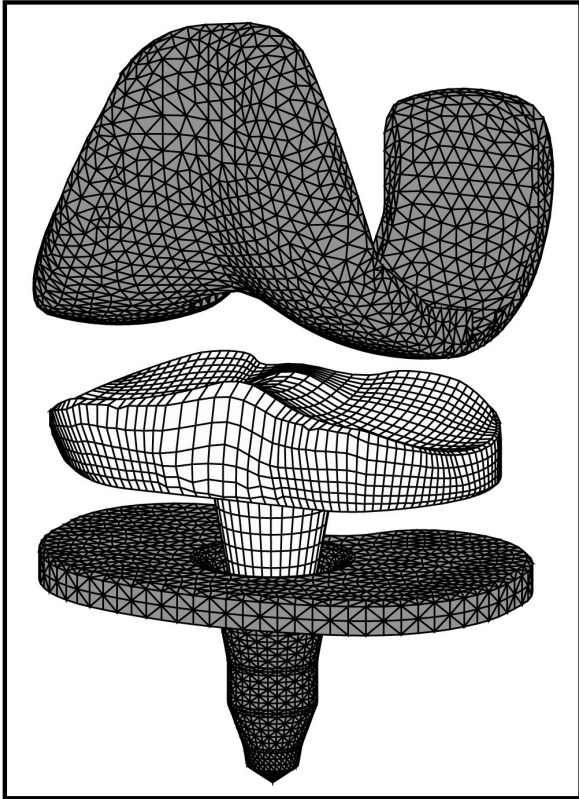


Values and Value- The Role of the Leader in Work and Life

**Jorge A. Ochoa, Ph.D., P.E.
Exponent, Inc.**

What we won't cover....

$$WD(\theta, \phi) = \sum_{i=1}^n k \cdot \sigma_i(\theta, \phi, t) \cdot s_i(\theta, \phi, t)$$



$$\begin{Bmatrix} \sigma_{11} \\ \sigma_{22} \\ \sigma_{33} \\ \sigma_{23} \\ \sigma_{13} \\ \sigma_{12} \end{Bmatrix} = \begin{bmatrix} C_{11} & C_{12} & C_{12} & 0 & 0 & 0 \\ C_{12} & C_{11} & C_{12} & 0 & 0 & 0 \\ C_{12} & C_{12} & C_{11} & 0 & 0 & 0 \\ 0 & 0 & 0 & C_{44} & 0 & 0 \\ 0 & 0 & 0 & 0 & C_{44} & 0 \\ 0 & 0 & 0 & 0 & 0 & C_{44} \end{bmatrix} \begin{Bmatrix} \epsilon_{11} \\ \epsilon_{22} \\ \epsilon_{33} \\ 2\epsilon_{23} \\ 2\epsilon_{13} \\ 2\epsilon_{12} \end{Bmatrix}$$

$$\sigma_{ij} = L_{ijkl} \epsilon_{kl} - M_{ij} p$$

$$m - m_o = R_{ij} \epsilon_{ij} + Q p$$

$$q_i = -\rho \kappa_{ij} \frac{p}{x_j}$$

Our Credo

We believe our first responsibility is to the doctors, nurses and patients,
to mothers and fathers and all others who use our products and services.

In meeting their needs everything we do must be of high quality.

We must constantly strive to reduce our costs
in order to maintain reasonable prices.

Customers' orders must be serviced promptly and accurately.

Our suppliers and distributors must have an opportunity
to make a fair profit.

We are responsible to our employees,
the men and women who work with us throughout the world.

Everyone must be considered as an individual.

We must respect their dignity and recognize their merit.

They must have a sense of security in their jobs.

Compensation must be fair and adequate,
and working conditions clean, orderly and safe.

We must be mindful of ways to help our employees fulfill
their family responsibilities.

Employees must feel free to make suggestions and complaints.

There must be equal opportunity for employment, development
and advancement for those qualified.

We must provide competent management,
and their actions must be just and ethical.

We are responsible to the communities in which we live and work
and to the world community as well.

We must be good citizens – support good works and charities
and bear our fair share of taxes.

We must encourage civic improvements and better health and education.

We must maintain in good order
the property we are privileged to use,
protecting the environment and natural resources.

