

The Practice of Innovation by Peter M. Senge

PETER Drucker has elegantly presented the three ingredients of the discipline of innovation: focus on mission, define significant results, and do rigorous assessment. But if it sounds so simple, why is it so difficult for institutions to innovate? There are two possible explanations, representing dramatically different worldviews. These opposing outlooks were first clarified nearly 40 years ago by Douglas McGregor in his groundbreaking *Human Side of Enterprise*: Theory X (employees as unreliable and uncommitted, chasing a paycheck) versus Theory Y (employees as responsible adults wanting to contribute).

One possibility for difficulties innovating is that most people really don't care about innovation. After all, Theory X is still the prevailing philosophy in most large institutions -- certainly in the American corporate world. Few people in positions of authority would admit to that view, but our practices belie our espoused values. If we look honestly at how organizations manage people, most appear to operate with the belief that people cannot work without careful supervision. As Arie de Geus has shown in his recent book *The Living Company*, we treat the business enterprise as a machine for making money rather than as a living community. Consequently, we view people as "human resources" waiting to be employed (or disemployed) to the organizations' needs. (The word *resource* literally means "standing in reserve, waiting to be used.")

From the Theory X perspective, institutions fail to innovate because most people lack the desire to innovate; forget Drucker's theory of innovation. The answer to that problem is simple: find more capable people. But that's a never-ending story. "We don't have the right people" is an excuse that suits all times and all circumstances; it is a refuge for scoundrels. Moreover, it obscures leaders' fundamental task of helping people do more together than they could individually. If, on the other hand, we take the Theory Y perspective, that most people come to work (or at least came to work at one time) truly desiring to make a difference, to gain, as Peter Drucker puts it, a "return on their citizenship," then the failure to innovate becomes a bigger puzzle. It cannot be laid off on not having the right people. It must have more to do with why Peter Drucker's three core practices are more difficult than meets the eye. It requires that we try to understand how it is that good people, desiring to learn and innovate, can consistently fail to produce what they intend.

Know Your Purpose

WE can start by inquiring into what we mean by *mission* anyway. It is very hard to focus on what you cannot define, and my experience is that there can be some very fuzzy thinking about mission, vision, and values.

Most organizations today have mission statements, purpose statements, official visions, and little cards with the organization's values. But precious few of us can say our organization's mission statement has transformed the enterprise. And there has grown an understandable cynicism around lofty ideals that don't match the realities of organizational life.

The first obstacle to understanding mission is a problem of language. Many leaders use *mission* and *vision* interchangeably, or think that the words -- and the differences between them -- matter little. But words do matter. Language is messy by nature, which is why we must be careful in how we use it. As leaders, after all, we have little else to work with. We typically don't use hammers and saws, heavy equipment, or even computers to do our real work. The essence of leadership -- what we do with 98 percent of our time -- is communication. To master any management practice, we must start by bringing discipline to the domain in which we spend most of our time, the domain of words. The dictionary -- which, unlike the computer, is an essential leadership tool -- contains multiple definitions of the word *mission*; the most appropriate here is, "purpose, reason for being." *Vision*, by contrast, is "a picture or image of the future we seek to create," and *values* articulate how we intend to live as we pursue our mission. Paradoxically, if an organization's mission is truly motivating it is never really achieved. Mission provides an orientation, not a checklist of accomplishments. It defines a direction, not a destination. It tells the members of an organization why they are working together, how they intend to contribute to the world. Without a sense of mission, there is no foundation for establishing why some intended results are more important than others.

But, there is a big difference between having a mission statement and being truly mission-based. To be truly mission-based means that key decisions can be referred back to the mission -- our reason for being. It means that people can and should object to management edicts that they do not see as connected to the mission. It means that thinking about and continually clarifying the mission is everybody's job because, as de Geus points out, it expresses the aspirations and fundamental identity of a human community. By contrast, most mission statements are nice ideas that might have some meaning for a few but communicate little to the community as a whole. In most organizations, no one would dream of challenging a management decision on the grounds that it does not serve the mission. In other words, most organizations serve those in power rather than a mission.

