CQI Learning Lunch

What Can We Do With a System of Profound Knowledge?

Host - Dennis Sergent
517-381-5330

May 17th, 2011
10:30 AM to 1:00 PM

University Club of Michigan State
3435 Forest Road, Lansing, MI 48909
517-353-5111
Sponsoring Organizations
Deming’s System of Profound Knowledge (SoPK)

“The aim . . . is to provide an outside view - a lens . . . provides a map of theory by which to understand the organizations that we work in”

Components of The Whole
- **Theory of Knowledge**
  - Knowledge is built on theory
- **Appreciation for a System**
  - A system is a network of interdependent components that work together to accomplish the aim of the system
- **Knowledge About Variation**
  - There will always be variation.....
- **Psychology**
  - Individuals
  - Groups
  - Society
  - Change

“One need not be eminent in any part of profound knowledge in order to understand and to apply it”

“The various segments of the system . . . Cannot be separated. They interact with each other. For example knowledge about psychology is incomplete without knowledge of variation.”
## Deming’s System of Profound Knowledge - Components

### TIMELINE of PROFUND KNOWLEDGE - IMPORTANT COMPONENTS

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<th>Knowledge</th>
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<td>Shewhart Control Chart, W. Shewhart 1924</td>
<td>Economic Control of Quality of Manufactured Product, W. Shewhart - 1931</td>
<td>Use of Statistical Methods to Support The War Effort 1941 to 1945</td>
<td>Enumerative vs. Analytic Studies, W. E. Deming 1960</td>
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<td>Statistical Method From the Viewpoint of Quality Control, W. Shewhart - 1939</td>
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SoPK - Theory of Knowledge

“One need not be eminent in any part of profound knowledge in order to understand and to apply it”

- Management is prediction
- Knowledge is built on theory
- Information is not knowledge
- Rational prediction requires theory
- Interpretation of data from a test or experiment is prediction
- There is a need for operational definitions
- Enlargement of a committee is not a reliable way to acquire knowledge

OPERATIONAL DEFINITION:

Knowledge is a statement which predicts a future outcome, built on theory, which can be proven by observation and measurements, with the risk of being wrong.
SoPK - Appreciation For A System

“One need not be eminent in any part of profound knowledge in order to understand and to apply it”

• A system must have an aim
• The aim is a value judgment
• A system includes the future and competitors
• A system must be managed, it will not manage itself
• A system can not understand itself and needs guidance from outside
• The bigger the system, the more difficult to manage
• The greater the interdependence between components
  • The greater the need for cooperation between them
• Management must manage the interdependence
  • Between components
  • Towards the aim of the system
• Left to themselves, the components become:
  • Selfish,
  • Competitive
  • Thus destroy the system

OPERATIONAL DEFINITION:
A system is a network of interdependent components that work together to try to accomplish the aim of the system.
SoPK - Knowledge About Variation

“One need not be eminent in any part of profound knowledge in order to understand and to apply it”

- There will always be variation in every thing
- Variation in common causes and special causes are to be understood
- Stable systems and their capabilities must be studied to be understood and appreciated
- Use of data about a system requires knowledge about the different sources of uncertainty and variation
- Use of data requires understanding of the distinctions between enumerative studies & analytic problems
  - Enumerative Studies = Information about the frame
  - Analytic Problems = Results of a test or experiment must be inferred
    - To a predicted future state
- The cost of mistakes of thinking and action
  - Fundamental Attribution Errors
  - Tampering

OPERATIONAL DEFINITION:

Numerical differences in measurable, observable characteristics of a process or product.
SoPK - Psychology

“One need not be eminent in any part of profound knowledge in order to understand and to apply it.”

- Psychology helps understand people and the interactions between them
- Every person is different than every other person
- People are born with a natural inclination to learn
- People learn in different ways and at different speeds
- People are born with a need to be in relationships with others and need love, respect and esteem by others
- All people are motivated differently by extrinsic and intrinsic factors
  - See Daniel Pink “You Tube” Video
- Intrinsic and extrinsic sources motivate in much different ways
- Total submission to extrinsic motivation
  - Leads to destruction of the individual

OPERATIONAL DEFINITION:

Psychology is the science and study of the connections between mind and actions, to understand behavior and mental processes and thereby, solve problems in many different spheres of human activity.
Lunch!

- Let’s collect our lunch!
- Room will be secure
- Staff will take your drink orders
- While you dine, discuss this
- Make sure everyone is heard from
- Be prepared to share your answers to the following questions!
TABLE DISCUSSIONS

AT EACH TABLE DISCUSS:

• WHAT ARE OUR NEXT ACTION STEPS?
  – What did I learn here?
  – What do we need to discuss next?
  – Who else should be here?
  – What will we do with this learning?
  – When do we meet again?
Future Agenda

Future Discussions = 3 Weeks + 1 Weekday

- June 8th, 2011 = Overcoming Roadblocks
- June 30th, 2011 = Innovation and the Alternatives
- July 22nd, 2011 =
- August 15th, 2011 =
- September 6th, 2011 =
- September 28th, 2011 =
- October 20th, 2011 =
- November 21st, 2011 =
- December 8th, 2011 =

• What Are Your Ideas?
Other Subject & Speaker Suggestions

- Benchmarking
- Brainstorming
- Civility - Lack of it Costs up to $300 Billion Annually (Pattie McNeil)
- Comparisons of Quality Management Systems
- Continuous Improvement
- Design & Control of Quality (Ian Bradbury of Peaker Services, Inc.)
- Effective Measurement for Training & Development Initiatives
- Gipsie Ranney
- Having Difficult Conversations - Principles and Tools
- How to Plan the Perfect Meeting
- Influence (Influencing Your Leader and Your Team)
- InThinking, Investment Thinking, Thinking Roadmap
- Lean Project: Eliminating the Waste In Performance Reviews (R. Steele of Peaker Services)
- Mentoring & Partnership Between Generations (Baby Boomer, GenX, GenY, Transition to Future)
- Quality Assurance Through Proofing
- Six Sigma
- Training vs Learning - What Makes The Difference in Performance?

- What Are Your Ideas?
CQI LEARNING LUNCH

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