

THE CONTINGENCY THEORY OF MANAGEMENT

A path out of the jungle

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Management theory has taken divergent paths in recent years. The author discusses each of these as well as the movement to unify existing schools of thought. The process approach, traditional and classical, has been supplanted by the quantitative, the behavioral, and the systems approaches. The author defines these and explains their role in management theory and their function in actual practice. Singly, none of these theories can be applied to every organization and management problem, and currently a theory is emerging that can be used to draw the disparate elements together. This new approach is the contingency theory of management, which can be applied situationally.

Over a decade ago Harold Koontz wrote about the existing management theory jungle in which he identified six different theoretical schools of thought.¹ Although Koontz wrote the article to defend the process approach, his

1. The six schools identified by Koontz were the management process, empirical, human behavior, social system, decision theory, and mathematical schools. Harold Koontz, *Academy of Management Journal* (December 1961), pp. 174-88.

efforts have turned out to be a losing battle. The traditional management process has failed to unify management theory.

Today a jungle of management theories still exists, but there are some clearly identifiable paths that seem to be leading out of the jungle. The purpose of this article is to identify the paths and trace them through the jungle and beyond. The figure accompanying this article can be used as a guide to the discussion; it shows that the path leading up to the current jungle was the process approach. Other names applied to this path were classical, traditional, universal, operational, and functional.

The starting point for this process approach can be traced to the work of Henri Fayol. In 1916, he identified the universal functions of management as planning, organizing, commanding, coordinating, and controlling. He also described some universal principles of management such as unity of command and equal authority and responsibility. Unfortunately, Fayol's work on the functions and principles of management did not become part of the mainstream of management theory in this country until the 1950s. Since that time, there have been many other process theorists, but they have not

added much to Fayol's original conception of management theory.²

Much of the terminology has been changed; for example, Fayol's commanding is now known as directing or leading. Also the meanings of Fayol's functions have become broader; for example, planning now incorporates decision making, and directing incorporates communication, motivation, and leadership. The principles have also changed in terminology and number. Yet, despite these changes, the universality assumption is still made, and the process approach as a theoretical base for management remains basically the same as that given by Fayol over fifty years ago.

The process approach has undoubtedly had some unjustifiable criticism over the years. However, it is also true that it was not strong enough to weather the storm of protest in recent years. This approach became overgrown and entangled by other theoretical approaches. By 1960 the process path had been completely overrun, and two separate paths emerged in opposite directions. These new paths became known as the quantitative and behavioral approaches to management.

THE NEW PATHS

Quantitative Approach

The quantitative approach has its roots in the scientific management movement that actually predates the process approach. However, as a major thrust in management theory, the quantitative approach really got under way about 1960. This new approach made a clean break from the traditional process orientation of management.

During the 1960s the quantitative

2. Probably the most widely recognized standard bearers of the process approach in modern times are Harold Koontz and Cyril O'Donnell, authors of *Principles of Management* (New York: McGraw-Hill Book Company, 1972). The book, which came out in 1955, is in its fifth edition.

approach was characterized by the techniques of operations research. Various mathematical models were developed to solve decisional problems. However, it soon became apparent that, although OR techniques were effective tools for management decision making, this approach fell short of providing a theoretical base for management as a whole.

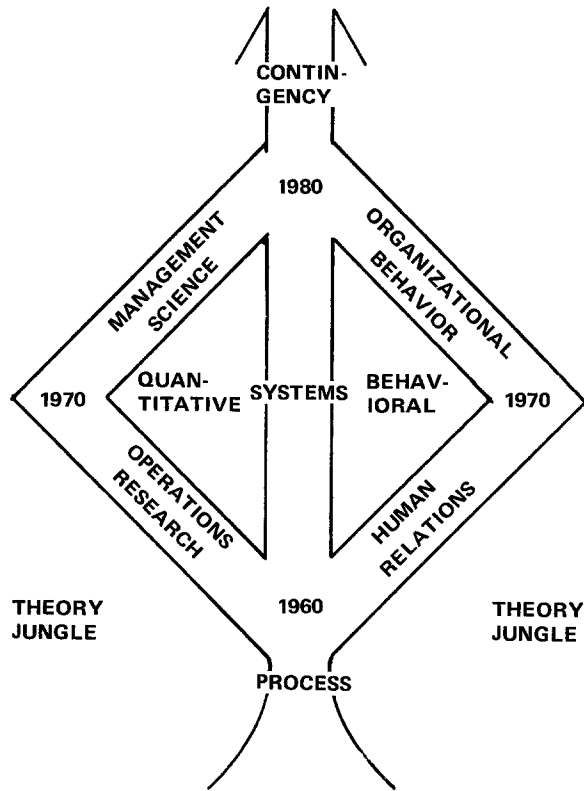
Starting in about 1970, the quantitative approach turned away from emphasis on narrow operations research techniques toward a broader perspective of management science. The management science approach incorporates quantitative decision techniques and model building as in the OR approach, but it also incorporates computerized information systems and operations management. This latter emphasis in the quantitative approach marked the return toward a more broadly based management theory.

