

# Six Sigma- Challenges Before Service Industry

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**Abstract-**In this work, researchers tried to identify to find out challenges faced by organizations from service industry in implementation of Six Sigma process. It is based on secondary data collected from various resources. Skilled manpower, Shortage of resources and Unpredictability in the marketplace are emerged s major components for these organizations in case of Six Sigma implementation. These organizations should get proper resources with experts to deliver quality services to the customer has become the need of the hour in this competitive world. Organizations are doing their best but these uncontrollable factors need to tackle on priority basis.

The findings of the study clearly suggest that Six Sigma strategy can be used to eliminate causes of defects in business processes by concentrating on outputs which are critical to quality.

**Key words-** Six Sigma, Service industry, Quality, Talent availability, Unpredictability in the market, Need of resources

## I Introduction

### 1.1 Overview of Service Industry

The service industry is contributing very highly in GDP of India. The service industry isn't just the major segment in India's GDP, yet it has additionally pulled in huge unknown venture, has contributed necessarily to send out and has given huge reach business. India's administrations part covers a decent kind of exercises like exchange, inn and eateries, transport, stockpiling and correspondence,

financing, protection, land, business administrations, network, social and private administrations, and administrations related with development. Starting at 2018, 31.45% of India's utilized population is working inside the services sector.

### 1.2 Six Sigma

The roots of Six Sigma as a measurement standard are often traced back to the first industrial era, during the eighteenth

century in Europe; Carl Frederick Gauss (1777-1855) introduced the concept of normal curve. The advancement of Six Sigma took one step ahead with Walter Shewhart showing how a three sigma deviation from the mean required a process improvement.

In 1981, a training institution in Motorola was established. They set a goal to improve the standard of their products by an element of ten within Five years. Unfortunately, they could not achieve their target and their customers were dissatisfied with the product quality. The company came to understand that the poor product quality results from the buildup of the many little defects made during the manufacturing process – not inherent design flaws. Eliminating the source of these defects was therefore the sole way the corporate could deliver higher quality to its customers. At an equivalent time, they decided that a typical measurement and system for quality should be used to guide their manufacturing activities.

Six-Sigma is a strategy that gives organizations apparatuses to improve the ability of their business forms. This expansion in execution and abatement in process variety encourages lead to surrender decrease and improvement in benefits, representative assurance, and nature of items or administrations.

The Six-Sigma framework was made during the 1980s by engineers at Motorola as a way to deal with improves creating structures. At its middle, Six Sigma incorporates assembling and using data to remove flaws and waste in assembling, with a definitive target of improving in all the efficiency, capability

and quality.

## 2 Lit. Review

**Hongbo Wang (2009)** surveys related writing to portray procedure, usage and future explores. The current paper synopsis four issues inside the sub-class of the underlying Six Sigma ideas: fundamental idea, DMAIC, DFSS and organization. At that point, a few areas that appreciate the usage of Six Sigma are rattled off, and in this way the key variables impacting the fruitful Six Sigma venture execution are distinguished. Finally, a few points for future exploration are introduced.

**Venkateswarlu Pulakanam and Kevin E. Voges, (2010)** explains that despite the apparent popularity of Six Sigma, little or no is understood about the extent to which Six Sigma is really being adopted by organizations. Since 2004, varieties of empirical studies are undertaken in several countries and industry sectors to deal with these gaps in our knowledge of Six Sigma adoption. The bulk of those studies are reviewed and summarized during this paper. The conclusions are that Six Sigma is merely a foreign second to Lean in terms of recognition. During the amount 2003 to 2007, Six Sigma was implemented in 5% to fifteen of the organizations.

**M. Soković, D. Pavletić, E. Krulčić (2006)** inspect the orderly utilization of Six Sigma DMAIC devices and system inside a car parts creation results with a few accomplishments such are decrease of apparatuses costs, cost of low quality and work costs. It was demonstrated that Six sigma is a proficient gratitude to figure out where are the best cycle needs and which

are the gentlest purposes of the strategy. Additionally, Six Sigma gives quantifiable pointers and sufficient information for logical examination. Upgrades through diminished Production time, Control time, Material and Internal piece are yield huge budgetary. Besides, this experimental run program empowered presentation of Six Sigma system in more extensive scope of maker exercises. The paper investigates the probability of Six Sigma application inside assembling measure. This paper is of the value to scientist inside the field of value the executives and quality improvement, likewise on experts inside the assembling business, any place the standard improvement is an issue.

### 3 Objectives-

- I) To study the Six Sigma process implementation in service sector.
- II) To identify the challenges in implementation of Six Sigma Process.

### 3 Research Methodology-

This investigation is based upon secondary data with the objectives to find out what challenges organizations are facing in use of Six Sigma process.

Researchers have critically studied research paper and data available on various e-resources. After that following challenges are identified in case of six sigma implementation part.

- a) Unpredictability in the marketplace
- b) Shortage of talent
- c) Increased competition
- d) Need for new skills

### 4 Discussion-

The management consulting industry face a multitude of business challenges, some longstanding and some fresh. The forces driving change are numerous. Disruptive technology, the evolution of new business models and the heaviness exerted by strong global competition are altering the marketplace.

#### a) **Unpredictability in the marketplace**

These are disrupted occasions, and 38% of respondents concur that flightiness in the commercial center is on their minds. The consulting commercial center is advancing rapidly from one that depended fundamentally on relational contact to grow new business (think systems administration or individual referrals) to a fully open battleground on the web. Progressively, that is the place the game is played and purchasers are choosing the victors. In any case, there's more taking care of the market furor than business improvement changes.

#### b) **Shortage of talent**

Ranking third on the rundown, and referenced by 40% of consulting service industry firms, is discovering top talent. This worry isn't novel to support consultancy firms. Firms over the expert administrations range battle with a similar issue, and winning the talent war has been a developing concern. Given this developing worry, to stay serious, firms must concentrate on reviving their manager image.

#### c) **Increased competition**

Respondents from consultancy industry firms and every expert in consulting

service responded also: they stress a lot over rivalry originating from both new firms and greater contenders, with a little edge to the rising firm danger. Indeed, these dangers showed up in the main five difficulties of each industry portion.

#### d) Need for newskills

The top concern consulting firms recognized was the requirement for new skills as a huge test for the executives counseling firms. As new innovations and strategies emerge in the commercial center, firms feel a tenacious strain to stay aware of the steady change. In the event that they don't, a contender will. Also, keeping up, requires the opportune individuals with the correct ranges of abilities.

### 5 Conclusion

Quality is the primary need for the survival of the Production and manufacturing organizations in fiercely serious business competitiveness. Production and manufacturing organizations are required to give excellent products to its globally present clients, who are consistently watching out for cost effective items. Poor product quality will climb the expenses of adjust i.e. time spent on reworking, recuperation, objections, etc. Production and manufacturing industry is tormented with different difficulties that are not part of administrations industry. Its job is to produce tangible products with data on client's necessities in the start of ventures, the regularly changing client needs along the cycles, expanding desire from the clients. These elements present one of kind difficulties that frequently make one to trust Six Sigma is hard to be utilized for

these organizations. In accordance with these presumptions, the discoveries of the investigation plainly propose that Six Sigma technique line with these assumptions, the findings of the study clearly suggest that Six Sigma strategy can be used to eliminate causes of defects in business processes by concentrating on outputs which are critical to quality.

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