

The End of Perfection

*(Reflections from Dr. Deming on a
Foundation for Leading)*

Presented by Bill Bellows

President

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Reflections

In their advertising campaign, the bottlers of Arrowhead water proclaim that "*Better has no finish line.*" A similar sentiment is revealed in the slogan, *Citius, Altius, Fortius* (swifter, higher, stronger), Latin words ending in "ius" that were joined by Pierre de Coubertin in 1894. Yet, many organizations today maintain a steadfast commitment to *eliminate* variation and non-value added activities, all the while in pursuit of a quality goal of *zero* defects and a productivity goal of *zero* waste, seen together as the attainment of *perfection*.

Reflections

Yet, might it be possible that finish lines, such as the achievement of these goals, stem from how individuals within organizations think about their efforts as *separate* parts and tasks and not how they *connect* with each other?

To perceive improvement as *continuous* requires thinking past the *illusion* of separate parts, tasks, actions, elements, to see them as united.

Reflections

Leaders think beyond such barriers by perceiving them as mental, conditioned by how we think and prioritize our efforts, not physical limits. In doing so, improvement efforts could be advanced by acknowledging self-imposed restrictions on our thinking; specifically, thinking in terms of good parts and on-budget tasks, rather than in terms of the interactions between parts, actions, and elements, not these efforts taken separately.

Call it team work and the end of zero defects, zero waste, and perfection as finish lines.

Deming on Innovation

One is born with a natural inclination to learn. Learning is a source of innovation. One inherits a right to enjoy his work. Good management helps us to nurture and preserve these positive innate attributes of people.

Agenda

- *Background*
- *Perception & Thinking*
- *Resource Management*
- *Modes of Thinking*
- *Purposeful Resource Management*
- *Opportunities to Act*

Background

Dr. Deming

Western CT State University, February 1990



Hearing Test

I know what I said.

I don't know what they heard.

W. Edwards Deming

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.

Source: The New Economics, W. Edwards Deming, 1993

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*

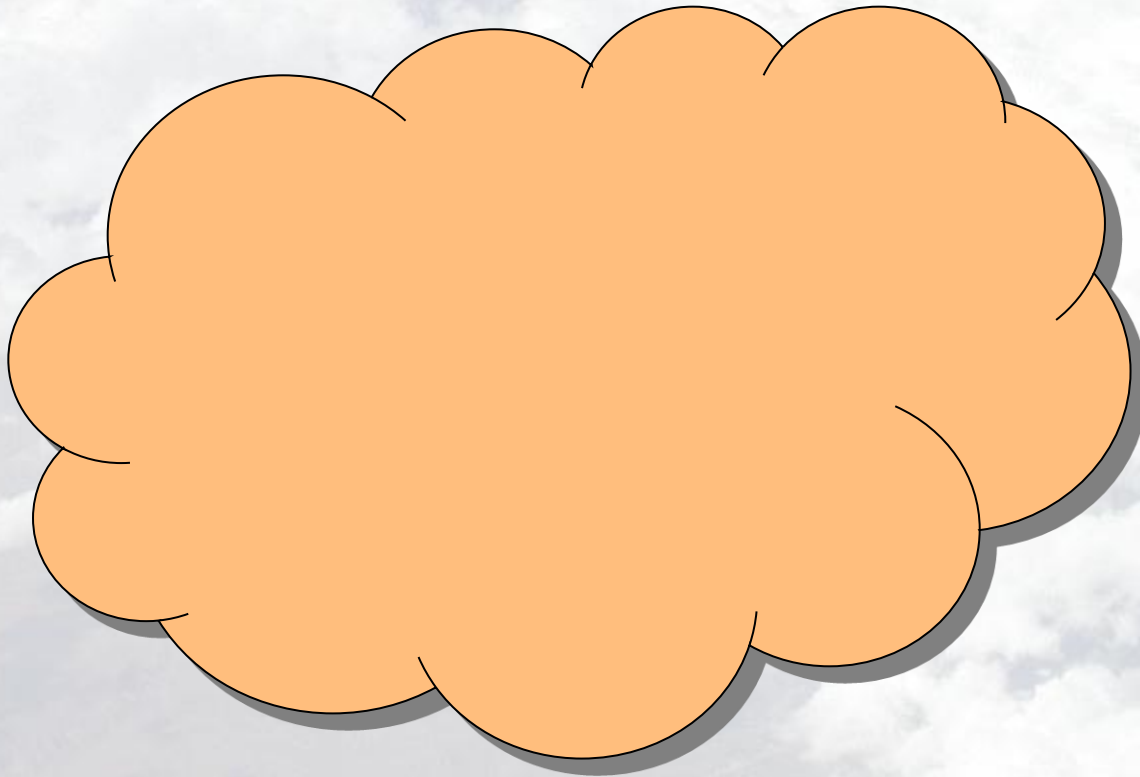
Source: The New Economics, W. Edwards Deming, 1993

Deming on Quality

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

Product or Service Innovation

As Conceived





Product or Service Innovation

As Conceived



The top 5 uses:

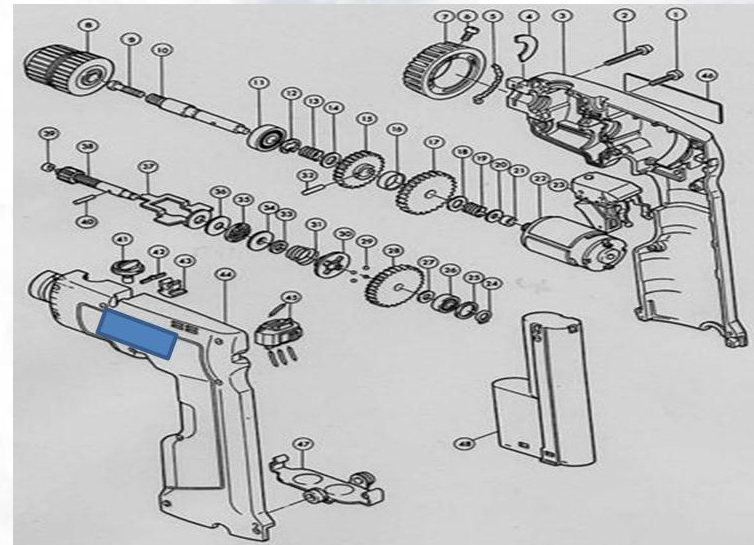
1. Replacing the screwdriver
2. Pilot holes
3. Hole saw
4. Drywall installation
5. Concrete

Product or Service Innovation

As Conceived



As Managed



Perception & Thinking

Satisfaction

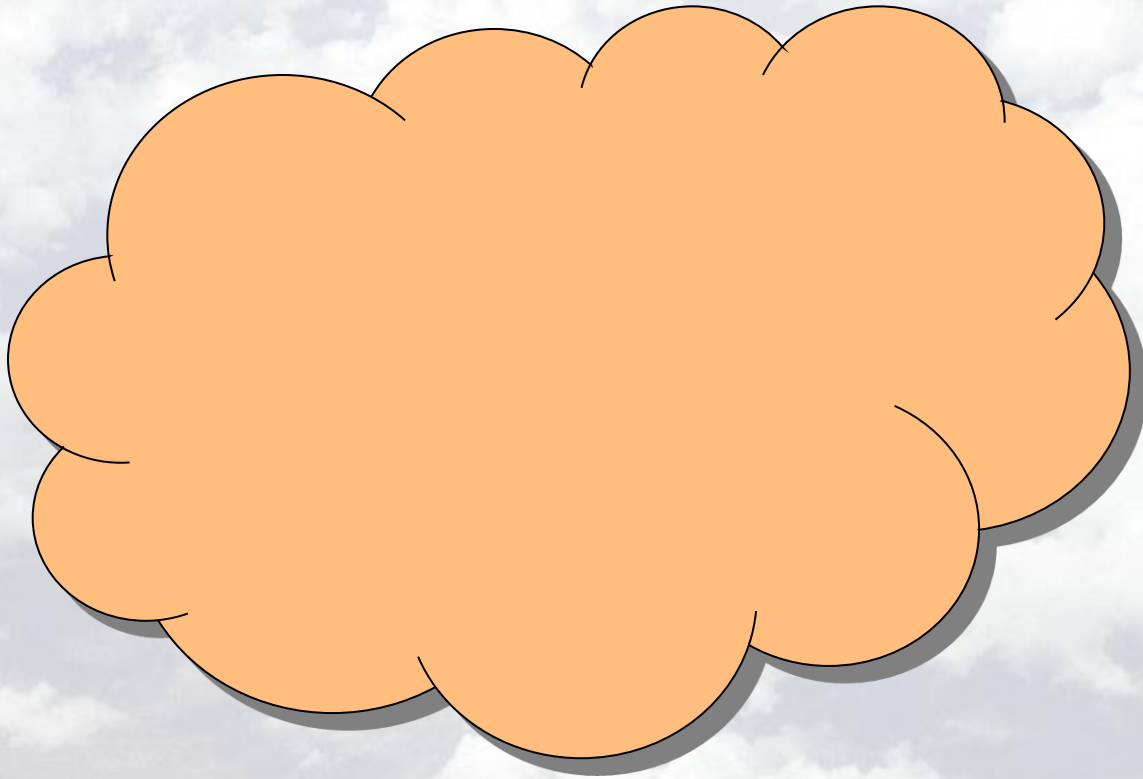
How important is customer satisfaction?

