

The Processes of Organization and Management

Managers today are enamored of processes. It's easy to see why. Many modern organizations are functional and hierarchical; they suffer from isolated departments, poor coordination, and limited lateral communication. All too often, work is fragmented and compartmentalized, and managers find it difficult to get things done. Scholars have faced similar problems in their research, struggling to describe organizational functioning in other than static, highly aggregated terms. For real progress to be made, the "proverbial 'black box,' the firm, has to be opened and studied from within."¹

Processes provide a likely solution. In the broadest sense, they can be defined as collections of tasks and activities that together—and only together—transform inputs into outputs. Within organizations, these inputs and outputs can be as varied as materials, information, and people. Common examples of processes include new-product development, order fulfillment, and customer service; less obvious but equally legitimate candidates are resource allocation and decision making.

Over the years, there have been a number of process theories in the academic literature, but seldom has anyone reviewed them systematically or in an integrated way. Process theories have appeared in organization theory, strategic management, operations management, group dynamics, and studies of managerial behavior. The few scholarly efforts to tackle processes as a collective phenomenon either have been tightly focused theoretical or methodological statements or have focused primarily on a single type of process theory.²

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¹B. S. Chakravarthy and Y. Doz, "Strategy Process Research: Focusing on Corporate Self-Renewal," *Strategic Management Journal* 13 (special issue, Summer 1992), pp. 5–14, quote from p. 6.

²L. B. Mohr, *Explaining Organizational Behavior* (San Francisco: Jossey-Bass, 1982); P. R. Monge, "Theoretical and Analytical Issues in Studying Organizational Processes," *Organization Science* 1, no. 4 (1990), pp. 406–430; A. H. Van de Ven, "Suggestions for Studying Strategy Process: A Research Note," *Strategic Management Journal* 13 (special issue, Summer 1992), pp. 169–188; and A. H. Van de Ven and G. Huber, "Longitudinal Field Research Methods for Studying Processes of Organizational Change," *Organization Science* 1, no. 3 (1990), pp. 213–219.

Yet when the theories are taken together, they provide a powerful lens for understanding organizations and management:

First, processes provide a convenient, intermediate level of analysis. Because they consist of diverse, interlinked tasks, they open up the black box of the firm without exposing analysts to the “part–whole” problems that have plagued earlier research.³ Past studies have tended to focus on either the trees (individual tasks or activities) or the forest (the organization as a whole); they have not combined the two. A process perspective gives the needed integration, ensuring that the realities of work practice are linked explicitly to the firm’s overall functioning.⁴

Second, a process lens provides new insights into managerial behavior. Most studies have been straightforward descriptions of time allocation, roles, and activity streams, with few attempts to integrate activities into a coherent whole.⁵ In fact, most past research has highlighted the fragmented quality of managers’ jobs rather than their coherence. A process approach, by contrast, emphasizes the links among activities, showing that seemingly unrelated tasks—a telephone call, a brief hallway conversation, or an unscheduled meeting—are often part of a single, unfolding sequence. From this vantage point, managerial work becomes far more rational and orderly.

My aim here is to give a framework for thinking about processes, their impacts, and the implications for managers. I begin at the organizational level, reviewing a wide range of process theories and grouping them into categories. The discussion leads naturally to a typology of processes and a simple model of organizations as interconnected sets of processes. In the next section, I examine managerial processes; I consider them separately because they focus on individual managers and their relationships, rather than on organizations. I examine several types of managerial processes and contrast them with, and link them to, organizational processes, and identify their common elements. I conclude with a unifying framework that ties together the diverse processes and consider the implications for managers.

ORGANIZATIONAL PROCESSES

Scholars have developed three major approaches to organizational processes. They are best considered separate but related schools of thought because each focuses on a particular process and explores its distinctive characteristics and challenges. The three categories are (1) work processes, (2) behavioral processes, and (3) change processes (see the sidebar on organizational processes).

³A.H. Van de Ven, “Central Problems in the Management of Innovation,” *Management Science* 32, no. 5 (1986), pp. 590–606.

⁴L.R. Sayles, *Leadership: Managing in Real Organizations*, 2nd ed. (New York: McGraw-Hill, 1989).

⁵C.P. Hales, “What Do Managers Do?,” *Journal of Management Studies* 23, no. 1 (1986), pp. 88–115; and H. Mintzberg, *The Nature of Managerial Work* (New York: Harper & Row, 1973).

Three Approaches to Organizational Processes

Work Processes

- “A process is thus a specific ordering of work activities across time and place, with a beginning, an end, and clearly defined inputs and outputs: a structure for action.”
T.H. Davenport, *Process Innovation* (Boston: Harvard Business School Press, 1993), p. 5.
- “Process. Any activity or group of activities that takes an input, adds value to it, and provides an output to an internal or external customer.”
H.J. Harrington, *Business Process Improvement* (New York: McGraw-Hill, 1991), p. 9.
- “We view processes as the direction and frequency of work and information flows linking the differentiated roles within and between departments of complex organization.”
J.R. Galbraith and R.K. Kazanjian, *Strategy Implementation: Structure, Systems, and Process* (St. Paul, MN: West, 1986), p. 6.

Behavioral Processes

- “The key to understanding what makes an organization more or less effective is how it does things . . . One must understand various processes—how goals are set, how the means to be used are determined, the forms of communication used among members, their processes of problem solving and decision making, how they run meetings and groups, how superiors and subordinates relate to each other, and ultimately how leaders lead.”
E.H. Schein, *Process Consultation: Its Role in Organization Development*, 2nd ed. (Reading, MA: Addison-Wesley, 1988), p. 15.
- “Decision making is an organizational process. It is shaped as much by the pattern of interaction of managers as it is by the contemplation and cognitive processes of the individual.”
L.R. Sayles, *Managerial Behavior* (New York: McGraw-Hill, 1964), p. 207.

Change Processes

- “Process is a way of giving life to data by taking snapshots of action/interaction and linking them to form a sequence or series . . . Process is the analyst’s way of accounting for or explaining change.”
A. Strauss and J. Corbin, *Basics of Qualitative Research* (Newbury Park, CA: Sage, 1990), pp. 144, 148.
- “A good process theory describes, at least in broad outline, plausible time parameters associated with change within and between the phenomena of interest . . . At the center of all dynamic analysis is the assessment of change over time.”
P.R. Monge, “Theoretical and Analytical Issues in Studying Organizational Processes,” *Organization Science*, vol. 1, no. 4, 1990, pp. 408, 426.
- “Study of organizational change tends to focus on two kinds of questions. (1) What are the antecedents or consequences of change in organizational forms or administrative practices? (2) How does an organizational change emerge, develop,

grow, or terminate over time? . . . The second question requires a ‘process theory’ explanation of the temporal order and sequence in which a discrete set of events occurred based on a story or historical narrative.”

A.H. Van de Ven and G.P. Huber, “Longitudinal Field Research Methods for Studying Processes of Organizational Change,” *Organization Science*, vol. 1, no. 3, 1990, p. 213.

Work Processes

The work process approach, which has roots in industrial engineering and work measurement, focuses on accomplishing tasks. It starts with a simple but powerful idea: Organizations accomplish their work through linked chains of activities cutting across departments and functional groups. These chains are called processes and can be conveniently grouped into two categories: (1) processes that create, produce, and deliver products and services that customers want, and (2) processes that do not produce outputs that customers want, but that are still necessary for running the business. I call the first group “operational processes” and the second group “administrative processes.” New-product development, manufacturing, and logistics and distribution are examples of operational processes, while strategic planning, budgeting, and performance measurement are examples of administrative processes.

Operational and administrative processes share several characteristics. Both involve sequences of linked, interdependent activities that together transform inputs into outputs. Both have beginnings and ends, with boundaries that can be defined with reasonable precision and minimal overlap. And both have customers, who may be internal or external to the organization. The primary differences between the two lie in the nature of their outputs. Typically, operational processes produce goods and services that external customers consume, while administrative processes generate information and plans that internal groups use. For this reason, the two are frequently considered independent, unrelated activities, even though they must usually be aligned and mutually supportive if the organization is to function effectively. Skilled supply chain management, for example, demands a seamless link between a company’s forecasting and logistics processes, just as successful new-product development rests on well-designed strategy formation and planning processes.

The work processes approach is probably most familiar to managers. It draws heavily on the principles of the quality movement and reengineering,⁶ both of

⁶For discussions of processes in the quality literature, see H.J. Harrington, *Business Process Improvement* (New York: McGraw-Hill, 1991); E.J. Kane, “IBM’s Quality Focus on the Business Process,” *Quality Progress* 19 (April 1986), pp. 24–33; E.H. Melan, “Process Management: A Unifying Framework,” *National Productivity Review* 8, no. 4 (1989), pp. 395–406; R.D. Moen and T.W. Nolan, “Process Improvement,” *Quality Progress* 20 (September 1987), pp. 62–68; and G.D. Robson, *Continuous Process Improvement* (New York: Free Press, 1991). For discussions of processes in the reengineering literature, see T.H. Davenport, *Process Innovation* (Boston: Harvard Business School Press, 1993); M. Hammer and J. Champy, *Reengineering the Corporation* (New York: Harper Business, 1993); and T.A. Stewart, “Reengineering: The Hot New Managing Tool,” *Fortune* 23 (August 1993), pp. 40–48.

which focus on the need to redesign processes to improve quality, cut costs, reduce cycle times, or otherwise enhance operating performance. Despite these shared goals, the two movements are strikingly similar on some points, but diverge on others.

