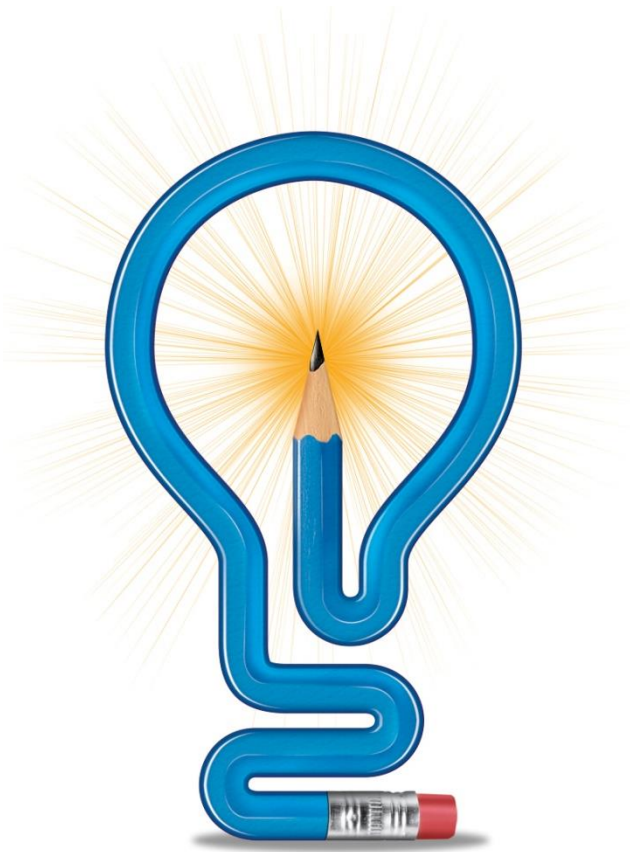




Approach Paper For Lean in Supply Chain Management

Submitted to:



Need for JIT Mfg

The modern mass producing industries are not much older than a century, as its genesis came from the invention of motor car by Henry Ford in 1906. There are two concepts that made complex gadget manufacturing possible; one is the interchangeability and the second is sub-contracting of parts manufacturing. It is prudent to get the parts manufactured from vendors rather than investing on facilities to manufacture them all in-house. The business process value involved in getting those parts & raw materials made from vendors is called “In-bound Logistics”.

In the traditional manufacturing systems, the inventory and quality issues of the incoming parts were not of a serious concern as factories held a huge inventory and the re-work of incoming supplies was assumed to be a part of the value chain. In modern era however, the Lean manufacturing system wishes to get supplies Just-in-Time (JIT) as the inventory carrying cost is considered as avoidable waste (*muda* in Japanese language). Increasingly, JIT demands First Time Right (FTR) parts which do not require any re-work at the point of receipt. Often, JIT wishes to have Green Channel vendors (Self Certified) whose parts do not require any inspection or re-work.

Rationale For JIT in Supply Chain Management (SCM)

In the manufacturing value chain (Raw material to Finished Goods) major focus is on reduction of Machine downtime; change over time, Work in process, in process quality issues. Over and above to have continuous flow in the value chain, its important to have focus on the parts supplied by vendor are ready to use once it arrives at factory premises without any further inspection involved. Arrival of these has to be based on the Just in Time (JIT) principle with ready to use so that unnecessary inventories can be avoided at the incoming stage. Automobile industries are matured in this process so that parts supplied to them can be directly fed to the manufacturing line. This significantly reduces the cost of inspection and inventory carrying cost. Most of the manufacturing industries are getting the parts manufactured from vendors. Keeping up their quality and delivery commitment depends largely on the vendors capability to supply defectfree & on time supply.

The entire supply chain management policies, processes and management for a traditional manufacturing system need to be challenged while reorienting supply chain management for the Lean manufacturing system. This includes enhancing manufacturing process capability, rationalising the vendor base, their location, vendor quality systems, etc.

Converting the vendors into ‘Green Channel (Self Certified)’ vendors is not an easy task, as many of the small and medium scale industries have limited inputs for process engineering and cannot afford to hire high profile people. Due to this scenario, often the Original Equipment Manufacturers (OEM) have hardly spend time and effort in developing the systems and competencies of their vendors leading to poor quality of supplies which has to be often re-worked in their factory. The companies in Japan, particularly automobile manufacturers, have systematically developed their vendors through a vendor integration program.

