We are in the middle of a genuine techno-economic revolution. This is the kind of moment that takes up whole chapters of history books. Fifty to 60 years from now, entire history chips will be devoted to this decade, recounting how well—or how badly—the great institutions of the mature industrial economies were able to reinvent themselves for the Information Age. Of all those institutions, the one whose successful reinvention will be the most important, is the oldest institution. Older by far than democracy or capitalism, the university and higher education will go through truly revolutionary times over the next 5, 10, 15 years. And in order to succeed in revolutionary times, they will have to be revolutionary themselves.

—David Pearce Snyder
January/February 2006 Facilities Manager

David Pearce Snyder is certainly not alone in his conviction that revolutionary times lie ahead for all of us. Perhaps the only thing we can absolutely count on is change. Book store shelves are lined with business, management, psychology, and self help manuals for dealing with the ever-increasing rate of change. Entrepreneurs are convinced that he who can best predict what lies ahead will have the competitive edge, and thus the role of futurists like David Pearce Snyder is taking on increased importance. We are all looking for suggestions on how to survive and preferably thrive in this era of rapid change. New “gurus” are popping up every day—on book shelves, in DVDs, and on the lecture circuit—offering their personal brand of sage advice. But where do you turn? Who should you believe?

A great place to start is with three men—W Edwards Deming (1900-1993), Stephen Covey (1932- ), and Peter Senge (1947- )—each of whom has gained considerable followings in recent years, but not for radically new ideas of how to prepare for the future and deal with rapid change. Rather, each of these individuals, in his own way, has advocated a return to the basics of focusing on the individual employee, developing a clear vision, and thinking in terms of total systems. I believe they would all agree that the only way to “thrive on change” is to be well rooted in these basic concepts. (Note: Although Dr. Deming passed away in 1993, his followers and teachings are as strong today as when he was alive.)

While Deming speaks in terms of 14 points, Covey espouses 7 habits, and Senge describes 5 disciplines, each readily admits there is nothing new in their teachings other than a new way of looking at some fundamental principles, which can foster wiser decision-making. In fact, much of what they preach is so basic, it has been described as “nothing more than common sense.” All three of these gentlemen are strong advocates for returning common sense and human judgment to the decision-making process. Since success or failure in any endeavor is inevitably linked to a series of wise or foolish decisions, and since the pace of change drives the pace of
Covey believes “a life of integrity is the most fundamental source of personal worth.”

decision-making, it might be worth listening to what these three men have to say on the subject.

**Individual Transformation**

All organizations, corporations, governments, societies, and institutions have as their basic element the individual person. The success of any collection of individuals is determined by the effectiveness with which these individuals work together toward common goals. To deal with the complexity and pace of today’s problems and challenges, individual people must work together in teams. Teamwork requires trust—a two-way, interdependent proposition. But trust cannot grow between and among individuals until each person learns to “self-trust.” The key element of self-trust is integrity—the capacity to live what one believes. The simple truth is this—people cannot live or work together effectively, they cannot make wise decisions, they cannot adapt to change, unless they can first trust themselves.

Stephen Covey’s first three habits are intended to develop personal integrity—to raise the individual from a state of dependence to one of independence. In his words:

The root is character: the foundation of integrity which builds the trustworthiness. Everything else builds on top and is made effective by it. … If you are an effective manager of your self, your discipline comes from within; it is a function of your independent will. You are a disciple, a follower, of your own deep values and their source. And you have the will, the integrity, to subordinate your feelings, your impulses, your moods to those values.

Covey believes “a life of integrity is the most fundamental source of personal worth.” People who do not think their life has value will have trouble respecting other people. Those with low self-esteem become easily defensive, are quick to blame others, and lack the courage of their convictions. These individuals tend to exhibit a conservative, risk-adverse attitude toward change, preferring to stick with the comfort and stability of the status quo. If they could only understand that in today’s era of constant change, nothing could be more destabilizing. Dr. Covey goes on to explain that reaching a level of strong integrity and high independence is not sufficient in today’s complex, interdependent world:

Independent thinking alone is not suited to interdependent reality. Independent people who do not have the maturity to think and act interdependently may be good individual producers, but they won’t be good leaders or team players. They’re not coming from the paradigm of interdependence necessary to succeed in marriage, family, or organizational reality. … Integrity in an interdependent reality is simply this: you treat everyone by the same set of principles. As you do, people will come to trust you.