The similarities begin with the belief that most existing work processes have grown unchecked, with little rationale or planning, and are therefore terribly inefficient. Hammer, for example, has observed: “Why did we design inefficient processes? In a way, we didn’t. Many of our procedures were not designed at all; they just happened . . . The hodgepodge of special cases and quick fixes was passed from one generation of workers to the next.”⁷ The result, according to one empirical study of white-collar processes, is that value-added time (the time in which a product or service has value added to it, as opposed to waiting in a queue or being reworked to fix problems caused earlier) is typically less than 5 percent of total processing time.⁸

To eliminate inefficiencies, both movements suggest that work processes be redesigned. In fact, both implicitly equate process improvement with process management. They also suggest the use of similar tools, such as process mapping and data modeling, as well as common rules of thumb for identifying improvement opportunities.⁹ First, flow charts are developed to show all the steps in a process; the process is then made more efficient by eliminating multiple approvals and checkpoints, finding opportunities to reduce waiting time, smoothing the handoffs between departments, and grouping related tasks and responsibilities.¹⁰ At some point, “process owners” with primary responsibility for leading the improvement effort are also deemed necessary. Their role is to ensure integration and overcome traditional functional loyalties; for this reason, relatively senior managers are usually assigned the task.¹¹

The differences between the two movements lie in their views about the underlying nature and sources of process change. The quality movement, for the most part, argues for incremental improvement.¹² Existing work processes are assumed to have many desirable properties; the goal is to eliminate unnecessary steps and errors while preserving the basic structure of the process. Improvements are continuous and relatively small scale. Reengineering, by contrast, calls for radical change.¹³ Existing work processes are regarded as hopelessly outdated; they rely on work practices and a division of labor that take no account of modern information technology.

⁷M. Hammer, “Reengineering Work: Don’t Automate, Obliterate,” *Harvard Business Review* 68 (July–August 1990), pp. 104–112.

⁸J. D. Blackburn, “Time-Based Competition: White-Collar Activities,” *Business Horizons* 35 (July–August 1992), pp. 96–101.

⁹E. H. Melan, “Process Management in Service and Administrative Operations,” *Quality Progress* 18 (June 1985), pp. 52–59.

¹⁰Davenport (1993), chap. 7; Hammer and Champy (1993), chap. 3; Harrington (1991), chap. 6; and Kane (1986).

¹¹Hammer and Champy (1993), pp. 108–109; Kane (1986); and Melan (1989), p. 398.

¹²Moen and Nolan (1987); and Robson (1991).

¹³Davenport (1993), pp. 10–15; and Hammer and Champy (1993), pp. 32–34.

For example, the case management approach, in which “individuals or small teams . . . perform a series of tasks, such as the fulfillment of a customer order from beginning to end, often with the help of information systems that reach throughout the organization,” was not economically viable until the arrival of powerful, inexpensive computers and innovative software.¹⁴ For this reason, reengineering focuses less on understanding the details of current work processes and more on “inventing a future” based on fundamentally new processes.¹⁵

Perhaps the most dramatic difference between the two approaches lies in the importance they attach to control and measurement. Quality experts, drawing on their experience with statistical process control in manufacturing, argue that well-managed work processes must be fully documented, with clearly defined control points.¹⁶ Managers can improve a process, they believe, only if they first measure it with accuracy and assure its stability.¹⁷ After improvement, continuous monitoring is required to maintain the gains and ensure that the process performs as planned. Reengineering experts, on the other hand, are virtually silent about measurement and control. They draw on a different tradition, information technology, that emphasizes redesign rather than control.

Insights for Managers. The work processes perspective has led to a number of important insights for managers. It provides an especially useful framework for addressing a common organizational problem: fragmentation, or the lack of cross-functional integration. Many aspects of modern organizations make integration difficult, including complexity, highly differentiated subunits and roles, poor informal relationships, size, and physical distance.¹⁸ Integration is often improved by the mere acknowledgment of work processes as viable units of analysis and targets of managerial action.¹⁹ Charting horizontal work flows, for example, or following an order through the fulfillment system are convenient ways to remind employees that the activities of disparate departments and geographical units are interdependent, even if organization charts, with their vertical lines of authority, suggest otherwise.

In addition, the work processes perspective provides new targets for improvement. Rather than focusing on structures and roles, managers address the underlying

¹⁴T.H. Davenport and N. Nohria, “Case Management and the Integration of Labor,” *Sloan Management Review* 35 (Winter 1994), pp. 11–23, quote from p. 11.

¹⁵I. Price, “Aligning People and Processes during Business-Focused Change in BP Exploration,” *Prism* (fourth quarter, 1993), pp. 19–31.

¹⁶Kane (1986); and Melan (1985) and (1989).

¹⁷H. Gitlow, S. Gitlow, A. Oppenheim, and R. Oppenheim, *Tools and Methods for the Improvement of Quality* (Homewood, IL: Irwin, 1989), chap. 8.

¹⁸P.F. Schlesinger, V. Sathe, L.A. Schlesinger, and J.P. Kotter, *Organization: Text, Cases, and Readings on the Management of Organization Design and Change* (Homewood, IL: Irwin, 1992), pp. 106–110.

¹⁹J. Browning, “The Power of Process Redesign,” *McKinsey Quarterly* 1, no. 1 (1993), pp. 47–58; J.R. Galbraith, *Organization Design* (Reading, MA: Addison-Wesley, 1977), pp. 118–119; and B.P. Shapiro, K. Rangan, and J.J. Sviokla, “Staple Yourself to an Order,” *Harvard Business Review* 70, July–August 1992, pp. 113–122.

processes. An obvious advantage is that they closely examine the real work of the organization. The results, however, have been mixed, and experts estimate that a high proportion of these programs have failed to deliver the expected gains.

My analysis suggests several reasons for failure. Most improvement programs have focused exclusively on process redesign; the ongoing operation and management of the reconfigured processes have usually been neglected. Yet even the best processes will not perform effectively without suitable oversight, coordination, and control, as well as occasional intervention. In addition, operational processes have usually been targeted for improvement, while their supporting administrative processes have been overlooked. Incompatibilities and inconsistencies have arisen when the information and plans needed for effective operation were not forthcoming. A few companies have used the work processes approach to redefine their strategy and organization. The most progressive have blended a horizontal process orientation with conventional vertical structures.²⁰

Behavioral Processes

The behavioral process approach, which has roots in organization theory and group dynamics, focuses on ingrained behavior patterns. These patterns reflect an organization's characteristic ways of acting and interacting; decision-making and communication processes are examples. The underlying behavior patterns are normally so deeply embedded and recurrent that they are displayed by most organizational members. They also have enormous staying power. As Weick observed, behavioral processes are able to "withstand the turnover of personnel as well as some variation in the actual behaviors people contribute."²¹

All behavioral processes share several characteristics. They are generalizations, distilled from observations of everyday work, and have no independent existence apart from the work processes in which they appear. This makes them difficult to identify but explains their importance. Behavioral processes profoundly affect the form, substance, and character of work processes by shaping how they are carried out. They are different, however, from organizational culture because they reflect more than values and beliefs. Behavioral processes are the sequences of steps used for accomplishing the cognitive and interpersonal aspects of work. New-product development processes, for example, may have roughly similar work flows yet still involve radically different patterns of decision making and communication. Often, it is these underlying patterns that determine the operational process's ultimate success or failure.²²

²⁰For example, see A. March and D.A. Garvin, "Arthur D. Little, Inc." (Boston: Harvard Business School, case no. 9-396-060, 1995).

²¹K.E. Weick, *The Social Psychology of Organizing*, 2nd ed. (Reading, MA: Addison-Wesley, 1979), p. 34.

²²S.C. Wheelwright and K.B. Clark, *Revolutionizing Product Development* (New York: Free Press, 1992).

Next I discuss three categories of behavioral processes, selected for their representativeness and rich supporting literature: decision-making, communication, and organizational learning processes. All involve the collection, movement, and interpretation of information, as well as forms of interpersonal interaction. In most cases, the associated behaviors are learned informally, through socialization and on-the-job experience, rather than through formal education and training programs.