Rationale of SCM^{Lean}©

SCM^{Lean} is a holistic approach of studying the current inbound logistics of the company through extended value stream mapping and identifying waste variation and over processing and systematically eliminating by restructuring the inbound logistics systems.

Mr. NC Narayanan (NC), the Founder & CMD of SSA Group of Companies, with his four decades of experience in automobile and auto-ancillary industry has come up with several thought leaderships in the area of Lean manufacturing system such as RMAOR[®] framework for Lean factory design. **SCM^{LEAN}©** is one of those thought leaderships of NC that fills the gap in developing green channel vendors for mass-producing industries. This approach will challenge all the Supply Chain Management systems, re-engineer them to improve their value chain to suit Lean manufacturing system.

Business Relevance of SCM^{LEAN}©

Every business irrespective of their size & product are facing the following challenges

- Low on time delivery & in full performance (OTDIF)
- High cost of poor Quality (COPQ)
- High Customer Return
- Underutilization of Resources
- Excessive Incoming Inspection Resources
- Quality assured by Inspection & hence low Reliable
- Cost Of Inventory at Incoming is very high

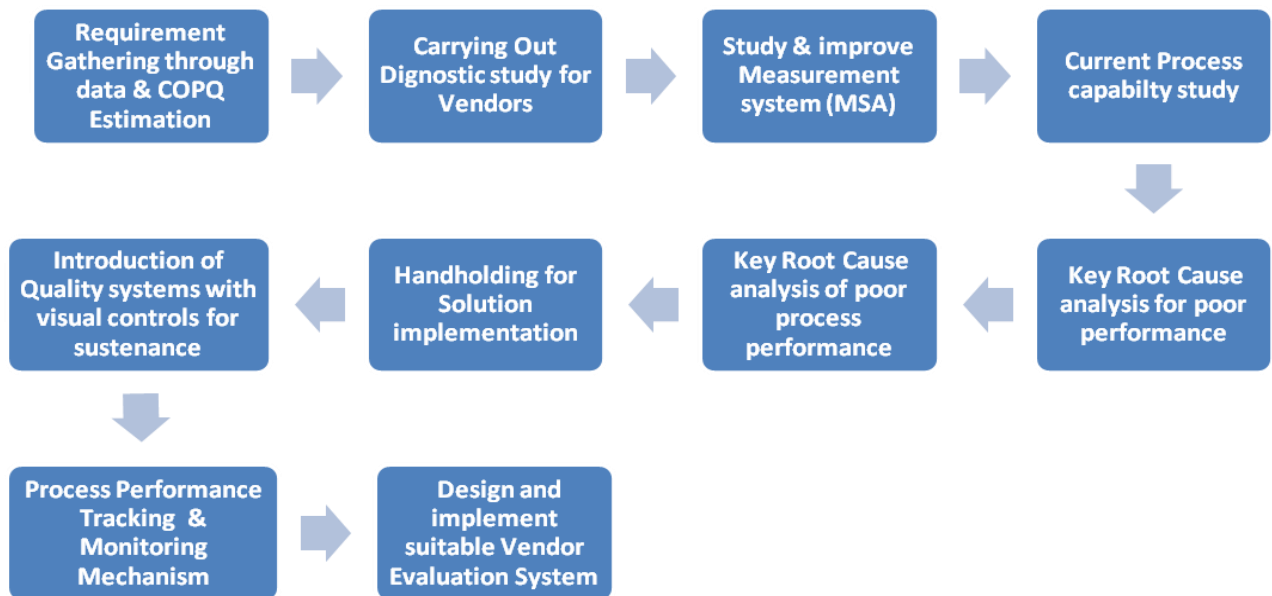
The objectives of SCM^{LEAN}©

The important objective of SCM Lean is the Reduction of Cost Of Poor Quality (COPQ) through

- Reduction in rejects and segregation of incoming supplies
- Reduction in inspection time of incoming supplies.
- Zero defect supplies from vendors
- Reduction in inventory of incoming materials
- Reduction in the Storage space

SCM^{LEAN}® Approach

The following illustrates the SSA's SCM^{Lean}® approach:



Note: These are the generic steps of the approach. This may vary from vendor to vendor based on complexity & product manufacturing systems.

