

TRAINING BROCHURE

Six Sigma Black Belt

Six Sigma Black Belt

Introduction

Improvement work is often one of the most profitable investments a company can make and in the longer term a condition for survival. Concepts and methodology that create understanding and guide employees to the correct facts and decisions are an important element for success. Six Sigma is a methodology that aims to increase customer satisfaction while improving internal efficiency. The mainstay of the methodology is to reduce quality deficiency costs through fact-based decisions, create lasting changes and measurable results.

The course is intended for individuals who are aiming, and expected, to play a leading role in the development and improvement of their organization. Participants need to be certified according to the Green Belt level in Six Sigma and might work in roles such as improvement manager, project manager, process, or business developer. During the course, you will develop your advanced knowledge in improvement methodology, problem orientation, mapping, analysis, and change management. After completing the course, you will be able to run complex change projects in your organization with Six Sigma as the main methodology.

The aim of the course

The aim of the course is to give you advanced knowledge of Six Sigma, as well as insights into what is required to drive complex changes that affect entire organizations. After completing the course, and having demonstrated your ability in practical applications, you will receive a CANEA certification in Six Sigma Black Belt.

What do you learn?

Six Sigma is based on five basic phases - DMAIC (Define, Measure, Analyze, Improve, Control) - in which you use both qualitative and quantitative tools that are central to the concept. You will learn about theoretical concepts in improvement methodology, deepen your knowledge of different tools to collect facts and identify root causes of problems, and concretize and implement solutions. As a participant, you will practice the methodology in your own business, where you will run a change project in which you are expected demonstrate measurable results. In your individual project, you are expected to demonstrate a business case that generates a benefit corresponding to at least MSEK 1 a year.



Six Sigma Black Belt

Six Sigma

The competition in the business environment is becoming increasingly intense. You constantly need to find new ways to satisfy customer demands. That is why Six Sigma quality has become a natural part of the zero-defect quality culture. Six Sigma is a concept rooted in the world of statistics that helps businesses focus on delivering flawless products and services.

One of Six Sigma's mottos is: "In God we trust, all others must bring data." In other words, no believing and thinking, everything should be verified with measurement data. The measurements should focus on the paying end customers to the organization. You should not evaluate things that customers don't care about. It is important to find permanent ways to measure and compare the company's processes. One of the key factors in Six Sigma is to understand and analyze how well the processes appear to be performing on all critical quality factors and understand the correlation between them.

What distinguishes Six Sigma from other approaches are some important core points of the improvement methodology.

Six Sigma:

- Is entirely focused on achieving large and measurable results, usually quantified in monetary terms.
- Is entirely based on facts about the outcome of the activity and how the overall activity is conducted.
- Interventions and measures are based on what we really know about cause and effect after careful analysis.
- Focused on addressing the chronic problems in the business. These problems have a significant impact on financial performance and usually require significant efforts to be addressed.
- Has a logical and clear structure with a clear division of responsibilities in the improvement work.
- Often implements improvements project by project, which makes the work concrete and result oriented.
- Implemented by management and employees who are close to the problems to be solved.

CANEA's thoughts on Six Sigma

The "Black Belt" level training in Six Sigma is conducted over a total of 13 days divided into 5 sessions. What distinguishes CANEA's Black Belt program from many others is our clear focus on change leadership. We retain all the essential elements of the Six Sigma concept regarding problem orientation, mapping, quantitative and qualitative analysis of data, all of which enable you to make fact-based decisions. However, we strongly emphasize that if you can't create changes in behavior and/or working methods, you will not create any improvements. The basis of the concept is to create measurable results, and it should be possible to do so based on all possible problems identified and corresponding opportunities.

CANEA's Black Belt program is an extension training where you are expected to be certified to the corresponding Green Belt level in Six Sigma from either CANEA, or one of our approved training providers.

Tools

The concept includes a plethora of methods and tools for improvement and change work. Well-selected methodology is reviewed during the course where participants get the opportunity to both train in choosing the right method and tool for the right purpose, as well as the opportunity to practice using them in real situations.

Exercises and Workshops

During the course, you will carry out several practical exercises linked to the different improvement phases where the purpose is to practice the usefulness of different methods and tools.

As part of the examination, you will also have to carry out a project linked to your own business where you go through all phases of DMAIC. You will use the concepts that you have learned during the course to investigate and concretize a problem, identify root causes and possible solutions, implement a change with demonstrated benefits, and present the results.

Coaching

During the course, you will be offered coaching and support from our experienced lecturers in the implementation of one of their own projects.

Six Sigma Black Belt

Content and program

Days 1-3

Introduction/start-up of change projects

- Program introduction.
- Presentation of participants/projects.
- The role of the Black Belt in Six Sigma.
- Strategy and business development.
- Goals/key figures/KPIs.
- DMAIC repetition.
- "Design for Six Sigma".
- Understanding and quantifying quality failure costs.
- Quantify the business case.
- Understanding and communicating the need for change.
- Rhetoric.
- Managing stakeholders.
- Creating teams.
- Preparing a change.
- Starting and planning data collection.

Days 4-6

Understanding the current situation - measuring & analyzing, part 1

- Mapping and developing processes and value streams, part 1.
- Understanding different forms of data.
- Normality test in data.
- Graphical analysis.
- MSA & Gauge R&R.
- Statistical Process Control (SPC).
- Project life-cycle and project models.
- Capability analysis and suitability testing.
- Shift & drift.
- Hypothesis testing.
- Proportion tests & confidence intervals.