Our final responsibility is to our stockholders.

Business must make a sound profit.

We must experiment with new ideas.

Research must be carried on, innovative programs developed
and mistakes paid for.

New equipment must be purchased, new facilities provided
and new products launched.

Reserves must be created to provide for adverse times.

When we operate according to these principles,
the stockholders should realize a fair return.

Johnson & Johnson

Ethical Principles

The Credo

- Our first responsibility is to the doctors, nurses, and patients...
- We are responsible to our employees...
- We are responsible to the communities in which we live and work...
- Our final responsibility is to our stockholders...

Johnson & Johnson Standards of Leadership

- Customer and Marketplace Focus
- Innovation
- Collaboration
- Complexity and Change
- Organizational and People Development

R&D Leadership Competencies

- **Communication Skills**
- **Demonstrates Passion and Champions R&D**
- **External Focus**
- **Fosters Technology**
- **Innovativeness/Entrepreneurship**
- **Partnering With Others**
- **People Development**
- **Personal and Professional Growth**
- **Takes Risks With Confidence**
- **Thinks and Acts Strategically**

LEADERSHIP

"To teach leadership is an act of arrogance."

-- Thomas E. Cronin, "Thinking and Learning About Leadership"

What is Leadership?

- Leadership is NOT management
- Leadership CAN be learned – desire!
- Leadership is developed, not discovered – Circumstantial

⇒ Knowing how to do a job is the accomplishment of labor

⇒ Showing others is the accomplishment of a teacher

⇒ Making sure the work gets done by others is the accomplishment of a manager

*⇒ Inspiring others to do a better work is the accomplishment of a leader**

**John C. Maxwell Developing the Leader Within You*

What is Leadership Made of?

- INTEGRITY – Rationalization
- PASSION – Survival
- VISION – No Risk
- REALISM - Stockdale Paradox

“Retain faith that you will prevail in the end, regardless of the difficulties, and at the same time confront the most brutal facts of your current reality, whatever they might be.”

- COMPLEXITY – Tyranny of the “or”; Change!
- “WALK THE TALK” – Credibility
 - *Integrity Builds Trust*
 - *Integrity Has High Influence Value*
 - *Integrity Facilitates High Standards*
 - *Reputation vs. Image*

Integrity

In-teg-ri-ty (in teg´ri tē), n. 1. adherence to moral and ethical principles; soundness of moral character; honesty.

Char-ac-ter (kar ik´ter), n. 3. moral or ethical quality. 4. qualities of honesty, courage or the like; integrity.

Moral (mor´el), adj. 1. relating to principles or habits with respect to right or wrong conduct.

Therefore, a Leader of Character* –

1. Makes judgment about what is right and wrong
2. Behaves in ways that are consistent with what is right
3. Remains faithful and steadfast to beliefs and values
4. Is not self-indulgent or driven by selfish values

*"The Legacy Leader," Anthony Lopez, 2003

Impact of the Legacy Leader

“The final test of a leader is what he leaves behind in other men, the conviction and the will to carry on.”

– Walter Lippman

- Choosing to be a leader is the wrong motivation, the wrong starting point.
- Effective leaders begin with a cause, a purpose, a goal, which will benefit fellow team members.
- Behaving as and becoming an effective leader is a by-product of an intense commitment to a purpose.
- Without credibility or trust the leader will impact the organization's:
 - Past
 - Present
 - Future
 - Value vs. Values

Have you ever had this chat in class?

Soapbox = Philosophy of life

Confusion, Balance and Settling for 2nd best

- You don't have to sell your soul to change style
- Confusion – Theory of Relativity!
 - Fair \neq Right
 - Unfair \neq Wrong
- Balance
 - Rights and Responsibilities
- Settling
 - Catering to the lowest common denominator

Side thought...