Expectation Dynamics

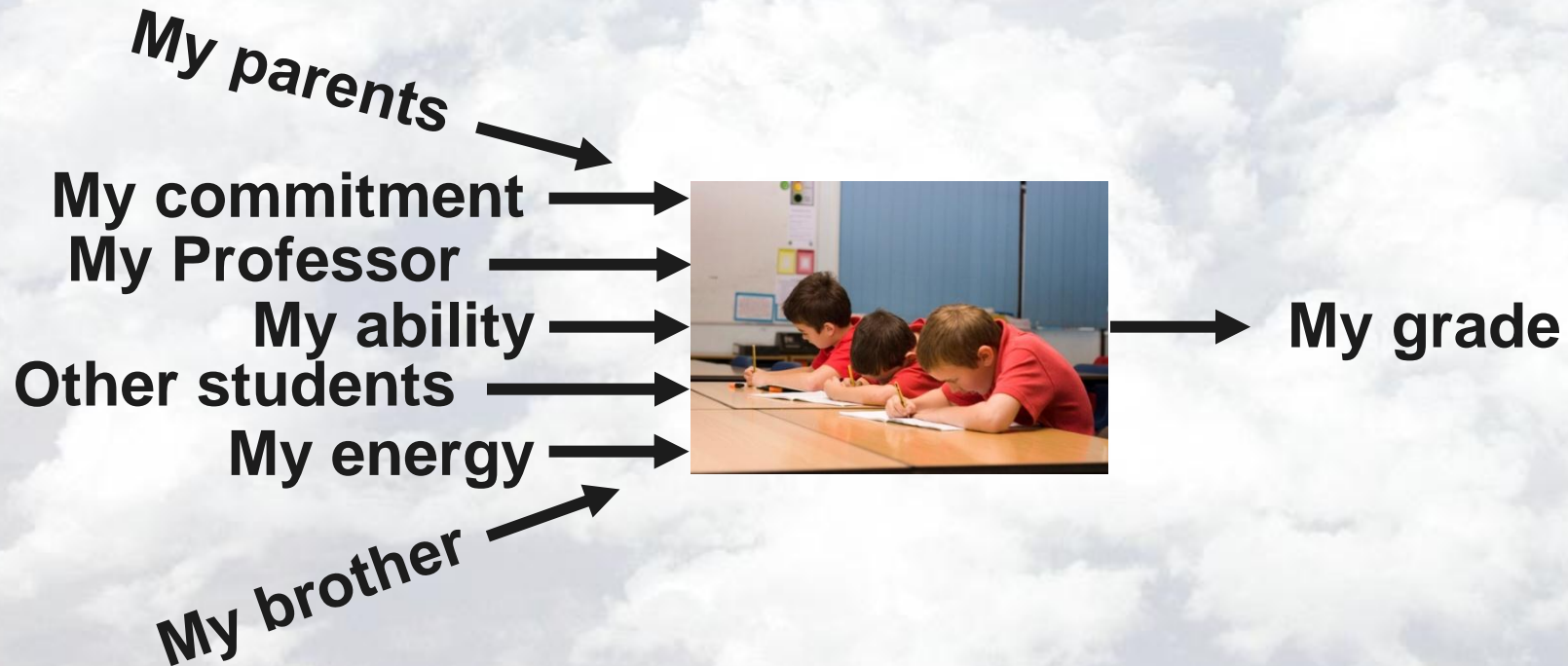
Value



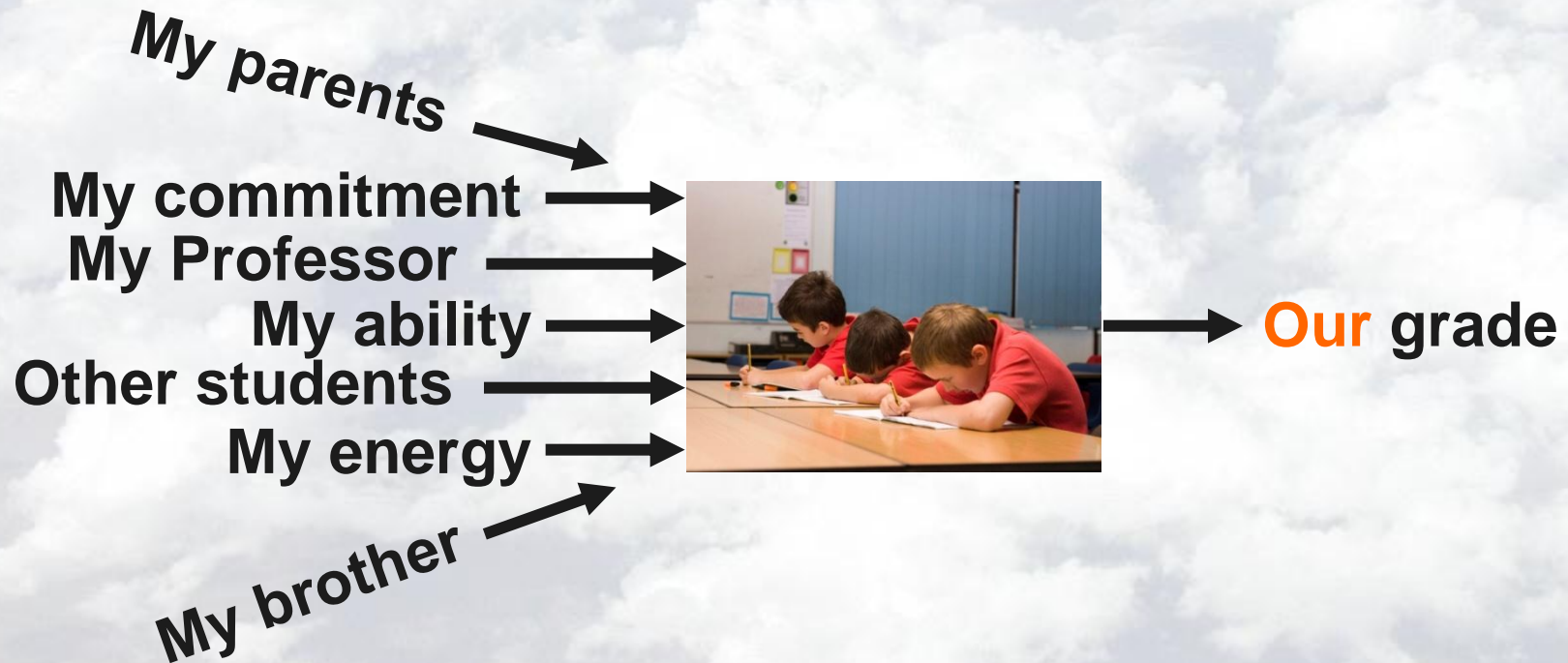
How did you do on the test?



How did you do on the test?



How did **we** do on the test?



Awareness Questions

*How did **we** do on the design?*

*How did **we** do on the proposal?*

*How did **we** do on the contract?*

Perception & Thinking

“What we see depends on what we thought before we looked.”

Myron Tribus

Trip Report

“We” Organization	“Me” Organization
<div>(physical)</div>	
<div>(people)</div>	

Trip Report

"We" Organization

yoga class ^{separate}
no walls, clean & well-
maintained, well lighted &
organized, good air, org.
layout, not a lot of waste,
material receiving area, ^{day care on site}
facilities, break rooms, ^{visible} metrics

1-line thinking, highly ^(people)
motivated, on the floor
management, open lines of
communication, attentive thinkers,
Enjoy working, part of the
solution (not the problem), self-
inspection of process or product,
enjoy the people they work with,
smiling people

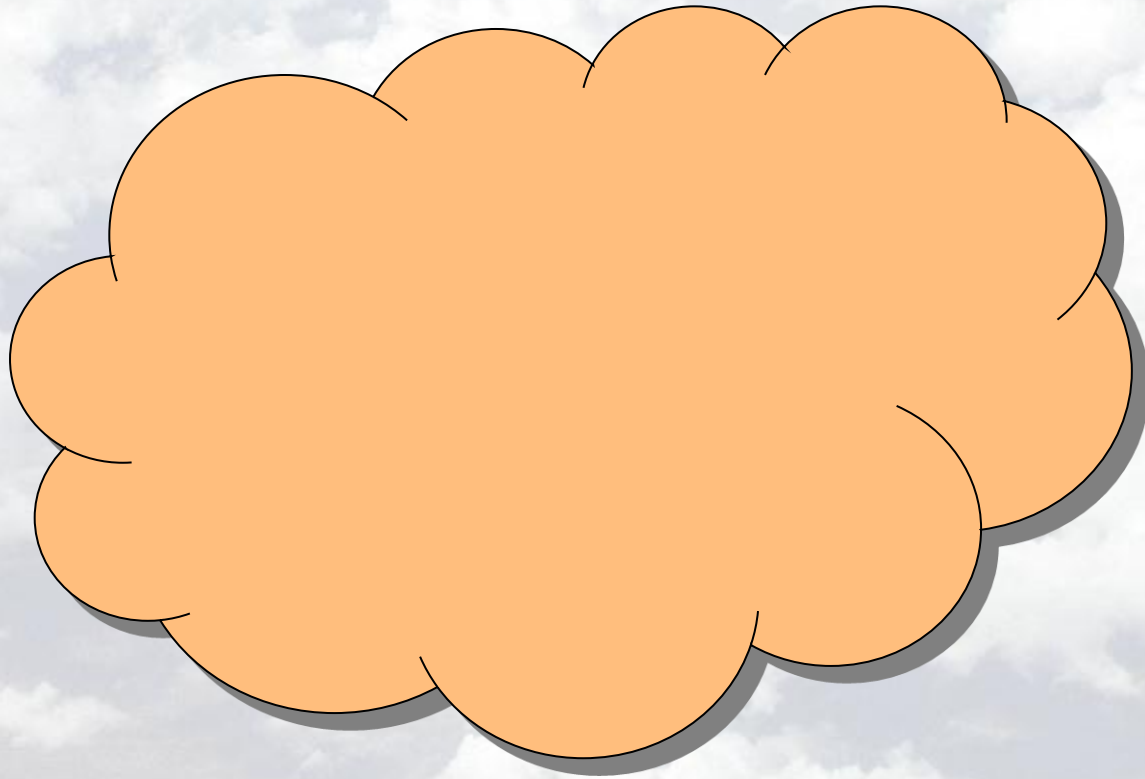
"Me" Organization

(physical) unorganized layout,
not well-maintained, individual
departments (walls), poor utilization
of assets, separate & distinct work
areas, outdated facilities, sloppy,
candle lighting, "Quality" signs,
scrap,

