment Effectiveness (Health of the production process) | + | + | + | + | | | |
| RTY: Rolled Throughput Yield. (Product effectiveness and risk to the business) | + | + | + | + | | | |
| Margin Stratification (<0%, 0% <plan,>=Plan) (Product/Process design/execution effectiveness)</plan,> | | + | + | + | | | |



Committee LMS Skills





Committee skills are key to effective execution; Accelerate the learning plan

- Determine key LMS skills for your business; Assess team
- Implement a training plan

With this method, you can...

- Identify strengths/weaknesses
- Set individual planning goals
- Tie learning to strategy
- Lead by example

| Sample Business-Based KPIs/VOS | Tom | Joe | Mary | Sue | Avg | |
|---|------|------------|------|------------|----------|--------------------|
| Understands all KPI defns | | | | | 2.75 | |
| VOS Metrics/Obeyah Wall: Understands use & all Component | 5 | | | | 2.50 | |
| VOS Cell: Understands use & all components | | | | | 2.50 | |
| VOS EHS TRIR/Safety Board: Understands use | | | | | 3.00 | |
| VSM (CVSM/FVSM/EVSM) Kaizen, takt | | | | | | |
| Understands Takt Time and calculation | | | | | 2.50 | |
| Understands OEE and calculation | | | | | 2.50 | |
| VOS can construct Current & Future State VSMs | | | | | 2.50 | |
| VOS can construct Enterprise VSM | | | | i | l i | |
| Standard Work (StdW) w/Visual Operating Systems (VOS) | | | | | | |
| VOS can conduct StdW Analysis: Machine | | | ^ | ١ _ | | 4 |
| VOS can conduct StdW Analysis: Operator | | • | P | ١S | se | ss team per skill; |
| VOS can conduct StdW Analysis: IDL | | | | | | • |
| VOS LPA: Understands use | | | 2 | C | 'OS | ss the business |
| Automomous Maintenance (TPM/SUR/RCO) | | | C | () | | o the bachlood |
| Understands TPM metrics: MTBF and MTTR | | | . F | = \ / | باد | late across skills |
| VOS PM Board: Understands use | | | L | _ V (| aic | iale acioss skills |
| TPM/SUR/RCO: Knows how to conduct Set-Up Reduction | | | | -, , | _ I. | |
| to achieve Total Productive/Autonomous Maintenance | | <u> </u> | י ב | =V | ait | late across team |
| Understands Error Proofing/Poka Yoke | | | _ | | | |
| Flow/Product Planning/Pull | | ∐ • | • (| :re | ובּבּ | te training plan |
| VOS can develop a PFEP | | | | <i>-</i> | <i>-</i> | io training plan |
| VOS can develop a TTR | | | | | | |
| VOS can develop a Schedule "Wheel" | | | | | اران، کا | |
| VOS can develop and utilize Kan Ban cards | | | | | 2.00 | |
| VOS Hourly Board: Understands use (production/transactional |) | | | | 2.00 | |
| VOS Receiving Board: Understands Use | | | | | 2.00 | |
| VOS Shipping Board: Understands Use | | | | | 2.00 | |
| VOS Supplier Pull Board: Understands Use | | | | | 2.00 | |
| VOS Tuggers: Understands use | | | | | 1.75 | |
| 5S: Knows the 5S's/Impact and Red Tag Approach | | | | | | |
| Understands 5S in execution and sustainment with LPA | | | | | 3.00 | |
| VOS 5S Board: Understands use | | | | | 3.00 | |
| Individual Strengths | 0.44 | 0.75 | 20 | 4 00 | 2.30 | |

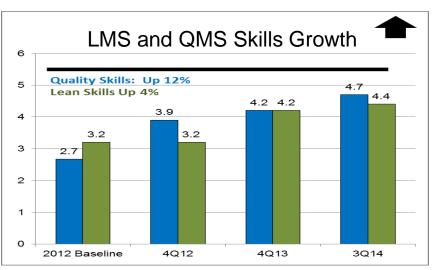
Growing the Committee's LMS Skills





Holding the Committee accountable for learning and applying the skills will increase business buy-in