Decision-Making Processes. Of all behavioral processes, decision making has been the most carefully studied. The roots go back to the research and writings of Chester Barnard and Herbert Simon, who argued that organizational decision making was a distributed activity, extending over time, involving a number of people.²³ Because it was a process rather than a discrete event, a critical management task was shaping the environment of decision making to produce desired ends. This, in itself, is still a surprising insight for many managers. All too often, they see decision making as their personal responsibility, rather than as a shared, dispersed activity that they must orchestrate and lead.²⁴

These early writings spawned a vast outpouring of research on decision making; eventually they coalesced into the field of strategic process research.²⁵ One group focused on the structure of decision-making processes: their primary stages, and whether stages followed one another logically and in sequence or varied over time with the type of decision.²⁶ The goal was a model of the decision process, replete with flow charts and time lines, that mapped the sequence of steps in decision making and identified ideal types. For the most part, the results of these studies have been equivocal. Efforts to produce a simple linear flow model of decision making—in the same way that work processes can be diagrammed using process flow charts—have had limited success. Witte, for example, studied the purchase process for new computers and found that very few decisions—4 of 233—corresponded to a standard, five-phase, sequential process. He concluded that simultaneous rather than sequenced processes were the norm: “We believe that human beings cannot gather information without in some way developing alternatives. They cannot avoid evaluating these alternatives immediately, and in doing this, they are forced to a decision. This is a package of operations.”²⁷

²³C.I. Barnard, *The Functions of the Executive* (Cambridge: Harvard University Press, 1938), pp. 185–189, 205–206; and H. A. Simon, *Administrative Behavior*, 3rd ed. (New York: Free Press, 1976), pp. 96–109, 220–228.

²⁴L.A. Hill, *Becoming a Manager* (Boston: Harvard Business School Press, 1992), pp. 20–21.

²⁵For reviews, see J.L. Bower and Y. Doz, “Strategy Formulation: A Social and Political Process,” in D.H. Schendel and C.H. Hofer, eds., *Strategic Management* (Boston: Little, Brown, 1979), pp. 152–166; and A.S. Huff and R.K. Reger, “A Review of Strategic Process Research,” *Journal of Management* 13, no. 2 (1987), pp. 211–236.

²⁶H. Mintzberg, D. Raisinghani, and A. Théorêt, “The Structure of Unstructured Decision Processes,” *Administrative Science Quarterly* 21 (June 1976), pp. 246–275; P.C. Nutt, “Types of Organizational Decision Processes,” *Administrative Science Quarterly* 29 (September 1984), pp. 414–450; and E. Witte, “Field Research on Complex Decision-Making Processes—The Phase Theorem,” *International Studies of Management and Organization* 2 (Summer 1972), pp. 156–182.

²⁷Witte (1972), p. 179.

Mintzberg et al. and Nutt, in their studies of strategic decision making, found it equally difficult to specify a simple sequence of steps.²⁸ After developing general models of the process, they identified a number of distinct paths through them, each representing a different type or style of decision making.

A second group of scholars adopted a more focused approach. Each studied a particular kind of decision, usually involving large dollar investments, to identify the constituent activities, subprocesses, and associated management roles and responsibilities, as well as the contextual factors shaping the process. Much of this research has examined the resource allocation process, with studies of capital budgeting, foreign investments, strategic planning, internal corporate venturing, and business exit.²⁹ This research has led to two important insights:

First, it has forced scholars to acknowledge the simultaneous, multilevel quality of decision processes. While sequential stages can be specified, they are incomplete as process theories and must be supplemented by detailed descriptions of the interaction of activities, via subprocesses, across organizational levels and through time. Bower, for example, identified three major components of the resource allocation process—definition (the development of financial goals, strategies, and product–market plans), impetus (the crafting, selling, and choice of projects), and determination of context (the creation of structures, systems, and incentives guiding the process)—and then went on to describe the linkage among these activities and the interdependent roles of corporate, divisional, and middle managers.³⁰ A simple stages model was unable to capture the richness of the process: the range of interlinked activities, with reciprocal impacts, that were unfolding at multiple organizational levels. This finding has obvious implications for managers because it suggests that effective resource allocation—as well as most other types of decision making—requires attention to the perspectives and actions that are unfolding simultaneously above and below one’s level in the organization.

Second, this body of research focused attention on the way that managers shape and influence decision processes. By describing the structural and strategic

²⁸Mintzberg et al. (1976); and Nutt (1984).

²⁹For studies on capital budgeting, see R. W. Ackerman, “Influence of Integration and Diversity on the Investment Process,” *Administrative Science Quarterly* 15 (September 1970), pp. 341–351; and J. L. Bower, *Managing the Resource Allocation Process* (Boston: Harvard Business School, Division of Research, 1970). For studies on foreign investment, see Y. Aharoni, *The Foreign Investment Decision Process* (Boston: Harvard Business School, Division of Research, 1966). For studies on strategic planning, see P. Haspeslagh, “Portfolio Planning: Uses and Limits,” *Harvard Business Review* 60 (January–February 1982), pp. 58–74; and R. Simons, “Planning, Control, and Uncertainty: A Process View,” in W. J. Bruns, Jr., and R. S. Kaplan, eds., *Accounting and Management: Field Study Perspectives* (Boston: Harvard Business School Press, 1987), pp. 339–367. For studies on internal corporate venturing, see R. A. Burgelman, “A Process Model of Internal Corporate Venturing in the Diversified Major Firm,” *Administrative Science Quarterly* 28 (June 1983), pp. 223–244; and R. A. Burgelman, “Strategy Making as a Social Learning Process: The Case of Internal Corporate Venturing,” *Interfaces* 18, no. 3 (1988), pp. 74–85. For studies on business exit, see R. A. Burgelman, “Fading Memories: A Process Theory of Strategic Business Exit in Dynamic Environments,” *Administrative Science Quarterly* 39 (March 1994), pp. 24–56.

³⁰Bower (1970).

context—the rules by which the game is played, including the organization’s goals, values, and reward systems—and showing how it is formed through actions and policies, scholars have demonstrated how senior managers are able to have a pronounced impact on decisions made elsewhere in the organization. While behavioral processes like decision making have great autonomy and persistence, they can, according to this line of research, be shaped and directed by managerial action.

Another stream of research has explored the quality of decision making. Scholars have studied flawed decisions to better understand their causes, examined the factors supporting speedy decision making, and contrasted the effectiveness of comprehensive and narrow decision processes.³¹ These studies have noted certain distinctive problems that arise because organizational decision making is a collective effort. Janis, for example, citing foreign policy debacles such as the Bay of Pigs, noted that when members of a decision-making group want to preserve social cohesion and strive for unanimity, they may engage in self-censorship, overoptimism, and stereotyped views of the enemy, causing them to override more realistic assessments of alternatives.³² However, certain techniques that introduce conflict and dissent, such as devil’s advocacy and dialectical inquiry, have been found to overcome these problems in both controlled experiments and real-world situations.³³

After the Bay of Pigs fiasco, President Kennedy explicitly reformed the national security decision-making process to include devil’s advocacy and dialectical inquiry, and used both techniques to great effect during the Cuban Missile Crisis.³⁴ Similarly, Bourgeois and Eisenhardt found that successful, speedy decision making relied on rational approaches, the development of simultaneous multiple alternatives, and the use of up-to-date operating information to form judgments.³⁵ For managers, the implications of this line of research should be

³¹G.T. Allison, *Essence of Decision* (Boston: Little, Brown, 1971); I.L. Janis, *Victims of Groupthink* (Boston: Houghton Mifflin, 1972); L.J. Bourgeois, III, and K.M. Eisenhardt, “Strategic Decision Processes in High-Velocity Environments: Four Cases in the Microcomputer Industry,” *Management Science* 34, no. 7 (1988), pp. 816–835; K.M. Eisenhardt, “Speed and Strategic Choice: How Managers Accelerate Decision Making,” *California Management Review* 32 (Spring 1990), pp. 39–54; J.W. Fredrickson and T.R. Mitchell, “Strategic Decision Processes: Comprehensiveness and Performance in an Industry with an Unstable Environment,” *Academy of Management Journal* 27, no. 2 (1984), pp. 399–423; J.W. Fredrickson, “The Comprehensiveness of Strategic Decision Processes: Extension, Observations, Future Directions,” *Academy of Management Journal* 27, no. 4 (1984), pp. 445–466; and I. Nonaka and J.K. Johansson, “Organizational Learning in Japanese Companies,” in R. Lamb and P. Shrivastava, eds., *Advances in Strategic Management*, vol. 3 (Greenwich, CT: JAI Press, 1985), pp. 277–296.

³²Janis (1972).

³³A.C. Amason, “Distinguishing the Effects of Functional and Dysfunctional Conflict on Strategic Decision Making: Resolving a Paradox for Top Management Teams,” *Academy of Management Journal* 39, no. 1 (1996), pp. 123–148; D.M. Schweiger, W.R. Sandberg, and J.W. Ragan, “Group Approaches for Improving Strategic Decision Making,” *Academy of Management Journal* 29, no. 1 (1986), pp. 51–71; and D.M. Schweiger, W.R. Sandberg, and P.L. Rechner, “Experimental Effects of Dialectical Inquiry, Devil’s Advocacy, and Consensus Approaches to Strategic Decision Making,” *Academy of Management Journal* 32, no. 4 (1989), pp. 745–772.

³⁴Janis (1972), pp. 146–149.

³⁵Bourgeois and Eisenhardt (1988).

obvious: the need to introduce healthy conflict and competing perspectives to ensure more effective, timely decision making.

