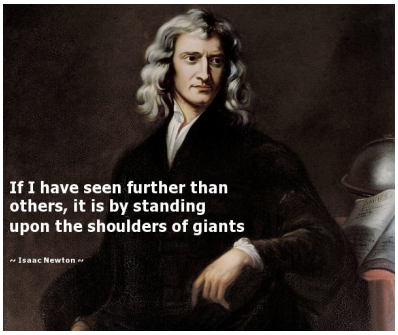
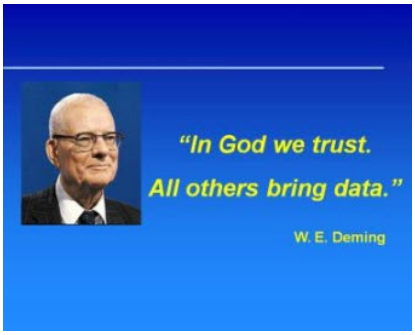
THOUGHT LEADERS OF A SUBJECT

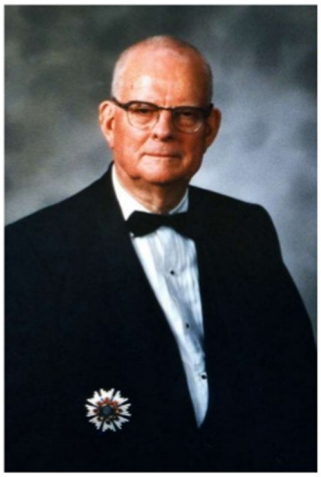
Physics/Mechanics



Quality Management



W E Deming



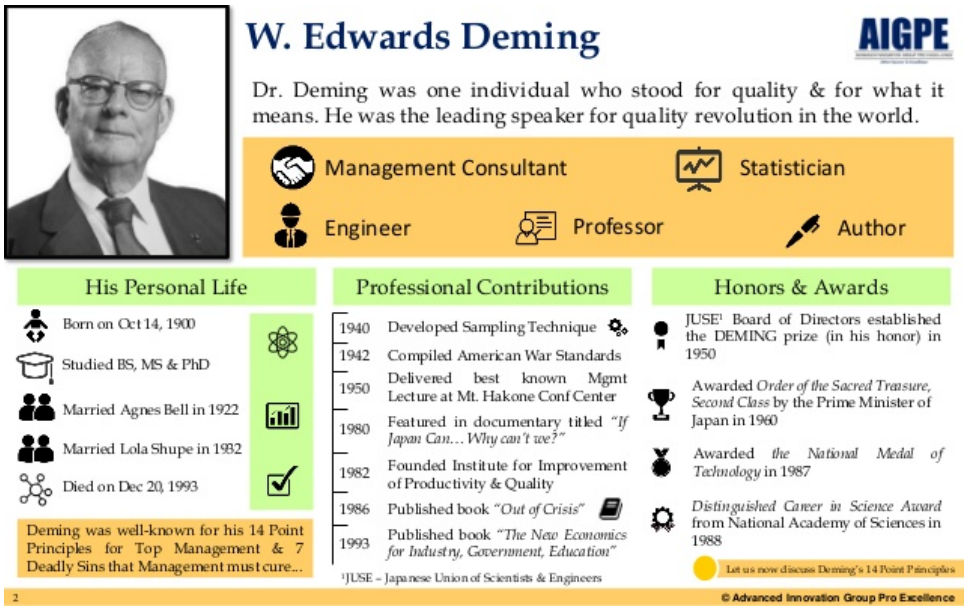
WILLIAM EDWARDS DEMING

Born October 14, 1900
Sioux City, Iowa

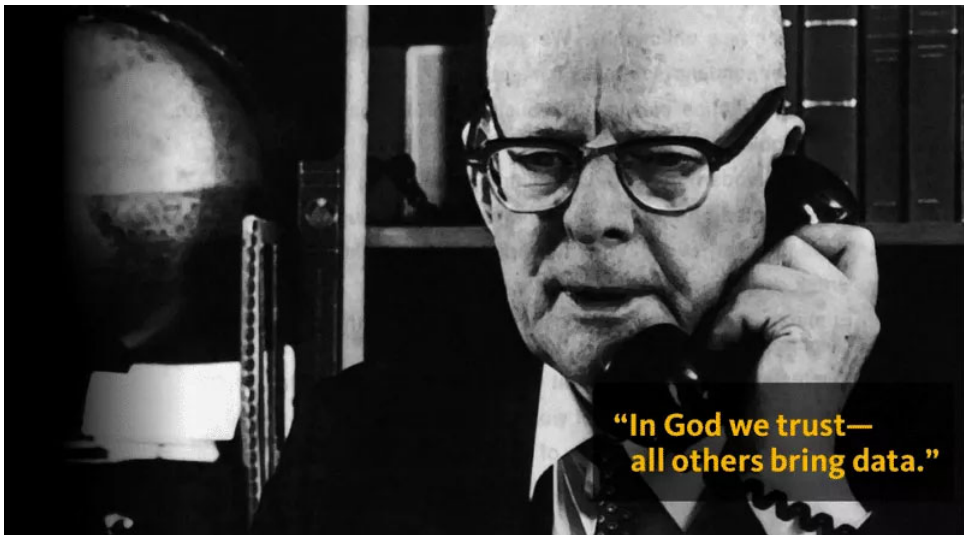
Died December 20, 1993
Washington, D.C.

