

Union of Japanese Scientists and Engineers (JUSE)

Shortly after World War II, the Japanese government encouraged the formation of several industrial organizations to help Japan recover from the war. The most notable of these organizations has been the Union of Japanese Scientists and Engineers (JUSE). This union brought together leaders and experts from all of Japan's major industries so that they could share best practices. This was done in the hope of revitalizing Japan's economy. Its main directive was to revitalize Japan's economy and eliminating waste by improving quality. It wasn't until 1949 that JUSE began to host statistical quality control seminars. In 1950 JUSE invited Dr. W. Edwards Deming, a U.S. government statistical advisor to lecture to them on use of statistical quality control. That invitation led to an eight day lecture that was well received by the eager Japanese engineers and scientists. Dr. Deming repeated his lectures many times with great reception. These initiated what is now commonly referred to as the Japanese quality revolution, of which JUSE is the quintessential poster child.

The notes to Dr. Deming's lecture, *Elementary Principles of the Statistical Control of Quality*, were subsequently translated and published in Japan. Although JUSE offered Dr. Deming the royalties for his lectures, he refused. JUSE, inspired by Dr. Deming's kindness, began the Deming Prize in 1951 from those same royalties. The prize, which is

a bronze medal bearing a likeness of Dr. Deming is awarded to those who have contributed to field of quality control. The Deming Prize was originally awarded in two categories. It is awarded to *individuals* who make a significant contribution to the theory and application of quality control and also to *firms* that obtain outstanding results in the application of quality control.

Another quality guru that also contributed to the culture and credence of JUSE was Joseph Juran. He like, W. Edwards Deming, was also invited to give lectures to the still burgeoning JUSE and did so in 1954 and 1960. His lectures focused more on a managing quality and how to make quality a business strategy. His ideas greatly supported JUSE's tenet beliefs in continuous improvement and quality circles.

The most influential figures in the history of JUSE have been its founder Ichiro Ishikawa and his son Kaoru Ishikawa. In 1946 Ichiro Ishikawa organized JUSE and helped many of then top Japanese executives to meet and pay attention to W. Edwards Deming. However, it was his son Kaoru that headed JUSE during its flourishing and led the Japanese to internalize the teachings of Deming and Juran. As a professor of engineering at Tokyo University, he developed the concept of quality circles. A Quality circle is an approach to Total Quality Management that encourages workers to form teams to present process changes to management for implementation. This reinforces Deming's 14th point for management, "Quality is everybody' responsibility." Kaoru

Ishikawa spearheaded the Japanese Quality Revolution that has given JUSE the prestige it enjoys today. Ishikawa left behind him a focus in JUSE of training others how to use Total Quality Management tools especially quality circles.

The quality circle concept has become so popular that there are now over 426,000 registered quality control circles in Japan. These groups, some small while others quite large, permeate all of Japan's industries and play a major role in Japan's culture. These quality control circles have helped Japan's industries thrive and often define the work and social context of many Japanese. This has been JUSE's and Ishikawa's largest contribution to Japan.

JUSE currently offers a plethora of seminars, training courses, and symposiums on quality related topics. These seminars include:

- Total Quality Management
- Reliability Engineering
- Quality Control Methods
- Experiment Design
- Multivariate Analysis
- Cost Reduction
- Quality Control Circles
- Medicine
- Research & Development
- Product Liability
- Product Safety
- ISO Management Systems
- Software

In addition to providing great resources for Total Quality Management enthusiasts, JUSE sponsors and co-sponsors many

conventions and other organizations that seek promote quality awareness and quality management techniques. JUSE supports the International Conference for Quality, Global Quality Affirmation, and the World Congress for Software Quality.

However, JUSE is most well known for its role in awarding and administering the Deming Prize. Today, the Deming Prize is open to all persons and companies both Japanese and foreign in one of three categories. These categories are:

- The Deming Prize for Individuals
- The Deming Application Prize
- The Quality Control Award for Operations Business Units

While these awards differ in criteria, they are all awarded to companies and individuals for their outstanding efforts to apply or disseminate Total Quality Management. JUSE also offers and co-sponsors other awards like the Japan Quality Medal, for Deming Prize winner overachievers, and Nikkei QC Literature award for excellent writings in the Total Quality Management field. All of these awards are administered by the JUSE Deming Award committee. Through these awards JUSE has sought to promote interest in the use and learning of Total Quality Management techniques throughout the world.

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