Mindset Matters
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When the Space Shuttle *Challenger* exploded shortly after its launch on January 28, 1986, six professional astronauts and one schoolteacher were tragically killed. The nation was devastated, and NASA was shaken out of its complacency brought on by years of successful--or at least non-lethal--space missions. A commission was formed led by then-Secretary of State William P. Rogers and composed of politicians, astronauts, military men, and just one scientist, to investigate the cause of the accident and to recommend steps to prevent such a disaster from ever happening again. The fact that Richard Feynman was that one scientist may have made the difference between answering the question of why the *Challenger* failed and eternal mystery. Feynman was gutsier than most men, not afraid to jet all over the country to talk to the men on the ground, the engineers who had recognized the fact that propaganda was taking the lead over care and safety in the shuttle program. His report, which was perceived by the Commission as an embarrassment to NASA, was almost suppressed by the Commission, but Feynman fought to have it included, although it was relegated to an appendix.

When the Commission held a live press conference to answer questions, Feynman did his now-famous tabletop experiment with one of the shuttle's gaskets, or O-rings, and a cup of ice water. It dramatically proved that those key gaskets had failed because the engineers' warning that it was too cold outside to proceed with the launch went unheeded by managers committed to the punctuality of their mission schedule.

The most powerful elements of the report do not, however, pertain to the failure of the O-rings per se, rather to an examination of the attitudes of mind wherein, *"for whatever purpose, be it for internal or external consumption, the management of NASA exaggerates the reliability of its product, to the point of fantasy."*

In the introduction to his report, Feynman shares an observation and poses a question: *"It appears that there are enormous differences of opinion as to the probability of a failure with loss of vehicle and of human life. The estimates range from roughly 1 in 100 to 1 in 100,000. The higher figures come from working engineers, and the very low figures from management. What are the causes and consequences of this lack of agreement? Since 1 part in 100,000 would imply that one could put a Shuttle up each day for 300 years expecting to lose only one, we could more properly ask, 'What is the cause of management's fantastic faith in the machinery?'"*

In the conclusion of his report, Feynman offers an answer to the above question: *"One reason for this may be an attempt to assure the government of NASA perfection and success in order to ensure the supply of funds. The other may be that they sincerely believe it to be true, demonstrating an almost incredible lack of communication between themselves and their working engineers."*

In the dozen or so pages between introduction and conclusions, Feynman elegantly examines the attitude of mind, or mindset, that made the *Challenger* disaster inevitable.

Our intent here is not to cover the entire report; it is to begin an exploration of this idea of mindset as a foundation for corporate performance.

As a way of exploring this idea of mindset, I would like to propose the following equation:

$$Results = f\ (Mindset)\ x\ (Mechanisms)$$

To make this useful we will expand the equation with representative lists (by no means exhaustive) of what could be included under the headings of mindset and mechanism.

$$Results = f\ (Mindset)\ x\ (Mechanisms)$$

Attitude	*Organizational Structure*
Intention	*Technology*
Accountability	*Policies*
Energy	*Competencies*
Enthusiasm	*Skills*
Commitment	*Business Process*
Spirit	*Management Information Systems*
Edge	*Project Management*
Creativity	*Research and Development*
Imagination	*Organizational Development*
Thinking	*Behavior*

Notice that the equation contains a multiplier. This is an important idea. Many of our attempts to improve results by re-engineering the mechanisms can seriously depress the spirit of our enterprise for a net loss in results. Michael Hammer, the great advocate of organizational re-engineering, while confronting the less than stellar long-term results of many such interventions, apologized in the Wall Street Journal for failing to appreciate the crucial factor of the human spirit in re-engineering efforts.

Jim McCarthy, formerly the head of the Microsoft Visual C++ Program Management Team, makes the comment, *"more people have ascended bodily into heaven than have shipped great software on time."* The challenge, according to McCarthy, is that *"articulated thought is the raw material of the intellectual product. But most of our commercial enterprises are not really designed to encourage thinking. You need to figure out all the reasons people aren't thinking and eliminate them--the reasons, not the people."* The challenge, restated, is how to manage mindset.