2-line thinking, slogans (empty),
front office manager, someone
always looking over their shoulder,
dictatorial, unattentive, individualistic
behavior, punitive, quota-data-
gatherers, on a time clock,
"go with the flow" type people

CR-325, 1/25-26/01

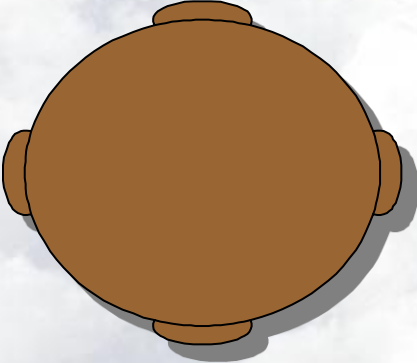
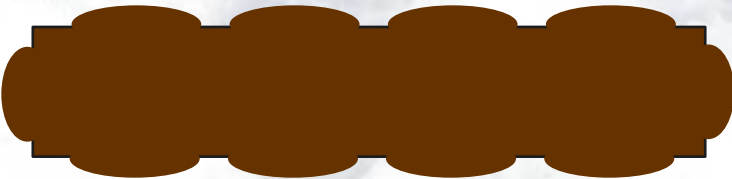
Conference Rooms



Trip Report

“We” Organization	“Me” Organization
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Trip Report

“We” Organization	“Me” Organization
	 (physical)
	 (people)

Conference Rooms

Ed Catmull, co-founder of Pixar Animation Studios and current president, Walt Disney and Pixar Animation Studios, is also the author of Creativity, Inc., a 2014 publication that features the sub-title, "Overcoming the Unseen Forces that Stand in the Way of True Inspiration." Chapter 1 begins with a Table Story, an account of a 13-year experience in Pixar's West One conference room with an "elegant," "long and skinny" table, "chosen by a designer Steve Jobs liked" that Catmull "grew to hate" for the way in which it "impeded our work," including the creative process for their first feature film, Toy Story.

Conference Rooms

Catmull eventually realized that standing meetings were being obstructed by the table, where "it was nearly impossible to make eye contact without craning your neck." Fixed seating arrangements, using place cards, further compounded the ability to work together. Upon shifting one meeting to a smaller room, with a square table, and experiencing a smoother flow of ideas, Catmull attributed the improvement in thinking together and learning together to the equilateral table geometry.

Conference Rooms

In short order, the long and skinny table in West One was replaced by a square table, the hierarchical place cards were eliminated, creativity improved, and these previously unseen forces became Pixar's Table Story.

A Map of Theory

Aim of this chapter. The prevailing style of management must undergo transformation. A system can not understand itself. The transformation requires a view from outside. The aim of this chapter is to provide an outside view - a lens - that I call a system of profound knowledge. The system of profound knowledge provides a lens. It provides a map of theory by which to understand the organizations that we work in.

Source: The New Economics, W. Edwards Deming, 1993

Resource Management

Resource Management

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

Reactive – applying effort after “bad,” “not OK,” “sick,” or “incorrect” happens

Resource Management Model

A
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y

Proactive

Reactive

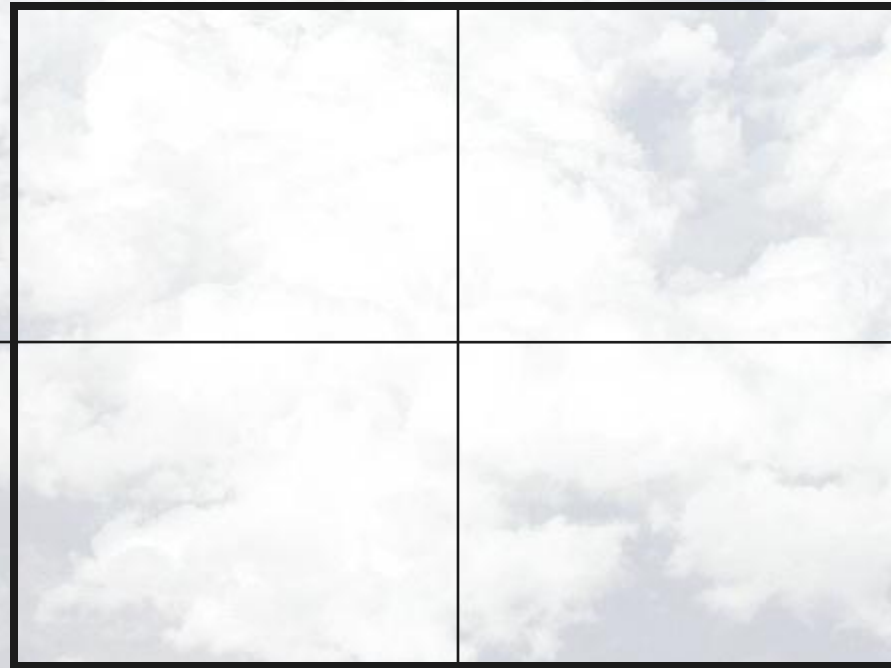


Resource Management Model

A
c
t
i
v
i
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y

Proactive

Reactive



"Mine"

"Ours"

Ownership

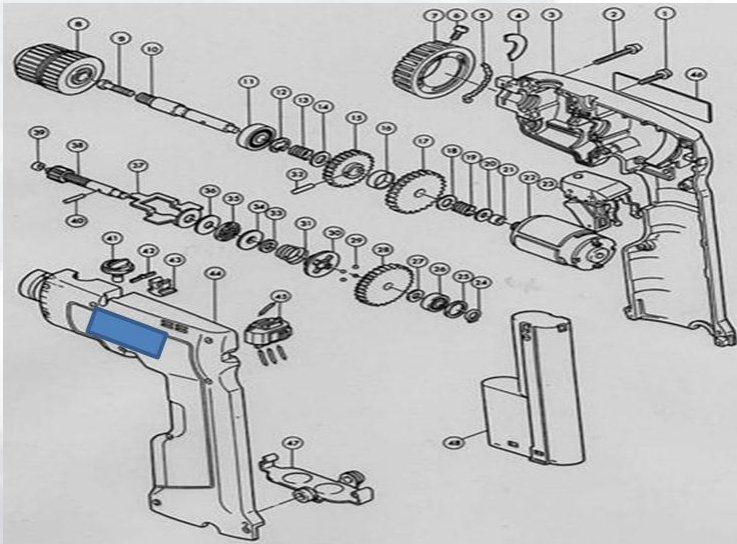
Actions & Interactions

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

Actions & Interactions

Actions - Parts



Interactions - Gaps

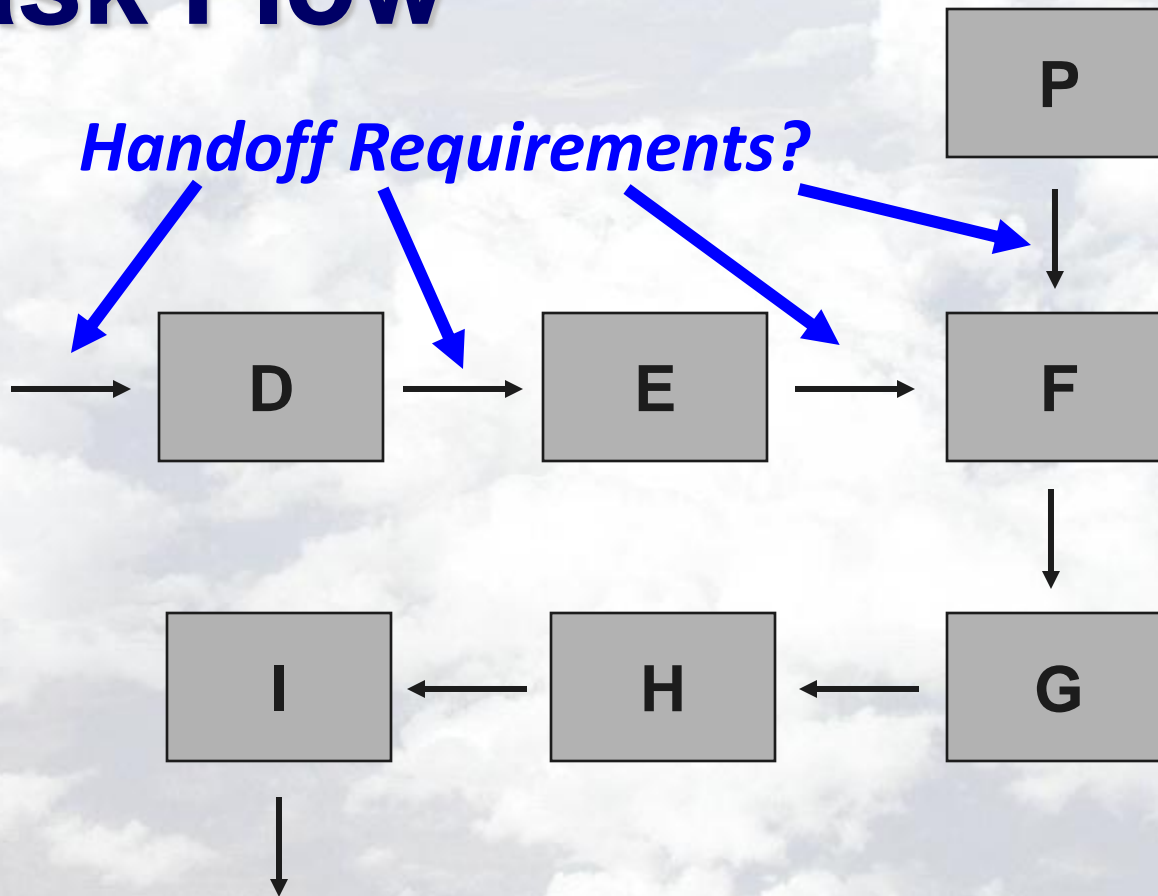


Grades

What letter grade is required for all purchased parts and services, as well as tasks completed internally?



