



Adelman

JOSEPH M. JURAN

1904–2008

Elected in 1988

“For pioneering contributions in developing the practice of statistical quality control, and in developing engineering design principles based on statistical concepts.”

BY KENNETH E. CASE

JOSEPH M. JURAN, founder of the Juran Institute for Leadership in Quality and a pioneer, teacher, consultant, and guru of quality control, died on February 28, 2008, at the age of 103. He was elected a member of NAE in 1988 for “pioneering contributions in developing the practice of statistical quality control, and in developing engineering design principles base on statistical concepts.”

Joseph Moses Juran was born on December 24, 1904, in Romania. Eight years later, the family immigrated to Minneapolis to escape poverty and the threat of violence against Jews. Joseph became a naturalized U.S. citizen in 1917 and served as a second lieutenant, eventually captain, in the U.S. Army Signal Corps Reserve performing cryptanalysis.

He went on to become the world-renowned elder statesman of quality control. His 75-year career included 17 years at Western Electric, four years on loan to the Lend Lease Administration beginning soon after the attack on Pearl Harbor, and more than 50 years as a management consultant. Joseph was not only a pioneer in the field of quality control field, but was also one of the most revered leaders in the field.

Joseph Juran was elected to the National Academy of Engineering in 1988. In 1992, he was awarded the National Medal of Technology by President George H. W. Bush “for his lifetime work of providing the key principles and methods by which enterprises manage the quality of their products and processes.” Even earlier, in 1981, he was awarded the Order of the Sacred Treasure by the emperor of Japan. That same year, he received the Frank and Lillian Gilbreth Industrial Engineering Award, the highest honor given by the Institute of Industrial Engineers. He also received the Grant Medal (1967), Edwards Medal (1962), and Brumbaugh Award (1958) from the American Society for Quality Control, any one of which is considered the capstone of a career; Joseph went on to contribute for another 40 years.

By the time he was 20, Juran had held 16 jobs, including his first job selling the *Minneapolis Tribune* at a streetcar stop. When he wasn’t working, he continued to pursue his formal education. His teachers kept moving him ahead to challenge him, and in 1920 he entered the University of Minnesota, where he received his B.S. in electrical engineering in 1924. College was a challenge, and maintaining a C average was sometimes a struggle, as he continued to work to make ends meet. In 1926, he joined the inspection statistical department at Western Electric, one of the first such departments ever established.

In 1929, at the age of 24, Joseph was appointed chief of Western Electric’s Quality Inspection Results Division, which oversaw five departments. In 1935, still working at Western Electric, Joseph earned a J.D. from Loyola University. Practicing law was his backup employment plan during the depression. In 1937, he moved to New York to become corporate industrial engineer at Western Electric/AT&T headquarters. About this time he also became active in the Society for the Advancement of Management, American Management Association, and American Society of Mechanical Engineers.

In 1941, while on a benchmarking visit to General Motors, he discovered the work of Vilfredo Pareto on the distribution of wealth (that relatively few people own the great majority of

the wealth). He applied this principle to quality by showing conclusively that relatively few contributors (e.g., components) in a system—the vital few—account for the bulk of the effect (e.g., defects). He later discovered that this principle had been incorrectly attributed to Pareto, but more than 50 years later, when he was asked if the name should be changed to the “Juran principle,” he said, “No, but perhaps after I go to the great beyond.”

The same year, 1941, he was “loaned” by Western Electric to the Lend Lease Administration for six weeks, starting on Christmas Day. As World War II continued, the six weeks stretched into four years.

From 1945 to 1949, Joseph began his career as a consultant, assisting clients such as Gillette, BorgWarner, and Hamilton Watch Company. During this time he became a founding member of the American Society for Quality Control (ASQC). From 1949 to 1979, he had his own consultancy. Beginning with clients such as General Foods, Bausch and Lomb Optical, and International Latex., his client list quickly grew to include many North American and international organizations. From 1950 to 1991, he made 178 trips abroad to lecture, consult, teach courses, and attend quality conferences in 34 countries.