Together, these studies have shown that decision-making processes are lengthy, complex, and slow to change. They involve multiple, often overlapping stages, engage large numbers of people at diverse levels, suffer from predictable biases and perceptual filters, and are shaped by the administrative, structural, and strategic context. Their effectiveness can be judged, using criteria such as speed, flexibility, range of alternatives considered, logical consistency, and results, and they are subject to managerial influence and control. Perhaps most important, these studies have shown that decision making, like other behavioral processes, can be characterized along a few simple dimensions that managers can review and alter if needed. A company's decision-making processes may be slow or fast, generate few or many alternatives, rely primarily on operating or financial data, engage few or many organizational levels, involve consensual or hierarchical resolution of conflicts, and be tolerant of or closed to divergent opinions.

Communication Processes. Social psychologists and sociologists have long studied communication processes, dating back to the original human relations experiments at the Hawthorne Works of Western Electric, the pioneering studies of Kurt Lewin, and the efforts of the National Training Laboratories to establish the field of organizational development.³⁶ The field currently covers a broad array of processes and interactions, including face-to-face, within-group, and intergroup relationships.

The efficacy of these relationships invariably rests on the quality and richness of interpersonal communication and information-processing activities: how individuals and groups share data, agree on agendas and goals, and iron out conflicts as they go about their work.³⁷ These processes frequently become patterned and predictable. But because they are embedded in everyday work flows, they are not always immediately apparent. Like decision-making processes, they reflect unconscious assumptions and routines and can often be identified only after repeated observations of individuals and groups. Moreover, the underlying processes are quite subtle, as Schein has observed:

Many formulations of communication depict it as a simple problem of transfer of information from one person to another. But . . . the process is anything but simple, and the information transferred is often highly variable and complex. We communicate facts, feelings, perceptions, innuendoes, and various other things all in the same "simple" message. We communicate not only through the spoken and written word but through

³⁶E.H. Schein, *Process Consultation: Its Role in Organization Development*, 2nd ed. (Reading, MA: Addison-Wesley, 1988), pp. 17–19.

³⁷D.G. Ancona and D.A. Nadler, "Top Hats and Executive Tales: Designing the Senior Team," *Sloan Management Review* 31 (Fall 1989), pp. 19–28; and D.C. Hambrick, "Top Management Groups: A Conceptual Integration and Reconsideration of the 'Team' Label," in B.M. Staw and L.L. Cummings, eds., *Research in Organizational Behavior*, vol. 16 (Greenwich, CT: JAI Press, 1994), pp. 171–214.

facial expressions, gestures, physical posture, tone of voice, timing of when we speak, what we do not say, and so on.³⁸

Because of these complexities, communication processes are best characterized along multiple dimensions. Schein has provided a relatively complete set of categories, including frequency and duration, direction, triggers and flow, style, and level and depth.³⁹ Some patterns can be captured through the tools of communication engineering, which model communication networks and present a picture of a group's information linkages and flows in the same way that work processes are often mapped.⁴⁰

A few studies have pursued an intermediate level of analysis, combining activities into subprocesses. These subprocesses fall into two distinct categories: those needed for task management and work accomplishment and those for building the group and maintaining its relationships.⁴¹ Examples of the first include information giving and seeking and opinion giving and seeking, and examples of the second include harmonizing and compromising. Several scholars have used these categories to develop simple self-assessment forms for evaluating group processes and have then linked the results to group effectiveness.⁴²

Together, these studies provide a relatively complete set of categories for diagnosing and evaluating communication processes. Like decision-making processes, they can be characterized along a few simple dimensions. Here, too, managers can use the dimensions to profile their organizations and identify areas needing improvement. The nature, direction, and quality of discussion flows are important, as are the interrelationships among group members, their stances toward one another, and the tenor and tone of group work.

Organizational Learning Processes. A wide range of scholars, including organizational theorists, social psychologists, manufacturing experts, and systems thinkers have studied organizational learning processes.⁴³ There is broad agreement that organizational learning is essential to organizational health and survival,

³⁸Schein (1988), p. 21.

³⁹Ibid., pp. 22–39.

⁴⁰O. Hauptman, "Making Communication Work," *Prism* (second quarter, 1992), pp. 71–81; and D. Krackhardt and J.R. Hanson, "Informal Networks: The Company behind the Chart," *Harvard Business Review* 71 (July–August 1993), pp. 104–111.

⁴¹Ancona and Nadler (1989), p. 24; Schein (1988), p. 50.

⁴²D. McGregor, *The Professional Manager* (New York: McGraw-Hill, 1967), pp. 173–174; and Schein (1988), pp. 57–58, 81–82.

⁴³R.L. Daft and G.P. Huber, "How Organizations Learn: A Communication Framework," in S.B. Bacharach and N. DiTomaso, eds., *Research in the Sociology of Organizations*, vol. 5 (Greenwich, CT: JAI Press, 1987), pp. 1–36; C.M. Fiol and M.A. Lyles, "Organizational Learning," *Academy of Management Review* 10, no. 4 (1985), pp. 803–813; G.P. Huber, "Organizational Learning: The Contributing Processes and the Literatures," *Organization Science* 2, no. 1 (1991), pp. 88–115; B. Levitt and J.G. March, "Organizational Learning," *Annual Review of Sociology* 14 (1988), pp. 319–340; and P. Shrivastava, "A Typology of Organizational Learning Systems," *Journal of Management Studies* 20, no. 1 (1983), pp. 7–28.

involves the creation and acquisition of new knowledge, and rests ultimately on the development of shared perspectives (often called “mental models”). Most scholars have described these activities abstractly, without trying to group or categorize them. But there are persistent underlying patterns. The way an organization approaches learning is as deeply embedded as its approaches to decision making and communication.⁴⁴

Four broad processes are involved: knowledge acquisition, interpretation, dissemination, and retention. In each area, companies appear to rely on relatively few approaches that fit their cultures and have been adapted to their needs. Over time, these approaches become institutionalized as the organization’s dominant mode or style of learning. According to Nevis et al.: “Basic assumptions about the culture lead to learning values and investments that produce a different learning style from a culture with a different pattern of values and investments.”⁴⁵

Knowledge, for example, may be acquired in many ways. Each approach involves distinctive tools, systems, and behaviors and is associated with a particular learning style. The underlying processes differ accordingly. Companies like DuPont have focused their efforts on brainstorming and creativity techniques; others, like Boeing and Microsoft, have become adept at learning from their own internal manufacturing and development experiences. AT&T and Xerox have gained considerable skill at benchmarking competitors and world leaders; others, like Royal Dutch/Shell, have used hypothetical planning exercises to stimulate learning. Similar distinctions exist for the processes of knowledge interpretation, dissemination, and retention. Retention, for example, may be through written records or tacitly understood routines, and the organization’s memory may be accessed by a range of indexing and retrieval processes.⁴⁶

Organizational learning processes thus share many of the same characteristics as decision-making and communication processes. Activity is distributed throughout the organization, unfolds over time, involves people in diverse departments and positions, and rests on a few critical subprocesses or routines. It too is “an organizational process rather than an individual process” and can be classified

⁴⁴P.M. Brenner, “Assessing the Learning Capabilities of an Organization” (Cambridge, MA: MIT Sloan School of Management, unpublished master’s thesis, 1994); Daft and Huber (1987), pp. 24–28; D.A. Garvin, “Building a Learning Organization,” *Harvard Business Review* 71 (July–August 1993), pp. 78–91; Levitt and March (1988), pp. 320; and E.C. Nevis, A.J. DiBella, and J.M. Gould, “Understanding Organizations as Learning Systems,” *Sloan Management Review* 37 (Winter 1995), pp. 73–85.

⁴⁵Nevis et al. (1995), p. 76.

⁴⁶T. Kiely, “The Idea Makers,” *Technology Review* 96 (January 1993), pp. 32–40; M.A. Cusumano and R.W. Selby, *Microsoft Secrets* (New York: Free Press, 1995); Garvin (1993); J. Simpson, L. Field, and D.A. Garvin, “The Boeing 767: From Concept to Production (A)” (Boston: Harvard Business School, case 9-688-040, 1988); R.C. Camp, *Benchmarking* (Milwaukee, WI: ASOC Quality Press, 1989); R.E. Mittelstaedt, Jr., “Benchmarking: How to Learn from Best-in-Class Practices,” *National Productivity Review* 11 (Summer 1992), pp. 301–315; A. De Geus, “Planning as Learning,” *Harvard Business Review* 66 (March–April 1988), pp. 70–74; Huber (1991), pp. 105–107; Levitt and March (1988), pp. 326–329; and J.P. Walsh and G.R. Ungson, “Organizational Memory,” *Academy of Management Review* 16, no. 1 (1991), pp. 57–91.

into distinctive modes or styles.⁴⁷ In fact, when combined together, the three behavioral processes are often complementary and synergistic. They interact in predictable ways, producing clusters of characteristics that are mutually reinforcing.

In the microcomputer industry, for example, the most effective firms were able to make quick decisions.⁴⁸ Their ability to do so rested on several mutually reinforcing activities. Decision making was rational and analytical, based on multiple alternatives and real-time operating information. Communication was open and wide ranging, with discussions that relied on shared ideas, pooled information, and the judgment of a few trusted counselors, but vested final authority with the chief executive officer (CEO). Organizational learning was guided primarily by external scanning and search. There is an important message here for managers. Just as administrative and operational processes must be complementary and supportive, so too must behavioral processes.

