Organizations as Unusual: Shift from Big Problems to Great Opportunities

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Abstract

Before his death in 1993, W. Edwards Deming provided “a map of theory by which to understand the organizations that we work in.” He was well aware of the challenges that organizations face, in their “as Usual” mode of operation. Beginning with an explanation of the difference between “Organisations as Usual” and “Organisations as Unusual,” this presentation will provide a preview of how program managers can add Dr. Deming’s Unusual insights to their efforts.
Agenda

- W. Edwards Deming
- Resource Management Reflections
- Organisations as Unusual
- Opportunities to Act
W. Edwards Deming
W. Edwards Deming
1900 - 1993
Powell, WY, 1904-1918
Yale and Beyond, 1928-1993
Deming and Toyota

“There is not a day I don't think about what Dr. Deming meant to us. Deming is the core of our management.”

These glowing words were spoken at the 1991 Deming Prize ceremony by Shoichiro Toyoda, former president of Toyota Motor Corporation.
Dr. Deming
Western CT State University, February 1990
I know what I said.

I don’t know what they heard.

W. Edwards Deming
Washing a Table

List 5 things that are needed to wash a table:

1) 
2) 
3) 
4) 
5)
Production Viewed as a System

Receipt and test of materials

Production, assembly, inspection

Tests of processes, machines, methods, costs

Design and redesign

Consumer research

Consumers

Suppliers of materials and equipment

Production Viewed “as Usual”

Suppliers of materials and equipment

A
B
C
D

Receipt and test of materials

Production, assembly, inspection

Tests of processes machines, methods, costs

Distribution

Consumers

Production Viewed “as Unusual”

- Suppliers of materials and equipment
- Receipt and test of materials
- Production, assembly, inspection
- Design and redesign
- Consumers
- Consumer research
- Distribution
- Tests of processes, machines, methods, costs

Quality

A product or service possesses quality if it helps somebody and enjoys a good and sustainable market.  

W. Edwards Deming

Quality is defined by conformance to requirements.  

P. Crosby
Quality

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Organisations as Unusual

Organisations as Usual
“Quality is the minimum of loss imparted to the Society by a product after its shipment to a customer”

Source: Introduction to Quality Engineering, Genichi Taguchi, 1983
Genichi Taguchi on Quality

“Quality is the minimum of loss imparted to the Society by a product after its shipment to a customer”

Source: Introduction to Quality Engineering, Genichi Taguchi, 1983
Resource Management Reflections
Time Management

How much time is spent discussing parts, tasks, activities, program milestones, etc. which are good and completed on time?

How much time is spent studying for the final exam, questions from weekly quizzes and the mid-term which were correct?
Time Management

How much time is spent discussing parts, tasks, activities, program milestones, etc. which are good and completed?

Little/None – Organisations as Usual

How much time is spent studying for the final exam, questions from weekly quizzes and the mid-term which were correct?
Resource Management

Proactive – applying effort while “good,” “OK,” “well,” or “correct” is happening

Reactive – applying effort after “bad,” “not OK,” “sick,” or “incorrect” happens
Imagine....No Problems

Beginning on Monday morning, all incoming material as well as all tasks completed internally, meet requirements and arrive on time, on budget...

What changes would begin to appear, within hours, days, weeks, and years?
Imag...Replies

1
2
3
4
5
6
7
8
Resource Management Model

Proactive

Reactive
“What should I focus on first?”

What do you think you should focus on?

“I think I should focus on all the things which are broken.”
“What should I focus on first?”

What do you think you should focus on? Organisations as Usual

“I think I should focus on all the things which are broken.”
Resource Management

“An ounce of prevention is worth a pound of cure”

Ben Franklin

“A stitch in time saves nine”

Francis Baily

“Every dollar we invest in high-quality early education can save more than $7 later on”

Barack Obama
Resource Management Model

Activity

Proactive

Reactive

Ownership

“Mine”

“Ours”
Product or Service Innovation

As Conceived

Replacing the screwdriver
Pilot holes
Hole saw
Drywall installation
Concrete
Product or Service Innovation

As Conceived

The top 5 uses:
1. Replacing the screwdriver
2. Pilot holes
3. Hole saw
4. Drywall installation
5. Concrete
Product or Service Innovation

As Conceived

As Managed
Actions & Interactions

Actions - Parts

Interactions - Gaps
“A system is never the sum of its parts. It is the product of the interactions of its parts………………the art of managing interactions is very different indeed than the management of actions, and history requires this transition for effective management.”

Russ Ackoff
“A system is never the sum of its parts. It is the product of its parts……. Managing interactions is very different indeed than the management of actions, and history requires this transition for effective management.”

Russ Ackoff
 Actions & Interactions

“A system is never the sum of its parts. It is the product of the interactions of its parts……. Managing interactions is very different indeed than the management of actions, and history requires this transition for effective management.

Russ Ackoff
Grades

What letter grade is required for all purchased parts and services, as well as tasks completed internally?
Task (Action) Flow

Handoff Requirements?