In 1979, Joseph incorporated the Juran Institute for the purpose of transferring his knowledge to a set of 16 videotapes, the “Juran on Quality Improvement” package, which included 50 workbooks, two leader’s manuals, and three books. The Juran Institute eventually expanded to offer consulting services, workshops, papers, and additional books and tapes. In 1987, Joseph stepped down from his position as chairman and CEO of the institute to become chairman emeritus. From 1988 to 1991, Joseph was tapped to serve as a founding member of the U.S. Malcolm Baldrige National Quality Award Board of Overseers.

Joseph’s writings number in the hundreds, many of them translated into 30 different languages. His books span nearly 60 years, beginning with *Bureaucracy: A Challenge to Better Management* in 1944 (probably still relevant today) and ending with his memoirs, *Architect of Quality*, published in 2003.

Juran's Quality Control Handbook, which has been published in many editions since it first appeared in 1951, is still considered the definitive compilation on quality. *Quality Planning and Analysis*, published in several editions since 1970, is used throughout the world by both practitioners and academics.

According to Joseph's son Donald, his father always told him, "Never be without a project." Speaking a few days after his father's death, Donald added, "And he never was." Joseph's contributions were motivated by his strong underlying beliefs developed over many years of helping people. A few of his sayings, captured by Hélio Gomes in *Quality Quotes* (ASQ Quality Press, 1996) are listed here:

- On the cost of poor quality: "In the U.S.A., about a third of what we do consists of redoing work previously done."
- On the definition of quality: "Quality is fitness for use."
- On quality control: "For quality in the sense of freedom from deficiencies, the long-range goal is perfection."
- On innovation: "Improvement means the organized creation of beneficial change; the attainment of unprecedented levels of performance. A synonym is 'breakthrough.'"
- More on innovation: "To achieve improvement at a revolutionary pace requires that improvement be made mandatory—that it become a part of a regular job, written into the job description."
- On standards/standardization: "Without a standard, there is no logical basis for making a decision or taking action."
- On top management commitment: "Observing many companies in action, I am unable to point to a single instance in which stunning results were gotten without the active and personal leadership of the upper managers."
- On total quality management (TQM) implementation: "The recipe for action should consist of 90% substance and 10% exhortation."

- On TQM leaders and managers: “All managerial activity is directed at either breakthrough or control. Managers are busy doing both of these things, and nothing else.”
- More on TQM leaders and managers: “Had Deming (also an NAE member and National Medal of Technology recipient) and I never gone there, the Japanese quality revolution would have taken place without us . . . the unsung heroes of the Japanese quality revolution were the Japanese managers.”

Joseph’s vision for this country was that the 21st century would be the “Century of Quality.” In 1994, he had argued for a national center for the study of quality. In 1997, he realized this ambition when the Carlson School of Management at the University of Minnesota established the Joseph M. Juran Center for Leadership in Quality. The center focuses on rigorous research, educating scholars, and the discovery, dissemination, and teaching of quality leadership in the United States and around the world.

In 2000, the American Society for Quality (ASQ) introduced the Juran Medal in Joseph’s honor. The medal is awarded to individuals who “exhibit distinguished performance in a sustained role as an organizational leader, personally practicing the key principles of quality and demonstrating breakthrough management.” In 2000 the recipient was Robert W. Galvin, and in 2003 the recipient was John A. Young, both NAE members.

Following Joseph’s death, *Quality Progress*, the flagship publication of ASQ, invited readers to share their thoughts, some of which are listed below

- “At a time when the field of quality was often contentious and our new Baldrige effort was still fragile, Dr. Juran was a steadying influence, bringing credibility and confidence to our work. His services and leadership within the first Board of Overseers were a key foundation for our early work, enhancing the award’s stature in the U.S. and around the world.”
—Curt Reimann, first director of the Baldrige National Quality Program.