So we must begin with each individual player, helping each to develop a sense of personal integrity which will lay the foundation for relationships with others based on trust.

In his last book, published shortly before his death when he was nearly 93 years of age, Dr. W. Edwards Deming has this to say:

The first step is transformation of the individual… The individual, transformed, will perceive new meaning to his life, to events, to numbers, to interactions between people… He will have a basis for judgment of his own decisions and for transformation of the organizations that he belongs to. The individual, once transformed, will:

- Set an example…
- Be a good listener…
- Continually teach other people…

The word metanoia is more suitable than transformation. Metanoia… means penitence, repentance, reorientation of one’s way of life, spiritual conversion.

While Deming tends to be thought of primarily as a statistician concerned with reducing process variation, he understood full well that the great variable in any process is human behavior. We all make decisions based upon our best prediction of the outcome, but when human behavior is inconsistent, there is no way to accurately predict. And the key to consistent behavior is integrity which produces trustworthiness which earns trust—trust in the sense that people will act for the right reasons, exercise common sense, exhibit sound judgment, and respect one another.

Peter Senge is also fond of the term metanoia, which he defines as a “shift of mind.” He likens metanoia to the process of “learning,” which also requires “a fundamental shift or movement of mind.” Growing as a person, adapting to the times, moving from a dependent to an independent to an interdependent state, making wise decisions that affect the future—the capacity to do all these things hinges on our ability to learn. In Senge’s words:

Real learning gets to the heart of what it means to be human. Through learning we recreate ourselves. Through learning we become able to do something we were never able to do. Through learning we perceive the world and our relationship to it. Through learning we extend our capacity to create, to be part of the generative process of life.

This, then, is the basic meaning of a “learning organization”—an organization that is constantly expanding its capacity to create its future.
Covey, Deming, and Senge are all strong believers in the value of vision, not in the sense of determining a final destination, but rather setting a course toward a more desirable future state.

The key is that learning must start on an individual level. In many ways the process of learning, or as Senge puts it, “expanding the ability to produce the results we truly want in life,” is akin to rising through Maslow’s hierarchy of needs. Most “knowledge workers” today have moved beyond the deficiency needs, to where they are “motivated primarily by social, esteem, and self-actualizing needs.” This process requires individual learning and growth throughout our lives. The more individuals grow, the better they are able to interact on a professional basis, appreciating the fact that differences between people can be complementary just as easily as conflicting. What motivates individuals is a function of where they reside on the “growth” scale, be it Maslow’s or Senge’s or Covey’s or anyone else’s. Kazuo Inamori, founder of Kyocera Corporation, says this:

> Whether it is research and development, company management, or any other aspect of business, the active force is “people.” And people have their own will, their own mind, their own thinking. If the employees themselves are not sufficiently motivated to challenge the goals of growth and technological development … there will simply be no growth, no gain in productivity, and no technological development.

Covey, Deming, and Senge all agree that before groups of people can grow and deal with change, the individuals comprising those groups must develop a sense of personal integrity, transform and reorient their way of thinking, and, by learning, move along the path toward self actualization. Only then can they embrace change as an exciting opportunity rather than fearing it as a departure from the “tried and true” comfort zone.

Thus the first responsibility of leadership is to help people develop and grow as individuals, to self actualize, to reach their maximum potential. This “people first” approach is easier said than done, however. In the words of Stephen Covey (with a little help from Dr. Deming):

> American management has given lip service to tapping the potential of its most important resource—its people. “The greatest waste in America is failure to use the abilities of people,” laments Deming. The first fundamental transformation of thinking required of American management is to develop new basic attitudes toward the intrinsic dignity and value of people, of their “intrinsic motivation” to perform to their maximum capabilities.