Unfortunately, managers frequently assume that restructuring or reengineering work processes will be accompanied by simultaneous, virtually automatic changes in behavior. Such changes are usually considered essential for successful transformations.⁴⁹ But because they reflect deeper forces, these behaviors normally remain in place unless the underlying processes are tackled explicitly. Managers must recognize that successful improvement programs require explicit attention to the organization's characteristic patterns of decision making, communication, and learning. Tools for stimulating change include simulations, exercises, observations, and coaching; each may be applied at the individual and organizational levels.

Change Processes

The change process approach, which has roots in strategic management, organization theory, social psychology, and business history, focuses on sequences of events over time. These sequences, called processes, describe how individuals, groups, and organizations adapt, develop, and grow. Change processes are explicitly dynamic and intertemporal. Unlike the relatively static portraits of work and behavioral processes, they attempt "to catch reality in flight."⁵⁰ Examples of change processes include the organizational life cycle and Darwinian evolution.

All change processes share several characteristics. They are longitudinal and dynamic, designed to capture action as it unfolds, with three components always present: "a set of starting conditions, a functional end-point, and an emergent process of change."⁵¹ Change processes therefore answer the question, "How did

⁴⁷Shrivastava (1983), p. 16.

⁴⁸Bourgeois and Eisenhardt (1988); and Eisenhardt (1990).

⁴⁹B. Blumenthal and P. Haspeslagh, "Toward a Definition of Corporate Transformation," *Sloan Management Review* 35 (Spring 1994), pp. 101–106.

⁵⁰A. M. Pettigrew, "Longitudinal Field Research: Theory and Practice," *Organization Science* 1, no. 3 (1990), pp. 267–292, quote from p. 270.

⁵¹Van de Ven (1992), p. 80.

x get from here to there?” Often, a story or narrative is required to provide coherence and explain the underlying logic of the process.⁵² Most descriptions of change also divide time into broad stages or phases. Each stage consists of groups of activities aimed at roughly similar goals, and the transition between stages may be smooth or turbulent.⁵³

Studies of change have focused on four broad areas: creation, growth, transformation, and decline.⁵⁴ Each period represents a critical stage in the individual or organizational life cycle, and, over time, the life cycle has become the organizing framework for the field. Scholars remain divided, however, about the pattern and flow of events over time. The primary question is whether change processes proceed through incremental steps—what Gersick has called “a slow stream of small mutations”—or through alternating periods of stability and revolutionary change.⁵⁵ Ultimately, the choice is between traditional Darwinian theories and those based on a newer, punctuated equilibrium framework. While the subject is still under debate, evidence supporting the latter view is accumulating rapidly.⁵⁶

Whatever their focus, change processes fall into two broad categories: autonomous and induced. Autonomous processes have a life of their own; they proceed because of an internal dynamic. The entity or organism evolves naturally and of its own course. In some cases, the direction of change is preordained and inevitable. In others, transitional periods create flux, and the entity may evolve in multiple, unexpected ways. Processes in the former category include an organization’s evolution from informal, entrepreneurial start-up to a more structured, professionally managed firm. Processes in the second category include organizational and industry shifts that result from revolutionary changes

⁵²Van de Ven and Huber (1990).

⁵³C.J.G. Gersick, “Revolutionary Change Theories: A Multilevel Exploration of the Punctuated Equilibrium Paradigm,” *Academy of Management Review* 16, no. 1 (1991), pp. 10–36.

⁵⁴For studies on creation, see D.N.T. Perkins, V.F. Nieva, and E.E. Lawler, III, *Managing Creation: The Challenge of Building a New Organization* (New York: Wiley, 1983); S.B. Sarason, *The Creation of Settings and the Future Societies* (San Francisco: Jossey-Bass, 1972); and A.H. Van de Ven, “Early Planning, Implementation, and Performance of New Organizations,” in J.R. Kimberly, R.H. Miles, and associates, *The Organizational Life Cycle* (San Francisco: Jossey-Bass, 1980), pp. 83–134. For studies on growth, see W.H. Starbuck, ed., *Organizational Growth and Development: Selected Readings* (Middlesex, England: Penguin, 1971). For studies on transformation, see J.R. Kimberly and R.E. Quinn, eds., *New Futures: The Challenge of Managing Corporate Transitions* (Homewood, IL: Dow Jones-Irwin, 1984); A.M. Mohrman, Jr., S.A. Mohrman, G.E. Ledford, Jr., T.G. Cummings, E.E. Lawler, III, and associates, *Large-Scale Organizational Change* (San Francisco: Jossey-Bass, 1989). For studies on decline, see D.C. Hambrick and R.A. D’Aveni, “Large Corporate Failures as Downward Spirals,” *Administrative Science Quarterly* 33 (March 1988), pp. 1–23; R.I. Sutton, “Organizational Decline Processes: A Social Psychological Perspective,” in B.M. Staw and L.L. Cummings, eds., *Research in Organizational Behavior*, vol. 12 (Greenwich, CT: JAI Press, 1990), pp. 205–253; and S. Venkataraman, A.H. Van de Ven, J. Buckeye, and R. Hudson, “Starting Up in a Turbulent Environment,” *Journal of Business Venturing* 5, no. 5 (1990), pp. 277–295.

⁵⁵Gersick (1991), p. 10.

⁵⁶M. Crozier, *The Bureaucratic Phenomenon* (Chicago: University of Chicago Press, 1964), p. 196; Gersick (1991); H. Mintzberg, “Patterns in Strategy Formation,” *Management Science* 24, no. 9 (1978), pp. 934–948; Starbuck (1971), p. 68; and Van de Ven (1992).

in technology.⁵⁷ In both cases, Selznick has observed, managers must be attentive to the path and timing of development: “Certain types of problems seem to characterize phases of an organization’s life-history. As these problems emerge, the organization is confronted with critical policy decisions.”⁵⁸ Appropriate action depends, in large part, on fitting behavior to the conditions and requirements of the current stage.⁵⁹ An obvious example is knowing when to introduce policies, procedures, and systems into a loosely knit, entrepreneurial firm. Too early, and growth may be stifled; too late, and the organization may already have spun out of control.

Unlike autonomous processes, induced processes do not occur naturally but must be created. All planned change efforts therefore fall into this category. While they are triggered in different ways, such efforts, once underway, unfold in a predictable sequence. Each step is accompanied by distinctive challenges and tasks, with striking parallels in different theorists’ descriptions. Induced change processes are commonly divided into three basic stages.⁶⁰ The first is a period of questioning, when the current state is assessed and energy applied to dislodge accepted patterns. The second stage is one of flux, when old ways are partially suspended and new approaches are tested and developed. The third is a period of consolidation, when new attitudes and behaviors become institutionalized and widely adopted. Again, it is critical that managers develop actions appropriate to the current stage and know when it is time to shift to a new stage. Examples of three-part theories include Beckhard and Harris’s present state, transition state, and future state; Lewin’s and Schein’s unfreezing, changing, and refreezing; and Tichy and Devanna’s awakening, mobilizing, and reinforcing.⁶¹

We can thus classify change processes on a few simple dimensions: They may be autonomous or induced, and involve slow incremental evolution or alternating periods of stability and revolutionary change. Complete process descriptions

⁵⁷L.E. Greiner, “Evolution and Revolution as Organizations Grow,” *Harvard Business Review* 50 (July–August 1972), pp. 37–46; and M.L. Tushman and P. Anderson, “Technological Discontinuities and Organizational Environments,” *Administrative Science Quarterly* 31 (September 1986), pp. 439–465.

⁵⁸P. Selznick, *Leadership in Administration* (Berkeley: University of California Press, 1957), pp. 103–104.

⁵⁹M.L. Tushman, W.H. Newman, and E. Romanelli, “Convergence and Upheaval: Managing the Unsteady Pace of Organizational Evolution,” *California Management Review* 29 (Fall 1986), pp. 29–44.

⁶⁰R.M. Kanter, B.A. Stein, and T.D. Jick, *The Challenge of Organizational Change* (New York: Free Press, 1992), pp. 375–377.

⁶¹R. Beckhard and R.T. Harris, *Organizational Transitions*, 2nd ed. (Reading, MA: Addison-Wesley, 1987); K. Lewin, *Field Theory in Social Science* (New York: Harper, 1951); E.H. Schein, *Professional Education* (New York: McGraw-Hill, 1972), pp. 76–84; and N. Tichy and M. Devanna, *The Transformational Leader* (New York: Wiley, 1986).