Golden Rule
vs.
Platinum Rule

Theory of “Relativity”

The Importance of Well-Reasoned Judgments

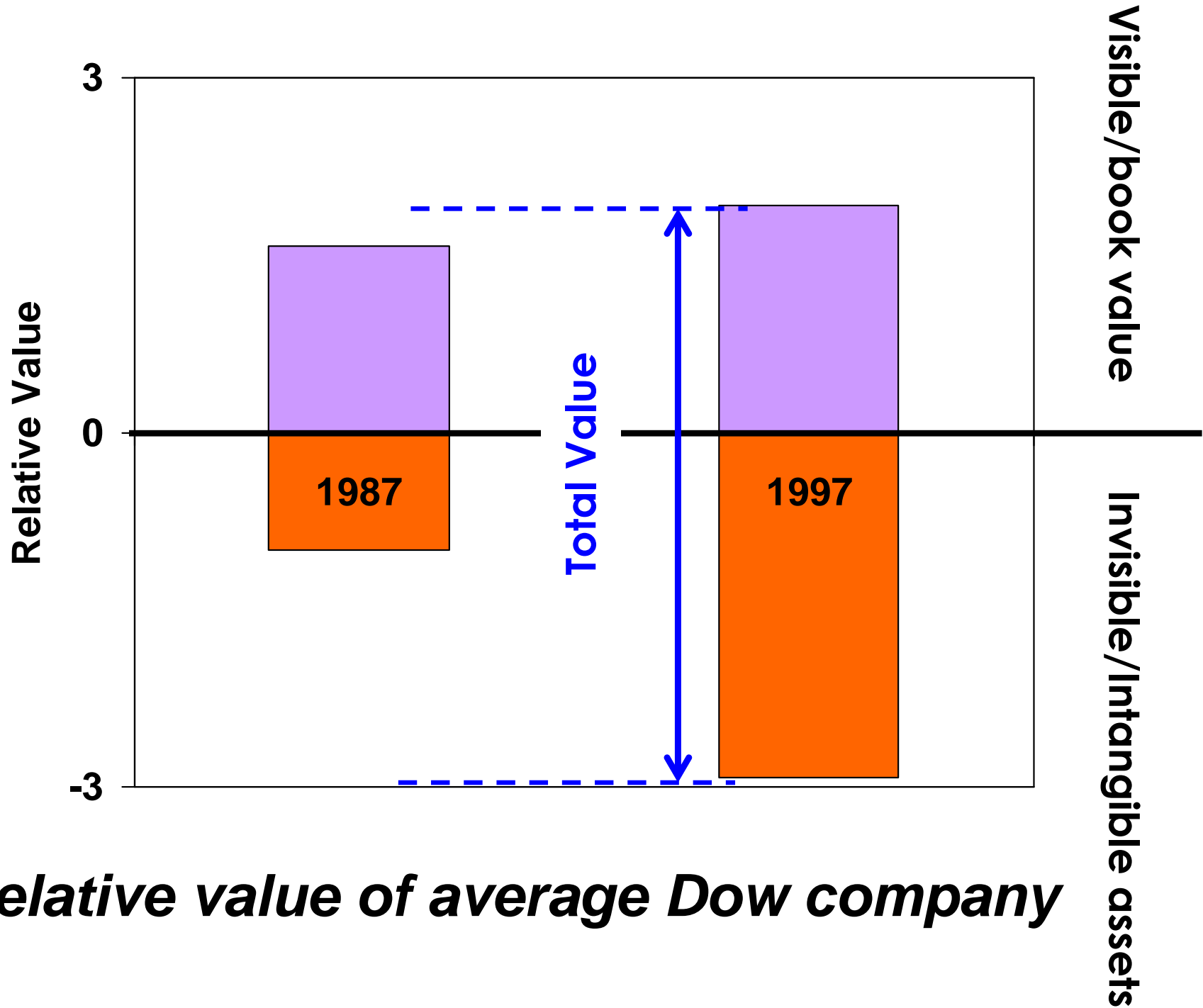
- We need to learn to differentiate opinions based on emotions from those supported by evidence and logical argument.
- A key misconception that ethics is a matter of opinion (the issue of moral relativism), and that ethical issues are not worth discussing or cannot be resolved.

Respect for Alternate Approaches and Viewpoints

- Ethics allows us to gain greater understanding and respect for other positions and approaches, even if we do not agree with them.
- It enhances our ability to understand the issues and values informing different points of view, and thus makes us better citizens within our society.

“.....a common language that stands for *universal (widely shared) values*, such as those focused on human dignity.....”