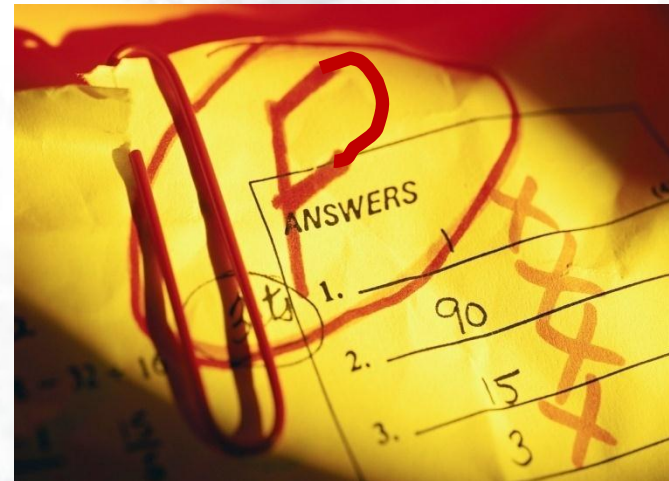
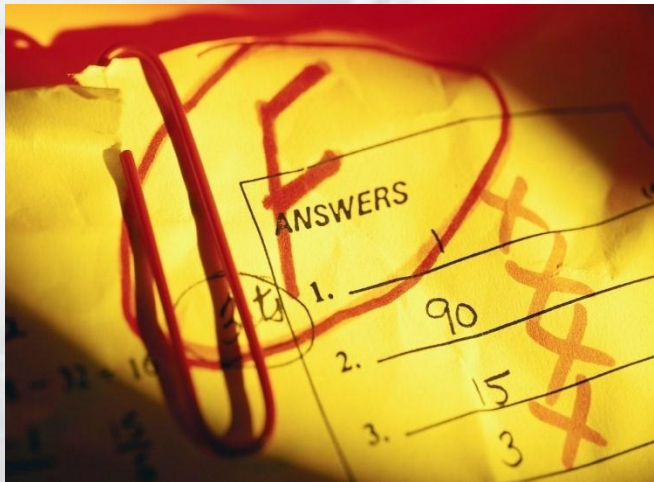
Task Flow



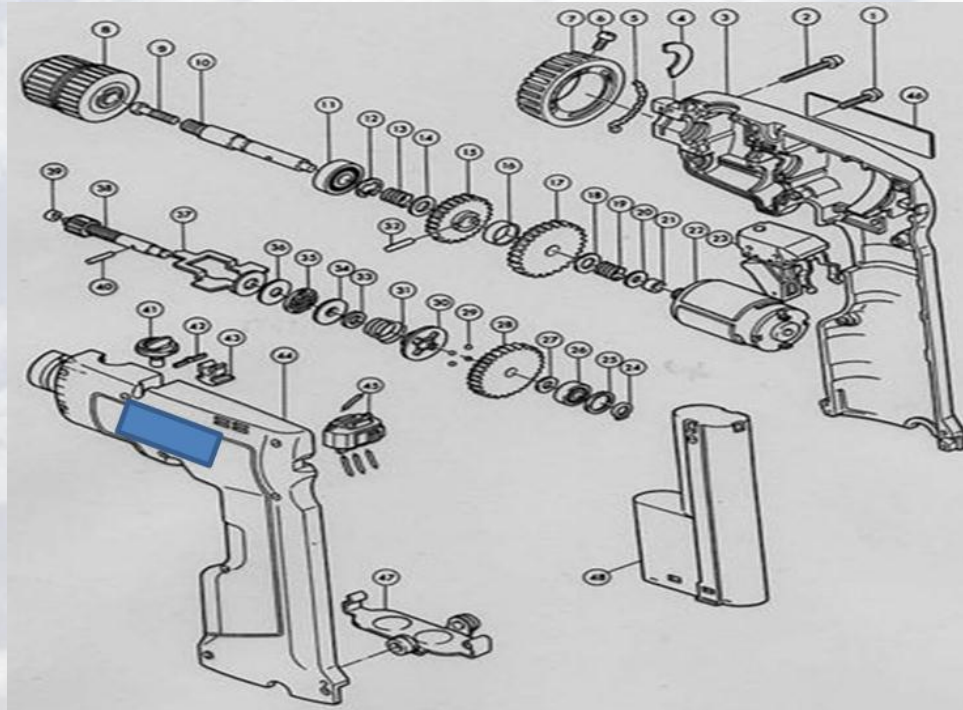
Task Grades



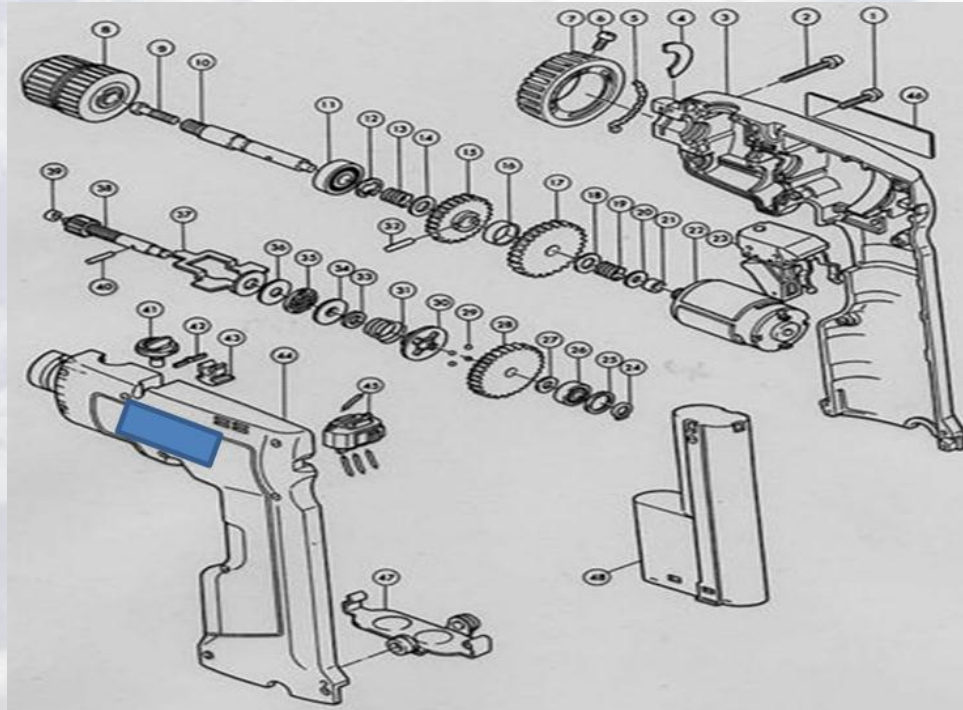
Task Grades



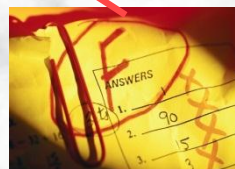
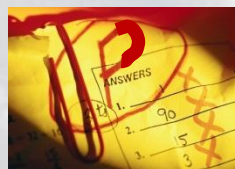
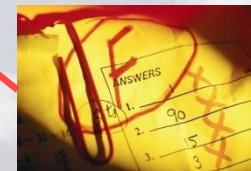
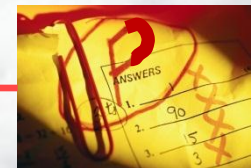
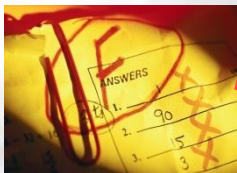
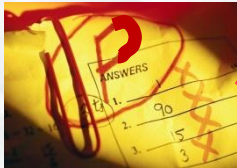
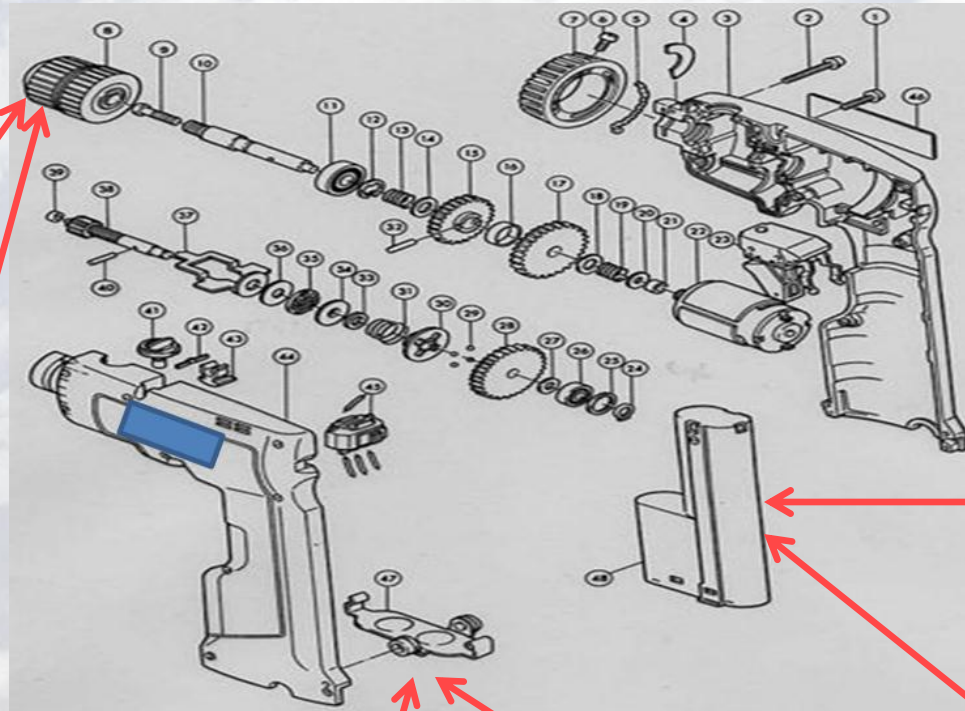
Task Management