EXHIBIT 1 An Organizational Processes Framework

	<i>Work Processes</i>	<i>Behavioral Processes</i>	<i>Change Processes</i>
Definition	<ul style="list-style-type: none"> Sequences of activities that transform inputs into outputs 	<ul style="list-style-type: none"> Widely shared patterns of behavior and ways of acting/interacting 	<ul style="list-style-type: none"> Sequences of events over time
Role	<ul style="list-style-type: none"> Accomplish the work of the organization 	<ul style="list-style-type: none"> Infuse and shape the way work is conducted by influencing how individuals and groups behave 	<ul style="list-style-type: none"> Alter the scale, character, and identity of the organization
Major categories	<ul style="list-style-type: none"> Operational and administrative 	<ul style="list-style-type: none"> Individual and interpersonal 	<ul style="list-style-type: none"> Autonomous and induced, incremental and revolutionary
Examples	<ul style="list-style-type: none"> New-product development, order fulfillment, strategic planning 	<ul style="list-style-type: none"> Decision making, communication, organizational learning 	<ul style="list-style-type: none"> Creation, growth, transformation, decline

also include the precise sequence, duration, and timing of stages, as well as the nature and number of activities and participants at each stage.⁶²

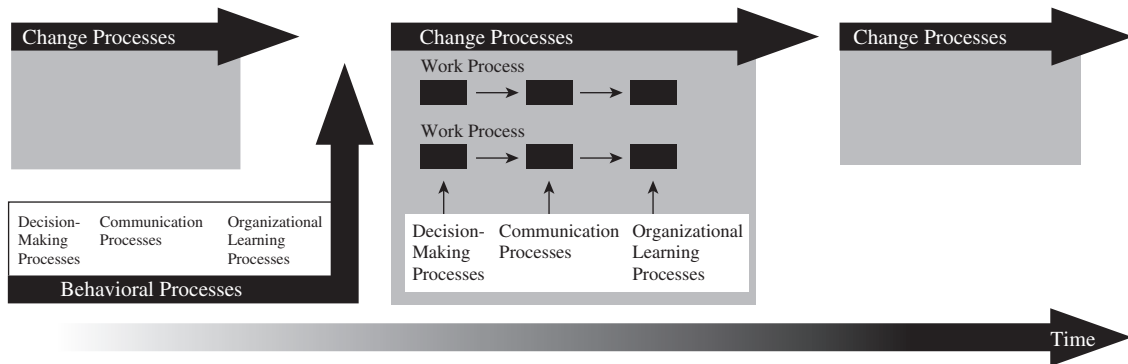
A Recap of Organizational Processes

The three major approaches to organizational processes have much in common (see Exhibit 1). Each views processes as collections of activities, involving many people, that unfold over time. Each involves repeated, predictable sequences or patterns. And each takes a holistic approach, grouping individual activities and decisions in coherent, logical ways. The latter quality is especially important because it suggests that processes provide managers with a powerful integrating device, a way of meshing specialized, segmented tasks with larger organizational needs.

Despite these similarities, the three types of processes capture different organizational phenomena and are best viewed as complementary pieces of a larger puzzle. They can, in fact, be combined into a single framework that includes both cross-sectional and dynamic elements. (For a unified portrait of organizations as collections and reflections of processes, see Exhibit 2.)

A process view of organizations offers several advantages. First, it provides a disaggregated model of the firm, but does so in ways that make the analysis of

⁶²A. Abbott, "A Primer on Sequence Methods," *Organization Science* 1, no. 4 (1990), pp. 375–392; Monge (1990); A. Strauss and J. Corbin, *Basics of Qualitative Research* (Newbury Park, CA: Sage, 1990), chap. 9; and Witte (1972).

EXHIBIT 2 A Diagram of Organizational Processes

implementation more tractable and explicit. Put another way, if organizations are “systems for getting work done,”⁶³ processes provide a fine-grained description of the means. Second, the diagram suggests the intimate connections among different types of processes and the futility of analyzing them in isolation. It is extraordinarily difficult—and, at times, impossible—to understand or alter a single process without first taking account of others on which it depends.⁶⁴

Perhaps most important for managers, a process view of organizations changes the focus of both analysis and action. All too often, managers’ first response to problems is to pin responsibility on an individual or department. Yet because processes shape the vast majority of organizational activities, they are frequently the true sources of difficulty. Accountability must therefore shift to a higher level: to those with wide enough spans of control to oversee entire processes. This principle has long been a staple of the quality movement, where it has been applied to operational processes. The preceding arguments suggest that managers need to be equally attentive to administrative, behavioral, and change processes. As a general rule, responsibility for these processes must shift to senior members of the firm.

Approaches to organization design must change as well. Most texts on the subject focus on tasks and structures, with detailed discussions of roles, positions, levels, and reporting relationships.⁶⁵ They say relatively little about processes or about how the work actually gets done. The implicit argument seems to be that organization design is largely a matter of architecture: drawing the right boxes and connecting them appropriately. A process perspective suggests that far more

⁶³C. Perrow, “A Framework for the Comparative Analysis of Organizations,” *American Sociological Review* 32, no. 2 (1967), pp. 194–208, quote from p. 195.

⁶⁴D. A. Garvin, “Leveraging Processes for Strategic Advantage,” *Harvard Business Review* 73 (September–October 1995), pp. 76–90.

⁶⁵See, for example, Galbraith (1977); and Schlesinger, Sathé, Schlesinger, and Kotter (1992).

attention should be paid to organizational functioning, and that design efforts should begin by attending to processes and only later should shift to the structures needed to accommodate them.

Finally, this approach suggests that managers are continually enmeshed in organizational processes. The result is a delicate balancing act. On the one hand, managers are constrained by the processes they face, forced to work within their boundaries and preestablished steps to get things done. On the other hand, they try to influence and alter these processes to gain advantage. This continual shifting from “statesman” to “gamesman” is what makes management such a challenging task.⁶⁶ It also suggests another, quite different use of the word *processes*.

MANAGERIAL PROCESSES

Management is often described as the art of getting things done. But because organizations are complex social institutions with widely distributed responsibility and resources, unilateral action is seldom sufficient.⁶⁷ Managers therefore spend the bulk of their time working with, and through, other people.⁶⁸ They face a range of challenges: how to get the organization moving in the desired direction, how to gain the allegiance and support of critical individuals, and how to harmonize diverse group interests and goals. In the broadest sense, these are questions of process: They involve how things are done, rather than the content or substance of ideas or policies.

The mechanics of implementation thus lie at the heart of this definition of processes. The focus is on the way that managers orchestrate activities and events and engage others in tasks so that desired ends are realized (see the sidebar on managerial processes, p. 20). Action is the key, and process is implicitly equated with skilled professional practice. Not surprisingly, this use of the term *process* appears in a wide range of professions where there is need for artistry, subjectivity, and careful discriminations. Architects, for example, engage in the design process; scientists employ the scientific process; and psychologists engage in the counseling process. Like management, each activity involves complex, contingent choices about how best to transform intentions into results.

Managerial processes, however, involve additional complications. Many scholars agree that “organizations . . . are fundamentally political entities,”⁶⁹ composed of diverse groups with their own interests that come into conflict over agendas

⁶⁶W.G. Astley and A.H. Van de Ven, “Central Perspectives and Debates in Organization Theory,” *Administrative Science Quarterly* 28 (June 1983), pp. 245–273, quote from p. 263.

⁶⁷C. A. Bartlett and S. Ghoshal, “Beyond the M-Form: Toward a Managerial Theory of the Firm,” *Strategic Management Journal* 14 (special issue, Winter 1993), pp. 23–46.

⁶⁸Hales (1986); Mintzberg (1973); Sayles (1989); and L.R. Sayles, *Managerial Behavior* (New York: McGraw-Hill, 1964).

⁶⁹J. Pfeffer, “Understanding Power in Organizations,” *California Management Review* 34 (Winter 1992), pp. 29–50, quote from p. 29.

Descriptions of Managerial Processes

- “Managing is a social process. It is a process because it comprises a series of actions that lead to the accomplishment of objectives. It is a social process because these actions are principally concerned with relations between people.”

W.H. Newman, C.E. Summer, and E.K. Warren, *The Process of Management* (Englewood Cliffs, NJ: Prentice-Hall, 1972), p. 12.

- “Whether proposing a change in the executive compensation structure, establishing priorities for a diverse group of business units, consolidating redundant operations, or preparing for plant closings, a senior executive’s conscious thoughts are foremost among the processes for accomplishing a change or implementing a decision: ‘Who are the key players here, and how can I get their support? Whom should I talk to first? Should I start by getting the production group’s input? What kind of signal will that send to the marketing people? I can’t afford to lose their commitment in the upcoming discussions on our market strategy.’”

D.J. Isenberg, “How Senior Managers Think,” *Harvard Business Review* 62 (November–December 1984), pp. 82–83.

- “Most of the literature of general management has separated the positional aspects [of the chief executive officer’s function] from the managerial ones. In positional frameworks, the problem of managing is described in terms of getting the firm from one position to another. . . . In the managerial framework, attention is focused on how goals are developed, on how resources are allocated, and on how the efforts of individuals are coordinated to achieve particular goals and patterns of allocation. Managerial frameworks focus on the process of management more than on the overall direction followed by the company.”

