

Blue Pen Companies and Enterprise Thinking

Presented by
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**Goodwill Industries Annual Delegate Assembly
June 26, 2005, Appleton, WI**



Abstract: Among the topics of discussion will be the concepts of “better thinking about thinking” and “thinking together.” A deeper understanding of these ideas and examples of their everyday use will provide direction for organizations to learn together and work together in new ways. This session will introduce you to these ideas through a series of questions that are specially selected to create awareness of a new approach to working together, learning together, and thinking together.



Agenda

- ✓ Aim
- ✓ Present State
- ✓ Thought Starters
- ✓ Future State
- ✓ Future State & Present State Organizations
- ✓ Visioning

Aim

Introduce the *potential energy* of
integrating the management
theories and thinking of

Dr. W. Edwards Deming



Dr. Genichi Taguchi



Dr. Edward de Bono

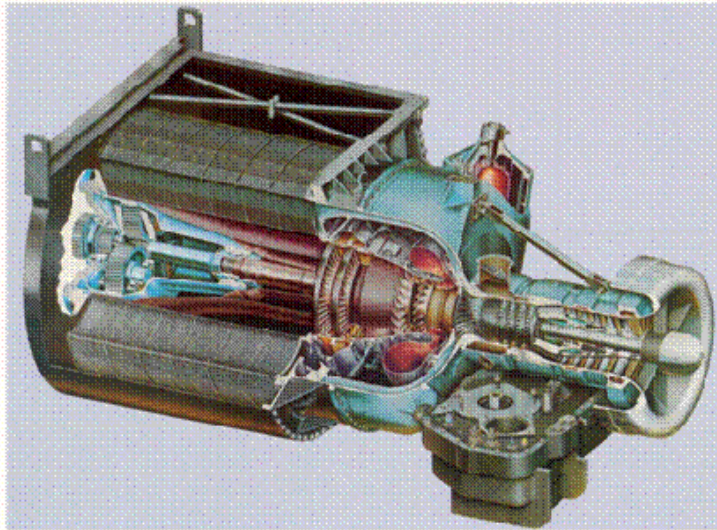
and many others...

3-D Diffusion Equations

of Heat

$$\frac{\partial^2 T}{\partial x^2} + \frac{\partial^2 T}{\partial y^2} + \frac{\partial^2 T}{\partial z^2} + \frac{Q'''}{k} = \frac{1}{\alpha} \frac{\partial T}{\partial t}$$

Tank Engines and Rocket Engines



AGT 1500 GAS TURBINE ENGINE

TEXTRON Lycoming
Stamford, Connecticut



InThinking

InThinking is about a transformation of the ways people think into effective predetermined patterns and sequences of thinking. The organization of thinking itself and the awareness that there is a choice of alternative ways of thinking when creating better solutions, presents a significant and exciting departure from traditional approaches.

InThinking & Enterprise Thinking





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

Edward de Bono on Thinking

“The quality of our thinking will determine the quality of our future.”

Edward de Bono



Present State



The Boeing Company - Vision 2016

✓ Core Competencies

- detailed customer knowledge
- large-scale systems integration
- lean enterprise

✓ Values

- leadership
- integrity
- quality
- customer satisfaction
- people working together
- a diverse and involved team
- good corporate citizenship
- enhancing shareholder value

Expectations



Expectation Dynamics



Present State

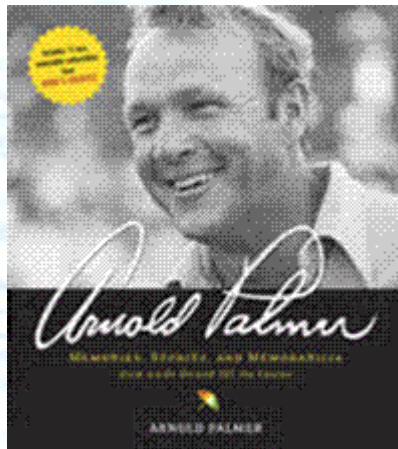
- ✓ Reducing Cost, Waste, Inventory, Variation, etc
- ✓ Talk about “Working Together”
- ✓ Striving for “Zero Defects”
- ✓ Striving for “Zero Waste”
- ✓ Striving for “Satisfaction”
- ✓ Continuous Improvement
- ✓ Using Metrics for Alignment*