- “The last time I saw him was in the White House when the first Baldrige Awards were given, and his first words to me were, ‘You should be proud of what you accomplished to bring this award about.’ Typical graciousness by a great man. The world and I will miss him.”—Jack Grayson, founder, American Productivity and Quality Center.
- “I visited Juran late last year, arriving unexpectedly during lunchtime. ‘If you had told me you were coming, we could have had lunch together. Now, you’ll have to watch me eat mine.’ He was obviously working hard, his desk covered with papers. It was the first time I had seen him in several years, and although he was slower afoot there was nothing, literally nothing, lacking in his mental agility. I departed amazed at the man’s vitality. Rare events, wonderful rare events, do occur.”—J. Stuart Hunter, NAE member, Professor Emeritus, Princeton University.
- “Dr. Juran wrote that the purpose of the (Juran) Institute is to improve the quality of society. He said, ‘Whatever you do, make sure it improves society. Don’t just do it for the sake of profit.’”—Joseph A. DeFeo, president and CEO, the Juran Institute
- “Dr. Juran changed many lives. He did so through his books, videos, recordings, papers, and public addresses. He did so by simply striking up a conversation with a stranger at a conference. He changed lives by setting an extraordinary example. Through his deeds. His generosity. His wisdom. His unselfish focus on humanity. And his unrelenting goal to pay back a debt to society for the opportunities presented to him over the years. Everything he said or did represented the kind of human qualities we would all like to emulate.”—Howland Blackiston, Juran’s grandson-in-law and producer of the documentary, “An Immigrant’s Gift.”
- “Heaven will get better.”—Joaquim Donizetti Donda, an ASQ member.

Married for 81 years, Joseph is survived by his wife Sadie, four children, and many grandchildren and great-grandchildren.

Note: The author appreciates the generosity of ASQ, especially Mark Edmund, for permission to use material from "The Architect of Quality: Joseph M. Juran 1904–2008," *Quality Progress*, April 2008.

His son, Charles wrote:

I want to tell you about my Dad but it isn't easy to find the words while emotions are still ragged and raw. How do you look at a life and explain what it meant? Most brave things are done in private and there is no medal for being faithful or meeting one's responsibilities. Eulogies at least give us a chance to honor these things.

His amazing journey began when Theodore Roosevelt was in the White House and Hitler, a failed art student. He persevered through grinding poverty in the early days, endless wars, a frightening depression, family problems, and a complete lack of social skills resulting from the upbringing he had.

Later in life things mellowed for him and the accolades came, although he never sought them. His touchstone, from Kipling, was to meet triumph and disaster on equal terms. He doted on his grandchildren and great-grandchildren. In this, we were able to give something back. I treasure what he inscribed to us in one of his books: "To the Redlands Jurans: you have so sweetened these years."

I inherited his flair for technical things and we had a wonderful relationship but his greatest gift to me was not the genes (although that was major), it was a moral compass I struggled vainly to emulate: knowledge, humility, a stern work ethic, honor, absolute honesty, justice, and love of his family and country.

The Last of their Kind

They are all gone now, the last survivors of that little band of immigrant kids who sailed to America in 1912. These three,

unlike today's immigrants, were tossed cold turkey into an English-speaking school, to sink or swim. They chose to swim.

Out of that little shack in Minneapolis came three who had a huge influence on my life: Aunt Min, who had to go to an orphanage when her mother died, overcame her upbringing, put her ambitions on hold until her family was raised, and finally went to college, all the way to Ph.D. status. And Uncle Nat, who never bore a grudge about his poverty years, studied architecture at MIT, switched to the movie business, and became an Oscar winning director.

And my Dad, overcoming the demons from a bitter childhood to achieve worldwide prominence in his chosen field of managing for quality. Only in America! And although this is still the land of opportunity, I don't think we'll see their like again.

