



St. Joseph's college of Commerce (Autonomous)

Affiliated to Bengaluru City University

Accredited with 'A++' Grade (4th Cycle) by NAAC | College with Potential for Excellence (CPE)

Ranked 72nd in NIRF 2020 by MHRD

#163, Brigade Road, Bengaluru – 560025, Karnataka, India

An Initiative by the Department of Commerce
(BPM- Industry Integrated)

THE INSIGHT BULLETIN

- Volume 03 | Issue 09 | March 2021

PROLOGUE

St. Joseph's of Commerce is one of the top commerce and management institutes in India. It has been recognized as a "College with Potential for Excellence" in February 2010 by the UGC and has been accredited with an 'A++' grade (4th Cycle) by the National Assessment and Accreditation Council (NAAC). The college has been ranked 72nd in NIRF 2020 by MHRD.

Owing to India's rapid shifts in various dimensions of business and economics, the college ensures that all its programs are at par with industry requirements and standards. The college's dynamic approach towards education prompted it to start a specialization in Business Process Management along with B.com; in the year 2015. B.com (BPM-Business Industry Integrated) is a program which caters to the mercurial business environment; providing students with corporate exposure. It consists of eight papers centered on different aspects of the BPM Industry such as: Finance and Accounting, Insurance, Banking, Retail, Operations Management, Corporate environment and Capital Market. This program has been devised in collaboration with Tata Consultancy Services (TCS).

"THE INSIGHT BULLETIN" is an initiative by the Department of Commerce (BPM-Industry Integrated) to provide valuable insights to the students of our college with respect to contemporary domains in the enterprising business field.

Six Sigma

Introduction

For the constant growth of an organization along with digital transformation it has to be equally supported by management methods of quality control. Keeping in tune with this Motorola had developed the concept of six sigma in 1986 which deals with quality management and improvements in the process. Since then, six sigma has seen a worldwide adoption. The use of six sigma methodology has led to significant performance enhancement in organizations.

Six sigma is

Statistics
Based

Data Driven

Focused on continuous
improvement

Six sigma offers the organisation the tools and techniques to determine what is causing the manufacturing process to slowdown. It also helps to eliminate the mistakes and improve the process. By using the concept of six sigma you can produce a defect free product 99.9996% of the time allowing only 3.4 errors per million opportunities.

History

- 1777 • Carl Fedrick Gauss introduced the normal curve concept.
- 1920 • Walter shewharts showed that three sigma from the mean is the point where a process requires corrections.
- 1986 • Bill Smith along with Mikel Harry of Motorola launched THE SIX SIGMA QUALITY PROGRAM.
- 1988 • Motorola was the first recipient of Malcolm Balridge National Quality Award.
- 1995 • Jack welch later adopted six sigma at General electric and saved billions of dollars.

Quality Glossary Definition: Six Sigma

Six Sigma is a method that provides organizations tools to improve the capability of their business processes. This increase in performance and decrease in process variation helps lead to defect reduction and improvement in profits, employee morale, and quality of products or services

Objectives of six sigma:

1. It aims at reducing the defects
2. Improve quality
3. Helps in increasing the customer satisfaction
4. Reduces the wastage
5. Decreasing the cycle time.

Methodologies of six sigma

According to the 2005 book “JURAN Institute Six Sigma Breakthrough and Beyond” by Joseph A. De Feo and William Barnard, there are two methodologies used within six sigma and both comprise of 5 sections.

DMAIC: the DMAIC method is a data driven problem-solving technique designed to identify and confront inefficiencies in a process, to improve the end results.



Define: This phase involves determining the process, focus, scope and the ultimate goal and what deliverables will be expected as a result of the project.

Measure: This phase determines the immensity of the problem associated with the feature by understanding, evaluating the process and measuring the current performance.

Analyse: This phase involves analysing data to identify the root causes of the problem associated with the feature.

Improve: This phase determines the solution to reduce the problem associated with the feature by verifying critical input variables, design improvements and pilot new process.

Control: maintain the reduction of the problem associated with the feature by finalising the control system and verifying the long-term capability.

DMADV: The DMADV method is used when the existing products needs to be redesigned to create new products, new processes or services.



Define: This phase involves defining goals that are compatible with the customer demand and the organizations goals.

Measure: This phase involves measuring the critical components of the process (CTQ's) and the product capabilities.

Analyse: This phase analyses the data and develops various designs for the process, eventually picking the best one.

Design: This phase involves designing an improved alternative based on the analysis done in the previous step and pick the best suited one.

Verify: This phase involves verifying the design by running simulations and setting up pilot runs and then handing over the process to the client.

Implementation of Six – Sigma:

Implementation of Six Sigma requires the full support of Top-level management. Executives establish project selection and approval criteria and define the standards for accomplishments. Management has the power to select and train the deployment team, they can ensure that the organization's best players take charge of adopting Six Sigma. Six Sigma implementation strategies can differ considerably between organizations, based on their definite culture and tactical business goals. After decisive to implement Six Sigma, an organization has two basic options:

- 1) **Implement a Six Sigma program or initiative**
- 2) **Create a Six Sigma infrastructure**