This also gives some clue as to why being mission-based is so difficult. It gets to the core of power and authority. It is profoundly radical. It says, in essence, those in positions of authority are not the source of authority. It says rather, that the source of legitimate power in the organization is its guiding ideas. Remember, "We hold these truths to be self-evident..."? The cornerstone of a truly democratic system of governance is not voting or any other particular mechanism. It is the belief that power ultimately flows from ideas, not people. To be truly mission-based is to be democratic in this way, to make the mission more important than the boss, something that not too many corporations have yet demonstrated an ability to do.

While this might appeal to our ideals, living this way is extraordinarily challenging. We are all closet authoritarians. For most of us it is the only system of management we have ever known, starting in school. To be mission-based, and to be values-guided, is to hold up lofty standards against which every person's behavior can be judged. Moreover, mission is inherently fuzzy, abstract. It is so much easier to make decisions based on "the numbers," habit, and unexamined emotions. To be mission-based requires everyone to think continuously.

To be mission-based means that those in positions of authority are not the source of authority.

But it can be done, and when done it can work. The largest commercial enterprise in the world, in terms of market value, is not Microsoft, General Electric, or Mashushita. It is VISA International, whose annual volume exceeded \$1.25 trillion in 1997. If its different member organizations' balance sheets of VISA products were combined and assessed according to common banking practices, it is estimated that its market value would exceed \$333 billion. But VISA is not a typical corporation. It's a network of 20,000 owner-members, who are simultaneously one another's "customers, suppliers, and competitors," in the words of founding CEO Dee Hock. VISA's innovative governance system grew from an extraordinary effort to clarify purpose, which, after several years, emerged as: "to create the world's premier system for the exchange of value." "Truly clarifying purpose and the principles which elaborate our deepest beliefs can be the hardest work you will ever do," says Hock. "But without it, there is no way to create an enterprise that can truly self-organize, where you can balance broadly distributed decision-making function and control at the most local level with coherence and cohesion at any scale up to the global."

Define Vision

THE second requirement for innovation -- define results -- is easier in some ways. Managers by nature are pragmatic; ultimately they are concerned about results and must concentrate on how, not just why. The danger is that short-term goals can obscure larger purposes. Here again, language matters. After all, vision -- an image of the future we seek to create -- is synonymous with intended results. As such, vision is a practical tool, not an abstract concept. Visions can be long term or intermediate term. Multiple visions can coexist, capturing complementary facets of what people seek to create and encompassing different time frames. Leaders who lack vision fail to define what they hope to accomplish in terms that can ultimately be assessed. While mission is foundational, it is also insufficient because, by its nature, it is extraordinarily difficult to assess how we are doing by looking only at the mission. For this we need to stick our necks out and articulate "an image of the future we seek to create."

Results-oriented leaders, therefore, must have both a mission and a vision. Results mean little without purpose, for a very practical and powerful reason: a mission instills both the passion and the patience for the long journey. While vision inspires passion, many failed ventures are characterized by passion without patience.

Clarity about mission and vision is both an operational and a spiritual necessity. Mission provides a guiding star, a long-term purpose that allows you to balance the inevitable pressures between the short term and the long term. Vision translates mission into truly meaningful intended results -- and guides the allocation of time, energy, and resources. In

Passion comes from what you contribute rather than what you get.

my experience, it is only through a compelling vision that a deep sense of purpose comes alive. People's passions flow naturally into creating something that truly excites them. Taken together, mission and vision fill a deep need: All human beings have a purpose, a reason for being. Most of us believe that there is something more important than what you can buy, acquire, or market. The passion at the heart of every great undertaking comes from the deep longing of human beings to make a difference, to have an impact. It comes from what you contribute rather than what you get.

Now, these ideas might sound good, but if we take a deeper look we realize that they are radical statements in today's society. The return-on-investment orientation -- the view that people go to work primarily for material gain -- is the bedrock of our beliefs about people in contemporary industrial society. Thus, the real discipline of innovation not only threatens established power relations, it also runs counter to our cultural norms.

Consider, for example, the saying "People do what they're rewarded for." What management is about in many people's minds is creating the right set of incentives and rewards so people will do what the enterprise needs them to do. As W. Edwards Deming saw clearly, our system of management -- in all organizations -- is based almost totally on extrinsic motivation. It is pure Theory X thinking. It is why, in the last years of his life, Deming said that "our system of management has destroyed our people." This may not be our intent, but it is the consequence of our actions. If we didn't view the human being as an amoeba that does only what it's rewarded to do, then why would we spend so much time worrying about incentives?