Take a moment to reflect on your own path to the ranks of leader/manager, and ask yourself, "How much time have I devoted to learning how to lead and manage my own attitude, intention, accountability, energy, enthusiasm, commitment, spirit, edge, creativity, imagination and thinking? How much time have I devoted to learning how to

lead and manage the attitude, intention, accountability, energy, enthusiasm, commitment, spirit, edge, creativity, imagination and thinking of the people in my organization?"

To move the attitude of mind challenge to a more personal space, think about this. As of December 2000, 61% of adult Americans were overweight. So there is a 61% chance you are one of them. Even if you aren't, play along here for a moment. Ask, "Why is this so?" (Hint: It has something to do with something we ate). If we now examine this phenomenon in the terms of the above equation, it becomes quickly obvious that there is no shortage of mechanisms to manage food intake and achieve the result of optimum body weight. Indeed we seem to be obsessed with the mechanisms of weight loss; Amazon.com alone lists 306 diet books! With each passing year we are presented with "new and improved" mechanisms, and yet the number of Americans overweight escalated by 7% in each of the last two decades! The answer to, "Why is this so?" lives in the mindset column of our equation.

Mechanisms are simply the humble servants of mindset. Without an empowering attitude of mind, espoused results are not forthcoming. When it comes to food, most of us seem unable to manage the level of intention it takes to achieve the result of optimum body weight. The result of this pervasive inability is an emerging epidemic of obesity in the United States that is imposing a health care burden that will soon surpass the cost of the health care consequences of the tobacco industry.

Back to organizational life--achieving meaningful organizational change is actually more challenging than permanently shedding those 15 lbs. We know we live in a world of change. The question is, are we committed to transformational change, or do we believe we can get by with implementing incremental change? Perhaps we need to define terms here, because the word *transform* was so popularized in the '70's that most people know the word and don't know what it actually means: *trans·form: a: to change in composition or structure b: to change in character or condition*. Transformational change can only begin with a change in the composition or structure, character or condition of a prevailing attitude of mind. Transformational change is intellectually demanding precisely because it demands a fundamental change in the way we think about ourselves, each other, and the world that together we share. And this change takes leadership.

A major of New Legends Consulting is leadership, with a focus on learning and teaching as essential elements of leadership at work. What attitude of mind most favors the process of our learning? Richard Feynman, who won the 1965 Nobel Prize in physics, considered by many as the father of nanotechnology, and perhaps the greatest physics teacher of all time, offers us this answer: *"I think it is much more interesting to live not knowing than to have answers which might be wrong…This attitude of mind – this attitude of uncertainty – is vital to the scientist, and it is this attitude of mind which the student must first acquire…Once acquired, one cannot retreat from it anymore."*

In the upcoming program we will ask you to be aware of your mindset as it accompanies and directs you through the various phases of the program. Be aware not only of your thoughts, feelings and behaviors, but also maintain awareness of the

structure, character and condition of your thinking, together with the frame of reference through which you view the world. It is all of this that yields the actual thoughts that you have, the feelings that you experience, and the behaviors you consistently exhibit. It is extraordinarily difficult to achieve an enduring change in behavior that is not preceded by a shift in mindset (which is why we have so much trouble with those 15 lbs).

As you work on your challenges, begin to contemplate possible ways your mindset is a help or hindrance in achieving the results you believe you are committed to. For example, as a leader/manager you may believe you get paid to be right. If so, how might this attitude of mind hamper creativity and innovation, which by nature must embrace uncertainty and include the possibility of being absolutely wrong?

Another great physicist, Albert Einstein, made the observation that, *"We live in a world of problems that cannot be solved by the same level of thinking that created the problems*." Successful leadership first demands thought leadership. It requires a level of thinking that leads beyond the ordinary. Outstanding results are the outcome of productively applying thinking, feeling and behaving. As proposed previously, thinking is placed in the mindset column of our equation. Feelings follow thoughts. (We literally feel the way we do because we think the way we do). Therefore, managing mindset is at the heart of success in the world we now find ourselves in. Are you up to the task?

Think about it.