While the committee was learning on live processes, they both improved the systems and their skills



Sustain Via The Committee





Analyze, Improve, Control

- Meet yearly to set strategy
- Check progress to initiatives monthly
- Meet monthly to review KPI performance
- Adjust to business needs

Rules of Engagement

- Agenda/Minutes
- Lessons Learned

| Date: | 19-Mar-2015 | Te | lecon: US 888 | .337.0215 | p = 6 | 8.22.753 |
|----------------|--|-------|----------------|------------------|----------|----------|
| Time: | 10:00 am – 11:00 am CST | | Intl 7 | 20.514.4158 | | |
| | DUDDOCE | | | | | |
| | w status of Lean standardization | | | | | |
| | w performance results to Lean K | | | | | |
| Shar | e Lessons Learned – Minimum, 1 location | | | | | |
| | EFFECTIVE MEETING CHAP | RACTE | RISTICS | I | | |
| x | Everyone notified | | x | Meeting Began | | |
| х | All Sites prompt, organized, prepared and participated | | x | Action Items As | | |
| х | Agenda Developed | | x | Minutes Record | | |
| x | Review past minutes and Action Items | | x | Meeting Ended | on-lim | ie |
| Commen | ts: Review QMS Status/Planning | | | | | |
| | DISTRIBUTION | | | DISTRIBUTION | | |
| Attend | AQC Member/Participant (BU/Site/Name) | | AQC Member | /Participant (Bl | J/Site/I | |
| Jd | | | | | _ | jb/ck |
| as | _ | P | | | _ | dk |
| n/a | | | | | - | |
| gn | - | | | | - | |
| jj | - | - ! | | | - | lw |
| ot | | | | | - | |
| kr | _ | | | | - | |
| ke | - | | | | - | |
| rt | | A | | | - | gm |
| jm/cc | _ | 4 | | | _ | pw |
| km | | I. | | | | db |
| | | | | | | |
| AGENDA | | A | tachments to I | e sent prior to | the Co | |
| Time | Topic/Discusssion Item | | | Who | _ | Time |
| 10:00 | | | | | \vdash | 0:03 |
| 10:03 10:04 | | | | | \vdash | 0:01 |
| 10:04 | | | | | - | 0:00 |
| 10:34 | + | | | | - | 0:00 |
| 10:34 | + | | | | | 0:03 |
| 10:34 | | | | | | 0:05 |
| 10:37 | | | | | | 0:05 |
| 10:47 | | | | | | 0:05 |
| 10:52 | | | | | | 0:05 |
| 10:57 | | | | | | 0:01 |
| | | | | | | |

Margin Results: PN Portfolio







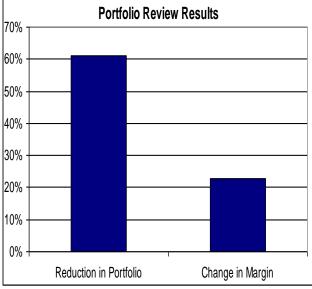


Ex: If targeted margin is 5%, then 8+ Items were meeting the 5% objective before and 14+ were meeting the objective after

Initiative: Improve margin by 5%

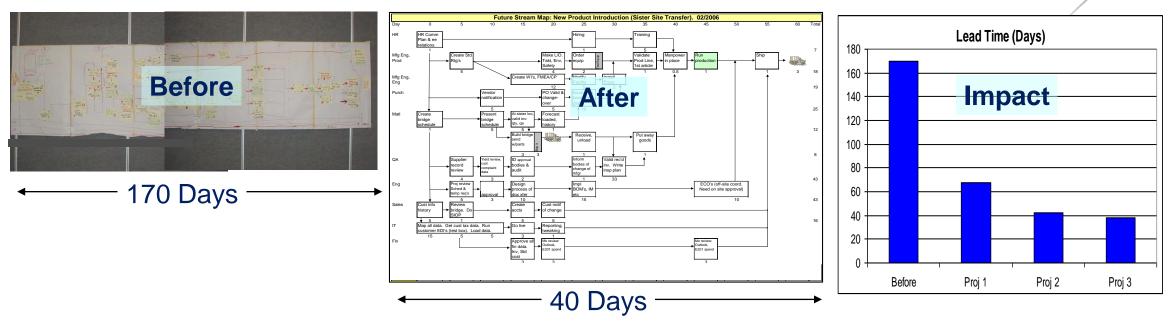
Action: Analyzed all SKUs on a margin continuum. Fixed or rationalized. Continued to fix