Vision

Once the individuals are “ready,” the second responsibility of leaders is to bring them together in a coherent way, encouraging them to move in a common direction. Covey, Deming, and Senge are all strong believers in the value of vision, not in the sense of determining a final destination, but rather setting a course toward a more desirable future state. But until people truly believe that they can affect some control over their lives, the concept of vision is nothing more than wishful thinking—a dream state. Stephen Covey refers to his first habit, Be Proactive, as the “habit of personal vision.”

When Covey encourages people to be proactive, he means they must come to understand that each individual has the ability to choose his or her response to any situation. With that power to choose comes the burden of accepting responsibility for our actions, but also the opportunity to plot the course of our lives. In essence, each person has the power to influence his own future—to progress along the road to self actualization. In the words of Henry David Thoreau, “I know of no more encouraging fact than the unquestionable ability of man to elevate his life by conscious endeavor.” Noel Tichy and Stratford Sherman, writing about the changes made by Jack Welch at General Electric, put it this way:

> No one has absolute control over his or her destiny. The point is to control what you can. … “control your own destiny or someone else will” is a philosophy of life basic enough to apply to anyone. … The meaning is simple: Take responsibility.

Covey’s second habit, Begin with the End in Mind, addresses the power and importance of long-range personal vision that encompasses who you are, what you believe, and what you want to accomplish. It is impossible to deal with constant change, to keep your life on course, without the foundation provided by a personal vision. As Covey puts it:

> People can’t live with change if there’s not a changeless core inside them. The key to the ability to change is a changeless sense of who you are, what you are about and what you value.

Deming takes the concept of vision from the personal level to the group or organizational level. His Point #1 (revised) states: “Create and publish to all employees a statement of purpose of the aims and purposes of the company. The management must demonstrate constantly their commitment to this statement.” His message is simply this: any organization has two kinds of concerns—those that have immediate or short-term impacts and those that have long-term impacts. He stresses the need for balance between these concerns:

> It is easy to stay bound up in the tangled knots of the problems of today, becoming ever more and more efficient in them. But no company without a plan for the future will stay in business.

Continued on page 40
Save money. Manage operations. Look good.

Christine Cruz  
Safety Coordinator  
Wesleyan University, CT  
• Private university  
• 2,700 full-time undergraduate  
  and 195 graduate students  
• 23,355 work orders completed in 2005

Work Order Management
Success

“With MaintenanceDirect, we are able to run reports on how much money we’re  
spending and see how much overtime is being worked.”

“SchoolDude has helped save time and money.  
And because we’re saving money, we are able to buy more materials, take on  
other projects, and keep better maintenance on equipment.”

“SchoolDude is a big part of my workday, and it has made me more successful.”

Visit www.schooldude.com/success for the full client success story and many more!

Online tools for managing colleges and universities.™

Start your own work order management success story with MaintenanceDirect!  
• Increase efficiency by managing work orders online from request to completion  
• Maximize budgets and resources by reducing operating costs  
• Improve customer service with faster response times  
• Effectively track and report on work orders and related costs

Learn more in a free, online MaintenanceDirect seminar: www.schooldude.com/seminars

Visit on the Web: www.schooldude.com  
Call now: 1-877-868-DUDE  
Email now: salesrequest@schooldude.com
Continued from page 38

Peter Senge, perhaps better than the other two, emphasizes the value of that “plan for the future,” especially when it is shared by all the members. He contends:

A shared vision is … a force in people’s hearts, a force of impressive power. … Few, if any, forces in human affairs are as powerful as shared vision. … Visions are exhilarating. They create the spark, the excitement that lifts an organization out of the mundane. … a shared vision changes people’s relationship with the company. It is no longer ‘their company;’ it becomes ‘our company.’ A shared vision is the first step in allowing people who mistrusted each other to begin to work together. It creates a common identity. In fact, an organization’s shared sense of purpose, vision, and operating values establish the most basic level of commonality.

