

Overview and Implementation of LSS Six Sigma Certification

Anam

Introduction

Six Sigma is a quality focused program that require process design. Today Lean and Six Sigma are the most popular business strategies for enabling continuous improvement (CI), customer satisfaction, rapidly growth the business. The main goal for any organisation wishing to achieve quality and operational excellence and to enhance perform. Therefore, the integration of 2 approaches improves efficiency and effectiveness and helps to achieve superior performance faster than the implementation of each approach. However, the term LSS was first introduced into literature around 2000.

LSS was defined as a “Business strategy and methodology that increase power performance that result in enhanced customer satisfaction and improve bottom line result”. There is the many reason for implement of LSS in organisation like to improve business performance, to improve operational efficiency, to improve product quality, to reduce production cost, to increase customer satisfaction and helps to growth in market.

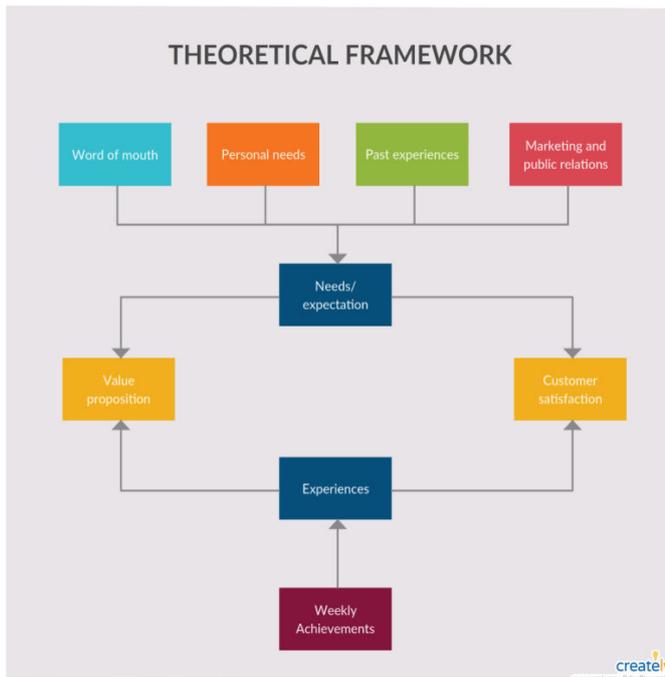
Review of Literature

The literature section comprises 2 parts. First, we define and discuss how various companies are implementing six Sigma within their organizations. Then we propose a theoretical framework for examining six-sigma implementation at our case study company. Many industries have used six-sigma programs as a way to cut costs, improve cycle time, reduce defects and increase customer satisfaction. GE, for instance, uses six Sigma to improve performance and product yield by reducing the number of defects in the processes and materials used to produce them. GE relies on a formal methodology of measuring, analysing, improving and then controlling the processes, in order to remove obstacles critical to customer satisfaction criteria, such as improved product-to-market times. Allied Signal uses six-sigma process as a foundation for continuous improvement (Harrold, 1999). They use it as a rally cry throughout their facilities to stress the

importance of process improvement. Six sigma helps them define areas their customers consider “critical to quality.” By concentrating quality efforts in these areas, Allied has been successful in reducing costs, shortening cycle time, and increasing speed to market (Industry Week, 1998). Raytheon Corporation is using six sigma as a means to reduce defects, and in still continuous improvement philosophies throughout the organization. This enables them to respond more quickly to customer’s needs, which results in improved customer satisfaction, competitive advantage, profits, and growth (Raytheon, 1999). As worker motivation is very important in successful implementation of quality programs, another area of literature research was related to motivation of workers. The literature suggests three methods of increasing employee motivation. The first is incentive-based compensation, the second employee ownership plans, and the third implementation of work-based teams. When using any motivational plan, it is extremely important to keep employees informed of how their cost savings are being utilized for the benefit of the company.

Theoretical framework

Since six-sigma implementation has come to involve changing the business processes of companies, we felt that business process change (BPC) theory may prove useful in explaining the outcomes of our case study. According to Grover (1995), any significant business process change requires a strategic initiative where top managers act as leaders in defining and communicating a vision of change. The individual components of the framework (shown in Figure 1) are applied to the subsequent case analysis to determine if they facilitate or inhibit the success of six sigma.



Lean Six Sigma and belts

Lean and Six Sigma have followed independent that can define the first lean was recorded in Ford in 1913, and those were then developed to mastery in Japan (within the Toyota Production System), while Six Sigma saw the light in the US (within the Motorola Research Centre):

- Lean is a process which can improved methods used to deliver the products and provide the service better & faster and at very lower cost and perform them more and more effectively. Lean thinking is a process which provide to do more & more due to the use of less human effort, less human equipment.
- Six Sigma is a data driven improvement methodology used to achieve accurate, predictable process results, this can be used for the reducing process variation and failures. Sneer (1999) defined it as “a business strategy that seeks to identify and eliminate causes of errors or defects or failures in business processes by focusing on outputs that are critical to customers”.

