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THE NEW INFOCRACIES: IMPLICATIONS FOR LEADERSHIP

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MAY/JUNE 2000

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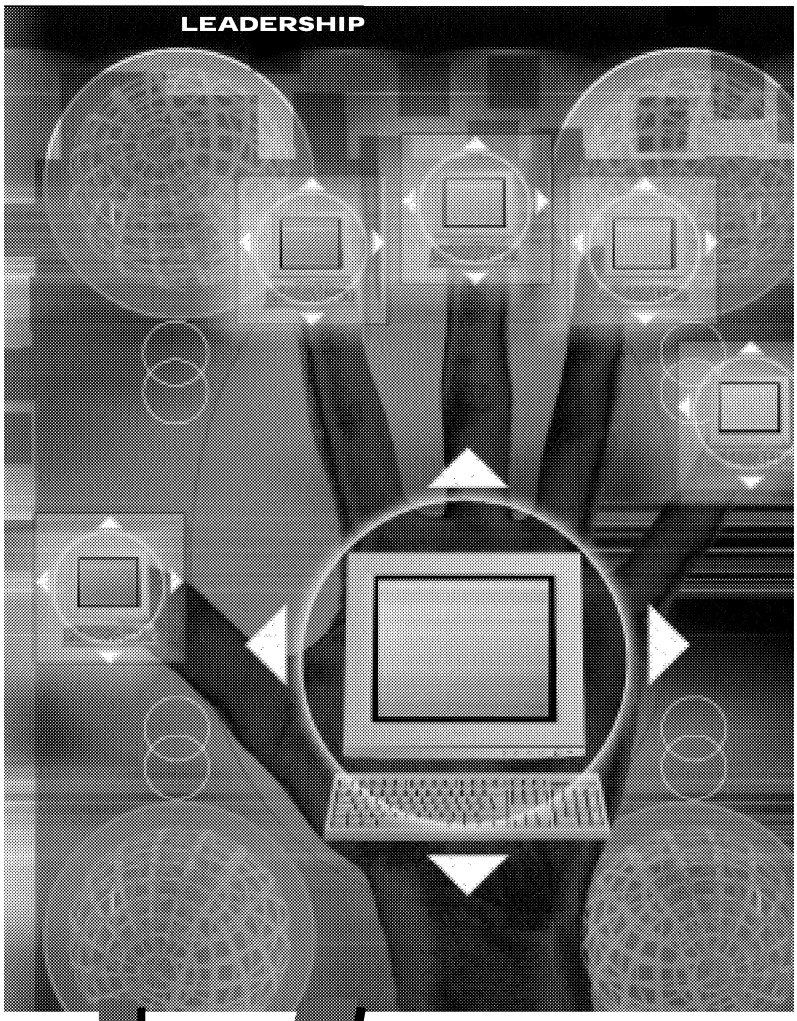


the new infocracies

IMPLICATIONS FOR LEADERSHIP

BY JAMES G. CLAWSON

To understand the challenges of leading and managing in an infocracy today, just consider these common business scenarios: The account manager of a global company has to struggle to get peers in Sydney, Johannesburg, Kuala Lumpur and Paris to pay attention to his—and their—client. A rapidly growing financial services firm is built around an extraordinary database that allows it to segment its customer and employee base more than 6,000 different ways. A financial services firm grows by acquisition, using a sophisticated merger model based on a fast, accurate and detailed database. A huge insurance company relies heavily on an enormous database and computer network to direct its phone business. A Federal Reserve Bank realizes that it must reorganize its employees in order to utilize new, emerging technology. A global factory automation company struggles to eliminate bureaucracy.

In all of these situations, the leaders or managers are learning how to function in the new, emerging "infocracies." The Information Age is creating a series of new organizational forms that are supplanting the bureaucracies of the Industrial Age. These infocracies create new dilemmas for leaders and demand different decision-making structures and avenues of influence. Some leaders are lagging behind, holding on to the bureaucratic principles of leadership with which they grew up. Others are forging ahead because they have to and learning the new habits and means of leadership.

