### CASE STUDY



# Problem Solving Training Helps Industry Leader Deliver Superior Quality.

#### The Challenge

The Company is a leading provider of high-performance semiconductor products in the global marketplace. They needed their engineers to have an exceptional ability to quickly identify the root cause of production problems and implement flawless solutions. This challenge was compounded by two factors: First, semiconductor manufacturing is an extremely complex process, where years of interrelated factors must be considered in order to resolve even the simplest production problem. Second, the semiconductor industry is highly competitive and fast-paced. When problems are encountered, engineers must use a rapid, accurate process to correctly identify the root cause of problems, or risk losing business.

#### The Solution

Action Management Associates, Inc. (AMAI's) objective was to provide repeatable processes that would enable trained employees to more quickly and accurately isolate the root cause of problems and develop and implement new solutions with less rework and fire-fighting. The solution was to introduce a suite of results-oriented, practical Problem Solving and Decision making (PSDM) tools and techniques to the company's engineers. The instruction focused on teaching root cause analysis tools such as Deviation Analysis, Distinction Analysis, and Force Field Analysis to correctly identify the core of the problem. For implementation,

engineers would apply the Anticipating Problems to assure solutions were rolled out in an effective manner. The workshops were enhanced through the use of a unique Sustain The Impact process where AMAI followed up on the training and rewarded workshop participants who applied what they learned and achieved a positive bottom-line impact for the Company. The Action Management Wheel illustrates the dynamic nature of all the PSDM workshop processes and the critical and creative thinking components the Company used. Teamwork is the hub and the Wheel rolls logically from quality of solution to quality of implementation.

#### The Challenge

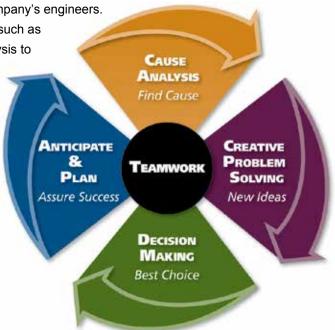
A leading provider of high-performance semiconductor products needed to consistently deliver superior-quality products to their customers and quickly resolve customer issues, or risk losing business.

#### **The Solution**

The Company certified two internal instructors to deliver Action Management's PROBLEM SOLVING & DECISION MAKING workshops and their unique Sustain the Impact system to follow up and recognize workshop participants.

#### **The Result**

With an investment of just over \$100,000, the Company reported over \$40,000,000 in positive bottom-line impact from using PSDM processes to resolve nearly 100 product and process-related issues.



#### **CASE STUDY**



#### The Implementation

AMAI certified two of the Company's instructors to teach the PSDM tools and processes to test engineers in 14 test facilities around the globe.

The instructors facilitated a number of two-day PSDM workshops.

In each workshop, participants brought current problems and issues and were given several opportunities throughout the two days to apply what they learned to their real-life concerns. The Company's engineers learned how to analyze their concerns and the concerns of their customers and to choose the right process to handle them:

- Need the help of others? Use Teamwork.
- Searching for a cause? Use Cause Analysis.
- Need new ideas? Creative Problem Solving is the key.
- In a dilemma over the best choice? Decision Making is the answer.
- · How can you assure success? With Anticipating Problems & Planning.

#### The Result

Over 18 months, the Client spent \$102,000 with AMAI and has so far reported over \$40,000,000 in positive impact as a result of solving nearly 100 product quality and process implementation concerns. In addition, many reported concerns that required months to resolve are now addressed in weeks, days and even hours. Some successes include:

- Solved a die crack problem that had plagued the company for six months thus avoiding the loss of a \$20 million a year customer.
- Improved productivity in a European engineering department by 30%.
- Identified the root causes of a 3% yield loss saving the company \$4 million annually.
- Used Creative Problem Solving to address "an unsolvable problem" thus saving the company in excess of \$1 million annually.
- Avoided several bottlenecks that would have delayed project completion by more than 5 weeks by using Anticipating Problems.
- Reduced machine jams by more than 30% resulting in savings of \$769,708 annually.

These and other positive results caused the Managing Director to remark: "The program has had a significant positive impact on meetings by making communication more objective and visible where both creative and contrarian ideas are more openly shared. It's not surprising that so many of our people want to take this workshop."

Action Management Associates, Inc. (AMAI) is a management training company, specializing in critical and creative thinking skills, with over 30 years of experience in client organizations worldwide. AMAI's workshops combine Rational, Creative and People approaches to help improve individual and team performance in anticipating, assessing and solving complex problems and making decisions. Each program offered by AMAI emphasizes immediate results while developing people who will make long-term contributions to their organization.

To explore ways that Action Management can help your organization achieve similar results, please contact:

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## Don't forget to ask about our results focused workshops including:

- Problem Solving & Decision Making
- Applied Critical Thinking
- Rapid Troubleshooter
- Critical Thinking for Business Growth
- Critical Thinking for Administrative Personnel

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Practical solutions. Measurable results.