



SigmaSense: A Management Tool for Six Sigma & Process Improvement

Introduction

Grouputer **SigmaSense** is the first online collaborative software solution designed for remote Six Sigma, Lean and business improvement project teams to conduct team meetings with structured tools and techniques with reduced cycle time, improved team productivity and greater buy-in.

Key Benefits

- Slashes project cycle times by up to 91 percent²
- Fosters management participation and buy-in
- Rapidly equips Green Belts with skills to manage project teams
- Enhances participation of global teams and overcomes cultural barriers
- Drives up team member recruitment

Overview

Since the 1990's Grouputer electronic meeting technology has been speeding up process improvement project cycle time by as much as four times – and boosting productivity by up to 200 percent. At the same time meeting duration has been shortened as much as 56 percent.¹

A new customized program, SigmaSense, comprising a suite of Internet-delivered tools is the first program to enable online team collaboration in structured meetings that implement the DMAIC methodology. Team members work together in an interactive environment to analyze problems, brainstorm, share statistical tools and undertake group process mapping.

SigmaSense's best-practice DMAIC and process improvement meeting methodologies allow facilitators to lead teams through a structured set of steps that describe and automate the implementation of each activity.

Local and global team members use the interactive, automated meetings to implement projects faster, with repeatability, and at lower cost.

Complex methodologies, such as FMEA and CTQ have become much easier to use because of SigmaSense's automation. Navigational help is always "at the fingertips", and process-thinking prompts and checklists enhance critical thinking. Consequently, facilitators require little or no training to competently use SigmaSense. SigmaSense manages Voice of the Customer including providing the online Survey tools for qualitative and quantitative questionnaires.

Where Do Six Sigma Projects Fail?

While Six Sigma offers a sophisticated and effective approach to business improvement, common shortcomings in the identification, design and execution of projects have emerged. The most often cited problems include:

- Lack of internal skills to deploy and sustain projects
- Long project cycle times which erode project savings
- Lack of buy-in to projects by front-line employees and managers
- Insufficiently structured methodology for the implementation of DMAIC
- Heavy training investment and delayed “readiness” by Green belts
- Compromised meeting productivity caused by manual meeting tools, such as flipcharts
- Inefficiency in decision making and document revisions as a result of serial email

Improving Six Sigma Results

Shorter project cycle times

Pressure to complete projects in shorter and shorter timeframes without reducing project effectiveness is cited as the biggest barrier to successful Six Sigma project implementation. The technology on which SigmaSense has been developed is proven to accelerate process improvement project completion by as much as four times and increase productivity by up to 200 percent while cutting meeting time by up to 56 percent.²

More participation from front-line managers and staff

Non-Belt participation is more forthcoming if meetings are consistently short and effective. Time is often the most difficult commodity to acquire from a leadership team, so it helps to keep planning meetings as brief as possible. A SigmaSense meeting will accomplish in a manager’s typical 30 or 60 minute time slot, as much as would be accomplished in twice the time.

Greater buy-in and commitment

With shorter project cycle time thanks to briefer, effective meetings, more people can engage in problem solving. SigmaSense facilitates idea sharing through brainstorming, decision making and action planning. Larger numbers of ideas contributed from a broader range of sources will result in better solutions – plus greater commitment to improvement strategies and immediate implementation of action items.

Action Learning techniques make Belt training faster

With SigmaSense's structured methodologies, running meetings follows a "learning-by-doing" approach. There is no longer a need to memorize how to use the many tools employed in Six Sigma projects. Focus can be directed onto the special requirements involved in facilitating team performance. Released from the need to think about the next step in the methodology, Belts rapidly become competent in facilitating complex meetings with enhanced critical thinking.

Collaboration technology empowers team members

Online collaboration tools typically emphasize meeting productivity as a goal. Look further. What dramatically empowers teams and improves team effectiveness are the positive effects gained from sharing ideas in a collaborative work space. Decision making is accelerated through brainstorming, prioritizing and action planning, all of which are widely incorporated into SigmaSense tools; and without a flip chart or word processing tool in sight. The more ideas generated, the greater the likelihood of producing high-quality solutions.

Use a structured methodology

In a recent survey 33 percent of respondents blamed "lack of a structured methodology" for shortfalls in Six Sigma projects.³ SigmaSense integrates online collaboration with a structured Six Sigma methodology to achieve accelerated project cycle time and high levels of management buy-in. High-performing teams with a systematic, structured methodology and the right collaboration tools have been found to reduce project cycle time by as much as 91%.⁴

Productivity tools for Belts

The integrated tools and processes in SigmaSense provide leadership support to Belts. Why? Belts are required to demonstrate high levels of competence in three diverse areas – statistical analysis, team and stakeholder management and meeting facilitation. Each of these draws on separate skill sets, and so increases the complexity of facilitating successful Six Sigma projects.

When equipped with automated methodologies for each DMAIC tool, group statistical tools, a facilitation "script", a roadmap and formatted Report, new Green Belt project leaders quickly become self-sufficient. Productivity increases follow, and projects are delivered in shorter cycle times.