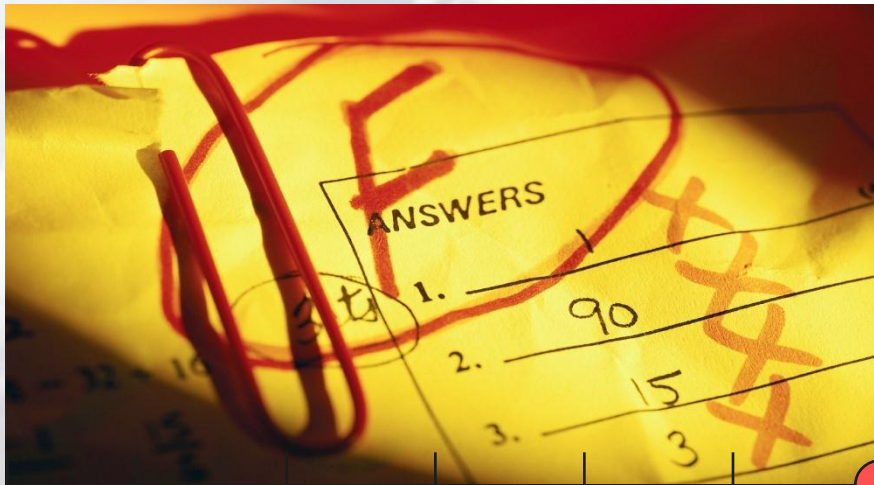
Macro System Model



Macro System Model



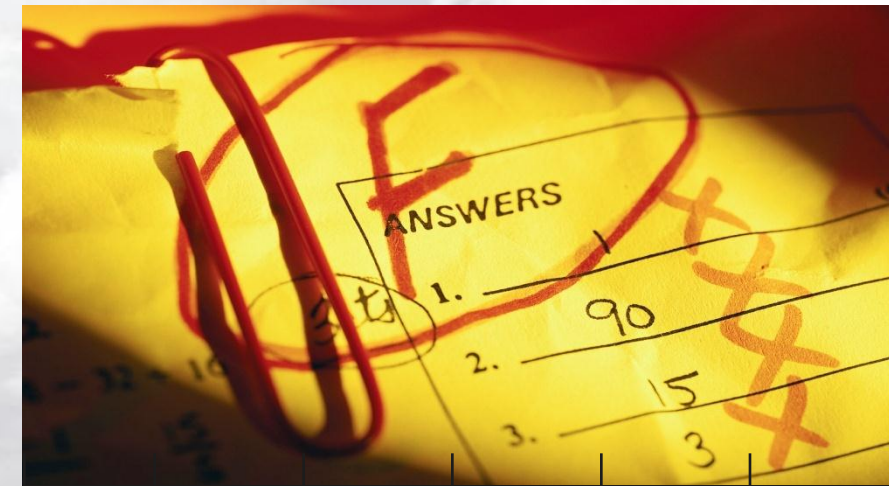
Task Grades



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

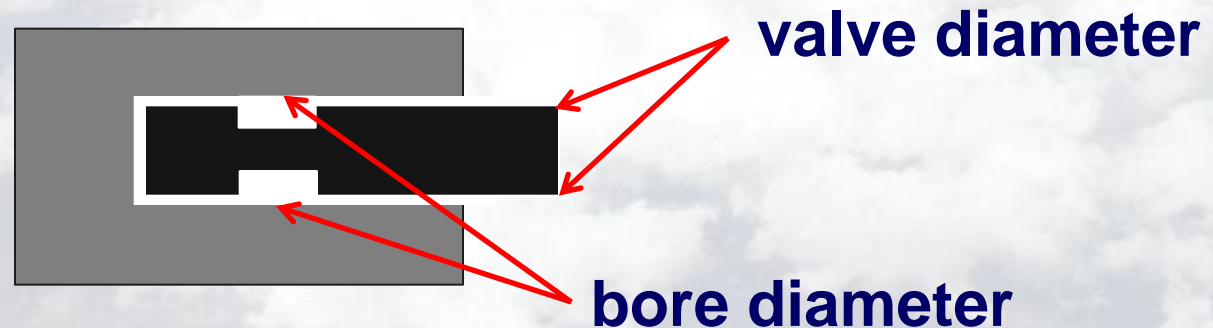
Much to the surprise of Ford's corporate warranty office, the number of complaints associated with the erratic shifting of the transmissions produced in Batavia were a factor of 3 greater than the complaints against the transmissions produced by Mazda.

Interactions, not Actions



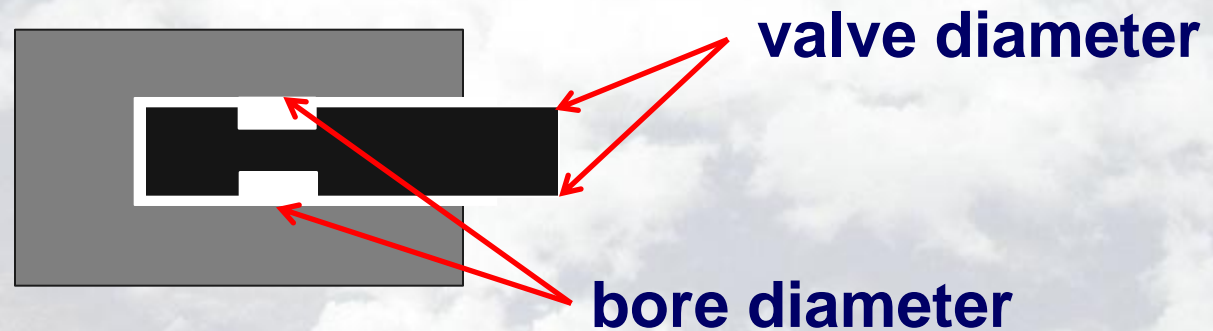
Interactions, not Actions

Upon close examination, Ford realized that their manufacturing focus was on the **valve diameter** and the **bore diameter**, *taken separately*

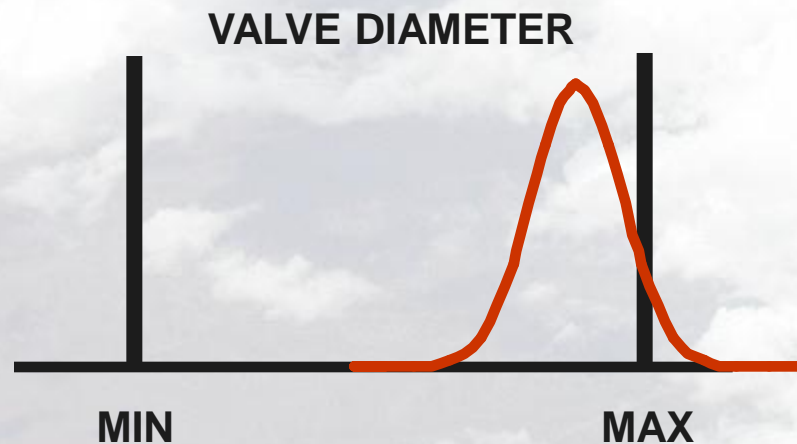
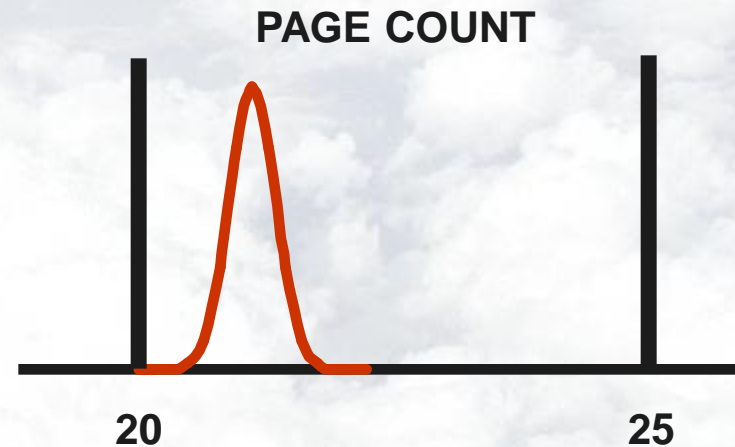
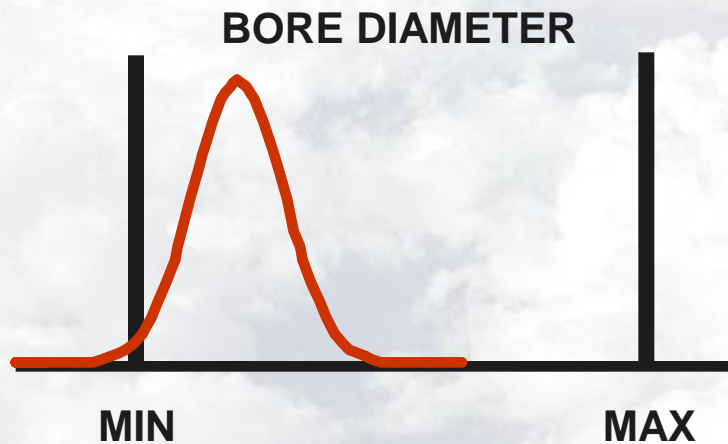