Benefits To The Vendor

- Increase in the throughput
- Less rejection and rework
- Reduction in Cost of Working capital
- Higher Market Share
- Lower manufacturing cost
- Faster payment cycle
- Low Working capital
- More competent operators
- Better utilisation of resources

Benefits To The Company

- Reduction in cost of Supply Chain Management
- JIT supplies to suit Lean manufacturing system
- Reduction on COPQ
- Throughput improvement

1 SSA's Credentials

1.1 IACET Accreditation

SSA is recognized as the first and only Authorized Provider in India of Continuing Education Units by the International Association for Continuing Education and Training (IACET). This puts SSA in the prestigious league of only 650 IACET CEU providers worldwide such as [American Society for Quality](#) (ASQ), Automotive Industries Action Group (AIAG), and Society of Automotive Engineers (SAE). All SSA Professional Development seminars, e-Seminars, and webinars meet eligibility requirements for IACET Continuing Education Units (CEUs) according to the ANSI/IACET 1-2007 Standard. To receive CEUs, attendees are required to be engaged in the entire class and demonstrate mastery of the learning objectives by successfully completing a knowledge assessment.



Many organizations offer some form of continuing education credit, but only the IACET CEU is held to the strict, research-based [IACET Criteria and Guidelines for Continuing Education and Training](#). Only IACET Authorized Providers, who undergo a strict application and site-review process, can award the IACET CEU. IACET Authorized Providers are required to re-apply and be reauthorized every five (5) years.

The Continuing Education Unit (CEU) was created by IACET as a measurement of continuing education. One (1) IACET CEU is equal to ten (10) contact hours of participation in an organized continuing education experience under responsible sponsorship, capable direction, and qualified instruction. Under IACET's care, the IACET CEU has evolved from a quantitative measure to a hallmark of quality training and instruction. For more information on IACET, visit www.iacet.org

SSA has implemented a knowledge research & develop, and training delivery processes conforming to IACET's exacting standards. Our in-house Research & Knowledge development department follows the IACET guidelines and processes right from the time client's needs are identified till the learning outcomes are evaluated and corrective actions initiated. This includes the faculty development & monitoring.

The training course keeps the engagement of the participants through teach back by participants, simulation in the class room, software hands on and frequent quiz to recap the topics covered. SSA follows the chalk-in-talk teaching method instead of overloading participants with excessive PowerPoint presentations. The concepts are driven through case studies and class room break-out sessions.

ANNEXURES

2 About SSA Business Solutions (P) Ltd.

SSA Business Solutions (P) Ltd. (SSA) is a leading Business Excellence Enabling organization engaged in the services of providing management solutions to Industries and Service organizations to achieve higher profitability and growth. The scope covers Strategy planning, process & people development.

SSA was founded with a missionary zeal to serve Indian industries with a purpose statement; "To make MADE IN INDIA synonymous to QUALITY". Founded in 1999, and ever since SSA has made a significant contribution to its client's image & profitability through many organizational development solutions.

CORPORATE DIRECTION:

SSA is the leader today in this Business Excellence consulting space in Asia and its corporate direction is given below:

Our Purpose

To enhance Stakeholder's Value through *partnering for growth*; our journey will continue as long as there is a *passion for perfection*.

Our Vision

SSA established its vision to define its scope of products & services and industry coverage. SSA wishes to partner with its prospects for long time enabling & hand-holding them in their journey of achieving business excellence:

- ***To become the No.1 (by turnover) Business Excellence solution provider in India by 2015 with 20% revenue from Overseas consulting.***

Our Quality Policy

Our Quality policy that directs all our actions is given below:

SSA Business Solutions (P) Ltd., Business excellence enablers is dedicated to enhance the competitiveness of our invaluable customers through business excellence.

We will strive to achieve customer satisfaction by partnering & providing end-to-end customized Solutions.

We will nurture the following means to achieve our policy:

- ***Dedicated & competent people***
- ***Innovation in our products & services***
- ***Operational excellence through continuous measurement and continual improvements in our processes***

Our Values

The guiding principles were identified by the Alchemites (this is the way all people in SSA are called). They are the core values that guide all actions at SSA. They are given below:

Customer Concerned Culture

Quality Of Thought

Entrepreneurship at all levels

Engaging each other with integrity

Process focus for Repeatable Excellence

2.1 SSA Competencies

SSA is ISO 9001:2000 certified Company. The certification is for the following capabilities of SSA:

“Design, Development, Implementation, Maintenance and Support in Business Excellence Model, Process Excellence through Six Sigma and Management Systems as per International Standards.