Global reach and cultural considerations

Managing a multicultural, transglobal project team presents specific challenges to team leaders. There are crosscultural issues which discourage members from contributing their knowledge during audio-only conferences. Such factors compromise outcomes, particularly where Belts are relying on local team members' skills and knowledge to identify process improvements. While verbal input may be difficult, brainstorming using the Discuss "intelligent chat" tool elicits rich ideas from culturally reticent team members.

SigmaSense Tools

SigmaSense provides an interactive, virtual work space for team meetings that stimulates critical thinking and problem solving while allowing facilitators to focus on teamwork.

Share your favourite statistical and process mapping tools during meetings with all members of the team using SigmaSense's Application Sharing tool.

Each tool in the suite provides the project team with:

- Introductory presentation
- Pre-configured, automated methodology
- Thinking prompts and checklists to optimise critical thinking
- "At-the-fingertips" navigational help
- Formatted report
- Group-enabled collaboration
- Additional features including Application Sharing, Document Viewing, Web tours and Surveys

DMAIC Tools

Define	<ul style="list-style-type: none">➤ Improvement Project Charter (with Business Case)➤ Stakeholder Analysis➤ Voice of the Customer (VOC)➤ Surveys➤ Process Mapping➤ SIPOC➤ Plan, Do, Study, Act (PDSA)➤ Affinity Tree➤ CTQ➤ Benchmarking➤ Communications Plan
Measure	<ul style="list-style-type: none">➤ Process Mapping➤ Data Collection Plan➤ FMEA➤ Affinity Tree➤ Plan, Do, Study, Act (PDSA)➤ Team Performance Improvement

Analyze	<ul style="list-style-type: none"> ➤ Cause and Effect Chart ➤ Brainstorming ➤ Process Mapping ➤ Histogram ➤ 5 Whys ➤ Failure Mode and Effects Analysis (FMEA) ➤ Plan, Do, Study, Act (PDSA) Cycle Plan
Improve	<ul style="list-style-type: none"> ➤ Brainstorming ➤ Force Field Analysis ➤ Plan, Do, Study, Act (PDSA) Cycle Plan ➤ Team Performance Improvement
Control	<ul style="list-style-type: none"> ➤ FMEA ➤ Control Plans ➤ Plan, Do, Study, Act (PDSA) Cycle Plan ➤ Team Performance Improvement

Process Improvement Tools

Process Improvement Tools	<ul style="list-style-type: none"> ➤ 5 Whys ➤ Affinity Tree ➤ Benchmarking ➤ Brainstorming ➤ Cause and Effect Chart ➤ Force Field Analysis ➤ Issues, Causes, Consequences ➤ Improvement Project Charter ➤ Problem Solving ➤ Process Mapping ➤ RACI/RASCI ➤ Risk Management ➤ Sigma XL Statistical Calculations ➤ Stakeholder Analysis ➤ Surveys ➤ Team Performance Improvement ➤ Voice of the Customer (VOC)
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SigmaSense tools comprise collaborative team meeting processes for each phase of DMAIC and Process Improvement. An extensive range of statistical tools and a process mapping tool are also available as add-on programs.

SigmaSense Features & Benefits

Features

- 20 collaborative DMAIC & process improvement team meeting methodologies
- Suitable for face-to-face and remote meetings or combinations of both
- Offers real time/facilitated (synchronous) and anytime/self-guided (asynchronous) meetings
- "Learning-by-doing" model for training and meeting support

- Optional add-in program for statistical tools, control charts
- Process mapping add-in tool available
- Formatted and custom reports on-demand
- Available as a hosted service and perpetual license
- Requires only a web browser

Benefits

- Accelerates decision making and critical thinking
- Promotes high-performance teams
- Standardized implementation for all projects
- Eliminates paperwork, minute writing
- Requires minimal facilitator training
- No training required for team members
- Replaces whiteboards, stickies, minute taking, serial email
- Engages more people in problem solving, requirements gathering, improvement plans
- Preserves organizational memory
- Audit trail of idea creation and decision making

Who Benefits from SigmaSense?

- Time-poor project teams able to accelerate project cycle time
- Global and local collaborative and multicultural teams
- Black Belts seeking buy-in from line managers and staff
- Green Belt project leaders empowered with automated methodologies
- Staff involved in shorter projects
- Stakeholders engaged in decision making
- Line managers involved in shorter meetings
- *Customers who benefit from continuous improvement projects*

About Grouputer

Grouputer provides e-meeting and e-learning tools for business problem solving, planning and training. The company launched the first ever portable electronic meeting system, Decisions, in 1993. This empowered consultants, facilitators, and trainers to use technology to deliver on-site electronic meeting services to customers.

Since 2003, Grouputer has focused on Internet collaboration between people meeting together in real time and anytime, in the same place and remotely.

The company services customers in the United States, Latin America, Canada, Australia and Europe through direct sales and value-added resellers. Customers include the Fortune 500, management consulting firms, universities and defense agencies.

Glossary

DMAIC (Design, Measure, Analyze, Improve, Control): A methodology for improvement based on reducing variation in products and processes.

Grouputer: A collaborative Internet program for groups to participate in e-meeting, e-learning and e-surveys and the name of the company.

References

1. Sloan Management School/Boeing Corp.
2. Boeing Corp
3. Actionworkout
4. Boeing Corp

If you would like more information or to contact us, please email us at enquiries@grouputer.com or visit our website at <http://www.grouputer.com> / Contact Us