J.L. Bower and Y. Doz, “Strategy Formulation: A Social and Political Process,” in D.H. Schendel and C.H. Hofer, eds., *Strategic Management* (Boston: Little, Brown, 1979), p. 153.

and resources.⁷⁰ In such settings, successful managers must align and harmonize competing interests, while cultivating commitment and motivation. Skillful managers therefore spend relatively little time issuing ultimatums or making big decisions. Rather, they engage in an extraordinary number of fragmented activities, tackling pressing issues or small pieces of larger problems.⁷¹ Often, the

⁷⁰Crozier (1964); J.G. March, “The Business Firm as a Political Coalition,” *Journal of Politics* 24, no. 4 (1962), pp. 662–678; Sayles (1989); and M.L. Tushman, “A Political Approach to Organizations: A Review and Rationale,” *Academy of Management Review* 2 (April 1977), pp. 206–216.

⁷¹Hales (1986); J.P. Kotter, *The General Managers* (New York: Free Press, 1982); Mintzberg (1973); and H.E. Wrapp, “Good Managers Don’t Make Policy Decisions,” *Harvard Business Review* 45 (September–October 1967), pp. 91–99.

process requires building and using interpersonal networks, as well as “skillful maneuvering” to overcome political obstacles.⁷²

The challenge for managers, then, is to shape, prod, and direct their organizations, through words and deeds, so that larger goals are realized. The approaches they use—which were once the subject of courses on administrative practice—are managerial processes. They have an underlying logic that is easily missed when scholars focus on taxonomies of discrete tasks and activities, rather than unifying threads.⁷³ Moreover, because these processes require flexibility and a sensitivity to context, they seldom unfold in the same set sequence or maintain the same character on every occasion.⁷⁴

Empirical studies of managerial processes fall into two broad categories. One group has taken an anthropological approach focusing on a single manager in action, with vivid descriptions of his or her behavior. Case studies in business policy fall into this category, as do studies by insiders or journalists who have gained unusual access to a company.⁷⁵ The associated processes have usually been idiosyncratic and highly individualistic, reflecting the distinctive character of the managers studied. Such nuanced, textured descriptions provide invaluable insight into the processes of management but permit few generalizations.

A second group of empirical studies, usually by scholars, has sought broader conclusions. Typically, they have reviewed the time commitments and activities of a few managers, grouped them into categories according to purposes and goals, and then applied a process perspective. Three broad processes have dominated this literature: direction setting, negotiating and selling, and monitoring and control.

Direction-Setting Processes

Direction setting, the most widely recognized managerial activity, has appeared, in some form, in most empirical studies of managerial work.⁷⁶ It involves charting an organization’s course and then mobilizing support and ensuring alignment

⁷²E.M. Leifer and H.C. White, “Wheeling and Annealing: Federal and Multidivisional Control,” in J.F. Short, Jr., ed., *The Social Fabric* (Beverly Hills, CA: Sage, 1986), pp. 223–242.

⁷³Hill (1992); and Kotter (1982).

⁷⁴W. Skinner and W.E. Sasser, “Managers with Impact: Versatile and Inconsistent,” *Harvard Business Review* 55 (November–December 1977), pp. 140–148.

⁷⁵Examples include *The Soul of a New Machine*, featuring Tom West, the leader of a project to build a new minicomputer at Data General Corporation, and *My Years with General Motors*, written by Alfred Sloan, who resurrected General Motors in the more than 20 years that he served as the company’s chief executive and chairman. See J.T. Kidder, *The Soul of a New Machine* (Boston: Little, Brown, 1981); and A.P. Sloan, Jr., *My Years with General Motors* (New York: Doubleday, 1963).

⁷⁶Mintzberg (1973), p. 92; Sayles (1964), chap. 9; and Hales (1986).

with stated goals. Kotter's description of how general managers met this challenge is representative.⁷⁷ All the managers he studied began by developing an agenda, collecting information from a wide range of sources, and then assimilating it and forming a few broad thrusts or general goals. They then worked hard to frame messages, using diverse communication media and opportunities, to ensure that members of the organization developed a shared understanding of the new objectives. Often, these activities occurred within the broad parameters of the organization's planning or goal-setting process, although much work was informal and unstructured, tailored to the unique skill of the manager and the distinctive demands of the situation. Gabarro and Simons reached similar conclusions in their studies of the "taking charge" process of new executives, where individualized managerial action was coupled with established organizational processes.⁷⁸

Together, these empirical studies have shown that direction-setting processes have several components: learning about the organization and its problems through a broad range of interactions, assessments, and continued probing; framing an agenda to be pursued during the manager's tenure through conscious reflection and intuitive experience; and aligning individuals through communication, motivation, rewards, and punishments, often using new or established organizational processes. Critical process choices that the manager makes include which information sources to tap, which communication media and supporting systems to emphasize, and which approaches to use in framing, testing, and revising initiatives.

Negotiating and Selling Processes

Once the manager sets a direction, negotiating and selling processes are necessary for getting the job done. They work in two directions, horizontally and vertically. Because horizontal flows link the activities of most departments, employees frequently rely on individuals outside their work groups for essential services and information.⁷⁹ Formal authority is normally lacking in these relationships, and managers must use other means to gain cooperation. This usually requires building a network of contacts and then working with the appropriate individuals to negotiate the "terms of trade" for current and future interactions.⁸⁰ Various approaches are used to gain support, including currying favor, creating dependence, providing quid pro quos, and appealing to compelling organizational needs.

⁷⁷Kotter (1982).

⁷⁸J.J. Gabarro, *The Dynamics of Taking Charge* (Boston: Harvard Business School Press, 1987); and R. Simons, "How New Top Managers Use Control Systems as Levers of Strategic Renewal," *Strategic Management Journal* 15, no. 3 (1994), pp. 169–189.

⁷⁹Sayles (1964).

⁸⁰Hill (1992); Kotter (1982); F. Luthans, R.M. Hodgetts, and S.A. Rosenkrantz, *Real Managers* (Cambridge, MA: Ballinger, 1988); and Mintzberg (1973).

Successful negotiating requires an understanding of “the strengths and weaknesses of others, the relationships that are important to them, what their agendas and priorities are.”⁸¹ Issues must be shaped and presented in ways that are palatable to individuals and groups with differing interests and needs. Sayles, who has conducted the most extensive research on these processes, noted that they usually began with “missionary work,” in which potential buyers and sellers were identified for possible future use.⁸² A surprising range of contacts was necessary because horizontal relationships fell into so many different categories. All, however, required skilled salesmanship: the ability to interest outsiders in a project, gain exceptions from staff groups, and convince support specialists to invest time and resources. For this reason, the most critical process choices involved framing and presentation: deciding how to solicit help and present proposals in ways that appealed to others yet met one’s basic objectives.

Selling is also required in a vertical direction. Middle managers must normally convince their superiors of the value of their proposals if they hope to see them enacted; to do so, they frame projects to highlight urgency and need, bundle them in ways that increase the likelihood of acceptance, and assemble coalitions to provide credibility and support.⁸³ This activity is not confined to middle managers. Chief executives engage extensively in selling, for it is often the only way they can gain acceptance of their strategies and plans.⁸⁴

Monitoring and Control Processes

Once operations are underway, managers engage in a third set of processes, designed to ensure that their organizations are performing as planned. Such oversight activities are necessary because business environments are inherently unstable; they generate any number of unexpected shocks and disturbances. Monitoring and control processes detect perturbations, initiate corrective action, and restore the organization to its previous equilibrium.⁸⁵ Typically, managers begin with efforts to sense problems and formulate them clearly, followed by probes to clarify the problems’ precise nature and underlying causes.⁸⁶ They collect information through their own contacts, others’ contacts, observation, and re-

⁸¹D.J. Isenberg, “How Senior Managers Think,” *Harvard Business Review* 62 (November–December 1984), pp. 80–90, quote from p. 84.

⁸²Sayles (1964).

⁸³J.E. Dutton and S.J. Ashford, “Selling Issues to Top Management,” *Academy of Management Review* 18, no. 3 (1993), pp. 397–428; and I.C. MacMillan and W.D. Guth, “Strategy Implementation and Middle Management Coalitions,” in R. Lamb and P. Shrivastava, eds., *Advances in Strategic Management*, vol. 3 (Greenwich, CT: JAI Press, 1985), pp. 233–254.

⁸⁴D.C. Hambrick and A.A. Cannella, “Strategy Implementation as Substance and Selling,” *Academy of Management Executive* 3, no. 4 (1989), pp. 278–285.

⁸⁵Mintzberg (1973), pp. 67–71; and Sayles (1964).

⁸⁶Isenberg (1984); and M.A. Lyles and T.I. Mitroff, “Organizational Problem Formulation: An Empirical Study,” *Administrative Science Quarterly* 25 (March 1980), pp. 102–119.

views of records.⁸⁷ At times, they use formal organizational processes, like variance reporting; more often, effective monitoring is nonroutine and conducted as part of other, ongoing interactions.⁸⁸ Here, critical process choices include the information sources to tap, the data to request, the questions to pose, and the amount of time to allow before drawing conclusions and initiating corrective action.

Recapping Managerial Skills

These three processes have different purposes, tasks, and critical skills (see Exhibit 3). Although most managers treat them as distinct challenges, at a deeper level, they have much in common. All depend on rich communication, pattern recognition, a sensitivity to relationships, and an understanding of the organization's power structure. Perhaps most important, all managerial processes involve common choices about how to involve others and relate to them as the organization moves forward. They are the essence of the manager's craft and can be applied equally effectively to direction setting, negotiating and selling, and monitoring and control.