INFOCRACIES?

Prior to the Industrial Revolution, Eastern and Western societies were largely stratified according to an aristocratic model, which conferred leadership and power by

birthright. Kings and noblemen (the leaders were almost always male) exercised extensive power over their subjects. While this male-dominated, lineage-based authority structure was codified around the 13th century with the formal adoption of primogeniture, it has actually been the dominant model for most of human history. Aristocrats were thought to be the primary possessors of the wisdom and the "right" to order and sustain society. The rights to govern and decide the fate of societies and their populaces ran, without fail, through the family line. Simply speaking, the underlying assumption that supported this arrangement could be summed up as "father knows best."

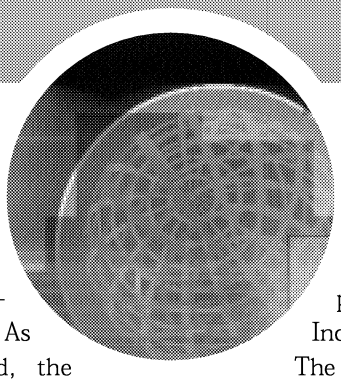
But the Industrial Revolution—as surely as, though less visibly than, the political revolutions in America and France—began to change all that. The advent of the steam engine during the late 18th century and the early 19th century, mass production techniques and petroleum spurred a change in the way societies viewed authority. People discovered that the dukes and the earls were ill prepared to administer the then new, emerging bureaucracies. Power gradually shifted to "offices" or in the French, "bureaus," which presumed a certain set of skills and abilities. This created a "succession" problem. Though it was relatively easy to identify the next king in an aristocracy, identifying the next person to hold the chief executive's office in the new Industrial Age required a wider-ranging search with a different set of criteria. As the new managerial system took hold, the underlying assumption shifted from "father knows best" to "the boss knows best."

In a world where few were educated enough to understand and deal with large-scale industrial problems, this assumption worked well enough. Large industrial organizations grew up during the 19th century with centralized decision-making structures and functionally specialized departments. Decisions that affected the organization as a whole filtered up to the chief executive. In an emerging industrial era, the titans of commerce were able to keep track of what was going on and, in general, to make decisions that grew their organizations. The personality and preferences of the Carnegies, Rockefellers, Fords, Sloans and Watsons of the world were stamped on their companies.

The transition from aristocracy to bureaucracy proceeded gradually. Indeed, it was nearly 100 years after the Industrial Revolution began that the German sociologist Max Weber codified the nature of bureaucracies in *The Theory of Social and Economic Organization*. His characterization of the tenets of bureaucracy, shown, is revealing. A comparison of Weber's summary with the tenets of aristocracies makes the differences clear.

WEBER'S BUREAUCRATIC PRINCIPLES

1. Law supercedes personal judgment.
2. "Offices" have responsibility.
3. Incumbents of those offices have authority.
4. Obedience is to the office, not the person.
5. Offices are bound by a rational system of division of labor.
6. Offices fit into a hierarchy of authority; every office is subject to another office.
7. Incumbents should learn to fit into their offices.



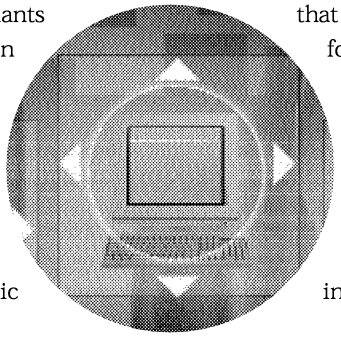
THE EMERGENCE OF INFOCRACIES

In the 20th century, "bureaucracy" took on a negative connotation. The term came to be synonymous with poor service, slow decision making, thick interdepartmental boundaries, a lack of flexibility and the notion of perpetuating itself. Being called a "bureaucrat" took on the quality of an epithet. Today's managers, unlike those of 150 years ago, would rather *not* be bureaucrats and instead aspire to being entrepreneurs, intrapreneurs or leaders of high-performing organizations. The negative connotations of "bureaucrat" are only a few of the many signs that another global paradigm shift of similar scale to that of the Industrial Revolution is currently under way.