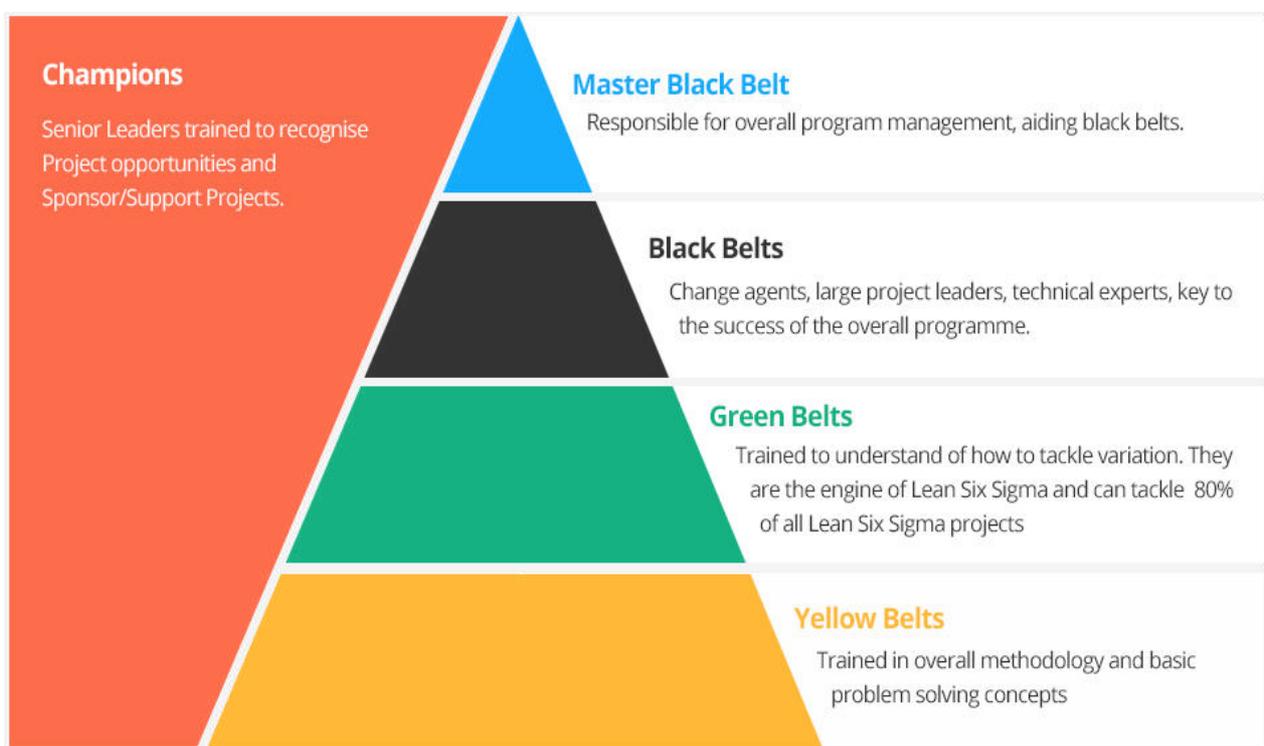
1) **Implement a Six Sigma Program or Initiative**

Implementing a Six Sigma program or initiative can present distinctive challenges. Because these projects are often created at a low level within the organization, they may not have buy-in from top-level management, which may lead to opposition from other groups affected by the initiative, there typically is no one designated to champion projects across organizational limits and facilitate change. This does not usually create a framework that leads to upshots benefits through projects tied to the strategic goals of the organization. Therefore, it may not capture the buy-in necessary to earn a large return on the investment in training.

2) Create a Six Sigma infrastructure:

Instead of focusing on the individual tools, it is best when Six Sigma training provides a process-oriented approach that teaches trainee a methodology to select the right tool, at the right time, for a predefined project. Six Sigma training for practitioners using this approach typically consists of four weeks of instruction over four months, where students work on their projects during the three weeks between sessions.

Implementation Roles:



Conclusion:

No matter which six sigma methodology we plan to adopt, we will need skilled professionals to make the implementation an achievement. Organizations should ideally have Six Sigma roles within departments to manage the six sigma process steps.

Clear objectives, thorough planning, immovable deadlines, unwavering support by senior executives, sufficient resources, strong desire to succeed in view of the high amount at stake, and overall organisational alignment to ensure success of each project. These are the key factors that are aligned and aimed towards the achievement of a successful of Six Sigma Project.

SOURCES

Source

- Name of the author- iSixSigma-Editorial
- Title- THE HISTORY OF SIX SIGMA
- Available at- <https://www.isixsigma.com/new-to-six-sigma/history/history-six-sigma/>
- Accessed on- 9th March 2021

- Name of the author- Pankaj Kumar
- Title- EVERYTHING YOU NEED TO KNOW ABOUT WHAT IS SIX SIGMA
- Available at- <https://www.simplilearn.com/what-is-six-sigma-a-complete-overview-article>
- Accessed on – 9th March 2021

<https://www.ricardo-barbosa.com/the-3-characteristics-of-six-sigma/>

<https://www.simplilearn.com/dmaic-process-article>

<https://asq.org/quality-resources/six-sigma>

“Key Criticisms of Six Sigma: A Systematic Literature Review”, Aug 2020
https://pure.hw.ac.uk/ws/portalfiles/portal/25462509/Six_Sigma_Limitations_paper_IEEE_AAM.pdf .

<https://esixsigma.in/six-sigma.php>

<https://www.pmi.org/learning/library/strategic-implementation-six-sigma-project-management-7740>

Activity:

Click on the following link to solve the activity

➤ <https://forms.gle/cawmxQ53zHhmmiTt8>

Staff Coordinator: Ms. Vedapradha R

Staff Editor: Ms. Sanjana S.I.

Student editor: Niranjana, Maitri, Aurelia, Jansi

Designer: Bhawar Lal