Results: 22% Improvement in margin base



Results: NPI





Initiative: Reduce New Product Introduction (NPI) Lead Time

Action: Conduct value stream map review. Implement fixes

Results: 70% Lead time reduction. Team able to increase NPI output

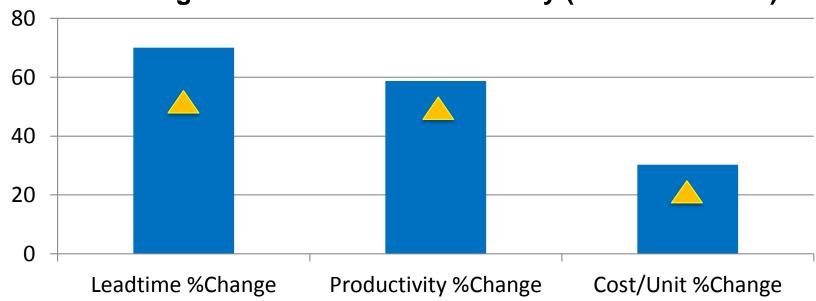


Real Results: 50-50-20





Changes in Benchmark Case Study (December 2017)



50% Reduction in Lead Time generally results in...

- Doubled (50%) Productivity and/or
- 20% Reduction in Cost/Unit



Results: YOY KPI Impacts





Enterprise-wide improvements are realized

| Leading Indicators | | Common Lagging Me | | | | | | | |
|---|-----|-------------------|-----------|----------|---------------|--|--|--|--|
| Manage the Outcomes | +/- | OTD | PPM | COPQ | Margin | | | | |
| What the Customer & Stakeholder Sees -> | • | | 1 | - | 1 | | | | |
| OEE: Operational Equipment Effectiveness (Health of the production process) | • | World | d class | OEE. 85% | %-95 % | | | | |
| RTY: Rolled Throughput Yield. (Product effectiveness and risk to the business) | • | Singl | e digit F | PPM | | | | | |
| Margin Stratification (<0%, 0% <plan,>=Plan) (Product/Process design/execution effectiveness)</plan,> | • | Profit | able gr | owth | | | | | |



Sustain: Hold The Gains





Steering Committees generally experience heavy turnover. To retain effectiveness consider...

- Quarterly alignment to strategic plan and initiatives
- Partner new members with seasoned personnel
- Standardized & accessible learning material
- Hold KPI accountability via personnel reviews



What We Did...



In our time together we have...

- Seen how a Lean steering committee can be effectively utilized in any type of organization
- Learned how to align the business' key strategies in the development of lean system objectives
- Learned how to better leverage leading indicator metrics to proactively manage outcomes

Leading On the Edge





You are all leaders in this room...

- Set the example
- This type of committee can work for many types of functions...Quality, Maintenance, IT, HR, etc
- Share and show the results
- You must show how you are relevant to your business







Thank You!

Your opinion is important to us!

Please take a moment to complete the survey using the conference mobile app.