The variables are few, but the combinations are virtually limitless. Whatever the issue, all managerial processes involve six major choices that a manager must make:

1. **Participants.** (Whose opinions should I seek? Whom should I invite to meetings? Who should participate in task forces? Which groups should be represented?)
2. **Timing and sequencing.** (Whom should I approach first? Whom should I invite next? Which agreements should I solicit before others? How should I phase events over time?)
3. **Duration.** (How much time should I devote to information collection? How much time should I give to individuals and groups for their assignments? How should I pace events to build momentum?)
4. **Framing and presentation.** (How should I describe and interpret events? How should I heat up issues or cool them down? How should I frame proposals for superiors, subordinates, and peers? What questions should I ask to gain information?)
5. **Formats.** (Should I make requests in person or over the phone? Should I communicate information through speeches, group meetings, or face-to-face encounters?)
6. **Style.** (How should I induce others to cooperate? How should I utilize and distribute rewards and punishments? What tone should I take when dealing with superiors, subordinates, and peers?)

⁸⁷Sayles (1964), p. 170.

⁸⁸Mintzberg (1973), pp. 67–71.

EXHIBIT 3 A Managerial Processes Framework

	<i>Direction-Setting Processes</i>	<i>Negotiation and Selling Processes</i>	<i>Monitoring and Control Processes</i>
Purpose	• Establish organizational direction and goals	• Obtain needed support and resources	• Track ongoing activities and performance
Primary task	• Developing an agenda	• Building a network	• Collecting information
Critical skills	• Synthesis, priority setting, communication	• Timing and sequencing, framing and presentation	• Questioning and listening, interpreting data

There are many possible answers. This variety helps explain why management, like many other professions, continues to be more an art than a science.⁸⁹ In the face of massive uncertainty, managers must make complex choices with few precedents or guidelines; the resulting processes seldom repeat themselves exactly. Moreover, seemingly minor variations in processes can have major impacts. Changes in sequencing, with one critical individual or department contacted before another, or shifts in format, with written memoranda replacing face-to-face meetings, often produce dramatically different coalitions and results.⁹⁰ The subtlety of these distinctions, plus the enormous range of possibilities, is what makes managerial processes so difficult to master. But, by thinking in process terms, managers are much more likely to link together their activities to produce the desired ends.

IMPLICATIONS FOR ACTION

The process perspective fills an important gap. Most research on organizations either employs highly aggregated concepts like strategy or focuses on low-level tactics and tasks. Researchers often ignore the middle ground. Processes, by contrast, are intermediate-level concepts that combine activities into cohesive wholes, yet offer a fine-grained, differentiated perspective. They are also inherently dynamic. Because processes unfold over time, they capture linkages among activities that are often lost in static models and cross-sectional analyses. A process approach encourages thinking in story lines rather than events; the appropriate metaphor is a movie rather than a snapshot.⁹¹

For this reason, the approach is unusually helpful in addressing implementation problems. Managers can articulate the required steps in a process, as well as improvements. By contrast, traditional lists of roles and responsibilities leave the associated activities unspecified or undefined. Job descriptions framed in process terms should therefore make it easier for untrained individuals to step

⁸⁹D.A. Schön, *The Reflective Practitioner* (New York: Basic Books, 1983), chaps. 1, 2, and 8.

⁹⁰MacMillan and Guth (1985); and Bower and Doz (1979), pp. 152–153.

⁹¹Mohr (1982), p. 43.

EXHIBIT 4 A Framework for Action

		<i>Organizational Processes</i>		
		<i>Work Processes</i>	<i>Behavioral Processes</i>	<i>Change Processes</i>
<i>Managerial Processes</i>	Direction-Setting Processes	<ul style="list-style-type: none"> • Are there clear goals for operational and strategic performance? 	<ul style="list-style-type: none"> • Are there well-specified approaches to communication, decision making, and learning? 	<ul style="list-style-type: none"> • Is there a clear rationale, direction, and path of change?
	Negotiation and Selling Processes	<ul style="list-style-type: none"> • Have we obtained the necessary agreements and resources from upstream and downstream departments? 	<ul style="list-style-type: none"> • Is there widespread acceptance of the desired approaches to communication, decision making, and learning? 	<ul style="list-style-type: none"> • Are others in the organization convinced that change is needed and that the proposed changes are the right ones?
	Monitoring and Control Processes	<ul style="list-style-type: none"> • Do we know how well our performance matches plans? 	<ul style="list-style-type: none"> • Do we know how well our current behaviors match the desired approaches to communication, decision making, and learning? 	<ul style="list-style-type: none"> • Do we know whether critical milestones have been reached and planned changes have been implemented?

into new jobs and acquire necessary skills.⁹² Managers should be able to focus their questioning of peers and subordinates on issues more directly related to the organization's operation.⁹³ And a sensitivity to processes should give managers clearer guidelines about how and when to intervene effectively in others' work.⁹⁴

We can combine the major organizational and managerial processes into a simple, integrating framework (see Exhibit 4). The framework consists of diagnostic questions that allow managers to assess the effectiveness of their, and their organization's, approaches to action. For example, the question "Is there a clear rationale, direction, and path of change?" asks managers to determine whether direction has been set effectively for a particular change process. Similarly, the question "Have we obtained the necessary agreements and resources from upstream and downstream departments?" assesses whether negotiation and selling have been conducted effectively for a given work process. Together, the questions provide a reasonably complete framework for evaluation.

⁹²E.D. Chapple and L.R. Sayles, *The Measure of Management* (New York: Macmillan, 1961), pp. 49–50.

⁹³Garvin (1995).

⁹⁴E.H. Schein, *Process Consultation: Lessons for Managers and Consultants* (Reading, MA: Addison-Wesley, 1987); and Schein (1988).

The framework has two primary uses:

First, it can help managers decide where, when, and how to intervene in their organization's activities. To do so, they should work down the columns of the matrix, asking each question in turn to isolate the likely source of difficulties and identify appropriate remedial actions. Consider, for example, a company experiencing customer service problems. Because customer service is an operational (work) process, the questions in the first column provide guidance. If the answers suggest that problems can be traced to unclear goals, managers need to invest time in setting and clarifying objectives. If the problems reflect a lack of support from upstream designers and manufacturing personnel, managers need to devote time to cross-departmental negotiations and salesmanship. If the problems signify slow, limited customer feedback, managers need to upgrade the processes for monitoring and collecting information.

Managers can use the same approach for less tangible processes like decision making. Suppose that decision making is currently parochial and unimaginative, and managers have decided to improve the process by encouraging dissent and constructive conflict. Progress, however, has been slow. Because decision making is a behavioral process, managers should use the questions in the second column to diagnose the problem. If the answers suggest that difficulties can be traced to unclear concepts (e.g., "We don't know how to distinguish constructive from unproductive conflict"), managers should focus on improved direction setting. If the difficulties reflect underlying disagreements about the appropriateness of the desired behaviors (e.g., "We are a polite company and see no reason to argue with one another"), managers should focus on selling the new approaches. If the difficulties are caused by poor awareness of current practices (e.g., "We don't need to do anything differently because we already entertain diverse viewpoints and debate issues in depth"), managers need sharper real-time feedback and monitoring. Here, too, the matrix provides managers with a powerful lens for identifying the underlying sources of problems and for framing responses in process terms.

Second, the matrix helps managers identify their personal strengths and weaknesses. Because direction setting, negotiation and selling, and monitoring and control are very different processes, few managers are equally adept at all three. One way to identify areas needing work is for managers to proceed across the rows of the matrix, asking the relevant diagnostic questions about diverse organizational activities.

For example, to assess direction-setting skills, a manager might look at a number of operational processes under his or her control to see if clear goals have been established, might review a variety of decision-making and communication processes to see if preferred approaches were clearly described and understood, and might assess several current change initiatives to see if the rationale, direction, and paths of change were clear. A series of "no's" in a row means that the manager needs to improve direction setting. As with the previous assessments of organizational processes, managers can conduct these evaluations working alone in their offices, teams of executives responsible for related projects or programs

can work in groups, or entire departments or units can work collectively. In general, the size of the evaluating group should correspond to the scope of the process under review, and the larger the group, the more likely that formal approaches to data collection such as surveys, questionnaires, and diagnostic scales will be needed.

Clearly, a process perspective has much to offer. It sheds light on many pressing questions of organization and management while providing a number of practical guidelines. Here I present a starting point, a taxonomy and frameworks for defining, distinguishing, and classifying the major types of processes. Used wisely, they will improve managers' ability to get things done.

ACKNOWLEDGMENTS

I would like to thank Christopher Bartlett, Joseph Bower, Robert Burgelman, Roland Christensen, Michael Cusumano, Alison Davis-Blake, Lynn Garvin, Donald Hambrick, Carl Kaysen, Ashish Nanda, Philip Rosenzweig, Malcolm Salter, Leonard Sayles, Leonard Schlesinger, David Upton, Richard Walton, Gerry Zaltman, and two anonymous referees for helpful comments on earlier drafts of this article, and the Division of Research, Harvard Business School, for financial support.