Senge places his emphasis on the concept of shared vision. Venturing out into the unknown frontier is scary, and individuals on their own will hesitate to take the risks necessary to try something new. But when bonded together by a “shared vision” of a preferred future, it becomes much easier to jointly summon the courage to make that leap of faith.

The challenges that this era of constant, rapid change will place on us individually and jointly will demand the development of a common focus, drawing us forward, and the place on us individually and jointly will demand the development of a common focus, drawing us forward, and the organization out of the mundane. … a shared vision changes people’s relationship with the company. It is no longer ‘their company;’ it becomes ‘our company.’ A shared vision is the first step in allowing people who mistrusted each other to begin to work together. It creates a common identity. In fact, an organization’s shared sense of purpose, vision, and operating values establish the most basic level of commonality.

Senge places his emphasis on the concept of shared vision. Venturing out into the unknown frontier is scary, and individuals on their own will hesitate to take the risks necessary to try something new. But when bonded together by a “shared vision” of a preferred future, it becomes much easier to jointly summon the courage to make that leap of faith.

The challenges that this era of constant, rapid change will place on us individually and jointly will demand the development of a common focus, drawing us forward, and the leadership to stay the course. Yet the leaders cannot impose a shared vision upon the group. It must germinate from within, from the bedrock formed by the personal vision of each member. Peter Senge says it best:

Shared visions emerge from personal visions. … caring is personal. It is rooted in an individual’s own set of values, concerns and aspirations. This is why genuine caring about a shared vision is rooted in personal visions. … Organizations intent on building shared visions continually encourage members to develop their personal visions. If people don’t have their own vision, all they can do is ‘sign up’ for someone else’s. The result is compliance, never commitment. On the other hand, people with a strong sense of personal direction can join together to create powerful synergy toward what I/we truly want.

**Systems Thinking**

Turning a vision into reality requires an understanding of complex, interrelated, interdependent systems. Senge claims:

[T]he unhealthiness of our world today is in direct proportion to our inability to see it as a whole. Systems thinking is a discipline for seeing wholes. It is a framework for seeing interrelationships rather than things, for seeing patterns of change rather than static ‘snapshots.’

Deming’s *Theory of Profound Knowledge* is all about dealing with “the whole” rather than “the parts.” He defines a system as “a network of interdependent components that work together to try to accomplish the aim of the system.” In this context, the aim could be the vision of an organization. Deming stresses the need to understand the variation that is naturally occurring in any system, the manner in which systems learn, and the way people behave in a system—the theory of psychology. He warns that adjusting any part of the system, without an understanding of the relationship of the part to the whole, is nothing more than tampering and tends to cause unintended negative effects in the long run.

When working within complex systems (like institutions of higher learning), decision-making becomes a circular process of developing a theory of cause and effect, testing the theory over time, measuring the results, and refining the theory as necessary. This process is commonly called the Plan-Do-Check-Act cycle. The objective is always to optimize the performance of the total system, much the way a quality orchestra performs when all the individual sounds blend properly. The whole becomes something different—something greater than the sum of its parts.

In Covey’s terms, this is to **Synergize**, his sixth habit. He claims the key to developing optimization or synergy when dealing with interdependent relationships is to value the differences. Learning, or, as Deming would say, re-theorizing cannot take place where everyone shares the same beliefs. We would still envision ourselves living on a flat earth if someone had not come along with a different theory and the courage to test it. In today’s rapidly changing world, it is all the more important to listen to other points of view, to “get out of the box” and expand our horizons—but that takes a high degree of self-awareness and inner strength. As Covey says:

Insecure people think that all reality should be amenable to their paradigms. They have a high need to clone others, to mold them over into their own thinking. They don’t realize that the very strength of the relationship is in having another point of view. Sameness is not oneness; uniformity is not unity. Unity, or oneness, is complementariness, not sameness. Sameness is uncreative…and boring. The essence of synergy is to value the differences.

Systems take on a life of their own. They develop a certain character and culture based upon the interconnectedness of the parts. Deming emphasizes that the output of any system is determined more by the system itself, by the way the various parts have been structured to interact, than by the best efforts of the various individuals working within the system. Working harder is seldom the answer; changing the system or process usually is.