Session No: TS/09
Driving A Lean Steering Committee

Jd Marhevko

Delphi Technologies

Jd.Marhevko@Frontier.com; Join me on Linked-In







APPENDIX





Company Quality Council Charter

20xx

| | Ö | Company Quality/Lean Council (QLC) | Council (QLC) | |
|---------------|---------------------------|--|--|--|
| Corporate | QA Name | Lean Name | SCM Name | Eng Name |
| Site QA & | |) wasama | | Site 1 IT Name |
| Lean Leaders. | | company council | | Site 2 IT Name |
| nembers | Site 4 QAI | Charter | er | Site 4 IT Name |
| | Site 5 QAI | | Grecos | Site 5 IT Name |
| Scope | Company's Quality and | Company's Quality and Lean Management Systems, Enterprise-wide | ems, Enterprise-wide | |
| Objectives/ | To support and effect a | systematic methodology | of deploying the Quality and | To support and effect a systematic methodology of deploying the Quality and Lean Management System |
| Deliverables | to meet the customer e | expectations and exceed c | to meet the customer expectations and exceed competitor performance and corporate requirements | corporate requirements |
| Key Actions | Define: Conduct Lean | and Quality Management | Define: Conduct Lean and Quality Management System baseline analysis across the business. Utilize | cross the business. Utilize |
| , | X-Matrix strategicplanr | ning methods to identify ke | ey areas in which to focus in | X-Matrix strategic planning methods to identify key areas in which to focus improvements and/or to close |
| | gaps. Insure horizonta | ıl and vertical alignment or | gaps. Insure horizontal and vertical alignment on the goals and objectives | |
| | Measure: Identify Qual | lity and Lean based KPIs f | Measure: Identify Quality and Lean based KPIs focusing on leading indicators. Refine and improve the | rs. Refine and improve the |
| | calibration and effective | eness of the KPIs and alig | calibration and effectiveness of the KPIs and align them to the business strategies. Continue to use a | egies. Continue to use a |
| | dashboardapproachto | dashboard approach to meet delivery, quality, cost and safety | ost and safety | |
| | Analyze: Conduct focu | used and effective system | Analyze: Conduct focused and effective system reviews using QMS and Lean methodologies. | in methodologies. |
| | Improve: Engageour | employees in the applicat | Improve: Engageour employees in the application and execution of effecting improvements. | ig improvements. |

To effectively support the Company in attaining its strategic goals and objectives by using Quality and Lean Management Systems and methodologies to help the business meet and exceed both intemal and external customer expectations of delivery, quality, cost and safety

Demonstrate before and after results. Regularly review and improve upon the Quality and Lean Science

Benchmark the systems of others to further our knowledge base

skills of our Council members. Sustain gains.

Control

Share successes and Lessons Learned (LL

QLC Vision: To be viewed by Accuride employees as Champions of Quality System Implementation and

in the bench strength of QLC members is needed based on key quality science skills levels. Standardized systems have been conducted across all core locations. An enterprise-wide improvement plan will need to be developed for execution. Leading KPIs have been developed for review and baselines are being established. A focused growth Baseline assessments are being reviewed for gaps as well as the opportunity to build upon existing foundations Assessment of Quality & Lean Functions: The team will execute through a Council.

indicator KPIs need to be developed. Overall, need to focus on and manage scrap due to lack of process control backgrounds, and ability to execute quality and lean systems. IT/Data systems are needed for effective data collection and rapid analysis. Internal/8D/CAPA systems need to be developed at most locations. Leading Challenges: Team members are at different levels of quality and lean science skill sets, applicational and system losses due to lack of material flow control. There is a need to manage cultural change. Consistency of Approach: Grow baseline education and establish goals. Utilize QLC to leverage execution of core processes. Share lessons learned; internally and externally. Create a plan to transfer from a platform of education to one of application with measured results.

Conduct bi-annual Leveraging Economies of Scale: Utilize monthly, web-based telecons for team alignment, Conduct bi-annual Face to Face (F2F) strategic plannings essions. Leverage F2F sessions to growskills and align resources. Leverage the Intranet for shared processes and documents. Publish/Share benchmarking activities across the business. Standardize quality and lean Visual Operating System documents/processes as feasible.



Charter Notes to Self...





| Area | r | Notes | 2019 |
|------------|---|-------|------|
| Members | | | |
| Scope | | | |
| Objectives | | | |
| Define | | | |
| Measure | | | |
| Analyze | | | |
| Improve | | | |



Charter Notes to Self...





| Area | Notes |
|------------|-------|
| Control | |
| Mission | |
| Vision | |
| Challenges | |
| Approach | |
| Scale | |