Just ask people in the organization if they think the senior management really believes that people come to work every day, as Deming said, "seeking joy in work." That's intrinsic motivation, and it's assumed to be in scarce supply in today's management. Joy in work comes from being true to your purpose. It is the source of the passion, patience, and perseverance we need to thrive as individuals and as organizations. However, people cannot define results that relate to their deeper passions unless leaders cultivate an environment in which those passions can be safely articulated.

While there are some extraordinarily principled and value-driven organizations, the defining characteristic of far too many enterprises is cynicism. And cynicism comes from disappointment. As the saying goes, "Scratch the shell of any cynic and you'll find a frustrated idealist." Make speeches to your organization about upholding high ideals or contributing to a better world, and most people will roll their eyes (if they're in corporations they'll almost certainly roll their eyes). That reaction is the product of thwarted expectations, and it is the reason so many organizations fail to innovate. They are afraid to let the genie -- passionate purpose -- out of the bottle. With good cause. Passion is a powerful force, but, when frustrated, it is also dangerous.

Assess Results

THE third dimension of innovation is assessment. We must continually gauge how we can best use our scarce resources. As managers we all know what assessing is about; it's one of the fundamental activities of all management.

Assessment has two components: measurement and interpretation. The problem is that the second and more difficult component of assessment -- interpretation -- requires understanding, participation, and physical presence. Statistical measures of an activity may be disappointing, but if you're actually involved, you may see that people are engaged and learning. They may be on the brink of a breakthrough. Incomplete or premature assessment destroys learning. As Bill O'Brien, retired CEO of Hanover Insurance, says, "managers are always pulling up the radishes to see how they're growing." Thus assessment is fundamentally about awareness and understanding without which any set of measures can

mislead. Someone sitting on the outside judging, rather than fully understanding, can make effective assessment impossible.

But with awareness comes yet another problem, as Drucker has pointed out: after assessing results, we must be willing to abandon what doesn't work. Abandonment often precedes innovation. It clears the decks for trying something new. Again, this sounds so simple. Yet, how many of us have ever found that it is difficult for organizations to abandon

"I worry about organizations that cannot fire one person but can fire a thousand."

what isn't working? To stop doing something that has been done for years? To remove a person from a position who really does not have credibility with his or her colleagues? "I worry about organizations that cannot fire one person but can fire a thousand," says O'Brien. There are good reasons why abandonment is a challenging organizational practice.

The first step in practicing abandonment is openness -- creating an environment in which, at a critical moment, somebody with lots at stake can tell a boss, "This is not working." Building a culture in which people can express their views without fear of reprisal is a huge challenge for most organizations.

How often, for instance, have you noticed that when a group of people gets together informally the night before a staff meeting, their conversation bears almost no resemblance to the same group's discussion at the official meeting the next day? How many meetings have you attended where the real meeting takes place not in the conference room but in the hallway or the rest room afterward, when the very people who asked lots of intelligent questions in the meeting say, "What nonsense." Furthermore, when people do feel safe enough to speak openly in a meeting, insiders, those with the most on the line, tend to discount what is said. When, for instance, a junior salesperson, a young woman (or an old one), tells the boss something is not working, you see how quickly an ostensibly open organization can reject unwelcome news.

I've never seen an institution that isn't deeply afflicted with these dynamics. Even the best managed corporations in the world fall short of their full potential, mostly because people know that the official meeting is not where the issues are really discussed or decided.

The litmus test for measuring openness is simple: How fast does bad news travel upward?

In most organizations good news travels upward faster than the speed of light. But failure is denied before the word can be spoken: "Whose failure? What failure? That wasn't a failure, we just didn't have enough funding." Make no mistake, the process of innovation is a process of failure. By nature, innovation is a continual learning process. You must experiment, assess, reflect on mission, identify results, experiment some more. Yet from an early age in school, and continuing in work, we have been trained to avoid failure, and thus real learning.

The process of innovation is a process of failure.