The Industrial Age is yielding to what most commentators have termed the Information Age, a turbulent business environment that places a premium on continuous learning, rapid communication, adaptability and at its centre—information. In such an environment, many of the former strengths of the bureaucratic model—a firmly established chain of command, rigidly uniform procedures, a "boss knows best" attitude—have become serious weaknesses. In industry after industry, companies have undertaken radical restructurings in search of a new organizational model to suit the demands of the

Information Age. These new organizations have a number of groundbreaking features in common—features that attest to the widespread realization that the basis of power is no longer aristocratic lineage or office, but *information*. (see "Principles of Infocracies"). The suffix "cracy" refers to power. Aristocracy, therefore, is power based on lineage. Bureaucracy is power based on office. Infocracy is power based on information. (James Clawson, *Level Three Leadership*, chap. 1, Prentice-Hall, 1999).

The second figure is a diagram of the managerial paradigm shifts described above. The stimulants in the two shifts, the Industrial Revolution and the Information Revolution beginning with the advent of the computer in the 1950s, are shown at the top. Notice that the colour gradient indicates that the paradigm shifts were not instantaneous, but rather extended over long periods of time. In fact, we still have vestiges of the aristocratic system in place today in Japan, England and Thailand, for example. The slope on the Information Age transition is shown to be much steeper because it seems to be taking place more rapidly than the previous one. That said, there are many corporations and organizations today who that slipping on that slope, reluctant as they are to embrace and learn the distinctive features of an infocracy and what the implications of those features are for leadership. Where is your organization?



PRINCIPLES OF INFOCRACIES

1. Data supercedes policies and personal judgments.
2. Databases have responsibility.
3. Database interpreters have authority.
4. Obedience is to the data.
5. Interpreters are bound by converging interpretations of the data.
6. Interpreters link to other databases and their interpreters. Every interpreter is subject to these network nodes.
7. Interpreters should learn to understand their data.
8. Infocratic cultures tend to be non-defensive and data-driven.
9. Hierarchies tend to be flatter and more egalitarian.
10. Feedback flows in all directions.
11. Fear of arbitrariness declines as more and more decisions are based on data.

In 1960, in IBM's *Think* magazine, Warren Bennis predicted that bureaucracies were dying. He predicted that the ponderous decision making and functional divisions of the Industrial Age bureaucracy would render them obsolete. He was right. I too remember sitting in a room with Jack Welch, who presided over the extraordinary growth and prosperity of the General Electric company for 20 years, and hearing him tell a story about visiting a room full of upper middle level GE managers and leaders. He said he gave a talk and then opened the session up for questions and answers. As he listened to their questions, he realized that he didn't have the answers, and what's more, he realized that he couldn't have the answers. At this point he realized that he needed to begin dismantling the bureaucracy that GE had become. His well-documented "Work-Out" effort that spanned the late 1980's and early 1990s—and that continues today—was the result. He hired four main consultants and 24 "lead" consultants to work with each of the major GE divisions to reduce or eliminate bureaucracy. As a participant in that effort, I began to see how the bureaucratic form, once the very foundation of economic growth, had become a significant inhibitor of that growth.

