

## SIX SIGMA CONSULTING

### Six Sigma - a breakthrough strategy for radical process improvement and cost reduction

#### 1. What is Six Sigma?

The Six Sigma - a strategy for quality and productivity improvement, was developed and introduced for the first time by Motorola in the mid-eighties. The competitive pressure from Japanese companies was so hard at that time, that Motorola had to increase the product quality and process performance significantly with the help of profound changes made within the company in order to achieve customers' satisfaction again.

Six Sigma as a strategy used initially only in the production now is increasingly applied for process optimization in such corporate areas as purchasing, administration, distribution etc. Nowadays big service and trading companies follow the classic manufacturing companies on their way of using this strategy to increase profit by continuous improvement.

Six Sigma is a modern management method which combines the company's strategic objectives of a consistent project management with the tools of quality management and statistics.

#### Definition of Six Sigma:

A comprehensive strategy for accelerated improvement of processes, products and services (achievement of breakthroughs), connected to a system for measuring the efficiency of procedures for the elimination of errors (failures) and variations in processes, products and services with the aim of increasing the profit.

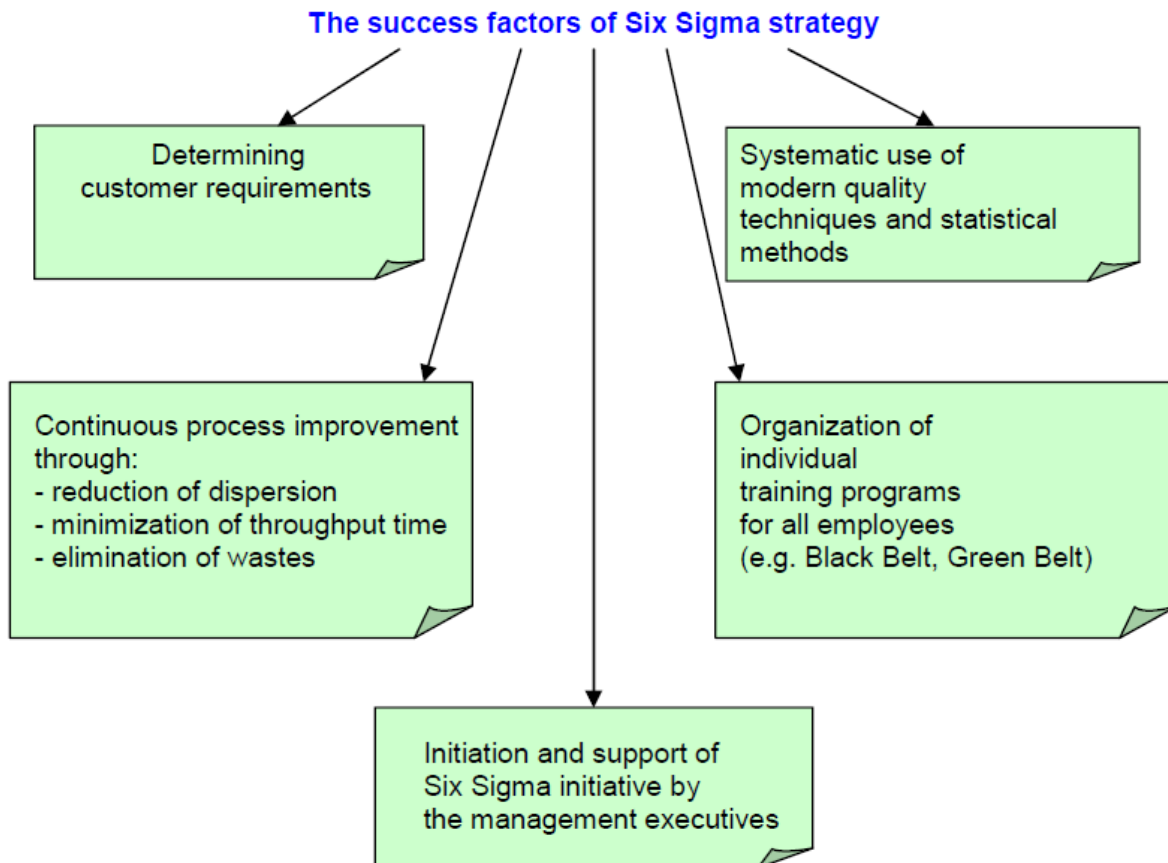
(Six Sigma Breakthrough Strategy, American Society for Quality)