Systems exhibit certain characteristics which Peter Senge refers to as the “Laws of the Fifth Discipline.” Problems experienced today are generally the result of yesterday’s solution to

Continued on page 42
It’s Plain. It’s Yellow. It Works.

Work Order Control

Is your CMMS overburdened with:
• Vent radiation in 204 Richards Hall
• No heat complaints in Admin Building
• Fan coils not operating in Science Building
• Valve seats need replacing in Lawrence Hall
• Noise in the pipes above the Chancellor’s office
• See Residence Hall Director about a heating/cooling problem

Tired of dealing with these routine problems year after year, season after season? One practical solution can solve them all and control the work orders by simply eliminating them.

How much do you want to save?

• Improves system performance
• Lowers energy expense
• No manual bleed at start up
• Easy installation, new or retrofit
• 3/4” to 36” pipe size, and flows up to 30,500 GPM

Spirotherm, Inc.
25 N. Brandon Drive
Glendale Heights, IL 60139
800-323-5264
www.spirotherm.com
info@spirotherm.com
Continued from page 40

another problem in another part of the system. In this sense, cause and effect are not closely related in time and space. Lack of knowledge of the complex interrelationships can result in tampering which tends to create a larger problem in a different place and at a different time. It is crucial that all players within the system, from the lowest level to the most senior, understand how their role fits into the aim or vision of the system. Actions taken or decisions made by individual players must consider the “whole” perspective with a clear understanding of the interactive ricocheting that can result.

Given the rate of change taking place around us, it is tempting to take quick actions to generate immediate results. Sometimes the short-term results are impressive, but all too often the long-term impact on the system is disastrous. Listen to Peter Senge summarize this need for systems thinking:

[M]ost of the problems faced by mankind concern our inability to grasp and manage the increasingly complex systems of our world… Today, the arms race, the environmental crisis, the international drug trade, the stagnation in the Third World, and the persisting U.S. budget and trade deficits all attest to a world where problems are becoming increasingly complex and interconnected.

Today, systems thinking is needed more than ever because we are becoming overwhelmed by complexity. Perhaps for the first time in history, humankind has the capacity to create more information than anyone can absorb, to foster greater interdependency than anyone can manage, and to accelerate change faster than anyone’s ability to keep pace.

Conclusion

Everywhere we look, the irresistible force of change is being felt. The strategy of “doing things the way we’ve always done them,” which for a long time meant comfort, stability, and security, is now a sure formula for disaster. The ability to adapt and change with the times is essential. But with so much complexity and so many unknowns, how can anyone do more than merely react and hope to survive one day at a time?

W. Edwards Deming, Stephen Covey, and Peter Senge have each approached this challenge in his own way, based upon their own experiences spanning different generations. But they seem to agree on three very basic, but essential ingredients required for today’s leaders to survive and, hopefully, succeed:

• Focus first on each individual, helping him/her to develop as a person. Everyone needs to develop a sense of self-worth, self-confidence, self-mastery, and inner-strength, which ultimately breeds integrity. Only then will they permit the vulnerability required by effective teamwork, partnering, and interdependent relationships.

• Develop a shared vision of a brighter tomorrow. Everyone needs to be inspired and drawn toward the prospect of a more desirable future state. Such a vision helps leaders stay on course during turbulent times, and provides each person a frame of reference for making decisions.

• Promote systems thinking at all times. Educate all players as to the complex interrelationships of the system, the organization, the process. Each player needs to value the way differing talents and opinions complement the total system, and understand how his or her actions and decisions affect the whole.

These ingredients for success are not startling new revelations developed for a time of revolutionary change, but a return to the basics of common sense, prudent judgment, and respect for one another. Perhaps the radical changes we are experiencing do not require new solutions, but rather a new way of thinking about basic truths. Perhaps that is what T.S. Eliot understood when he observed:

We must not cease from exploration and the end of all our exploring will be to arrive where we began and to know the place for the first time.

Endnotes:


