DEMING'S SYSTEM OF PROFOUND KNOWLEDGE

BEN ROCKWOOD
VP, SITE ENGINEERING
PACKET
ONCE UPON A TIME
INTERPRETING THE PAST
CHARLES SANDERS PEIRCE,
WILLIAM JAMES,
JOHN DEWEY

PRAGMATISM
PRAGMATISM: THEORY OF KNOWLEDGE

Good

- Separation of the philosophical from the practical
- Breaking down of the Platonic forms of the ideal

Bad

- People value ideological beliefs
- Tends towards a dehumanizing Utilitarianism
SCIENTIFIC MANAGEMENT IS BORN

1911

THE PRINCIPLES OF SCIENTIFIC MANAGEMENT
FREDERICK WINSLOW TAYLOR
TAYLORISM: MEASURE THINGS

- Good:
  - Increased productivity
  - Increase earnings
  - Reduction of injuries

- Bad:
  - Prescriptive
  - Denies personal agency
  - Dehumanizing
STATISTICAL PROCESS CONTROL: MANAGE VARIATION

- **Good:**
  - Data driven decisions
  - Increased consistency by controlling variation
  - Increase quality and reliability

- **Bad:**
  - Business by the numbers
  - Further challenges personal agency
  - SPC without context can lead to incorrect conclusions
MODERN TIMES (1936)
JUNG, MASLOW, ET AL.

PSYCHOLOGY
DEMING GOES TO JAPAN

W. EDWARDS DEMING

DEMING GOES TO JAPAN
1973 OIL CRISIS

OIL PRICE INCREASES BY 400%
AMERICA LOOKS TO JAPAN FOR ANSWERS

W. EDWARDS DEMING

OUT OF THE CRISIS
14 POINTS OF MANAGEMENT

▸ Create constancy of purpose for improving products and services.

▸ Adopt the new philosophy.

▸ Cease dependence on inspection to achieve quality.

▸ End the practice of awarding business on price alone; instead, minimize total cost by working with a single supplier.

▸ Improve constantly and forever every process for planning, production and service.

▸ Institute training on the job.

▸ Adopt and institute leadership.
14 POINTS OF MANAGEMENT

- Drive out fear.
- Break down barriers between staff areas.
- Eliminate slogans, exhortations and targets for the workforce.
- Eliminate numerical quotas for the workforce and numerical goals for management.
- Remove barriers that rob people of pride of workmanship, and eliminate the annual rating or merit system.
- Institute a vigorous program of education and self-improvement for everyone.
- Put everybody in the company to work accomplishing the transformation.
NECESSITY IS THE MOTHER OF INVENTION
LEAN MISSES THE POINT
ADAPT, DON'T JUST ADOPT
STOP CARGO CULTING
THE ANSWERS ARE WITHIN
YOUR ORGANIZATION
RIGHT NOW
THE SYSTEM OF PROFOUND KNOWLEDGE

- Appreciation of a System
- Knowledge of Variation
- Theory of Knowledge
- Psychology
APPLY THE LENS
QUESTIONS

APPRECIATION OF A SYSTEM

▸ What does X interact with?
▸ Are there feedback relationships between them?
▸ Can a failure in X impact Y?
▸ What stakeholders are involved?
▸ What constraints exist?
QUESTIONS

KNOWLEDGE

- Why do we believe X is so?
- What is it we actually are doing and what do we really want? (Current and Future State)
- What has caused it to be this way?
- How can we experiment with solutions and alternatives?
- How will we know we have accomplished our goal?
- What will we do with this new knowledge?
Questions

Variation

- What does “normal” look like?
- How much variance is acceptable?
- What should be done in the event of special cause variation?
- How do we avoid over-reacting to normal oscillation?
Does this empower humans?

How do humans feel about this?

How can humans use intuition to adapt the process to fit changing situations?

Is there broad consensus?

We we have a shared vision?
INVOLVE EVERYONE
APPLY THE LENS
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THANK YOU.