Chris Argyris, in his 1991 *Harvard Business Review* article "Teaching Smart People How to Learn" lays out a basic problem of learning in organizations. He notes that most people in organizations are quite smart, but that to succeed, they've learned to find correct answers and cover up incorrect ones. This undermines the inquiry skills essential to real innovation and leadership because these skills revolve around how to "uncover" what isn't working in ways that do not invoke defensiveness.

Consider this true story: A top management team of exceptionally bright, committed people is discussing key issues facing a major American corporation. In three hours, not a single genuine question is asked. Of course, trivial questions get asked, like "Didn't we go over this issue two years ago?" Or, "Don't our experienced salespeople disagree with that view?" Or, "When's lunch?" Each implies that we are wasting our time with the subject, that we already have the answer. Genuine inquiry starts when people ask questions to which they do not have an answer. That is rare in organizations. In most large corporations, people rise to the top because they're very good at a combination of two factors: merit and gamesmanship. In a good organization the mix may be 50/50; in a great one, 80/20. The problem is that even the best leaders -- those who create a terrific impression and get results -- actually know very little. In today's world how could they know much? Obviously, organizations want people at all levels who can produce results. But often the most important act of executive leadership is the ability to ask a question that hasn't been asked before, the ability to inquire, not just dictate or advocate. Unfortunately, most people in executive leadership positions are great at advocacy but poor at inquiry.

These are just a few of the issues revolving around effective assessment. This is an extraordinarily complex issue, with complex intellectual issues ("How do we know how long the radishes should take to grow?"), complex emotional issues (Who is not attached to ideas they believe in, many of which are wrong?), complex interpersonal issues ("I didn't want to tell him what I really think because it would hurt his feelings") and complex political issues ("But it is the boss' pet program that is not working and the company has invested millions in it") It is one thing for an organization with Peter Drucker advising it to "abandon practices that are not working." It is another for the rest of us who can only learn from peers.

For those reasons, assessment is a core research initiative within the new Society for Organizational Learning (SoL), leading companies, researchers, and consultants working together to advance the state of the art of how organizations learn. We are coming to believe that there is a big difference between "assessment for learning" and "assessment for evaluation." Because most of the assessment we have encountered in our lives was the latter, the very word tends to invoke defensiveness. But no learning can take place without continuous assessment. The key is that the assessment is done by the learners and the purpose is to learn, that is, to enhance capacity to produce intended outcomes, not to judge someone else.

From Habit to Discipline

TAKEN together, mission, vision, and assessment create an ecology, a set of fundamental relationships forming the bedrock of real leadership. These tools allow people, regardless of job title, to help shape their future. The failure of Industrial Age institutions to embrace the three components of innovation shows how far there is to go to meet the challenge of the next century. Moreover, Drucker is exactly right that innovation is a "discipline," a word having its root in the Latin *disciplina*, one of the oldest words for "to learn." Many have talent but real learning requires discipline, the process through which we draw out our potential through commitment, practice, passion, patience, and perseverance. It is a difficult process, but there is reason for hope. The discipline of innovation is practiced successfully in many domains of human affairs, notably the arts and science. Interestingly, when it is practiced effectively it is invariably done so within communities, among diverse individuals who share a common purpose. Energized communities, for example,

characterize most periods of innovation in the arts, such as the birth of impressionism, or modern dance, or jazz. Likewise, science at its best is an intensely collaborative undertaking; even when the "collaborators" are strong individuals competing with one another, their competition occurs within a larger mediating community. Likewise in business, real innovation is often much more collaborative than at first appears. For example, studies such as those by MIT's Eric von Hippel have shown that many of the best new product innovations come from customers. The problem is that most companies are not organized to tap this source of innovative thinking.

My guess is that mastering the discipline of innovation will require organizations working together, learning from one another's efforts. We must learn to do what artists have done for millennia, what scientists do when science works. To do something new, people invariably experience periods of profound discomfort. Confronting the threat and uncertainty such change brings is best done together, not in isolation.

Several years ago, at one of our early SoL community meetings (then called the MIT Organizational Learning Center), a manager approached me and said, "I see exactly what you're talking about, all these organizations learning from one another. This is Alcoholics Anonymous for Managers." I laughed, but I think he hit the nail on the head. We are all addicted to maintaining control, to avoiding failure, to doing things the way we always have. We can't help it. And we need one another to break the habit.