Provision of Corporate and Public Workshops as per Customer Requirements and International Standards”

SSA is a lead player in promoting Lean and Six Sigma movement and other profitability improvement initiatives like Lean Manufacturing Systems, Value engineering, BPMS (Business Process Management Systems). SSA's product line extends to organizational development solutions, commencing from setting up Management Systems for Certifications to International Standards till achieving coveted Business Excellence awards.

SSA has specialized in setting up Integrated Business Excellence and strategy implementation system automated with the state of art software solutions. SSA has many success stories in deploying change management in large scale MNCs covering many countries at the same time. SSA is the first consulting company in India which has combined Six sigma, Lean and Business Excellence for Change Management and successfully applied in many corporate.

SSA partners with the Corporate in creating a Quality culture through total employee involvement, dealing with the softer and competency building opportunities. SSA believes in empowering its clients through complete knowledge transfer by handholding during the tenure of its association with any organization

SSA has been certified for Information security management system conforming to ISO 27001 standard. This means that the ability of SSA's Management System to safeguard our clients data and information has been audited and found in conformity to the International Standard. Thus you can be rest assured that your information accessed by us will continue to be in safe hands

2.2 SSA Success Stories

SSA has successfully deployed large scale business excellence models integrating Balanced Scorecards, Lean and Six Sigma in many leading large-scale corporate such as National Stock Exchange (NSE), ABN AMRO Bank, JP Morgan, Vodafone. L&T Finance, HDFC Bank, ICICI Bank, ICICI InfoTech, Larson & Toubro, Bharat Petroleum, Bluestar, Godrej Saralee, Bombay Dyeing (DMT division), Lipidata Systems and many more. SSA also offers International certification programme on Lean, Six sigma Black belt / Green belt.

SSA also offers consultancy for Business Process Management Systems (BPMS) to leading large-scale corporate such as L&T HED, L&T Finance, Celetronix , Global Telesystems, Godrej Hi-Care, Marathon Housing and others.

In order to give a flavor of the expected outcome out of Business Excellence Initiatives through the application of Six sigma, the following information is provided from the previous consulting experience in India and overseas. The name of the client and details of the projects are masked to honor the confidentiality agreement:

Service Industry Projects

Sr. no	Industry	Project	Results Achievement
1	Commercial Bank	Reduction in TAT of Vendor payment	TAT reduced from 5 days to 1 day.
2	Bank's BPO (back office)	To have a robust system to avoid duplicate payments	Zero defect system achieved
3	-do-	Improving the accuracy of the billing process	4 sigma to 6 sigma level of accuracy (0.00034%)
4	-do-	Reduction in TAT for investigations of foreign cross border payments	TAT reduced from 24 hours to 4 hours
5	-do-	Reduction in TAT for No Objection Certificate for Automobile loans	TAT reduced from 15 days to 2 days
6	Trading House	Reduction in TAT for new member registration	60% reduction in TAT
7	-do-	Reduction in TAT for issue of new user ID	50% reduction in TAT
8	Logistics	Accurate POD/DC delivery on time (POD-Proof Of Delivery, DC-Delivery Challan)	Improvement in delivery of completed POD/DC to 90%
9	-do-	Reduction in attrition of sales staff	Attrition rate reduced from 51% to 25%
10	-do-	Reduction in cost of recruiting	Cost of recruitment reduced from 23 lakhs to 8 lakhs
11	-do-	Reduction in lead time for recruitment process	Lead time for recruitment reduced from 15 days to 5 days
12	-do-	Reduction in outbound billing errors related to wrong account number	Reduction in number of wrong account from 0.5% to 0.3%

13	-do-		Cost of approx 6.5K Euros was saved on operations supply
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Manufacturing Industry Projects