***without a thinking transformation**



Thought Starters

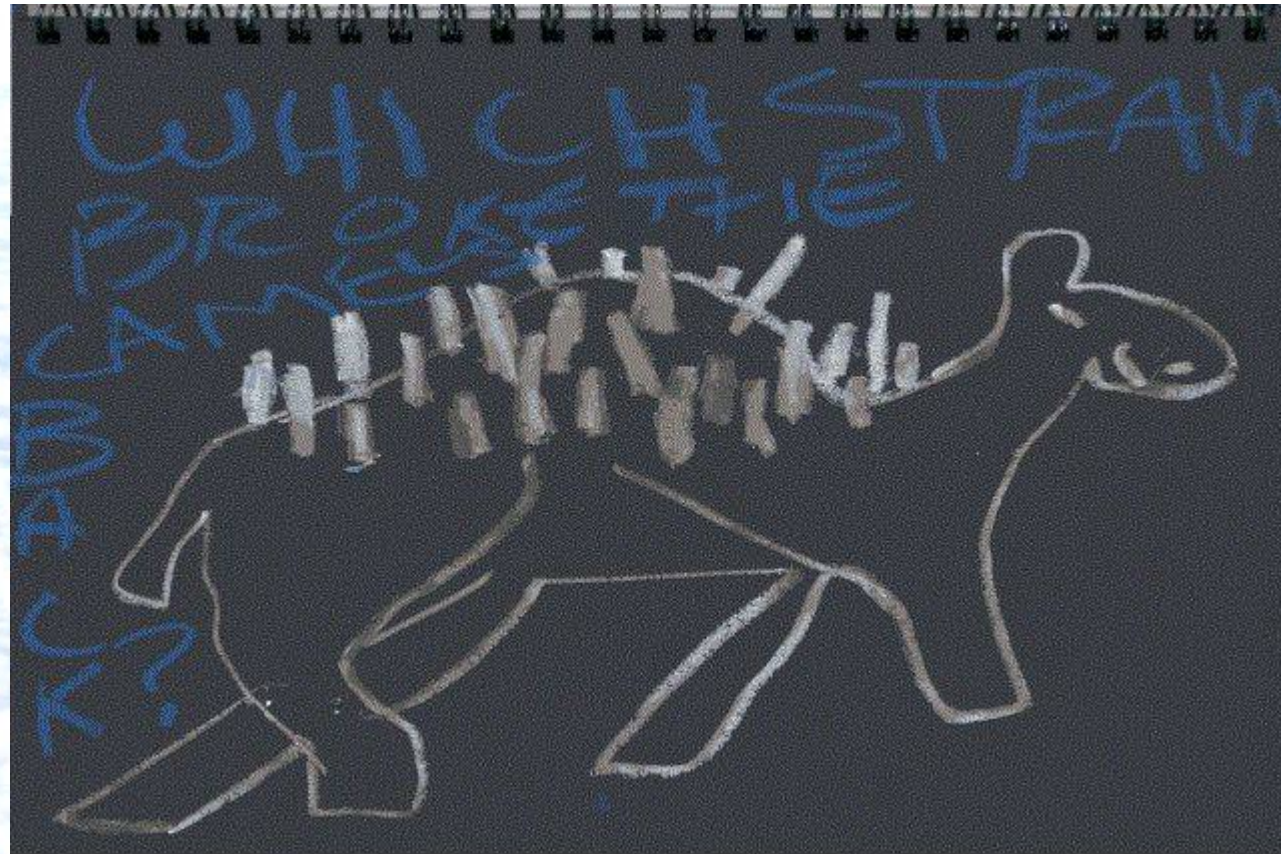
Arnold Palmer



Counting Heads



Counting Straws



Sorting Fruit



Sorting Kids



The New Math

$$1 + 1 = ??$$

Donella Meadows on Addition

“You think because you understand one you must understand two, because one and one makes two.