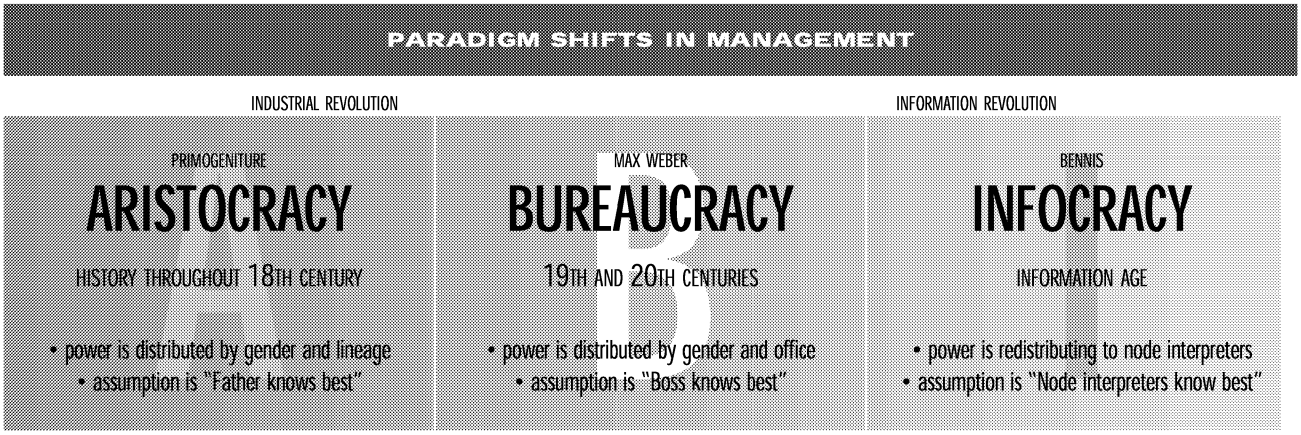
Infocracies share some characteristics with the bureaucracies they are replacing. They have not entirely abandoned hierarchy, and they have maintained certain internal policies, procedures and measurement systems in the interest of control and order. Leadership continues to be important. That said, Industrial Age bureaucracies were well represented by the pyramid-shaped organizational charts which have long been a fixture of the business world—the president at the top, the VPs in the next tier, and everyone aware of their place. Infocracies don't follow this blueprint. One very successful financial services company that a colleague and I visited recently has many characteristics of an infocracy. In fact an inquiry about the company's organization chart was met with "We don't have one. I guess we could sit down and I could explain it to you in a couple of hours, but it's not on paper and never has been." Information flow is the lifeblood of an infocracy, and in search of better circulation they have resorted to structures that have prompted a range of descriptive metaphors, from a network of neurons to a bowl of spaghetti.

Power in infocracies resides in no single person or office. Instead, it migrates to whomever is closest to the key

challenges facing the organization at any given time *and* who has access to the relevant data for making the appropriate decision. Proximity to these challenges gives such people an information-based expertise that upper management often cannot match. As a result, management takes on a supporting rather than a directing role.

Much of this support consists of marshalling, from various functional divisions, the teams of people who will be best suited to each challenge. As teamwork and information exchange become more crucial, the flow of content to merely break down the walls between one level of management and another, are even blurring the boundaries between the organization and its surroundings. As information—and therefore power—flows more freely between vendors and customers, between stakeholders inside the company and those in the outside world, the very distinction between "inside" and "outside" begins to lose meaning.

The central feature of infocracies is that decision-making power emanates from databases. Peter Drucker



activity becomes less like a vertical chain and more like a decentralized, team-based network.

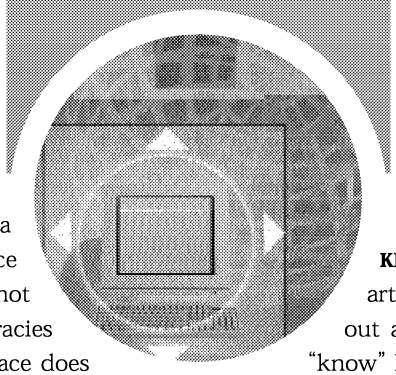
The key features of the new, emerging infocracies, as I see them, are shown in above. We have written these in part to show how they contrast with the principles of bureaucracy and also to add new features that seem to be emerging. We doubt that this is the "final" summary of the nature of infocracies and offer this definition as a starting point for the discussion about what infocracies are and how they are taking shape during this transitional period.

