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# SIX SIGMA IN SERVICE SECTOR

A CASE STUDY OF IMPROVING CONTENT DELIVERY PLATFORM AND  
SIX SIGMA IN HR ADMINISTRATION

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E-SIX SIGMA

a venture of sAvh Quality Solutions (Pune)



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## Introduction

Six Sigma is world-wide renowned quality improvement methodology that mainly works on removing defects from the products, services and the processes across the sectors.

It was invented in 1980's at Motorola company. In its initial application, Six Sigma was limited to Manufacturing & Production industries however with its increasing popularity, it spread to all other sectors.

Today, Six Sigma is considered one of the prominent methods for Quality Management and being used by over 90% of Fortune 500 companies. Almost all National and Multi-National companies use Six Sigma in some or the other way.

Six Sigma has 4 key levels of expertise identified as-

- Six Sigma Yellow Belt
- Six Sigma Green Belt
- Six Sigma Black Belt
- Six Sigma Master Black Belt

Every level of expertise has its own roles & responsibilities in Six Sigma Project Implementation and generally lead by a Master Black Belt.

When integrated with Lean, which is, in simple words, a waste removal method, Six Sigma becomes Lean Six Sigma.

### **e-Six Sigma** ([www.esixsigma.in](http://www.esixsigma.in))

e-Six Sigma is a cloud-based Six Sigma Training & Certification Platform accredited by 'Council for Six Sigma Certification (USA)'. CSSC operates in over 165 countries across the world.

It has won a National Award for 'Best Online Six Sigma Training & Certification Platform in India 2017' by India Education Awards.

e-Six Sigma is being loved for its unique value of providing 'practical knowledge' through AWYL i.e. 'Apply What You Learn' activities which are meant to free your hands on the key topics being taught in the chapter (the curriculum for Six Sigma Green Belt is divided into 14 distinct chapters).

It is a brand of sAvh Quality Solutions, a sister concern of sAvh Technologies Pvt Ltd, an ISO 9001-2008 certified company based in Pune. sAvh is a venture by IIM-Alumnus & Ex-Infosys Employee.

sAvh has trained over 1800 students and professionals for Six Sigma Training.

## Six Sigma and Service Sector

Although Six Sigma has its roots in manufacturing, it works just as effectively in service industries. Service organizations have different root causes of problems and a unique set of processes and metrics. Thus, the tools and methodology required to achieve the improvements of Six Sigma are significantly different.

While problems in the manufacturing setting may lie within a process, the issue in a service environment often is the process itself. Service industries are full of waste—and ripe for the benefits of Six Sigma. It is easy to apply relatively simple statistical and lean tools that will reduce costs and achieve greater speed with less waste in service processes.

In a service organization, the critical factors in quality and efficiency are flow of information and interaction between people, especially interactions with customers. Transforming the process of these flows will yield quality results. At the heart of every service business are the opinions, behaviours and decisions made by people. Analysing and modifying human performance in service environments is as complex as any manufacturing situation.

Six Sigma achieves documented bottom-line strategic business results by initiating an organization-wide culture shift. Until a process focus—rather than a task focus—is developed, the scope and endurance of improvements will be limited. Analysing and modifying human performance in these environments is complex, but Six Sigma provides the tools and methodology required to achieve significant long-term improvements.

Service managers trained in Six Sigma become skilled at advanced process analysis and problem solving techniques relevant to the “real world” of service environments. They learn to identify and eliminate poor decision-making processes, standardize practices, reduce cycle times and manage the risk of the extensive changes required for breakthrough process improvement in people-oriented transactional processes. Successful Six Sigma services projects will lead to:

- Improved Customer Satisfaction
- Increased Profit Margins
- Reduced Operational Costs
- Reduced SLA/ Turn Around Time
- Enhanced Deliverables' Efficiency and many more.

The Service Sector has its own & special characteristics such as Intangibility, Perishability, Inseparability & Variability that seeks special approach to deal with the challenges using Six Sigma.

Six Sigma will help a Service Environment become a customer-focused organization, gain control over process complexity, and improve response time on signature services.

## Case 1: Improve Content Delivery Platform saving over \$ 75,000

The below Case Study was included in the white paper '*Jet Engines and Sales: How Six Sigma Brings Breakthrough Results to the Service Sector*' provides proof that Six Sigma can benefit any industry.

One Financial Services Firm mentioned in the white paper was concerned over the high amount it paid for customer service. Although they offered customers a web-based platform to contact them – an option that was the least expensive for the company– customers still continued to use the Call Centre to receive their account information.

Wanting to deliver High Customer Service but in a less expensive way, the company implemented a Six Sigma and examined all Call Centre and Website data. It eventually found a way to reconfigure the website which would decrease cost but elevate the level of customer service. The result was the movement of customers to the Web, rather than the phone, to get account information. This helped the company to save a significant amount of \$75,000 in just six odd months.

It was really challenging for the company to understand how to get customer traffic to the website than the call centre. It had to go big transformation process to make the website worth a visit for getting account information.

Six Sigma helped the company to identify the CTQs for different processes and using RPN that were prioritized further. Also, the company used, Value-Stream Mapping to remove non-value adding steps from the website to fetch the data.