But you must also understand and.”

Driver's Education



“The significant problems we face cannot be solved at the same level of thinking we were at when we created them.”

Albert Einstein





Future State

Perception & Thinking

“How the world we perceive works depends on how we think.

The world we perceive is a world we bring forth through our thinking.”

H. Thomas Johnson

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

InThinking

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System of Profound Knowledge

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

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

Future State

- ✓ Resource & Relationship Management
(Striving for Balance)
- ✓ Thinking & Learning Together - Then
Working Together
- ✓ Managing Customers' Expectations
- ✓ Continuous Investment
- ✓ Using Thinking for Alignment
 - InThinking and Enterprise Thinking



Future State and Present State Organizations

Future State and Present State

Future State
Enterprise Thinking

Present State
Reflexive Actions

Physical
Attributes

People
Attributes

The First Step

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.

W. Edwards Deming

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

My First Step

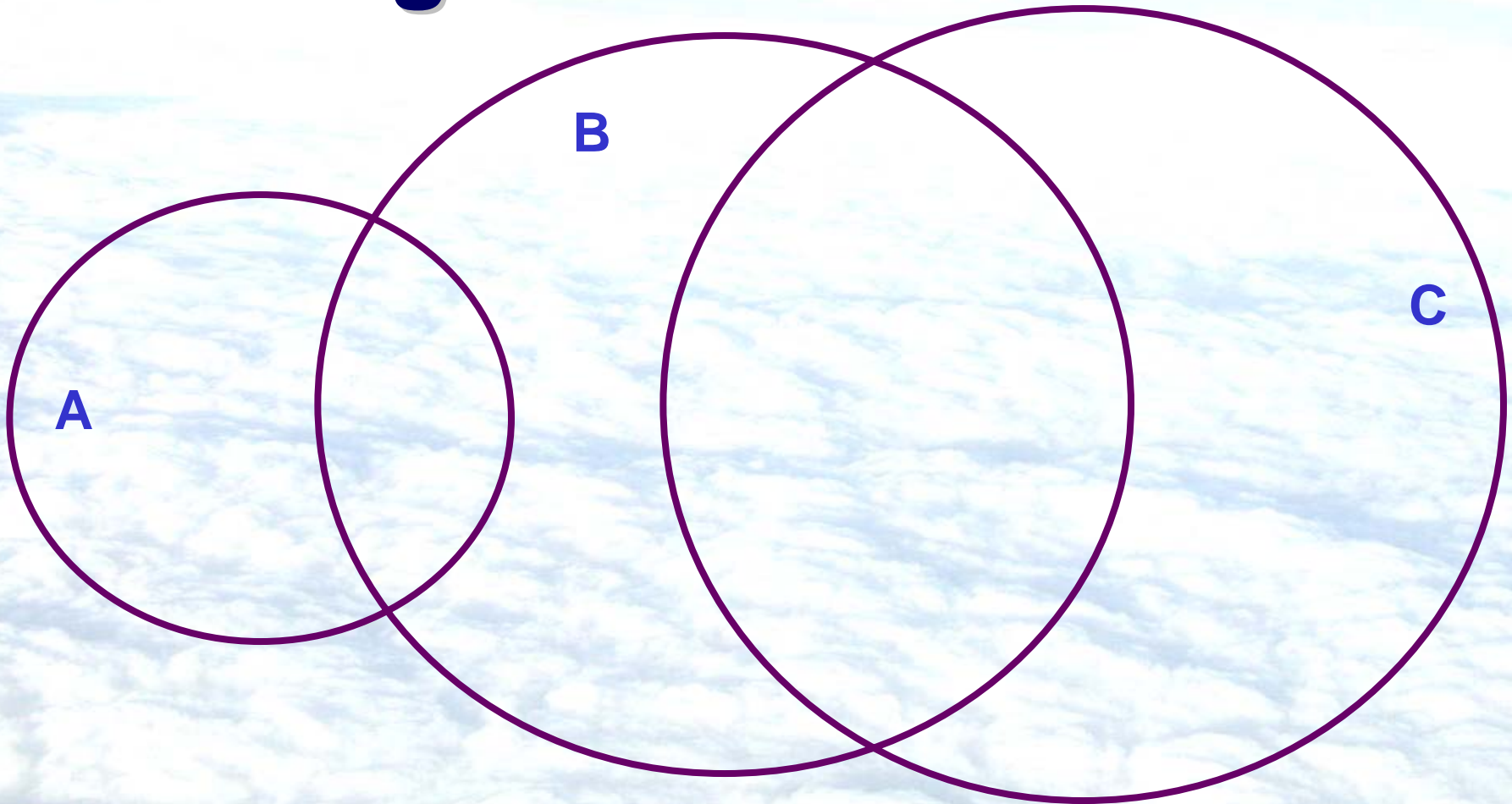


Genichi Taguchi on Quality

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

Source: Introduction to Quality Engineering , G. Taguchi, 1983

Sorting Circles



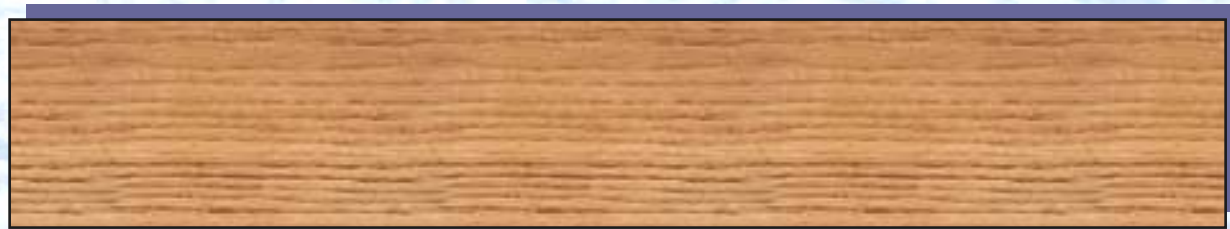
Sorting Circles, Part 2

Which 2 of these 3 circles are closest to having the same diameter?