Faced with a business environment in which the rate of change continues to escalate, corporations in every industry have begun to adopt features of this revolutionary new model. Some of these changes are highly visible—such as the phasing-out of executive offices and other symbols of bureaucratic hierarchy—and in companies with a half-hearted commitment to the new vision, reform may go no deeper than this. Other firms, though, not and others have argued that it is not the information database that is the central feature, rather it is the "knowledge worker." While it is clear that data without interpretation is meaningless, it is also clear that intelligent organizational members are powerless without key information, regardless of their title or organizational authority. The history of bureaucracies over the last 30 years of the 20th century is nothing if not about how disconnected most senior managers became from their markets and the signals they were sending to them. The electronics, automobile, computer and public utility industries were all rife with examples of companies whose management missed the importance of the market signals they were receiving or had such poorly designed information systems that they never got the signals in the first place. Consequently, effective infocracies are emerging as organizations in which there is a general and effective marriage between access to relevant and current databases and the education and experience necessary to

interpret them. In this model, the interpreters become the leaders and key decision makers rather than the nominal head of the organizational hierarchy. In many organizations, these interpreters are distributed widely throughout their networks so that the senior executives tend to get reports of decisions made rather than requests to make them. An examination of each of these characteristics is beyond the space allotted to this piece. Nevertheless, their implications for changes in leadership drive to the fore. The rest of this article will identify some implications of the infocratic form for leadership, style and characteristics. This list will not include all of the implications of infocracies, but it may help us anticipate some directions

LEADERSHIP FOR INFOCRACIES

1 Away from command-and-control toward data-based persuasion.
2 Non-defensive, high EQ, SQ and CQ.
3 Away from knowing toward need to know.
4 Away from information hoarding to information sharing.
5 Values-based.
6 Higher emphasis on ethics.
7 Away from social Darwinian winners and toward transcenders.
8 Away from narcissicism toward joint recognition.
9 Away from high OH toward low OH.
10 Away from use and lose toward clean as you go.



INFOCRACIES AND THEIR IMPLICATIONS FOR LEADERSHIP

Because infocracies are based on power distributed by access to widely distributed information, they demand a different kind of leadership than bureaucracies. Power is gradually shifting from chief executives to node incumbents, people who operate at the confluence nodes of information networks and customer demands. Most of the management philosophies and techniques that business schools—and experience—have taught for the last 200 years have bureaucratic assumptions at their roots. In an infocracy, a bureaucratic-minded manager will face problems that the old tools simply will not fix. The leadership implications of infocracies are summarized in the sidebar. While space does not permit a detailed discussion of each of these evolving characteristics, it does allow us to at least introduce them.

AWAY FROM COMMAND-AND-CONTROL TOWARD DATA-BASED PERSUASION. Command-and-control leadership based on the bureaucratic model of POMC (planning, organizing, motivating, and controlling and its variants) becomes much less meaningful in a data-based power structure. When many have access to the data, the few are less able to decide unilaterally what should be done. Data-based persuasion becomes the dominant means of influence. With increasing data links to virtually every household, market research becomes more accurate. With links to suppliers and customers, production planning becomes more automatic. Leadership books that recognize this shift are already appearing. (Jay Conger, *Winning 'em Over: A New Model for Managing in the Age of Persuasion*; Simon and Schuster, 1998).

NON-DEFENSIVE, HIGH EQ, SQ AND CQ. Infocratic leaders need to be relatively non-defensive. When information of all kinds, including performance evaluations, is flowing in all directions, the chief executive is no longer immune to bottom-up feedback. The explicit development of emotional intelligence that keeps leaders from being high-jacked by defensiveness will become increasingly important. IQ will be insufficient, as the ability to read emotions in others (SQ) and to recognize the need to change (CQ) will be essential in persuading others to change when the data implies they ought to. Where bureaucracies tolerate and even encourage power-based tirades by senior people, infocracies will require a more level, evidence-based set of leadership communications.