Sr. no	Industry	Project	Results Achievement
1	Petroleum	Yield improvement of Diesel	Rs 10 crore saving
2	-do-	Reduction in TAT of bitumen lorry loading	50 % reduction in TAT leading to Rs 15 crore savings
3	Air-conditioner manufacturing	Reduction in leakage of brazing joints in compressor	Rs 50 lacs saving due to 30% reduction in rejections & rework.
4	Printed Circuit Board Manufacturing	Reduction in Inventory	Inventory reduced from avg 20 days to avg 2 days.
5	-do-	Increase in the Productivity	Increase in the productivity by 51%
6	do	Reduction in the product lead time	Product lead time reduced from 45 hrs.to 22 hrs
7	Process Equipment Manufacturing	Improve product on time dispatch performance	Dispatch performance improved by reducing avg delay of 54days to 22 days
8	Plastic Manufacturing	Increasing throughput yield	No of despatchable sets increased from avg.17nos to 28 nos.
9	Chemical Manufacturing	Reduction in p-Xylene specific consumption	Rs. 1.45 Crore / annum
10	do	Improving the Plant Occupancy	Rs. 0.55 Crore / annum
11	do	Methanol Yield Improvement	Rs. 1.62 Crore / annum
12	do	Improving Specific Power Consumption (Energy Saving)	Rs. 1.31 Crore / annum
13	do	Increasing the loading of effluents in the Reactor	Rs. 3.94 Crore / annum
14	do	Administrative cost reduction – Energy saving (Bus Fleet, A/c, Lights etc.)	Rs.2 Crore / annum

18	AC Manufacturing	Reduction in Defects/ rework due to painting	Rs.45 Lacs/annum
19	FMCG	Yield improvement in 12hrs. Jumbo coils	Rs.58Lacs/annum
20	Geyser Manufacturing	Increase in Productivity of Geysers	199% increase
21	do	Increase in productivity of Tank Manufacturing	214% increase

2.3 Strategic Alliances

SSA has many strategic alliances with overseas companies specialized on specific areas of Business Excellence solutions. These include, Rath & Strong, iGrafx & Nutech from US and iNexus Global solutions from UK. SSA has experts trained in US by iGrafx (division of Corel Corporation), on Process Simulation techniques used in Six sigma. SSA provides sales and support for implementing Process Management Systems and process Simulation Solutions in India. For more details log on to www.iGrafx.com.

2.4 Management Team

SSA is a professionally managed company runs by highly qualified and experienced senior level management experts.

SSA Management includes the following professionals:

1. Mr. NCNarayanan, B.E (Mech) , MS (Research) – Founder & Managing Director
2. Mr. Naveen Narayanan, B.E (Mech) – Director
3. Mr. Ganesh Iyer – B.E (Chem) , MBA (Yale University) - Director
4. Ms. Sashi Iyer – B.Com , MBA (Washington University) – Director

SSA operates from a state of the art office, equipped with modern infrastructure facility providing prompt connectivity and communication. SSA has 4 Strategic Business Units namely *Manufacturing*, *Service*, *IT & ITES* and *Knowledge Management* to offer customized solutions to various industries for enhancing profitability through business Excellence.

2.5 Products & services

The various services of SSA have been broadly classified in two categories:

- Organizational Development solutions (ODS)
- Management Systems solutions (MSS)

The Organizational Development solutions are packaged to suit industry needs and often customized after carrying out a scoping exercise. The solutions may include one or more the following concepts:

1. Business & Strategy planning
2. Setting up Integrated Strategy implementation & management system.
3. Change Management
4. Leadership Development
5. Balanced Scorecard

6. Lean
7. Six Sigma (SS)
8. Lean Six sigma (LSS)
9. *Rap*DMAIC (Process Improvement Workshop)
10. Design for Six Sigma (DFSS) for new product development.
11. Lean manufacturing systems
12. Counseling for Business Excellence Awards (Rajiv Gandhi, Deming, etc.)
13. Project Management System (PMS)
14. Business Process management Systems (BPMS)
15. Knowledge Management Systems (KMS)
16. Process Simulation using advanced software support (I-Grafx)
17. Statistical Process Controls (SPC) with the application of software
18. Activity Based Costing (ABC)

The Management System Solutions are provided conforming to the following international standards:

1. Quality Management System to ISO 9000-2000
2. Environmental Management Systems to ISO 14000
3. Occupational Health & safety to OHSAS 18000
4. Information Security Management to ISO 27001-2005
5. IT Infra management systems to BS 15000
6. CMM-I
7. Food safety to HACCP
8. QMS to auto and ancillary industry to TS 16949

The Knowledge Management & Training Solutions group provides the following services:

1. Six sigma Greenbelt / Black belt certification Programmes
2. Lean Primer Certification Programmes
3. Lean Foundation Certification Programmes
4. Lean Advanced Certification Programmes
5. Lean Champion Certification Programmes
6. Lean Master Certification Programmes
7. Project Management Certification Programmes
8. Lead Auditor Training on ISO 9001
9. Personality development programmes
10. Workshops on the following quality concept
 - Quality Function Deployment (QFD)
 - Failure Mode Effects Analysis (FMEA)
 - Lean Manufacturing System
 - Lean for Service
 - DFSS – Design for Six Sigma
 - Six sigma
 - Total Preventive Maintenance (TPM)
 - Design of Experiment (DOE)
 - Statistical software (Minitab, Sigma-XL) workshop
 - Process simulation software (iGrafx) workshop

For more details about SSA, please visit www.ssa-solutions.com

2.6 Conventions

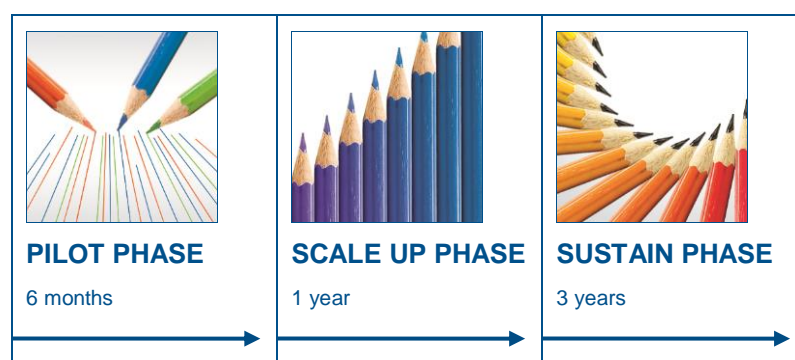
SSA organizes an annual convention to create a platform where all eminent speakers and corporate leaders share their experiences of deploying Lean, Six sigma, Business excellence and other Organizational Development initiatives.

2.7 USP – Unique selling proposition of SSA

- Pioneering in Lean & Six sigma since 1999
- Wide range of offerings – process improvements to strategy implementation
- Experience in all kind of industries – Manufacturing, service and IT
- Consulting model with a blend of knowledge transfer and active participation in problem solving with the team till the breakthrough results are demonstrated
- 25 full time dedicated consulting team supported by more than 20 subject matter experts as associates
- Software selection, application and support for business excellence by SSA Techknowlogies (P) Ltd, the division of SSA
- Hands-on experience in solving over 2000 business problems both in manufacturing and service areas
- Success rate in projects as high as 99.99% due to passionate resources and process driven project management systems
- Highest customer loyalty and good will due to delivery of commitments (client references given for enquiry)
- State-of-art consulting and teaching methods
- International exposure in 11 countries of multi-lingual, multi-ethnic environments
- Consulting experience from family owned MSME (Micro, small and medium scale enterprises) to fortune 500 multinationals
- Track record of delivering ROI from 3 to 48 times the consulting fee through savings
- Management Systems of SSA certified for ISO 9000 and Information security ISO 27001 to assure confidentiality of client's information

2.8 SSA's Standard Consultancy Model in other Organisations

Our Partnering Model



SCOPING (3 DAYS) PILOT WAVE (4 MONTHS)	SCALE-UP (3 DAYS)	INTERNALIZE (3 YEARS)
DELIVERABLES <ul style="list-style-type: none"> ▪ Customised Roadmap ▪ Create Buzz ▪ People enrolment 	DELIVERABLES <ul style="list-style-type: none"> ▪ Companywide improvements ▪ KRA linkages 	DELIVERABLES <ul style="list-style-type: none"> ▪ Internalization ▪ Integrate with strategy planning ▪ Policy deployment

SSA shall aim to deliver the objectives stated in the preamble. The approach and model that shall be applied by SSA is covered in details in this section below:

SSA Business Solutions (P) Ltd (SSA) believes in creating a continuous improvement culture with the enrolment of people through internalization of best practices using state of art organizational development solutions. Essentially, the change in the mind set of the people is the key ingredient for creating this culture. Keeping this in mind SSA has developed a unique consultancy model to partner with their clients.