Value and Values



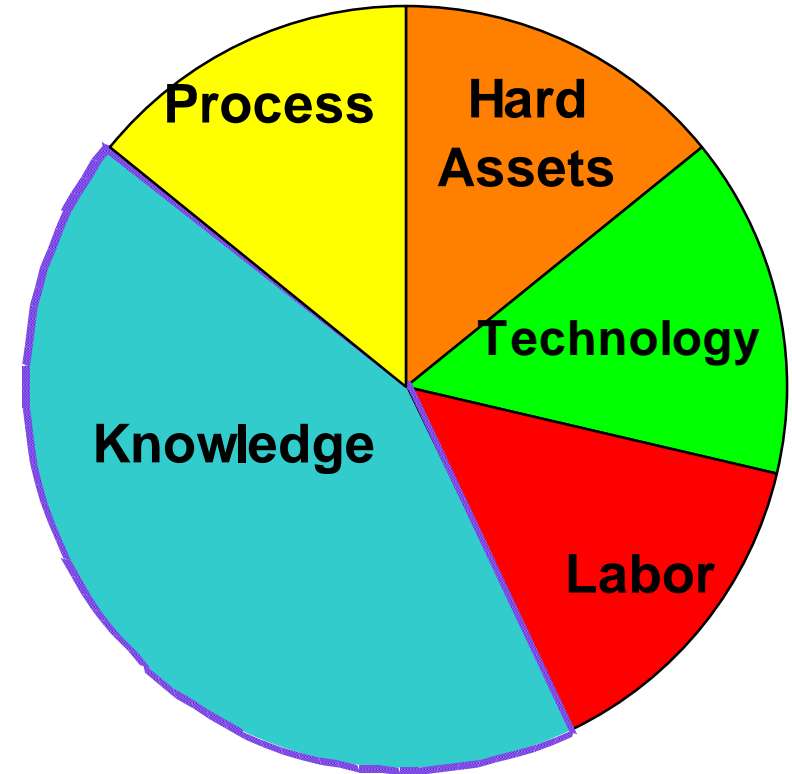
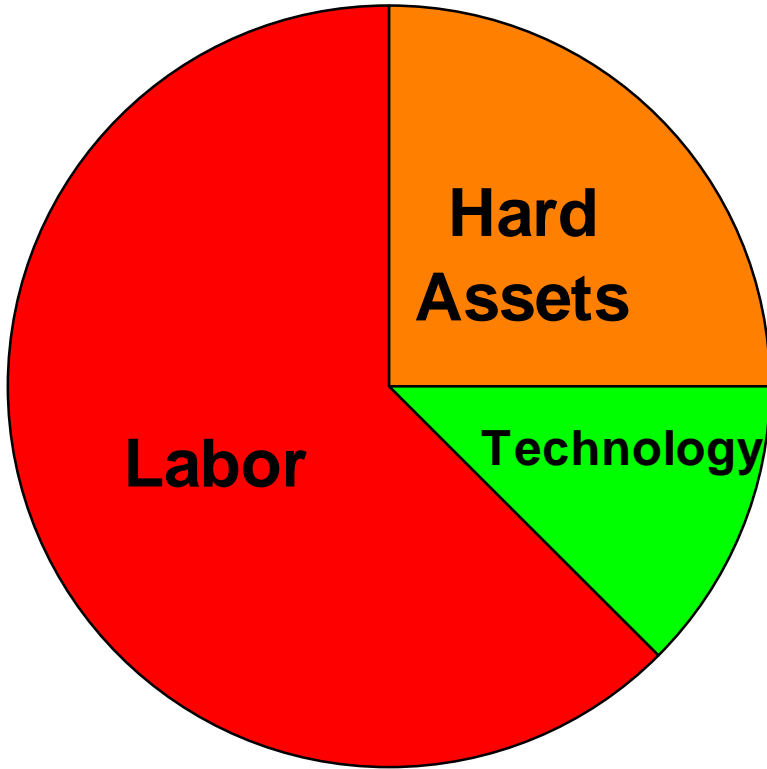
Relative value of average Dow company

Value & Values

Industrial Age
Value Model



Knowledge Age*
Value Model



*"4th Generation R&D: Managing Knowledge, Technology and Innovation" Miller and Morris, 1999

Leading up vs. leading down

“Downward leadership and upward leadership are integrally reinforcing; if you are effective at the first, it will beget the second; if you are adept at the second, it can inspire the first.