Few of the changes that the company made were-

- The UI and responsiveness of the website to be best viewed on the mobile devices were changed after a survey conducted using VOC (Voice of Customer) tool of Six Sigma.
- The language Availability was upgraded by introducing Multi-lingual Option.
- The addition of attractive images & indicators helped to keep the interest alive of the visitor of the website and browse further.
- The steps were reduced to maximum of 5 for getting any account information as compared to 21 steps previously.
- Moreover, the steps with examples were displayed for easy processing.
- Promoted website links than a telephonic conversation by offering reward points for the customers to access website than call centre.

The application of Six Sigma Tools & Techniques that used in this Project were led by small team of Six Sigma Professionals of which 90% were only Green Belt but with the guidance of Master Black Belt & necessity of the business, the company witnessed the great results.

This case clearly highlights the importance of learning Six Sigma to boost the capabilities of your core competencies.

## Case 2: Six Sigma in HR Administration

In the late 1980s, when Motorola implemented Six Sigma originally, obtaining astonishing results, the company was then faced with the dilemma of how to reward its employees for these successes. This was the first time Six Sigma and HR practices came into contact, and a more accurate definition of HR practices was needed.

If, in the past, the term HR was related only to administrative functions (e.g. payroll, timekeeping, etc.), the term has increased substantially, in the last few decades, to include the acquisition and application of skills and strategies to maximize the return on investment from an organization's human capital.

HR management is the strategic approach to the management of all people that contribute to the achievement of the objectives of the business. As such it includes, but it is not limited to, personnel administration. In effect it includes all steps where an employee and an organization come into contact, with the potential of adding value to the organization.

As such, and merging terminology from Lean and HR, it defined the following seven points as the Human Capital Value Stream Map:

1. Attraction
2. Selection
3. Orientation (or induction)
4. Reward
5. Development
6. Management
7. Separation

The Human Capital Value Stream Map is a Lean Six Sigma Technique that identifies the flow of information or material required in delivering a product or service to a customer. Human capital is the accumulated skills and experience of the human force in an organization.

The Human Capital Value Stream Map is the flow of human capital required for an organization to deliver its products or service to customers; the objectives of which are briefly described below:

1. Attract: to establish a proper employer's brand that attracts the right calibre of individual.
2. Select: to select the best possible candidate for the job.
3. Orient: to ensure new employees are properly trained and integrated into the organization.
4. Reward: to ensure compensation packages are appropriate and in line with the market.

5. Develop: to distinguish talent and ensure career progression.
6. Manage: to supervise and administer the day-to-day jobs.
7. Separation: to track reasons for voluntary leavers and maintain a constructive relationship.

It is possible to apply Lean Six Sigma tools to each step of the Human Capital Value Stream Map, in order to eliminate waste in the HR process. For each step in the Human Capital Value Stream Map, it is necessary to establish proper quantitative metrics that allow objective assessment and control of the process step. This makes use of the more quantitative statistical tools from the Six Sigma toolbox possible.

Establishing HR metrics can be controversial, with different parts of the organization having different objectives, but the answer to these simple questions may help to focus on the real value each step can provide.

1. What is the expected deliverable of the step?
2. What are the relevant metrics and key performance indicators of the step?
3. What are the opportunities for defects in the step?

For recruitment, for example, the answers to the above questions may be as follows.

1. Hire, in the shortest possible time, new members of staff to fulfil a certain job.
2. The number of days to fill a vacancy (also define the acceptable norm for the organization).
3. Any job remaining vacant for longer than the acceptable norm.

Similar thought processes can be performed for other steps: having set metrics for each step of the Human Capital Value Stream Map, an organization is now in the position to apply Six Sigma DMAIC to it.

Six Sigma can be used to improve administrative processes, such as HR processes. Implementing the Six Sigma DMAIC breakthrough methodology in HR follows the same path as implementing it in any other part of the organization.

However, there are some specific key learning points and challenges for the HR areas as:

- Difficulty in establishing an appropriate measurement system analysis and metrics;
- Data collection can be extremely difficult, as the project team is dealing with very sensitive issues; and
- Difficulty in performing any pilot or design of experiment. Any of these is going to impact on the behaviour of staff, making it difficult to measure its results accurately.

Every area of an organization needs to perform better, faster and more cheaply, to keep the company ahead of the competition, and be able to satisfy ever-increasing customer expectations. HR is no exception: more cost-effective and streamlined HR processes will create value for the organization, instead of just being a support act for management.

## Training & Mentoring by e-Six Sigma

e-Six Sigma offers Six Sigma Training & Certification Programs accredited by 'Council for Six Sigma Certification (USA)'. It is one of the renowned Accreditation Providers across the world that operates in over 165 countries.

e-Six Sigma is a venture by IIM-Alumnus & Ex-Infosys Employee that won a National Award in Feb 2017 by India Education Awards.

It provides state-of-the-art Virtual Infrastructure and Curriculum to learn Six Sigma at your convenience & pace to earn Globally Trusted Certification with life-time validity and Cross-Industry Applicability.

The main reason why our learners chose 'e-Six Sigma' over others, is that, we offer Practical Exposure through our Mandatory AWYL i.e. Apply What You Learn Activities and use of Real-life Examples for easy understanding.

With an extensive knowledge & experience of almost a decade in Training & Consulting, we partner with Academic Institutes, Corporates, Government Bodies & Individuals to gratify their respective Goals by empowering the way they perform.

You can learn more about its Training & Mentoring Programs at- [www.eSixSigma.in](http://www.eSixSigma.in).

For any queries, you can call on +91 866 911 32 99 or write to [info@esixsigma.in](mailto:info@esixsigma.in).