Behavioral Approach

At about the same time the quantitative approach broke off from the process base, the behavioral approach struck out on its own. At first the behavioral path was characterized by human relations. Simplistic assumptions were made about human beings, and equally simplistic solutions to behavioral problems were offered. The human relations movement in the 1960s searched for ways to improve morale, which was assumed would lead to increases in productivity. This approach certainly did no harm, but it also produced few, if any, results.

Around 1970, about the same time the quantitative approach moved from emphasis on narrow operations research to a broad management science perspective, the behavioral approach had a parallel development. This path veered toward a more broadly based organizational behavior approach, and now relies heavily on the behavioral sciences and makes more complex assumptions. More direct attention is devoted to organization

New Directions in Management Theory



theory and organization development. Organizational behavior is the result of the interaction between the human being and the formal organization.

Systems Approach

While the quantitative and behavioral approaches were going their separate ways, a new trend appeared—the systems approach. During the 1960s to the present, it took up where the process approach left off in unifying management theory.

As a specific, theoretical approach, systems can be traced back to the natural and physical sciences nearly a quarter of a century ago. The application to management has been more recent. The systems approach—physical, biological, or managerial—stresses the inter-relatedness and interdependency of the parts

to the whole. Systems has served as a magnet to attract the quantitative and behavioral approaches to management.

At the present time, both the management science and organizational behavior detours are heading back toward the main path of systems. In management science, the new emphasis on computer applications and operations management techniques are systems based. The same holds true for organizational behavior. The formal organization is viewed as a system consisting of structure, processes, and technology, and the human being is conceived of as a system containing a biological-physiological structure, psychological processes, and a personality.³

Whether systems will actually unify the quantitative and behavioral approaches to management only time will tell. To date, the quantitative, behavioral, and systems approaches are clear but distinctly separate paths through the jungle. However, as indicated by the figure, both the behavioral and quantitative paths are headed toward the systems path. If the three approaches do come together in the next ten years, then the results may be something entirely different. This something that is different from the sum of the parts is referred to in the figure as the contingency theory of management.

CONTINGENCY THEORY

The beginning of a path called contingency or sometimes situational is just starting to emerge.⁴ The figure indicates that by 1980 this path may be the one that leads management out of the existing jungle of theories.

3. Fred Luthans, *Organizational Behavior* (New York: McGraw-Hill Book Company, 1973).

4. For example see Robert J. Mockler, "Situational Theory of Management," *Harvard Business Review* (May-June 1971), pp. 146-55, and Fremont E. Kast and James E. Roscnzweig, *Contingency Views of Organization and Management* (Chicago: Science Research Associates, Inc., 1973).

The pressure leading to a contingency theory has largely come from people who are actually practicing management.

For the past fifteen years, scholars, consultants, and practicing managers have attempted to apply either quantitative or behavioral approaches, depending on their orientation, to all situations. The performance results of this universalist assumption were generally disappointing. Certain quantitative approaches worked in some situations with some types of problems but not in others. The same was true for behavioral approaches. For example, job enrichment seemed to work well with skilled technicians but not unskilled machine operators.⁵

Two of the difficulties encountered in practice were that the quantitative people could not overcome behavioral problems and the behavioral people could not overcome operations problems adaptable to quantitative solutions. In the 1970s it is becoming more and more apparent that neither the quantitative nor behavioral approaches have all the answers for all situations.

Many of today's management theorists believe that a systems-based theory can solve the quantitative/behavioral dilemma. The December 1972 issue of the *Academy of Management Journal* was entirely devoted to general systems theory (GST) applied to management. The authors weighed the pros and cons of whether GST can unify management. The majority concluded that the systems approach is appealing and has a great deal of future potential, but is as yet incomplete. The open, as opposed to closed, systems view is able to cope better with the increased complexity and environmental influence facing today's managers. Systems concepts such as entropy (a system will become disorganized over time) and equifinality (a system can reach the same final

state from different paths of development) are quite applicable to the present managerial situation.