The following section details the approach in detail:

To achieve the above objectives, SSA follows a proven project management approach with the following features:

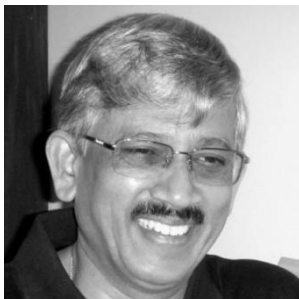
- Enroll the senior management in selecting the strategically important projects.
- If the projects have already been chosen, assess the suitability of projects chosen and possibility of completing the projects within 6 months.
- Train the team on Continuous Improvement (Hereafter called as CI) deployment tools. Blend the team for knowledge as well as attitude for enrolling them for continuous improvement activities. SSA training methods ensures that this happen. SSA training curriculum has a blend of class room simulations, group exercises using case studies. The chalk-in talk methods adopted by SSA is one of the international best practices.
- The vigorous steps followed during the training in terms participative sessions through simulation and case studies engages the participants well in learning. The frequent quiz and teach-back by the participants along with examinations ensures the active learning by the team.
- Well defined project plan with each task planned and formatted to ensure that projects always on schedules.
- Over the years SSA has added many risk assessment and mitigation plan to ensure that the project deliverables are met irrespective of any risk that may happen during the course of the project such as attrition, roadblocks, lack of people enrolment etc.
- SSA has a unique XL format of tools called KTS – Key Task Scheduler which enables the teams to carry out their project steps using the tool kits described in the KTS. It also helps the teams to keep a journal of their project which is used for presentations to the steering committee during reviews. This saves time and acts as an effective communication tools.

SSA resources the project with highly competent accounts managers / project leads to ensure that customer has a single window to get any information on the project.

- SSA believes working with the team is the best way to impart knowledge instead of training them and letting the team to apply. One of the reason SSA enjoys excellent customer good will is due to this differentiation form all other consulting firm in India and overseas.
- A workout is the working session with the teams where the consultant facilitates the team with structured steps & formats for each phases and makes the team to brainstorm in the class and apply the principles learned in the training. Please refer for more details in this proposal.
- There are coaching sessions followed by the workouts during which the consultant meets each teams separately and helps them to complete the project steps. There are workouts followed by coaching sessions for each phase.
- SSA's program manager and project leads shall send a fortnightly report on the project status highlighting the issues needs to be addressed by the client. If there are any roadblocks, the concerned project manager of the client is expected to clear within certain time frame (shown in the escalation matrix below). If there is a delay in the resolution, the matter is escalated to the seniors in SSA as well as in the client's organization. This approach ensures that the project is progressed well and breakthrough results are achieved.
- SSA project management model covers a gate review at the completion of each phase. This review is carried out by the steering committee in the presence of SSA accounts manager. This review is very critical as the management expectation is known to the teams and just in case if there are deviations, they are addressed on time.

2.9 Profile of our Top Management

Mr. NC Narayanan, Founder & Managing Director



Professional Experience

NC is the founder MD of SSA Business Solutions (P) Ltd which was founded by him in 1999. NC has worked for 30 years in various professional Organizations and 10 years in Business excellence Consulting. He has held several senior management positions including General Manager – Technology in Crompton Greaves Ltd and Chief Designer – Lucas TVS Ltd.

NC has been doing a pioneering work for creating Quality consciousness in Indian industries since 1999.

NC has authored the famous pocket book “Lean six sigma in a nutshell” and “Enigma of Lean” in addition to several publications in the press.

Among his accomplishments:

- Trained over 2000 Green Belts & Black Belts in the Six Sigma DMAIC Curriculum
- He has specialized in DFSS and Lean in addition to six-sigma.

- Lead Lean Six Sigma deployment in 10 corporate and Institutionalized Six Sigma in 20 companies
- Consulted over 100 companies for ISO 9000 QMS implementation in Mfg and service industries
- Implemented Information Security Management System (ISO 27001 / BS 7799) in 3 financial institutions.
- Designed and Conducted over 500 training programmes in the area of Quality Management and HRD
- Institutionalized TQM in two companies
- External examiner for VJTI Engineering College, Mumbai and In-house trainer for number of professional companies
- Specialized in Vendor Development - Green channel Vendor systems
- Training & development of Designers and development engineers in concurrent Engineering
- Trainer in System's Approach to Organizational re-designs
- Involved in Design & Development of Electro-mechanical Equipments
 - Lighting Technology Management.
 - Overseas Vendor development (Global Sourcing)
 - Project design and Implementation.
 - Tools and mould design & manufacturing
 - New Technology identification & Implementation.
 - Trained in CAD/CAM from Lucas UK & Common wealth secretariat.
 - Design & Implementation of CAD/CAM Systems.

Mr. N C Narayanan has been a keynote speaker in various associations as below: Indian Merchants Chamber, The Bombay Chamber of Commerce & Industry, The Council of EU Chamber of Commerce & Industry, The Indian Electrical & Electronics Mfg Association, The All India Plastic Mfg's Association, Bombay Industries Association, The Karjat Ambernath Manufacturers Association, Rotary Club, SP Jain College of Management Studies and Thana Small Scale Industries association.

Education

- B.E (Mech) Gold medalist from Anna University, Chennai and M.S (Research) in CAD/CAM from IIT, Chennai
- Masters in Change Leadership
- Master Black Belt in Six Sigma Curriculum, Train the Trainer in Balanced Score Card from Balanced score card Institute, USA. Certified Trainer on Lean Six Sigma Process Simulation from IGrafX, USA
- Certified Business Excellence Assessor in EFQM Model, Certified Lead auditor for ISO 27001 (BS 7799)
- Information Security Management System and Certified Lead Assessor for ISO 9000 (Batalas-UK)
- Trained in JUSE, Japan in TQM

Naveen Narayanan, Director



Professional Experience

Naveen is a Mechanical Engineer with an MBA in International Business from Thunderbird School of Global Management. He has over eight years experience in the world of Strategy and Change Management and is a Certified Six Sigma Black Belt and Quality Improvement Associate from American Society for Quality. Over the years, he has led several corporate wide transformation programs, mentored change agents, and produced sustainable customer and business results for clients throughout Asia-Pacific. In climbing the near vertical learning curves for these projects, he discovered that he not only enjoys shouldering these different responsibilities, but can also readily shine when faced with such international and interdisciplinary challenges. As a Lean Six Sigma Master Black Belt, he has a strong grasp of the fundamentals of statistics and problem solving techniques. He is also highly proficient in data analysis using advanced software such as Minitab, iGrafx, SPSS, @Risk, and SigmaXL. He is a certified assessor for Business Excellence conforming to EFQM model and a Certified Internal Auditor for TS 16949:2002 standard.

Partial List of Clients Consulted:

Bharat Petroleum, Pfizer Pharmaceuticals, Nortel Networks, DHL Express, Bluedart, ABN-AMRO bank, Blue Star, Larsen & Toubro, and Godrej Sara Lee.

Certifications & Honors:

- Inducted to Beta Gamma Sigma, the scholastic honorary society for business students, in recognition of his outstanding academic record during his MBA program
- Earned First Class with Distinction and was ranked among top 5% graduating students in Mechanical Engineering from Mumbai University
- Certified Business Excellence Assessor for CII-EXIM Bank Excellence Award

Ganesh Iyer, Joint Managing Director



Ganesh Iyer is a graduate in Chemical Engineering from Bombay University with Advanced Management Degree from INSEAD, France.

His professional background includes over a decade and a half spanning across IT and Management Consulting. Before joining SSA, Ganesh worked for organizations such as Tata Infotech, Infosys and Bearing Point in the US. Ganesh was holding the position of a Manager in the Strategic Sourcing and Procurement Group with Bearing Point, USA. In this capacity, he has consulted Microsoft, Dell Computers, Washington Mutual and many others in the US to achieve breakthrough improvements in their Business processes.

Ganesh has led a number of Change Management engagements using the Lean six sigma methodology. He has trained more than 500 Green Belts around the world and coached as many breakthrough improvement projects.

He has been trained in Process Simulation & Rapid DOE techniques by iGrafx (division of Corel), Portland – USA and is a certified Trainer by iGrafx to conduct process simulation courses all over the World. He has trained several Green and Black belts in Process simulation techniques.

Partial List of Clients Consulted:

National Stock Exchange, DHL Express, Blue dart, Vodafone, Coromandel Fertilizers, NSDL

Certifications & Honors:

- Certified Six Sigma Black Belt and Quality Improvement Associate from American Society for Quality
- Certified Project Management Professional from PMI
- Certified ISMS Lead Auditor
- Approved Six sigma instructor for DPWN (DHL Group), Germany

CONCLUSION:

SSA wishes to thank the management for giving this opportunity.

For SSA Business Solutions (P) Ltd

NC Narayanan

Managing Director

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