



Dr. Joseph Juran: The Pioneer of

BY FLORENCE STONE

“Whatever advances American manufacturing has made in the last 30 to 40 years, we owe to Joe Juran.” —Dr. Peter Drucker

What better way to open a retrospective on Dr. Joseph Juran than with a quotation from another renowned visionary: Dr. Peter Drucker. Dr. Juran and Dr. Drucker, winner of AMA’s Leadership Visionary Award presented at AMA’s 80th Anniversary Leadership Forum, are lifelong friends. Early in the history of AMA, both of these management thinkers were active participants in AMA’s conferences and seminars.

THE FATHER OF THE WORLDWIDE QUALITY REVOLUTION

As Dr. Juran prepares to celebrate his one hundredth birthday, *MWorld* wants to acknowledge this individual who has come to be called—and with cause—“the father of the worldwide quality revolution.” Dr. Juran’s work is the foundation for much of the quality movement of the twentieth and twenty-first centuries—everything from Total Quality Management to Six Sigma. He helped create and champion quality management systems, quality tools and teams long before they became standard practice in the United States. His contribution to the revolution in Japanese quality philosophy made that country into a market leader.

Juran’s fame, indeed, centers upon his ideas and thinking about quality management, but it would be unfair not to credit him, as well, for his contribution to the field of management. During his life, he has played a number of roles—writer, teacher, trainer and consultant—and much of management thinking is infused with his ideas.

His 30 books have collectively been translated into some 13 languages. He has received more than 100 medals, honorary fellowships and awards in 12 countries, including the Second Order of the Sacred Treasure, which is the highest decoration presented to a non-Japanese citizen. This high honor states that it is “Awarded for the development of quality control in Japan and the facilitation of the U.S. and Japanese friendship.”

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Quality Management

HUMBLE ROOTS

Born in Braila, Romania in 1904, Dr. Juran left his native country as a child with his impoverished family for the United States, settling in Minneapolis. While Dr. Juran is proud of his adopted homeland, life was not easy for his family in the “Land of Opportunity.” After his mother’s death, the Juran family fell apart. Joseph’s sisters were placed in an orphanage, while young Joseph and his father moved to Minneapolis’ red light district and lived among the destitute.



Dr. Juran conducts a public lecture in Japan in 1960. He recalls that he used an overhead projector there in 1954—it was the only such machine in Japan at the time.

Fortunately, Juran had a refuge. As he writes in his autobiography, *Architect of Quality*, that refuge was the world of books he found at the public library. “We had no books at home, but now I could borrow books to be read at home,” he wrote. A voracious reader, Juran excelled at school in America. His affinity for mathematics and science enabled him to skip grades and enroll at the University of Minnesota at the age of 16. He later earned a J.D. in Law at Loyola University in 1936.

At Western Electric, the manufacturing arm of Bell Telephone, where he began his career, he demonstrated his analytical and statistical abilities—talents that helped move him up the ranks. In 1926, he was one of 20 chosen for an inspection-training program by a visiting Bell Laboratory team. Shortly thereafter, he was appointed one of the two engineers in the newly-formed inspection statistical department. It was while he held this position that he authored his first book, *Statistical Methods Applied to Manufacturing Problems*.



Dr. Juran's time in Japan was spent visiting numerous plants. Here he is at the Kurake Spinning Company instructing plant managers and workers about how they could improve their plant's competitive position.

In 1937, he became head of industrial engineering at Western Electric's headquarters in New York, a position that gave him the opportunity to visit other companies and discuss ideas about quality and industrial engineering. During his visit to General Motors in Detroit, he recalls, realizing how relevant Pareto's idea of "the vital few and the trivial many" was to quality management.

THE 80/20 RULE

Several years passed before he wrote about the Pareto Law in his *Quality Control Handbook*, now in its fifth edition. But Juran was, in reality, the first to identify and popularize the 80/20 rule that suggests that 80 percent of

return comes from 20 percent of effort. Indeed, in the year 2003, the American Society for Quality proposed renaming the Pareto Principle the "Juran Principle."

In 1941, as the United States watched the war in Europe, Juran was assigned to work for the Lend-Lease Administration in Washington, D.C. This assignment lasted for four years, during which he streamlined the shipment process to reduce documentation and thereby cut costs significantly. Today, we call this "business process re-engineering (BPR)." Juran's accomplishment of the same thing at least a half century before may explain why he contends that "there is nothing new about BPR."

Juran left Washington and Western Electric in 1945 to become a writer and consultant. Juran believes that decision was critical. Known to be outspoken and to follow his own thinking, he realized early in his career that he was better suited working for himself than working for someone else.

A GLOBAL PLATFORM

During these years, Dr. Juran, like Dr. Drucker, became actively involved in the American Management Association. A member of AMA since 1941 and speaker and participant at its many conferences, he was invited in 1947 to become a member of its Manufacturing Council, one of the volunteer advisory groups at the time. A year later, he was asked to lead the AMA seminars that he helped to develop on quality for senior executives. In this role, he trained thousands of managers on how to make improvements in quality.

After the publication of his *Quality Control Handbook*, Juran's position as an authority on quality expanded. In 1954, he delivered a series of lectures in Japan at the invitation of the Union of Japanese Scientists and Engineers. The ideas from these lectures were published in his book *Managerial Breakthrough*, published in 1964.

As Juran's reputation grew, he recognized that he needed to build an organization to increase awareness of his ideas. So in 1979, at the age of 75, he founded The Juran Institute. The

JURAN'S MESSAGE

The foundation of Dr. Juran's message about quality is that it does not happen by accident—it must be planned. Quality planning is part of a trilogy: quality planning, quality control and quality improvement. Integral to the quality planning roadmap are these milestones:



Dr. Juran welcomes AMA President and CEO Ed Reilly to his study.

- Determine who are the customers.
- Determine the needs of those customers.
- Develop a product that responds to those needs.
- Optimize the product features to meet your needs as well as customer needs.
- Develop a process that is able to produce the product.
- Optimize the process.
- Prove that the process can produce the product under operating conditions.
- Transfer the process to operations.

Dr. Juran's remarks during the celebration of his 100th birthday can be found in the Leadership Section of The Best of *MWorld* in the AMA Online Library: www.amanet.org/amalibrary

Institute was created to provide research and solutions to help companies from diverse industries attain the proper tools and techniques for managing quality. It was through this Institute that the widely acclaimed video series *Juran on Quality Improvement* was produced. Although he retired from leading The Juran Institute in 1987, he still played an active role in the quality movement. For example, he was active in the creation of the Malcolm Baldrige National Quality Award.

Dr. Juran may have retired from The Juran Institute but he continues to closely monitor the quality movement. He is currently writing a new book that identifies steps U.S. organizations can take to surpass the Japanese in the quality race.

AN ONGOING EFFORT

The respect with which Dr. Juran is held by those at The Juran Institute is evidence that he is leaving the task in dedicated hands. According to Joseph De Feo, the Juran Institute will continue to define the three management processes required by every organization to improve: quality control, quality improvement and quality planning.

“Dr. Juran is a seminal figure in the development of management theory,” says Joseph De Feo, president and CEO of The Juran Institute. “Dr. Juran has contributed more to the field and over a longer period of time than any other person, and yet he feels he has barely scratched the surface,” says De Feo. Dr. Juran has said, “My job of contributing to the welfare of my fellow man is the great unfinished business.” [MW](#)

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