By never forgetting what those below have done for us and what those above expect of us, new can help ensure that everything from our daily actions to our career decisions remains true to their sacrifice and to our mission.”

--Michael Useem, “Leading Up”

- Leading Down = Manage, Mentor, Guide, Motivate
- Leading Up = Executive Leadership, Influence

Leadership is needed at all levels, in all directions!

Jack Welch's Operating Principles*

- Control Your Destiny or Someone Else Will
- Face Reality as it is, not as it was or as you wish it were
- Be candid with everyone
- Don't manage, lead
- Change before you have to
- If you don't have a competitive advantage, don't compete

* Control Your Destiny or Someone Else Will, Noel Tichy and Stratford Sherman, HarperBusiness, 1993.

What is an engineer?

“Engineers are are what they are. And, to a great extent, engineers are what they do.”

-- Samuel C. Florman, “The Introspective Engineer”

“One who applies fundamental science for the practical betterment of the human condition”

- Engineers touch -
 - every project
 - every discipline
 - every product
 - every processearly.....they are the ultimate resource
- The implicit conviction of every engineer is that thought will lead to action
- Engineers care more about engineering than engineers!



***Level 5 Leadership from Good to Great by Jim Collins**

Level 5 Leadership

Engineering requires:

- **Personal humility and professional will**
- **Set successors up to win**
- **Compelling modesty, self effacing, understated**
- **Fanatically driven towards sustained results**
- **Workmanlike diligence**
- **Window-success, mirror-failure**
- **Know who/what to look for!**

*Level 5 Leadership from Good to Great by Jim Collins

Way of Life – Not Quick Fix

- CLARIFY YOUR CENTER
- CLARIFY WHAT IS POSSIBLE
- CLARIFY WHAT OTHERS CAN CONTRIBUTE
- SUPPORT OTHERS SO THEY CAN CONTRIBUTE
- BE RELENTLESS
- MEASURE AND CELEBRATE PROGRESS

“Teaching Note for Joshua Chamberlain,” by James G. Clawson, Darden Graduate Business School Foundation, Charlottesville, VA. 1999.

IQ & Technical Skills vs. Emotional Intelligence

SELF AWARENESS

The ability to recognize and understand your moods, emotions and desires, as well as their effect on others

- Self confidence
- Realistic self assessment
- Self deprecating sense of humor

SELF RECOGNITION

Ability to redirect or control disruptive moods/impulses
Properly suspend judgement/think before acting

- Trustworthiness NAD integrity
- Comfort with ambiguity
- Openness to change

MOTIVATION

Passion for work beyond money/status
Pursue goals with energy
NAD persistence

- Strong drive to achieve
- Optimism, even in face of failure
- Organizational commitment

EMPATHY

Ability to understand emotional makeup of people
Treating people according to their emotional reactions

- Building NAD retaining talent
- Cross-cultural sensitivity
- Customer focus

SOCIAL SKILL

Proficiency in managing relationships and building networks
Ability to find common ground and build rapport

- Leading change
- Persuasiveness
- Bulking NAD leading teams

* Daniel Goleman – What makes a Leader?
HBR Reprint #98606

My Next Stop - Educational Philosophies*

CLASSICAL

- Reaches for an Ideal
 - Transcendent
- Says what SHOULD be
- Ignores reality to press toward ideal
- Presumes to prescribe curriculum
 - Brilliance not required
- Desired result: Virtuous Student

MODERN

- Reaches for power
 - Utilitarian
- Says what IS
- Focuses on reality to accommodate needs
- Accedes to demands for curriculum
 - Brilliance not desired
- Desired result: Good job, good money

* Nancy Price, Ph.D. founder and Head of School (ret.)
The Bear Creek School, Redmond, WA

Impact of OUR Legacy

“Having a legacy is not a choice. The only choice is what the legacy will be.” – Tony Lopez

**“ “The safest road to Hell is the gradual one – the gentle slope, soft underfoot, without sudden turnings, without milestones, without signposts.”
– C.S. Lewis**

**“Great ambition and conquest,
without contribution,
is without significance”**

**“Always do right. This will
gratify some people, and
astonish the rest”**

“Play big”

THANK
YOU!