AWAY FROM KNOWING TOWARD NEED TO KNOW. Mick McGill and John Slocum's article "Unlearning the Organization" points out a set of infocratic principles. Those who "know" how to run their businesses are becoming increasingly obsolete. Bureaucracies tend to promote people who know how to do a job; infocracies will promote people who have a thirst for learning and are willing to let go of yesterday's "knowledge" in the face of today's data. Jack Welch put it succinctly: "Face reality as it is, not as it was or as you wish it were."

AWAY FROM INFORMATION HOARDING TOWARD SHARING INFORMATION. Functional bureaucracies with their

competitive hierarchies tended to encourage comments like: "Sorry, that's on a need to know basis only." Infocracies encourage: "Yes, that's on a need to know basis, and you all need to know." Small and large information systems in infocracies will be designed to share data on all aspects of the organization with all its members so that those closest to the decisions will be supported immediately. The Chicago Park District worked extraordinarily hard in the mid-1990s under the leadership of Forrest Claypool and Carol Rubin (chief operating officer) to develop a data collection and distribution network that would describe the activities of the hundreds of facilities in its system. The challenge, as Claypool put it, was to "transform a moribund bureaucracy" into a vibrant organization that served the citizens of Chicago.

VALUES-BASED. Subordinates in bureaucracies ultimately obey the authority of an office regardless of the incumbent. Members of infocracies respond to data that confirm a certain direction. The choice of directions is a value-based, strategic set of decisions. Employees no longer say: "Yes, sir" to the superior officer, rather they ask: "Do we agree on our goals and future vision?" and then, "What evidence do you have that we are going in that direction?" This kind of persuasion presumes clarity of objective based on a set of values that have become increasingly more important. The first three leadership generations at the FMC Aberdeen plant in South Dakota established a set of values around which they designed and led the plant to extraordinary performance. These values were so central that it took nine days to train mature adults how to reconfigure their daily conversational patterns (to give accurate, descriptive feedback or data to each other). The new values also caused the company to hire people for interpersonal rather than technical qualifications (hiring a woman who had never welded, for example, to be a welder).

HIGHER EMPHASIS ON ETHICS. To the extent that bureaucracies encouraged members to think in terms of their own specialties (responding to others with the commonly heard, "That's not my department"), they also encouraged members to avoid general responsibility—whether it be for labour relations, diversity issues, pollution or other aspects of social responsibility. Infocracies share data rapidly and efficiently so that it is much easier for any member of the organization to learn what the company is doing on any front. Further, the impact of the Information Age on society generally means that no company can long expect to be hidden from public view—just as politicians now are faced with public scrutiny. In some cases, this lack of privacy in an infocratic age will demand and force leaders to adhere to higher standards of societally defined ethical standards. For example, *Fortune* magazine recently reported on the seemingly unethical practices of many new dot-com companies, with the clear intent of pressuring them to clean up their accounting acts. It was much harder to see and get this information in the Industrial Age; in the Information Age, public scrutiny will continue to sharpen and the information will be easier to access.

AWAY FROM SOCIAL DARWINISM "WINNERS" TOWARD "TRANSCENDERS." It seems obvious that human civilization has far outstripped our genetic endowment. The "win/lose" contest resulting in the survival of the fittest has become increasingly dysfunctional Economies and industries will have to learn to be interdependent rather than trying to kill off all competitors. In the Information Age, data will make that possible. Awareness of the dependencies of Information Age societies demands that infocratic leaders learn to consciously shape their development, rather than rely on genetic codes developed fighting, conquering and destroying neighbouring tribes. Increasingly, infocracies are intertwined with each other. Data links to suppliers, distributors, customers, point-of-sale inputs and related pieces of an interconnected global economy continue to "infect," in Mihalyi Csikszentmihalyi's terms, memes (like genes)—powerful new ideas—like viruses, take root and spread in what used to be relatively independent, stand-alone, win/lose-oriented companies. (Mihalyi Csikszentmihalyi, *The Evolving Self: A Psychology for the New Millennium*, Harper & Collins, 1993).