While both Lean and Six Sigma have been used for many years, they did not get integrated until the late 1990s and early 2000s, and today Lean Six Sigma is

recognised as “Leanis aprocess that can be used to increasesperformance resulting in increase customer satisfaction and improved results”.

It is also increasing accuracy. The benefits of Lean Six Sigma in the industrial have been widely highlighted in the literature. All these terms (“Black Belt”, “Green Belt”, “Master Black Belt”, “Yellow Belt” and “White Belt”) are in industry being used somehow indiscriminately, without an understanding of the skills and responsibilities, as the training and requirements are mostly tailored to different industries. In the literature commonly accepted definitions are:

White Belt: The concept of white belt: it requires 40 hours training and it has a much narrower focus than the black belt, as white belt works within a specific work area. A white belt hascompleted up to 10 projects a year, with the financial return of 25000 per project.

Yellow Belt:Similar to the White Belt described, the Yellow Belt is not mainly used in industry to aware employees enhance their skill in Six Sigma, along with their other job responsibilities and duty.

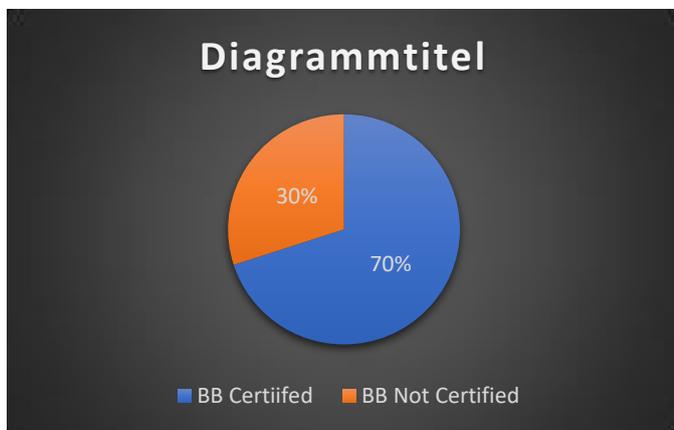
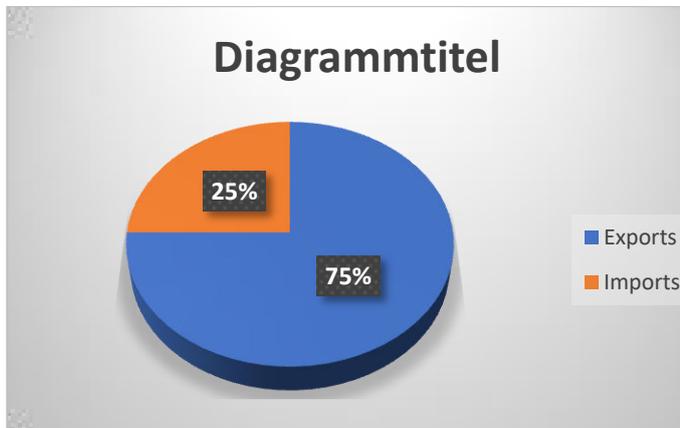
Green Belts:Green belt training is 17hours training,employee take up roles in Six Sigma projects, along with their other job responsibilities. They can use many of the same tools as Black Belts but focus on projects within a single location.

Black Belts:In this individual who have had at least 160 hours of Six Sigma training and who have mastered relatively sophisticated tools and statistical techniques. Black Belts typically work on large projects which can take few months to complete.

Master Black Belts:As Black Belts, that have exceeded at project execution, and have practiced for a few years, may move forward to the role of Master Black Belt: a full time practitioner in Six Sigma tool and a mentor to successful Green and Black BeltsOften, however, the use of those Lean Six Sigma terms in business and consultancy is not rooted in a proper definition of the skills and responsibilities of those roles.

Overview of Current Specification GB and BB certified users

I have gathering data for the Green belt and Black Belt certified users



These are the most common critical failure factors of Lean Six Sigma

(1) Lack of commitment and top management had been identified as the most CFF of LSS in this paper as it appeared in 25 of the papers. This play a critical role for the different organization which has been placed in different countries. This have stated that without any management. Normally LSS projects easily failed. Top management is to ensure that the availability of required resources and that no problem occurred during the final stage of project.

(2) Lack of education has been placed as the 2nd top factor of Lean Six Sigma failure. Here lots of organisation that occur the training is the waste lots of money. However, training is the critical factor of learning in LSS and implementation in LSS.

(3) Poor factor that shows the selecting of wrong training and select some wrong project. Therefore,

finding the right project is must important for LSS success.

(4)LSS occurs lots of issue for the implementation of any project like GB, BB and also in lean idea.

(5) Most organisations in different countries and different sectors are facing the financial and management issues.

Case Study 1:

Green Belt Project: My Six Sigma Data Sync Issue

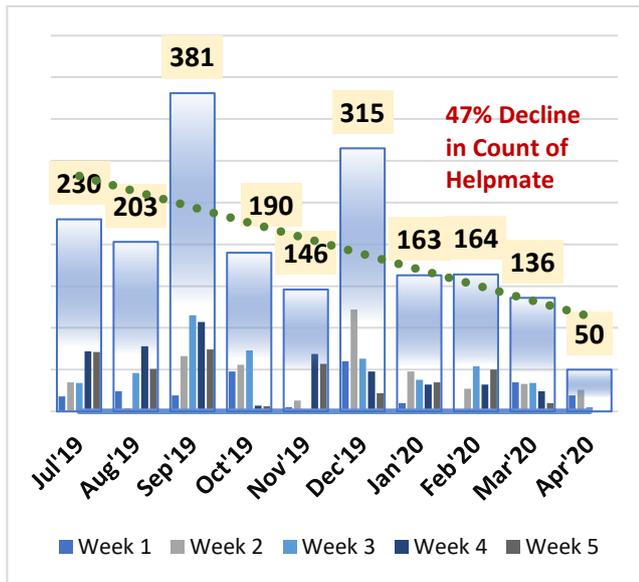
Business Case

- My Six Sigma is a platform which can be accessed by users to check their LSS certification status and to download their certificate. MSS is currently integrated with HRMS, SharePoint & ProGear to map the employee details and their certification details
- In last few months(June'2019) there has been an increasing trend in the helpmate tickets raised by employees on the account of incorrect LSS certification status on MSS. This has also led to inaccuracy in LSS DNA report which is published fortnightly to the top leadership and the clients

Challenges

- Inaccuracy in LSS DNA Report, published fortnightly to the top leadership and the clients
- User is Green Belt/Lean Trained & Tested the same doesn't reflect on MSS Platform

Metric Movement (MoM)



Root Cause & Solution:

1- Old logic built in MSS & Code Bugs in the platform

Common Error Log Issue- Fix the code for the Error Log and post fixing the code analyze the error log to identify the root cause of the main data sync problem

Code bug in MSS – Fixing the code for Sequence Error, primary key violation during the insertion of main sequence ID during bulk updating due to which record entry fails.

2- Records fails to update in case of Empty Marks field

Set up process of raising helpmate tickets for the updating of records on MSS and Admin to avoid marking the assessment on iLearn complete from the backend. (This issue will be resolved once the Green belt curriculum is upgraded)

3- Completed Equivalent cases (due to Batch Run in 2016 to mark the status complete)

Get the records with status Completed Equivalent updated on MSS

4- Incorrect Learning Objects with same training name active on iLearn, creating more cases of “Completed Equivalent”

Make the old/incorrect LOs inactive on iLearn to stop “completed equivalent” cases from occurring

5- Missing records in MSS Report for Lean Training due to Excel limitation of 65K rows

Code change in MSS to fix the excel limitation of 65K

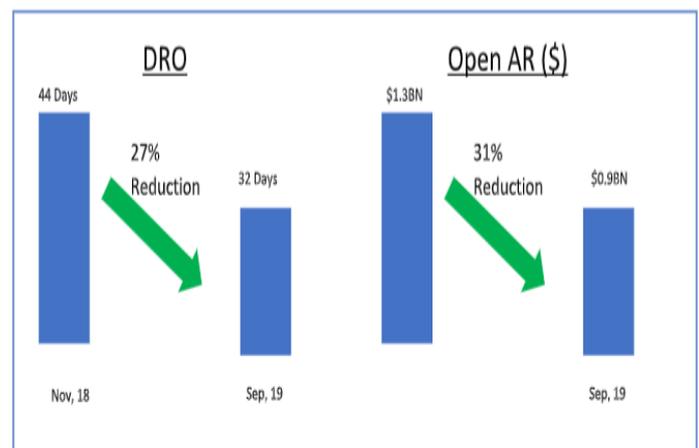
Case Study2:

Black Belt Project: Reduce Days Receivables Outstanding - Walmart

Business Challenge:

- Account Receivables is responsible for \$ 10-12 Bn in Billing and collections annually. The measure of the health of AR is by the performance on Days Receivable Outstanding (DRO)
- DRO is one of the contractual SLA metric and involves penalty if not met.
- For Genpact its performance also an impact on NPS in the long term
- For Walmart, it is a measure of Cash Flow and impact working capital through cost of cost
- Based on the historic performance the DRO is in the range of 40-44 days against a target of 36 days. The total open receivables as of Nov 18 was \$ 1.3 Bn at a billing of \$ 9 Bn
- The target was to reduce the Open Receivables by 33% and keep it consistent at 8% of 12 months rolling billing.

Project Goal: Reduce Days receivables outstanding from 44 days to 32 days



Root Causes:

- Open unworkable AR 0-30 days
- Penetration on higher dollar values
- Incorrect Measurement System and scattered reporting
- Existing collection strategy
- Performance Measurement System
- Communication challenges with the vendors

Solution Implemented:

- Revised strategy on open AR 0-30 days buckets (Direct Imports, Excessive defects @ 6% of open AR)

- Targeted > 90 days buckets to clean up aged receivables sitting in higher ageing. 100% penetration achieved in > 90 days buckets
- Reporting Standardization and Digital Dashboard Implementation
- Revision of collections strategy by daily tracking on top balances impacting open AR
- Goals assigned to associates, Allocation Strategy by Managers
- 80/20 rule to target top delinquent suppliers through face to face meeting- Open House with Buyers