Interactions, not Actions

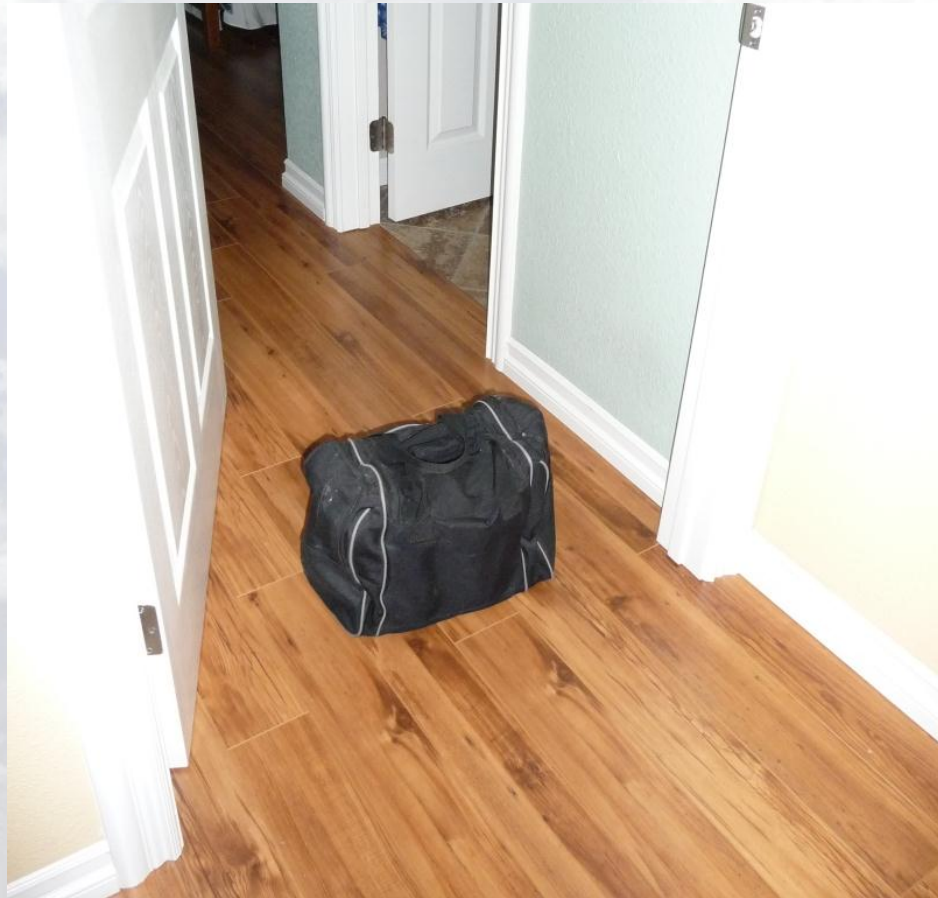
In doing so, Mazda's efforts realized the existence of an ideal gap, resulting from ideal ("target") values for both the bore and valve diameters, with an awareness that variation in gap size matters.



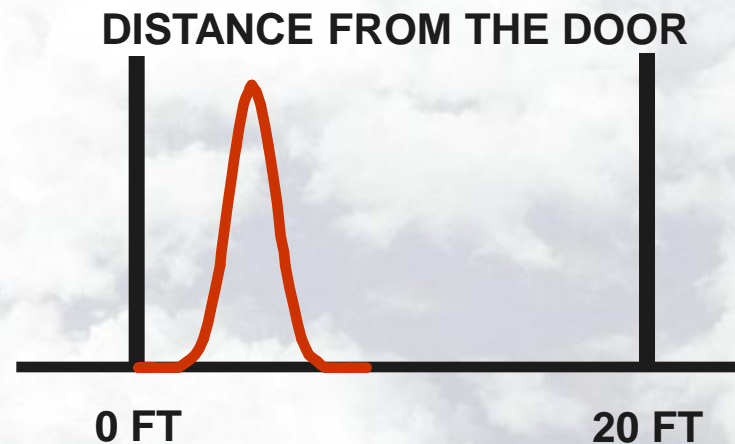
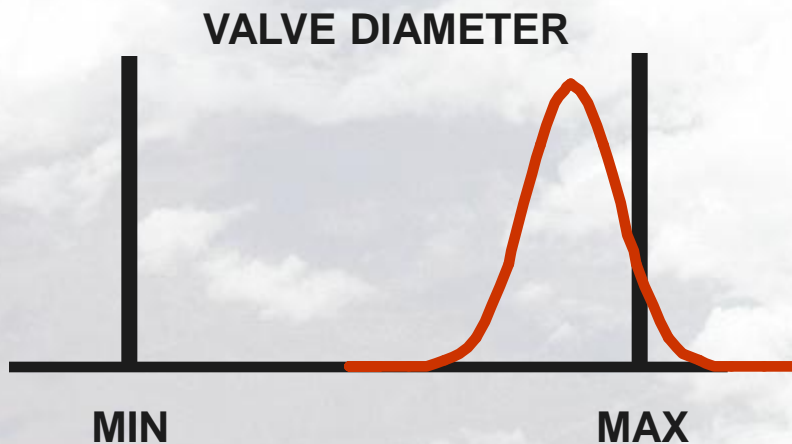
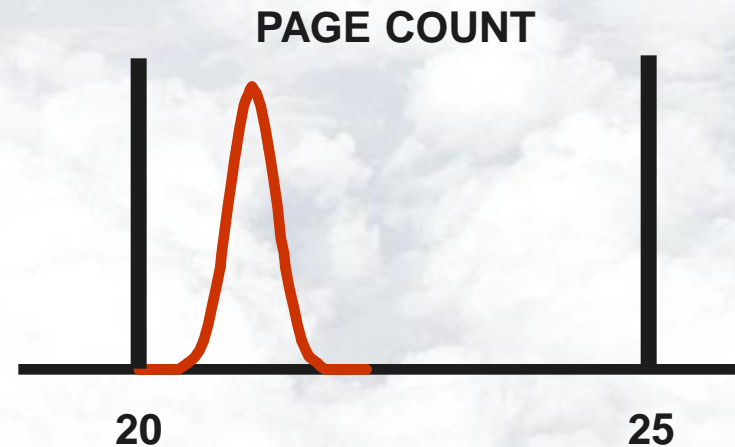
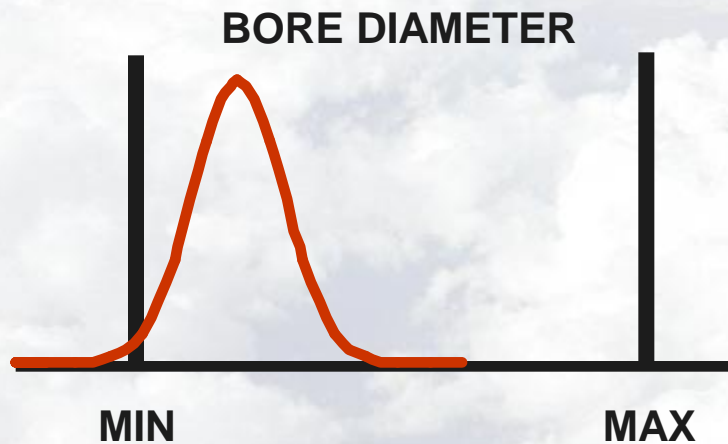
Examples of Action Management



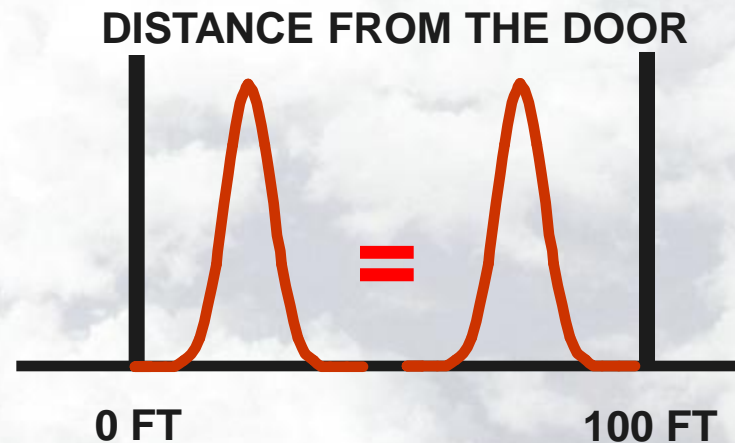
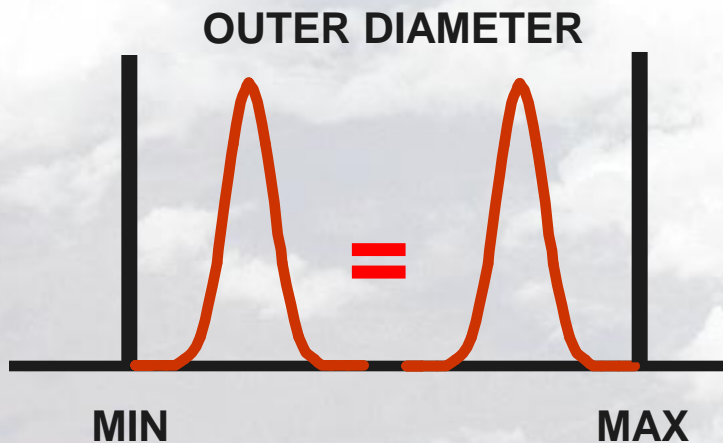
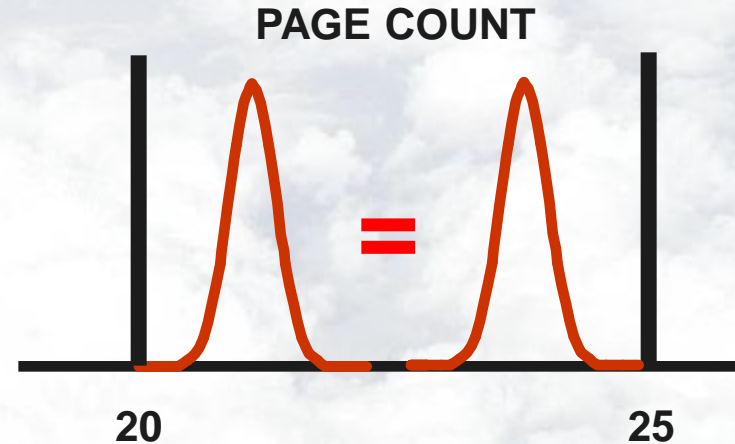
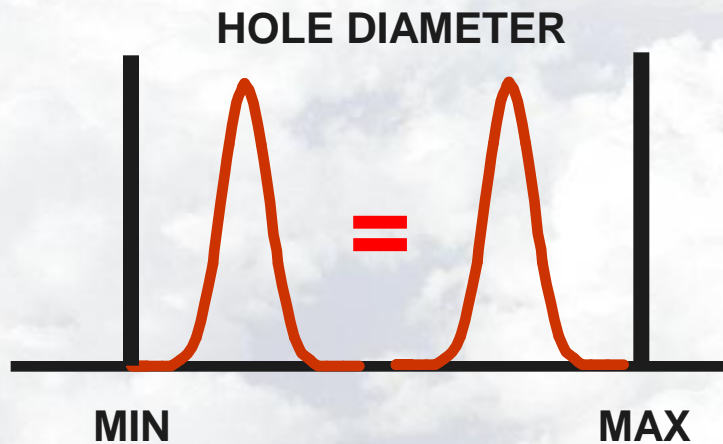
On Bowling Balls