Fields Stastician

*"It is not enough to do your best;
you must know what to do,
and then do your best."*


W. Edwards Deming
AIGPE
Dr. Deming was one individual who stood for quality & for what it means. He was the leading speaker for quality revolution in the world.
Management Consultant
Statistician
Engineer
Professor
Author
His Personal Life
Born on Oct 14, 1900
Studied BS, MS & PhD
Married Agnes Bell in 1922
Married Lola Shupe in 1932
Died on Dec 20, 1993
Deming was well-known for his 14 Point Principles for Top Management & 7 Deadly Sins that Management must cure...
Professional Contributions
1940 Developed Sampling Technique
1942 Compiled American War Standards
1950 Delivered best known Mgmt Lecture at Mt. Hakone Conf Center
1980 Featured in documentary titled "If Japan Can... Why can't we?"
1982 Founded Institute for Improvement of Productivity & Quality
1986 Published book "Out of Crisis"
1993 Published book "The New Economics for Industry, Government, Education"
[1]JUSE – Japanese Union of Scientists & Engineers
Honors & Awards
JUSE[1] Board of Directors established the DEMING prize (in his honor) in 1950
Awarded Order of the Sacred Treasure, Second Class by the Prime Minister of Japan in 1960
Awarded the National Medal of Technology in 1987
Distinguished Career in Science Award from National Academy of Sciences in 1988
Let us now discuss Deming's 14 Point Principles
2
© Advanced Innovation Group Pro Excellence

W E Deming


"In God we trust—
all others bring data."

Systems

- Most organizational processes are cross-functional
- Parts of a system must work together
- Every system must have a purpose
- Management must optimize the system as a whole

5

Variation

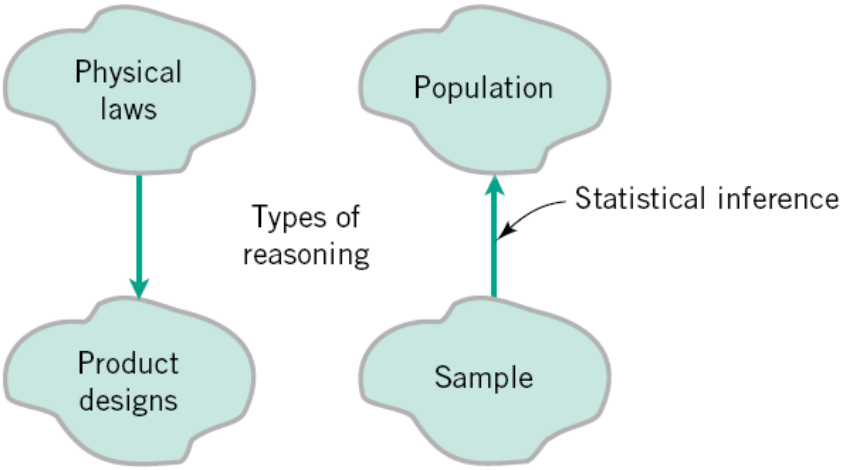
- Many sources of uncontrollable variation exist in any process
- Excessive variation results in product failures, unhappy customers, and unnecessary costs
- Statistical methods can be used to identify and quantify variation to help understand it and lead to improvements

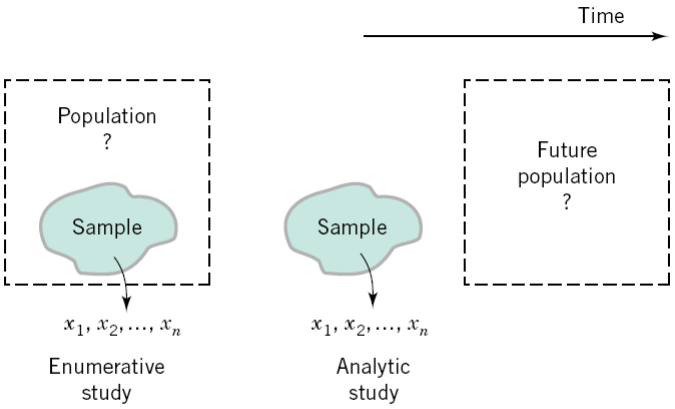
6

Why do we want to study Probability and Statistics?

Categories of Probabilities

- Classical (counting of outcomes)
- Relative frequency (limiting value; “intrinsic property”; bridging statistics and probability)
- Subjective (degree of belief)


Physical laws
Population
Types of reasoning
Statistical inference
Product designs
Sample


Time
Population ?
Sample
Future population ?
Sample
$x_1, x_2, \ldots, x_n$
$x_1, x_2, \ldots, x_n$
Enumerative study
Analytic study