D → E → F

I ← H ← G

P
Task Grades
Task Grades
Task Management
Macro System Model
Macro System Model
Macro System Model

Managing Actions – Organisations as Usual
Macro System Model

Task Completion

- Step 1
- Step 2
- Step N

GOOD

Task A

GOOD

Task B

GOOD

Task O

GOOD

Task P

Assembly

FIT

Sub-Assembly 1

FIT

Sub-Assembly 2

Final Assembly

FIT

Product Assembly

GOOD WORKS

Macro System Model
Macro System Model

Task Completion
- Step 1
- Step 2
- Step N

GOOD
Task A

GOOD
Task B

GOOD
Task P

Assembly

FIT
Sub-Assembly 2

FIT
Product Assembly

GOOD
GOOD
GOOD

Step 1
Step 2
Step N

Step 1
Step 2
Step N

Step 1
Step 2
Step N

Step 1
Step 2
Step N

What’s missing?
Task Grades
Task Grades
Interactions, not Actions

One inspiration for challenging the mental model of “good parts are equally good” is the 1983 discovery by Ford Motor Company of a dramatic difference in warranty claims between automatic transmissions designed by Ford and produced in two locations, one in Batavia, Ohio, the other by Mazda in Japan.
Interactions, not Actions

Much to the surprise of Ford’s corporate warranty office, the number of complaints associated with the erratic shifting of the transmissions produced in Batavia were a factor of 3 greater than the complaints against the transmissions produced by Mazda.
Interactions, not Actions
Interactions, not Actions

Upon close examination, Ford realized that their manufacturing focus was on the **valve diameter** and the **bore diameter**, *taken separately*.
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**Managing Actions – Organisations as Usual**

- Diameter
- Bore diameter
Interactions, not Actions

Meanwhile, Ford learned that Mazda’s manufacturing focus was to actively manage the gap between the outer diameter of the valves within the transmission and the corresponding diameter of the valve bore.
In doing so, Mazda’s efforts realized the existence of an ideal gap, resulting from ideal ("target") values for both the bore and valve diameters, with an awareness that variation in gap size matters.
Interactions, not Actions

In doing so, Mazda’s efforts realized the existence of an ideal gap, resulting from ideal ("target") values for both the bore and valve diameters, with an awareness that variation in gap size matters.

Managing Interactions – Organisations as Unusual

valve diameter

bore diameter
Examples of Action Management

**BORE DIAMETER**

**PAGE COUNT**

**VALVE DIAMETER**
On Bowling Balls
On Bowling Balls

Managing Actions – Organisations as Usual
Macro System Model (Actions)

HOLE DIAMETER

MAX

MIN

PAGE COUNT

25

20

DISTANCE FROM THE DOOR

100 FT

0 FT

OUTER DIAMETER

MAX

MIN

= =
Macro System Model (Actions)

HOLE DIAMETER

MIN ≠ MAX

PAGE COUNT

20 ≠ 25

OUTER DIAMETER

MIN ≠ MAX

DISTANCE FROM THE DOOR

0 FT ≠ 100 FT
Resource Management Contrast

BORE DIAMETER

MIN  MAX

MIND THE PART

BORE DIAMETER

MIN  MAX

MIND THE GAP
Organisations as Unusual
On Baseball (as “Unusual”)
On Football (as "Unusual")
On Baseball (as “Usual”)

@LeanMJournal #LMJAC
On Football (as “Usual”)
Counting Heads

Are two heads better than one?
Togetherness

- What does it mean to “work together”? 
- What does it mean to “learn together”? 
- What does it mean to “think together”?
Together

“In or into contact or association”

“In or into harmony or coherence”

Merriam-Webster Dictionary
“The prevailing style of management must undergo transformation. A system can not understand itself. The transformation requires a view from outside.”

Transformation

Once the individual understands the **system of profound knowledge**, he will apply its principles in every kind of relationship with other people. He will have a basis for judgment of his own decisions and for transformation of the organizations that he belongs to.

New Meaning

“The first step. The first step is transformation of the individual. This transformation is discontinuous. It comes from understanding of the system of profound knowledge. The individual, transformed, will perceive new meaning to his life, to events, to numbers, to interactions between people.”

Transformation

The outside view. The layout of profound knowledge appears here in four parts, all related to each other:

- Appreciation for a system
- Knowledge about variation
- Theory of knowledge
- Psychology

InThinking Infusion - Process

- Increase individual awareness on thinking (InThinking)
- Evolve the way we learn together
- Evolve the way we work together
- Evolve the way we run our organizations
Resource Management Model

Ownership

Proactive

Reactive

“Mine”

“Ours”

REFLEXIVE

PURPOSEFUL
Resource Management Model

Organisations as Usual

Organisations as Unusual

Proactive

Reactive

Ownership

“Mine”

“Ours”
Opportunities to Act
Opportunities to Act
(differences that make a difference)

- Quality defined by relationships vs quality defined by conformance to requirements
- Production viewed as a system vs. production viewed as a linear flow of tasks
- Focus on *actions* which are “good” to minimize problems
- Focus on *interactions* to discover “opportunities for investment”
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