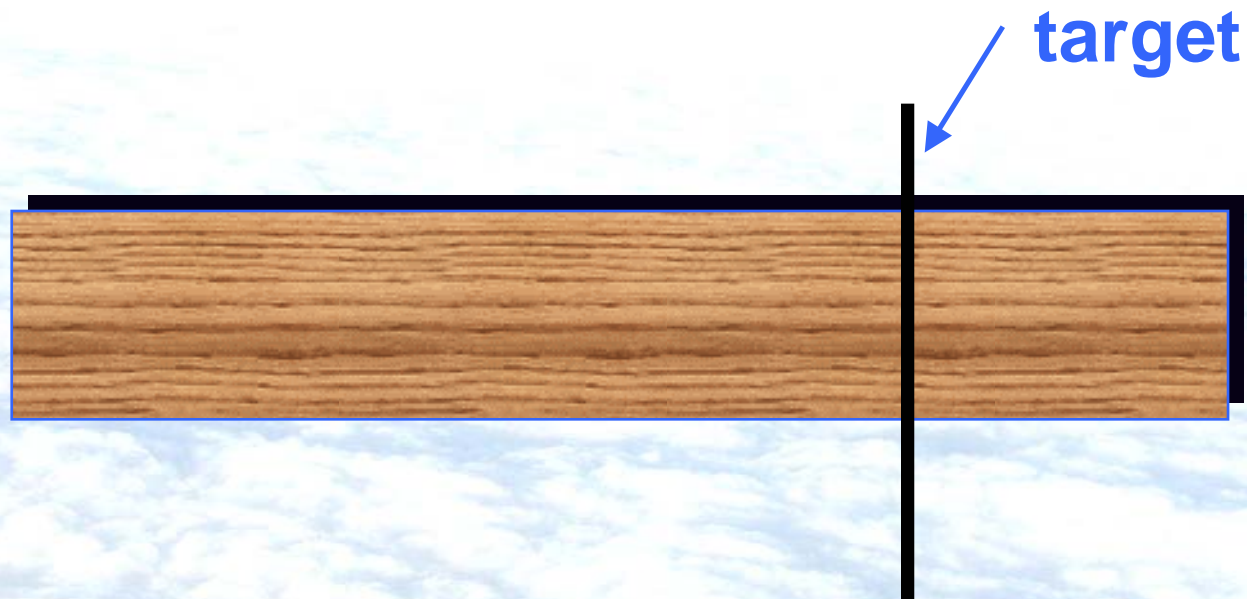
Cutting Wood

Given a piece of wood that will be cut into 2 pieces....

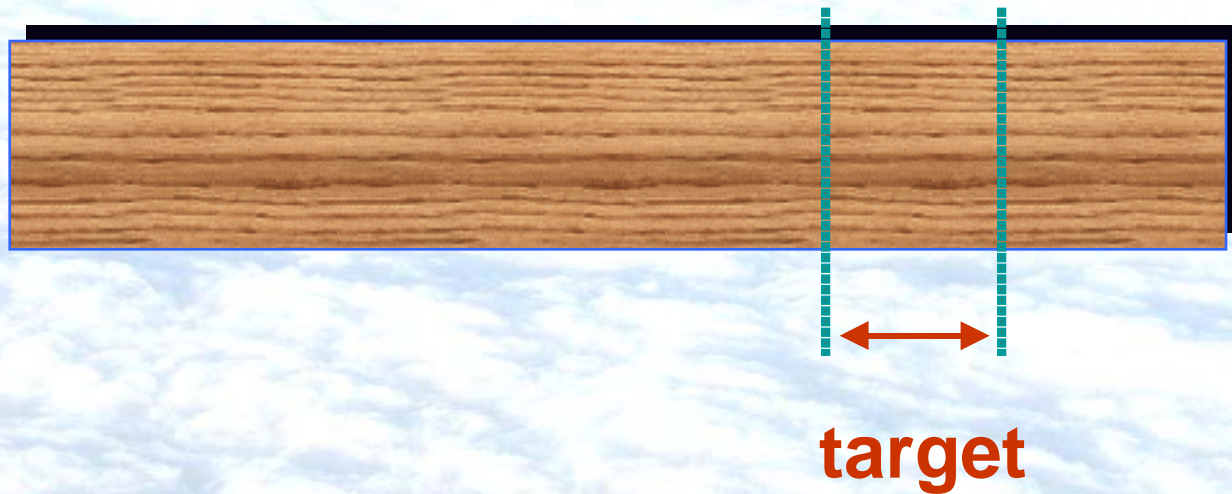


how many lines will be drawn across the top face before the cut is made ?