Day 7-9

Understanding cause & effect - measuring & analyzing, part 2

- Qualitative root cause analysis with 7 + 7 QMTs.
- Correlation and regression analysis.
- Stratification of data.
- ANOVA.
- DOE.
- Brainstorming - innovation & new thinking.
- Determining root causes and identifying solutions.
- Mapping of processes & value streams, part 2 - creating a future state.
- Risk analysis.
- Steering towards goals and results.
- Examination/test.

Days 10-12

Change Management and Change Leadership

- Change management & change leadership.
- Resistance to change.
- Model for change leadership.
- Roles, who should do what, and creating change ambassadors.
- Myself as a change leader.
- Analysis of conditions for change.
- Leadership in the change curve.
- The power of participation.
- Structural barriers and creating incentives.
- Ownership and personal responsibility.
- Getting past limited thinking.
- Coaching, creating motivation.
- Communication tools.
- Measuring and following up.
- Applying knowledge to real change.
- Personal action plan.

Day 13

Project Presentation & Certification

- Project presentation/examination.
- Certification ceremony.
- The future as a Black Belt in Six Sigma.
- Closing with coaching & feedback.

Six Sigma Black Belt

Our training methodology

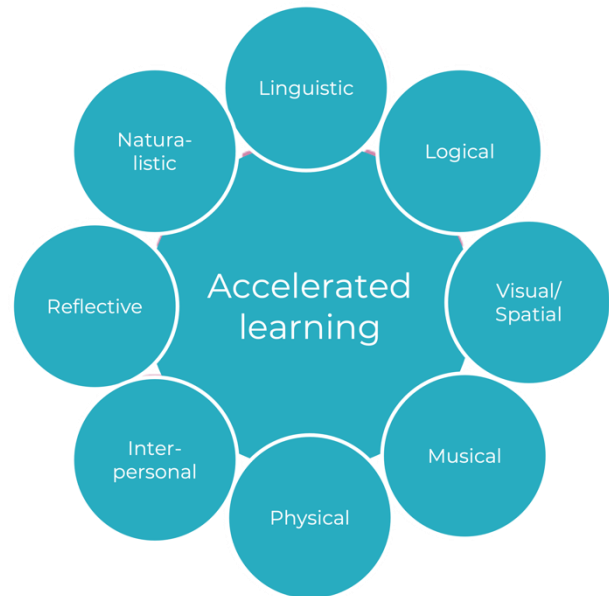
We run both open and in-house training courses. Knowledge is the basis for fact-based decisions and a prerequisite for engaging management and staff. Knowledge is part of our approach to changing behavior. Simply providing information is seldom enough to make people act differently.



The staircase model for information transfer and processing of values and attitudes

We complement the information with methods to address the values and attitudes of the participants. Through well-thought-out workshops, we go through all stages of the learning process. In in-house training, we often use the staircase model (see picture above) with training in the company's own operations and follow-up.

To further customize the training, company visits and consultations with our experienced consultants often precede in-house training. Part of our strength is that we can offer a complete solution for each company's training needs, from operator level to senior management. Our training courses are based on best practices from practical work in companies, where the lecturer provides many real-life examples. This is combined with a theoretical foundation.



The Accelerated Learning methodology, which involves stimulating learning with all the senses, is widely applied. The training group should consist of a maximum of 20 people, which gives the lecturer the opportunity to activate all participants in discussions. By alternating theory with activities and workshops, participants are given the opportunity to apply what they learned, which facilitates learning.

Contact us for more information:

Tel. 010-459 00 11
www.canea.com
utbildning@canea.se

CANEA – lasting success

There are three key factors for a successful change process: Competence to create and drive the change. IT systems that control and support it properly. And relevant know-how among your employees to maintain it over time. We are unique in bringing these three factors together in an integrated offering. This is a key reason why we have been able to deliver great results to hundreds of customers over the past 20 years.



CANEA Management – making your organization better

Our experience from numerous assignments shows that there are valuable opportunities for improvement in every organization. To meet increasingly stringent requirements, it is important to develop your own operations.

We have extensive experience with what works. This is gathered in our own method library, which forms the core of our knowledge and experience management. Based on each client's situation, an adaptation is made so that both the whole and the details work.

Our consultants understand both the whole and the details of an organization's environment, function, and management. Additionally, they have well-developed analytical mindsets and the ability to motivate. Teaching skills are also a given since we place great emphasis on knowledge transfer.

CANEA ONE – an integrated software suite

CANEA ONE is a comprehensive software suite for effective business management. The system enables control, implementation, monitoring and improvement of the business thanks to a fully integrated management of strategies, projects, processes, cases, and documents.



CANEA Document

A document management system that creates order. Ideally managing an integrated management system.



CANEA Workflow

A case management system that allows you to design, deploy and monitor all types of workflows in a single solution.



CANEA Project

A comprehensive and easy-to-use project, portfolio, and resource management system supporting all aspects of project activities.



CANEA Process

An effective solution for modeling, communicating, collaborating, and improving business processes.



CANEA Strategy

Enables strategy activation through smart features such as goal decomposition, communication, and visualization.

