



Company Expertise

While additional expertise is available, eMRI primarily offers consulting, facilitation and training in the following areas:

Supplier Quality

- Supplier assessment
- Supplier improvement/development
- Quality problem resolution
- Supplier quality management

Six Sigma/Black Belt

- Organizational implementation
- Project consultation
- Black Belt and Green Belt training

Quality Systems

- Implementation
- Quality system auditing
- Use of quality improvement tools and methods

Gage Management

- Calibration optimization
- Consultation for gaging cost reduction

Our mission is to help our clients improve their bottom line through improvements in quality and productivity. We facilitate improvements in quality and productivity through the combination of consulting, facilitation and training services that provide the optimal benefit to the client.

Case Studies

Quality System Implementation

Business Problem:

A client wanted to establish an ISO/TS 16949 Quality Management System (QMS) as a process improvement measure and to meet customer requirements. The client had previously established a QMS that was structured after the QS-9000 requirements, but the system had not been fully implemented nor maintained and had never been certified by a third party registrar.

Our Solution:

Accomplish an assessment of the organization's current QMS and develop a comprehensive project plan with objectives, tasks, milestones, resource requirements, and timing requirements. Train organizational personnel in the ISO/TS 16949 requirements and develop a cadre of competent internal auditors. Identify the organization's processes including the defining of process inputs, outputs and process measurables. Led first round of internal audits to ensure a comprehensive assessment and to verify the effectiveness of the organization's internal auditors and reviewed corrective actions.

Results:

The client was successfully certified on their first attempt with minimal findings and recommendations for improvement. The client and eMRI received very positive feedback from registrar during both the readiness review and certification audit.





Transactional Continuous Improvement Consulting (Teams/Statistical Analysis)

Business Problem:

A multi-billion dollar transactional organization's leadership determined that continuous improvement was not taking place at the desired pace and the measurement system for determining departmental performance was delivering results that were counterintuitive.

Our Solution:

eMRI met with the senior executive responsible for the division desiring improvement. The goals of the project were clearly laid out and eMRI began leading a team of client associates in investigating the problems.

Improvement activities identified by the team included appropriate measurement system assessments and improvements, emphasis on variables data collection and deemphasis of attribute data, proper control charting, termination of statistically improper analyses and development and application of statistically valid tests.

Results:

Improvement activities undertaken by the team have reduced nonconformities by over 50% in the past 7 months.

Additionally, the team has implemented a pilot of the departmental evaluation system. Initial results show a much improved analysis of departmental performance. Anticipated is an organization-wide rollout of the system in early 2005.

Manufacturing Continuous Improvement Consulting (DOE)

Business Problem:

A \$100+ million/year plant was experiencing excessive rates of scrap in a high tolerance machining operation. As there were several parallel processes, the costs associated with the scrap problem were significant.

Our Solution:

An assessment of the process showed that there were several potential sources of variation. It was clear from the outset that the only route to assessing the key input variables was design of experiments.

eMRI assisted the improvement team through the process of planning the experiment and then left the team to perform the experiment itself. A "spare" machine was set aside for the team to work with. Upon completion of the experiment, eMRI analyzed the data and was able to discern the critical factors affecting process performance. This information was communicated to the team and the team put the process changes into place.

Results:

Cost savings from implementation of improvements indicated by the DOE are saving the client in excess of \$1 million annually.



Manufacturing Continuous Improvement Consulting (Six Sigma)

Business Problem:

A major, global tier one automotive supplier (annual sales over \$10 billion) desired improved results from its global Six Sigma program. The program, as it was currently functioning, was not yielding the desired results.

Our Solution:

eMRI was asked by a senior executive to provide consultation services and to utilize its background in corporate Six Sigma implementation to re-energize the Six Sigma Program. A 90-day window to evidence improvement was agreed upon.

eMRI met with and surveyed employees from the senior leadership team down through supervisory-level employees. Analysis of the survey results were used to develop a strategy that would be supported by senior leadership and drive Six Sigma success.

A seven step strategy was crafted. Steps were focused on key cultural, strategic and tactical issues facing the Six Sigma program.

Results:

The client's Leadership team and Six Sigma team agreed on the implementation of all seven of the recommendations. Specific results yielded positive feedback in terms of Six Sigma momentum across the organization. Specific results are client confidential.

Corporate Quality Universities

Business Problem:

A multi-national manufacturer of chemicals determined that to achieve its strategic goals, several hundred key employees would require world-class knowledge in the area of quality and productivity improvement systems and tools.

Our Solution:

eMRI worked with the client and one of its academic partners to create a turnkey "Quality University" solution to cover all 55 North American plants. A combination of material customization, open enrollment training hosted by eMRI and its academic partner, onsite training and project consulting was developed. The solution provides turnkey administration, marketing (under the clients own name), course materials, trainers, etc. The rollout plan over 4 years has a heavy focus on Six Sigma and Six Sigma projects.

Results:

Identification of all Fall 2004 training has been completed. Full scale rollout began in August of 2004. The initial feedback has been positive. Based on initial results, individual facilities have begun to request specialized consulting and training services.



Supplier Problem Resolution

Business Problem:

An automotive parts supplier was receiving out of specification parts from a key supplier. eMRI was asked to provide immediate assistance to determine the root cause and assist in identifying the required scope of containment.

Our Solution:

Within four hours eMRI had a statistical expert onsite. Within 2 days, eMRI had identified a key process issue that was resulting in the significant portion of the defective parts being produced. Upon completing the historical analysis, eMRI formulated a set of recommendations for process improvement including sophisticated destructive test measurement system assessments, statistical process control charts to separate within and between variation and a path by which to pursue DOE.

Results:

The client reports that defects have dropped to effectively zero. Additional continuous improvement actions are currently in process.

Headquartered in Saline, Michigan with offices in Columbia, South Carolina

HEADQUARTERS CONTACT INFORMATION:

6453 Hollowtree Court
Saline, MI 48176

Phone: (734) 429-0747

Fax: (734) 944-0748

Email: info@e-mri.net