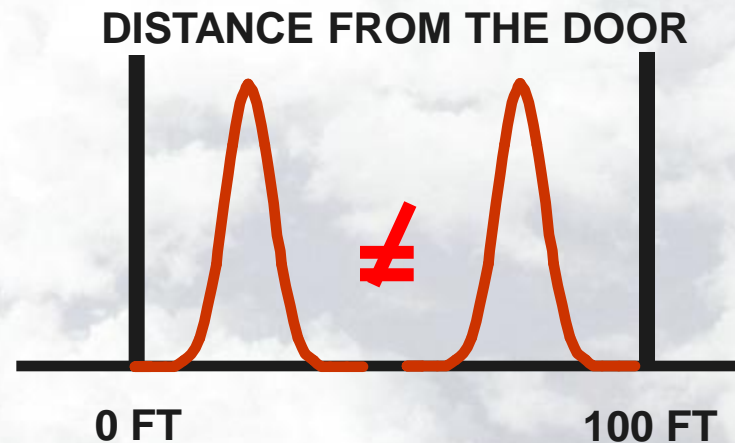
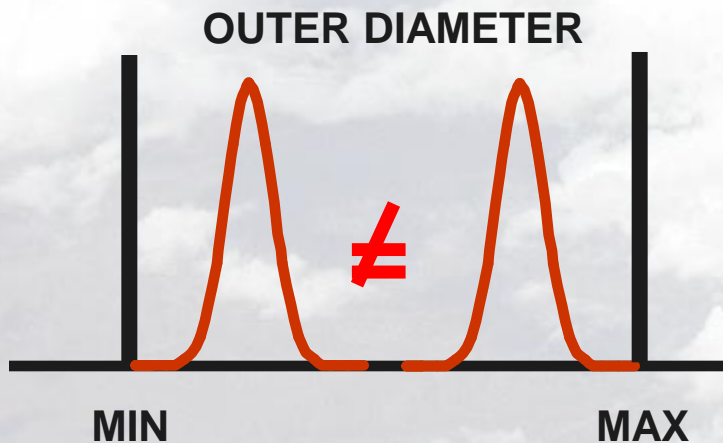
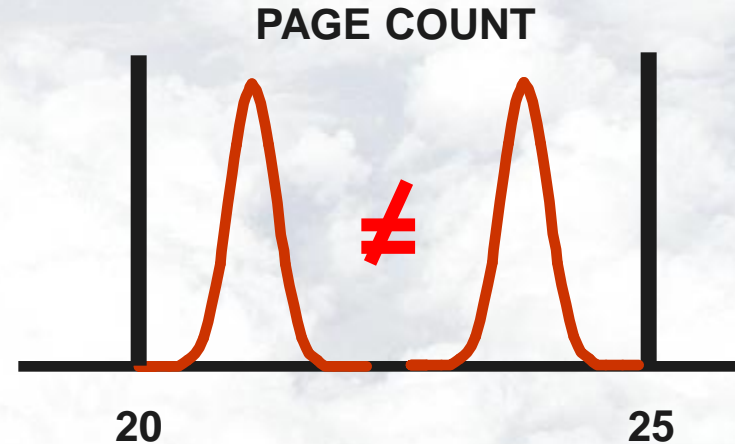
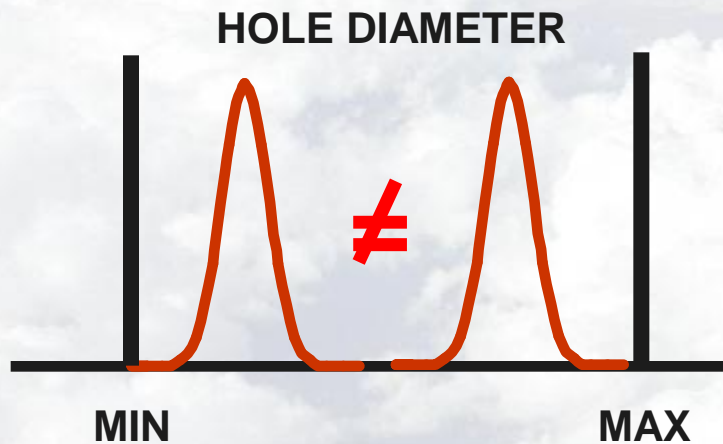
Examples of Action Management



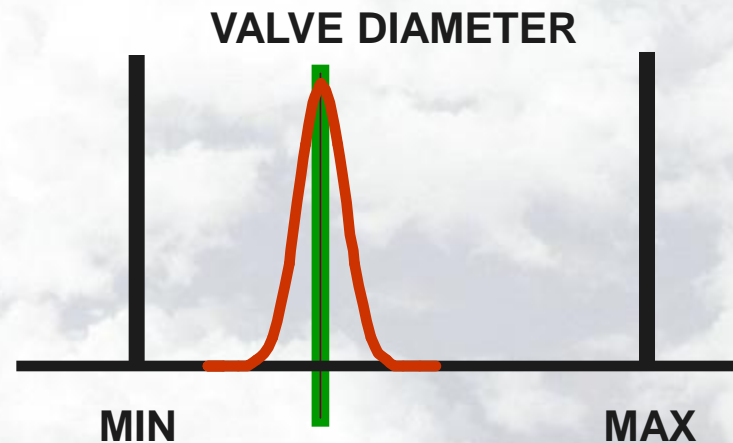
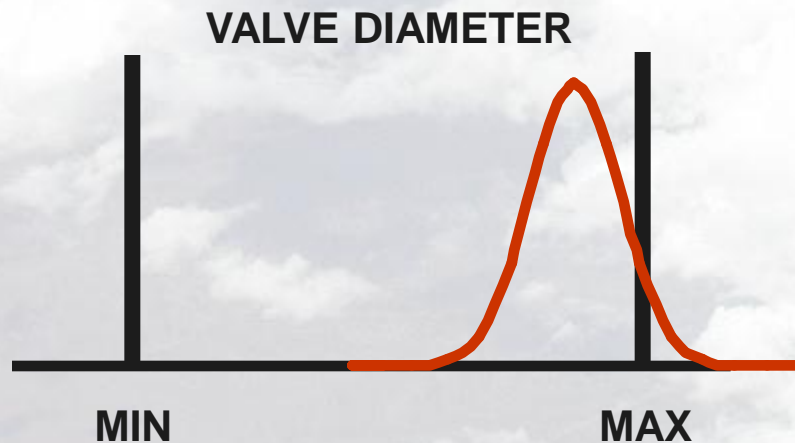
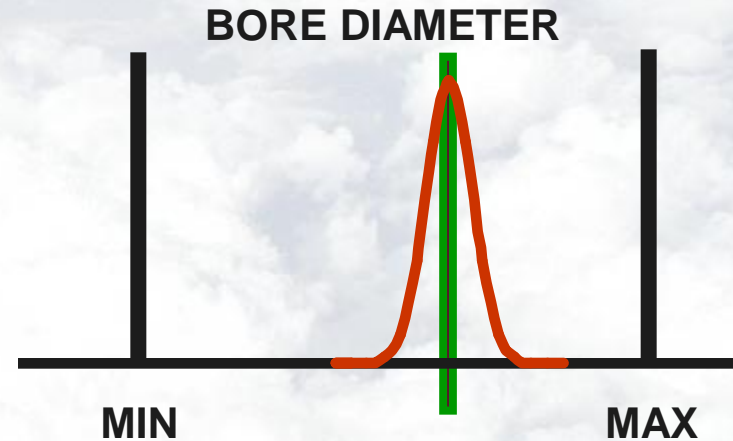
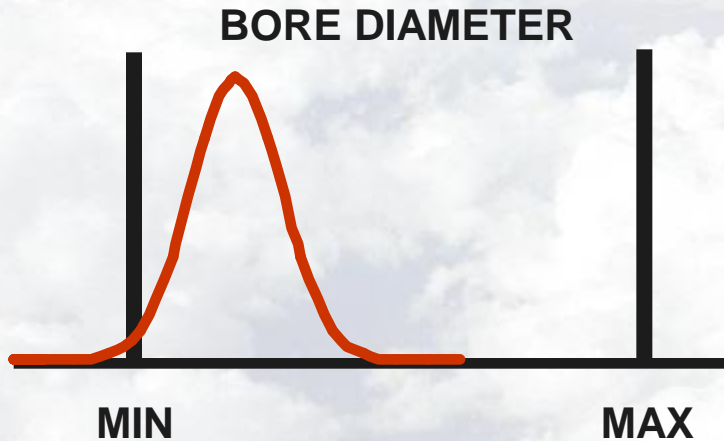
Macro System Model Action Management