Cutting Wood, Part 2

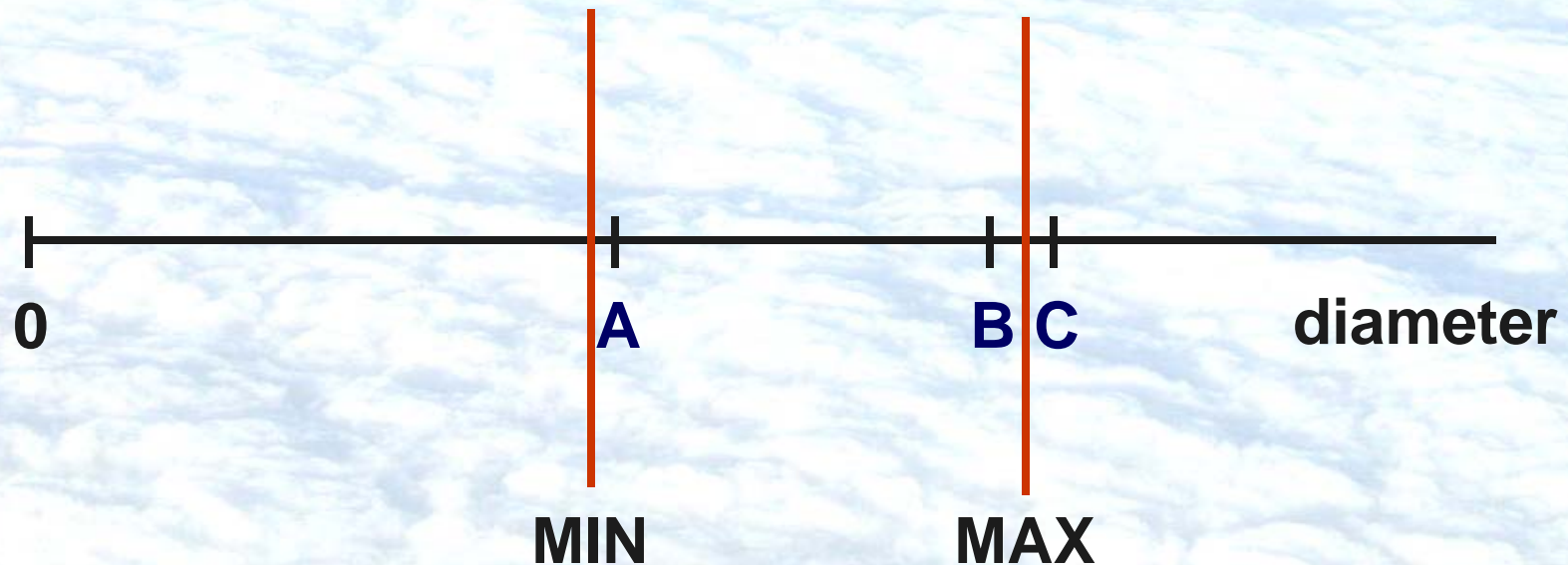


Cutting Wood, Part 3

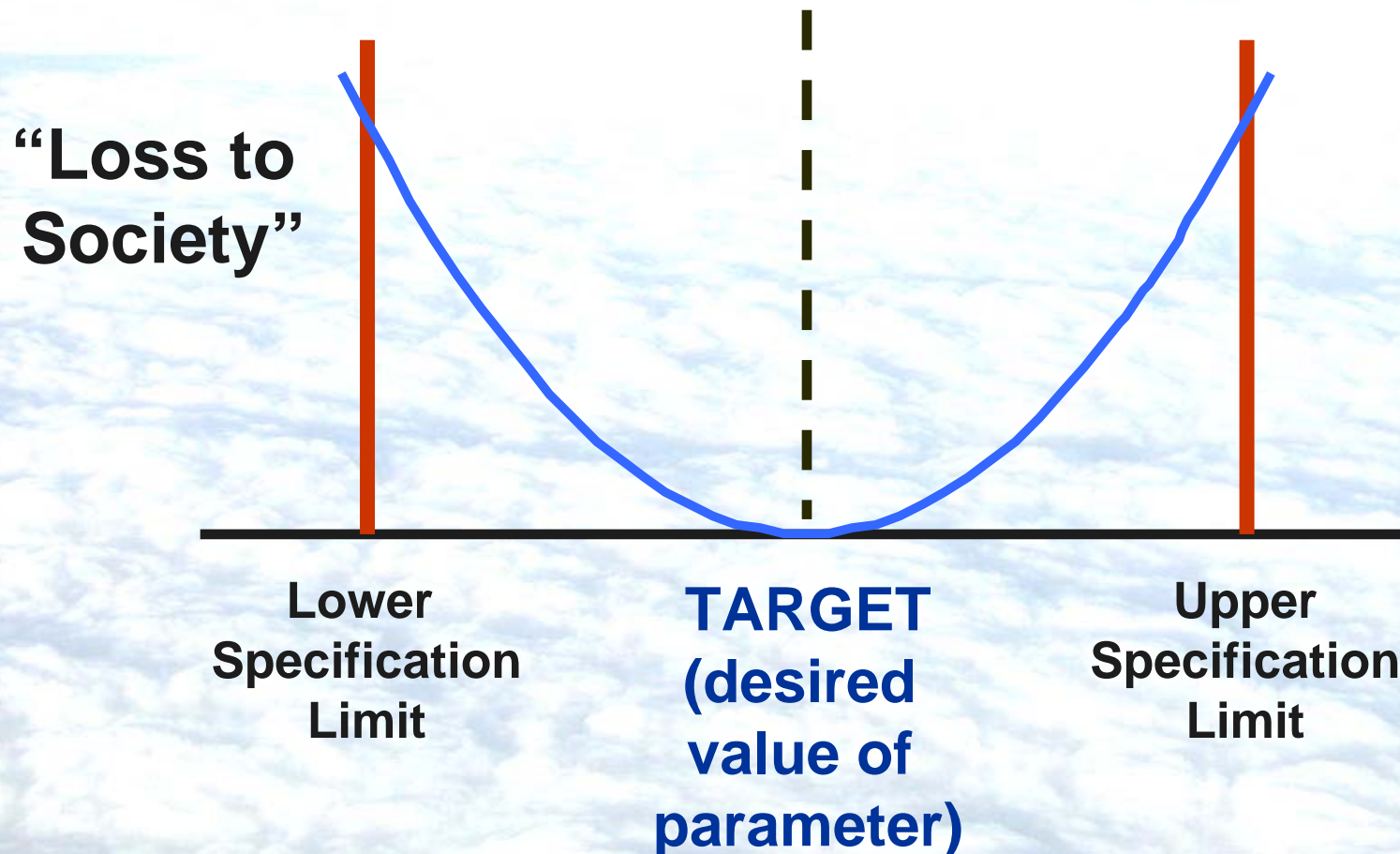


Sorting Circles, Part 3

Which 2 of these 3 circles are closest to having the same diameter?



Taguchi's Quality Loss Function



Bridges



Picking Up Nails

Spending time (yours)
to
Save time (others)

*Minimizing Loss to
Society*

Investment Thinking

- ✓ Seeing connections
- ✓ Spending \$ to save \$
- ✓ Spending time to save time
- ✓ Spending resources to save resources
- ✓ Examples
 - ✓ a stitch in time, an ounce of prevention, college education, roof repair, time with kids

InThinking & Enterprise Thinking





Visioning

What's Next?

- ✓ Thinking Together
- ✓ Rethinking "Working Together"
- ✓ Rethinking "Learning Together"
- ✓ Rethinking "Management"
- ✓ Rethinking "Leadership"
- ✓ Rethinking "Ethics"
- ✓ Rethinking "Interchangeable parts"
- ✓ Rethinking ???

Visioning

“it’s not what the vision is that is important...

it’s what the vision does...”

Peter Senge

Source: *The Fifth Discipline*, Peter Senge, 1992

3-D Diffusion Equations

of Heat

$$\frac{\partial^2 T}{\partial x^2} + \frac{\partial^2 T}{\partial y^2} + \frac{\partial^2 T}{\partial z^2} + \frac{Q''''}{k} = \frac{1}{\alpha} \frac{\partial T}{\partial t}$$

of InThinking and Enterprise Thinking

$$\frac{\partial^2 ET}{\partial x^2} + \frac{\partial^2 ET}{\partial y^2} + \frac{\partial^2 ET}{\partial z^2} + \frac{\text{In}T}{k} = \frac{1}{\alpha} \frac{\partial ET}{\partial t}$$



In2:InThinking Network

Imagine the Possibilities...

- ✓ when operating in an “Enterprise Thinking” environment
- ✓ if we could develop a broader appreciation of “continuous and connected learning”
- ✓ if we could develop a deeper appreciation of “*working together*”, “*learning together*” and “*thinking together*”

Imagine the Possibilities...

✓ and the markets we could create

Working Together

Investing Together

Designing Together

Building Together

Learning Together

Thinking Together

Leading Together