AWAY FROM NARCISSICISM TOWARD JOINT RECOGNITION. Michael Maccoby recently described the pros and cons of the narcissistic leader. (Michael Maccoby, "Narcissistic Leaders: The incredible pros, the inevitable cons," *Harvard Business Review,* Jan/Feb 2000, p. 69). Their weaknesses—sensitivity to criticism, inability to listen, lack of empathy, distaste for mentoring and intense competitiveness—are

much better suited to a bureaucratic world than an infocratic one. Narcissists, for instance, like to build large edifices, a common feature of the bureaucratic age. Infocracies are much less impressed with large buildings that belie their underlying hierarchies than are bureaucracies. I once visited a potential client interested in reducing bureaucracy and became aware of the difficulties of the task driving into the parking lot that surrounded the huge, pyramid-shaped headquarters building. Some interpret the win/lose assumptions of most bureaucracies to be strong, and the assumptions of flatter, win/win organizations to be weak. Infocratic leaders will not be weak; it takes enormous mental toughness to listen to and deal with disconfirming data, and they will be required to be more honest in recognizing the contributions of the node interpreters throughout their organizations as essential to their joint success. In this kind of organization, narcissism increasingly becomes a liability.

LOW ORIENTATION TO HIERARCHY AWAY FROM HIGH ORIENTATION TO HIERARCHY. Infocracies are much flatter than bureaucracies. They are organized around networks and connections rather than hierarchies. ("Organigraphs: Drawing how companies really work," Henry Mintzberg and Ludo Van der Heyden, *Harvard Business Review*, Sept/Oct, 1999; reprint #99506). I am currently conducting research that suggest that "orientation toward hierarchy" may be a measurable difference in leaders and one that reflects a resistance to change in bureaucracies (high OH) or a willingness to work in an infocracy (low OH). Csikszentmihalyi's "transcenders," who consciously push against the genetic code that encourages domination and subjugation, come to mind; infocratic leaders will be transcenders who are able to push against and modify the assumptions of the bureaucracies in which they were trained.

AWAY FROM "USE AND LOSE" TOWARD "CLEAN AS YOU GO." The Industrial Age coincided with the exploration and settling of the earth's land mass. As we have attained the farthest reaches of the "south forty" on our global ranch, we are learning that questions about the sustainability of the race are coming to the fore. With better data available to all, bureaucracies are no longer able to say to society that "sustainability is not my department." Leftovers of all kinds are now the target of recycling rather than disposal. One Swiss industrial filter manufacturer forced by regulation to ship its waste to Spain for disposal retained Bill McDonough of the University of Virginia to help design a clean facility. In the end, some 4,900-plus chemicals used in the plant failed an environmental audit. The 20 some odd chemicals that "passed" were used in a design in which the company was later able to report that continuing its high quality of productivity, its *effluence* was cleaner than the water drawn into the system. This kind of social responsibility will become an increasing hallmark of the infocracy, where descriptive data on all aspects of operations will become available to insiders and outsiders alike.

There are a number of issues related to working and leading in infocracies that remain to be sorted out. For example, it remains to be seen how these issues will be experienced, designed and described: engagement, work/life balance, strategic thinking, relationship building, quality, sense making, innovation, organizational design and structure, learning and work addiction. These and other issues are being dealt with and created as infocracies gradually but inexorably replace the bureaucracies that preceded them.

The Information Age is spawning a new kind of organizational form, the infocracy, in which power is distributed by the size, strength and relevancy of its information networks and databases. As bureaucracies make this transition, some leading and some lagging, leaders who understand the different kinds of leadership demands that an infocracy implies will be better positioned to continue and expand their influence than those residual bureaucrats who dig in their heels and resist. Every person in a position of authority today would do well to reflect on the characteristics of infocracies, to define their own variant and, more importantly, to reflect on their own skills and leadership habits in that context. Even those who have accumulated significant power, particularly in an Industrial Age company, will someday have to acknowledge that in leadership, as Dylan once sang, "the times, they are a changin'." ▩

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