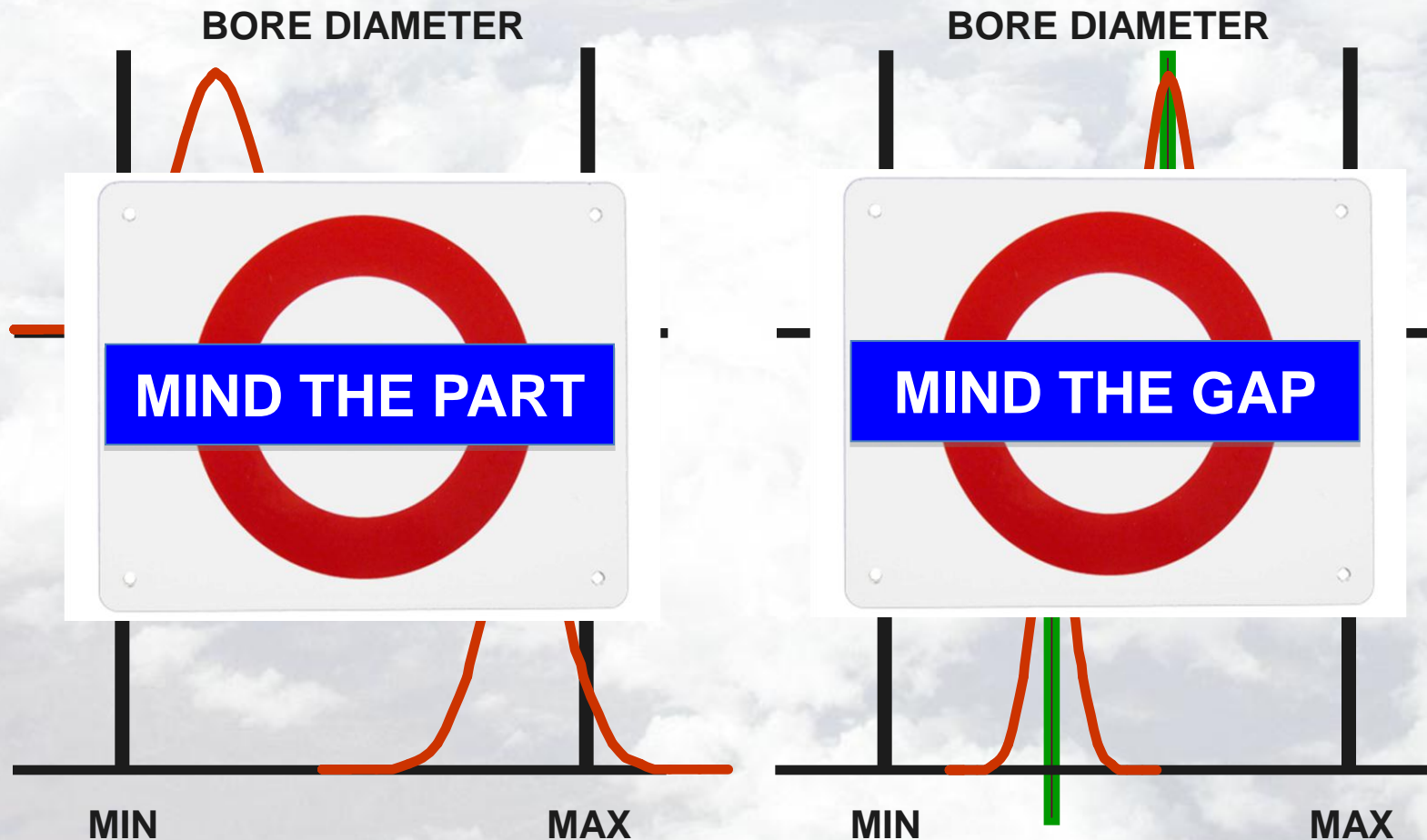
Micro System Model Action Management



Resource Management Contrast



Resource Management Contrast



Modes of Thinking

Modes of Thinking

■ Categories

- Absolutes
- Discrete
- Good vs. Bad, Smart vs. Dumb
- How many students at UW? How many faculty?



■ Continuum

- Relative
- Wholeness
- Better/Faster/Cheaper/Smarter/etc.
- Students are different, faculty are different



Modes of Thinking

■ Categories

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■ Continuum

- Relative
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- Students are different, faculty are different





Purposeful Resource Management

Assumptions

- A better way to operate an organization is to invest resources with the ability to manage customer delight, satisfaction, and disappointment
- Better investment results from discovering opportunities to invest
- The discovery of opportunities for investment is limited by how thinking is conditioned

What is needed ?



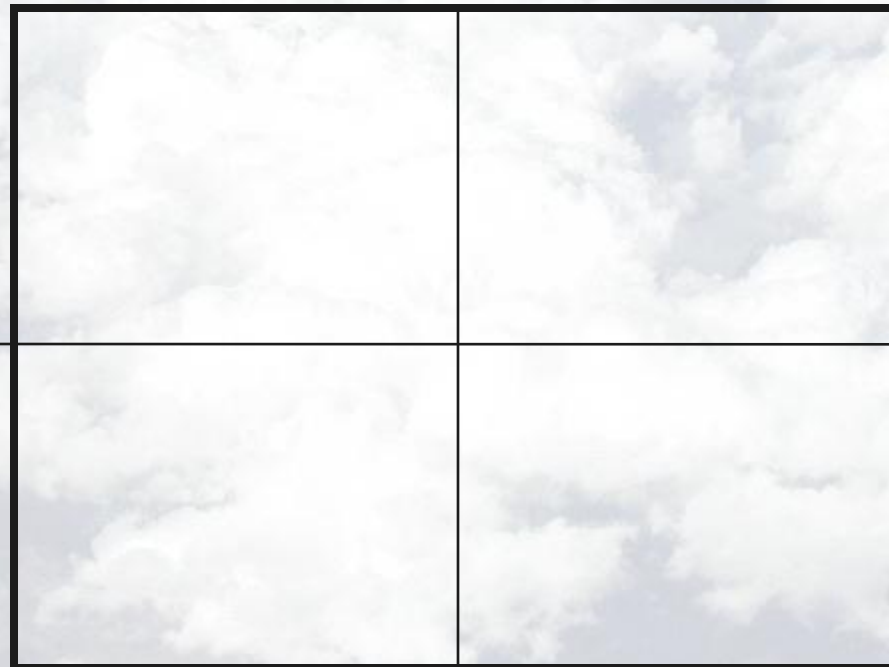
Thinking that
promotes
better
discovery

Resource Management

A
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Proactive

Reactive

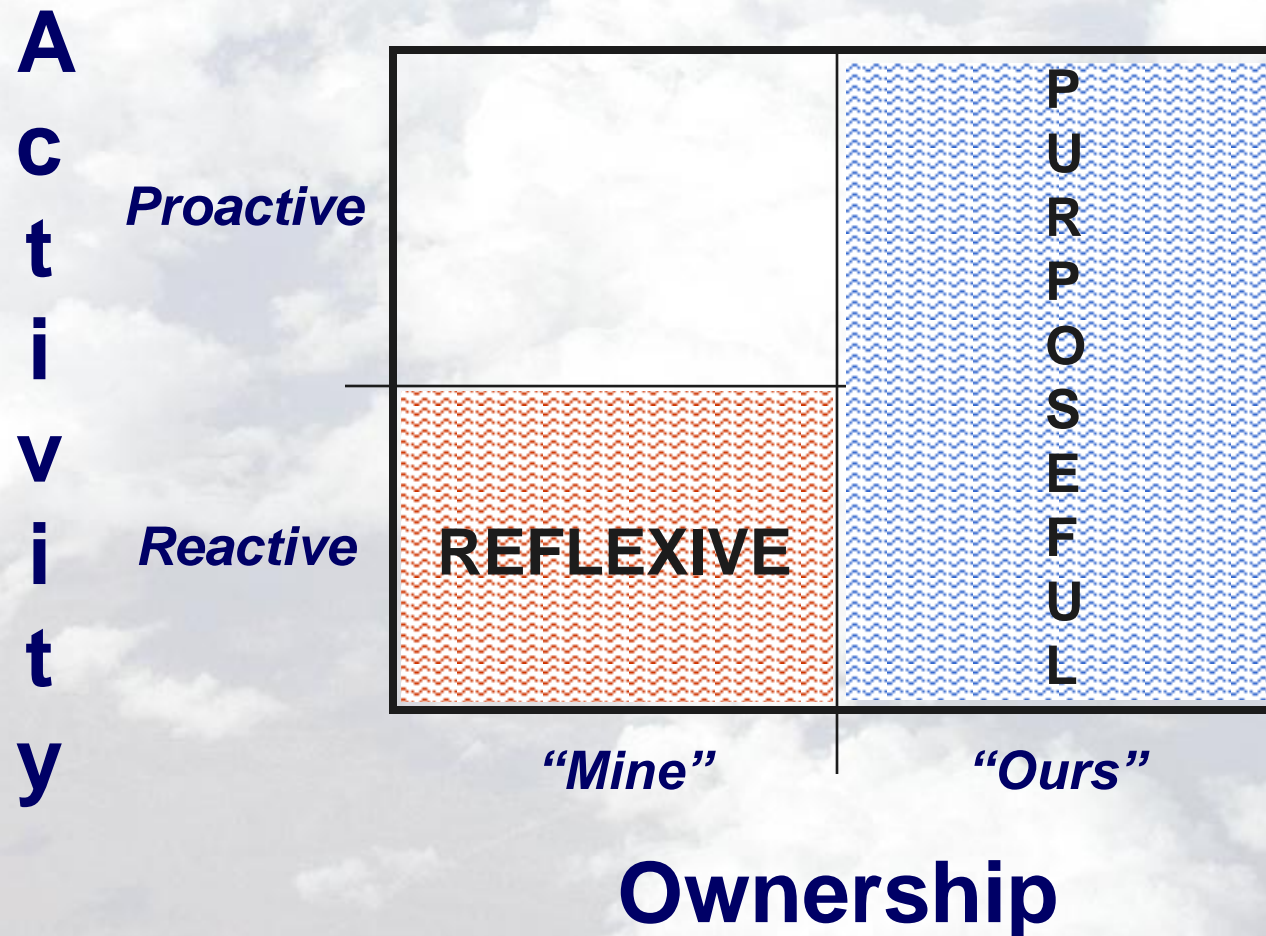


"Mine"

"Ours"

Ownership

Resource Management



Deming on Innovation

*One is born with a natural inclination to learn. Learning is a source of innovation. One inherits a right to enjoy his work. Good **[resource]** management helps us to nurture and preserve these positive innate attributes of people.*

Opportunities to Act

Opportunities to Act

(differences that make a difference)

- Category Thinking vs. Continuum Thinking
- Macro System Models vs. Micro System Models
- Attention to “Good” elements
- Manage interactions, not actions

A Foundation for Innovation

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.

Source: The New Economics, W. Edwards Deming, 1993

The End of Perfection

Disneyland will never be completed. It will continue to grow as long as there is imagination left in the world.

Walt Disney

The End of Perfection

*(Reflections from Dr. Deming on a
Foundation for Leading)*

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