#### The aims of Six Sigma strategy:

- higher level of competitiveness
- higher level of customers' satisfaction
- cost savings
- high profit

## The success factors of Six Sigma strategy

The Six Sigma strategy provides the improvement methodology, tools, training and measurement system to eliminate the identified deficits and promote excellence. Six Sigma enables a swift and effective implementation of improvement projects in terms of cost savings and revenue growth by the inclusion of employees. Six Sigma improvement projects are only realized if a measurable benefit can be expected.



## 2. Steps to be taken to implement the Six Sigma initiative

For the successful implementation of Six Sigma initiative in the company, the corresponding conditions must be created. This includes, for example, that some individual employees in the company can focus exclusively on the initiation, monitoring and implementation of improvement projects. These can also be consultants appointed by the management.

It is crucial for the success of the continuous improvement processes and thus for Six Sigma that the initiative is introduced and supported by the top management. The management should formulate clear objectives at the beginning of the initiative and specify them if necessary at regular intervals. Within the company there should be created a climate of trust which is free of fears of losing the job. The management is responsible for creating an infrastructure within the company to support Six Sigma.

The Six Sigma quality improvement model can be applied to both management and production areas. It is based on a **unified approach in five steps: D M A I C - Define, Measure, Analyze, Improve, Control.**

### Define

Definition of customer requirements, clearly defined projects: defining the objectives of the project, analysis of error / failure statistics, complaints

### Measure

Calculation of sigma levels: Process representation, selection of critical features, development process map, validation of measurement system

### Analyze:

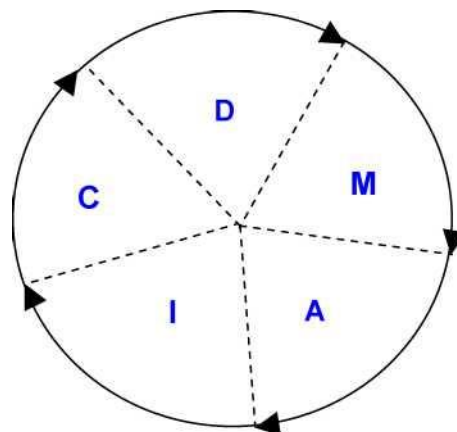
Identification, verification and quantification of the causes, setting targets. Data analysis, determining product / process capability, using tools

### Control

Control of the improvements introduced: Definition, implementation and monitoring of the control system

### Improve:

Implementation of the improvement plan, determining the optimal specifications and improvement measures, implementation of the action plans



### 3. OMC service spectrum in the field of Six Sigma consulting

The ÖMC consultants carry out Six Sigma projects on the basis of the **DMAIC method** in following areas:

- ▶ management decisions and strategy
- ▶ development projects and innovation boosts
- ▶ procurement and supplier management
- ▶ production and manufacturing process
- ▶ distribution and customers' reclamation management

**The following services are agreed according to specific customer requirements:**

- application of project management during the initiation of Six Sigma strategy
- business process analysis and modeling for the optimization, using statistical software (Minitab, iGrafx and Minitab 14 release)
- working out the deficits and potentials for improvement
- active trainings in groups with example exercises
- Online support
  - data evaluation using statistical software
  - preparation of test series in the production area
  - evaluation of suppliers' quality data
- consulting in respect of practical application of preventive quality techniques in the development projects:
  - Quality Function Deployment (QFD)
  - Failure Mode and Effects Analysis (FMEA)
  - Statistical experimental design and optimization (DoE)
  - Process Flow Diagram and Process Simulation
- Support in the development of ISO compliant documentation

### Get your own impression of how it works!

Make an appointment with us for an initial talk. Can you imagine a performance and competitiveness increase as a result of Six Sigma coaching?

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