Despite the advances made in general systems development and the trend for both the quantitative and behavioral approaches to move toward a systems base, a contingency path seems better suited to lead management out of the present theory jungle. Kast and Rosenzweig, who are closely associated with the systems approach, support this view, at least for the present. They call for a contingency approach, a mid-range concept that falls somewhere between "simplistic, specific principles" and "complex, vague notions."

The contingency approach "recognizes the complexity involved in managing modern organizations but uses patterns of relationships and/or configurations of subsystems in order to facilitate improved practice."⁶ Important breakthroughs in various subsystems of management (organization design, leadership, behavior change, and operations) have already demonstrated the value of the contingency approach.

CURRENT CONTINGENCY APPROACHES

Pigors and Myers have been associated with a situational approach to personnel management for the past twenty-five years. However, the work of Joan Woodward in the 1950s marks the beginning of a situational approach to organization and to management in general. She clearly showed in the British companies studied that organization structure and human relationships were largely a function of the existing technological situation. Armed with this and supporting follow-up evidence, some organizational theorists such as Lawrence and Lorsch began to call for contingency models of organizational structure.⁷

5. William E. Reif and Fred Luthans, "Does Job Enrichment Really Pay Off?" *California Management Review* (Fall 1972), pp. 30-37.

6. Fremont E. Kast and James E. Rosenzweig, "General Systems Theory: Applications for Organization and Management," *Academy of Management Journal* (December 1972), p. 463.

Organization Designs

The contingency approach to organization design starts with the premise that there is no single design that is the best for all situations. The classical approach was to say that a bureaucratic design would lead to maximum efficiency under any circumstances. The neo-classical theorists pushed decentralization for all conditions. It is inferred that even the modern free-form systems and matrix designs have universal applicability. In practice, the classical, neoclassical, or modern structural designs did not hold up under all situations.

For example, bureaucracy was not able to cope with a highly dynamic situation; decentralization did not work well in a highly cybernated situation; and the free-form, matrix designs were not adaptable to a situation demanding cutbacks and stability. Even Warren Bennis, who has been a leading advocate of discarding classical, bureaucratically organized structures and replacing them with modern free-form, behaviorally oriented structures, has recently retrenched. Ironically, because of his actual experience as a practitioner, he now admits that bureaucratic structures may be appropriate in certain situations.⁸

The contingency designs are conditional in nature. The bureaucracy may work best in a stable situation and the free form in a dynamic situation. Technology, economic and social conditions, and human resources are some of the variables that must be considered in a contingent organization design.

7. Joan Woodward, *Industrial Organization* (London: Oxford University Press, 1965). Follow-up evidence from William L. Zwermer, *New Perspectives on Organization Theory* (Westport, Conn.: Greenwood Publishing Corporation, 1970). For examples of support for contingency models see Paul R. Lawrence and Jay W. Lorsch, "Differentiation and Integration in Complex Organizations," *Administrative Science Quarterly* (June 1967), pp. 1-47, and, more recently, Y. K. Shetty and Howard M. Carlisle, "A Contingency Model of Organization Design," *California Management Review* (Fall 1972), pp. 38-45.

8. Warren Bennis, "Who Sank the Yellow Submarine?" *Psychology Today* (November 1972), pp. 112-20.

Model of Leadership

More has probably been written about leadership than any other single topic. Although all this attention has been devoted to it, for years research was not able to come up with any concrete results. Most often the leader and his traits were examined. Recently, the work of Fred Fiedler, who emphasizes the importance that the situation has in leadership effectiveness, has produced a significant breakthrough. Based on years of empirical research, Fiedler was able to develop a contingency model of leadership effectiveness.

In simple terms, the model states that a task-directed leader is most effective in very favorable and very unfavorable situations, but that a human relations-oriented leader is most effective in moderately favorable and moderately unfavorable situations.⁹ Of special interest, however, is his ability to classify situations according to the three dimensions of position power, acceptance by subordinates, and task definition. This type of classification is the necessary goal of any contingency approach.

Model of Behavioral Change

Although not generally recognized in a managerial context, the contingency approach has been widely applied to behavioral change in mental health and education. Based on the principles of operant conditioning, this approach assumes that behavior depends on its consequences. Therefore, to change a person's behavior, he must be able to perceive a contingent relationship between his behavior and the consequence of that behavior. This contingent relationship, once established, will affect the frequency of subsequent behavior.

The author is currently directing a major

9. Fred Fiedler, *A Theory of Leadership Effectiveness* (New York: McGraw-Hill Book Company, 1967).

field research program that is using this contingency concept. The approach is called Organizational Behavior Modification (O.B. Mod.). It can be used to train industrial supervisors through a process method of instruction to be contingency managers of their workers. Preliminary results of this program are very encouraging.¹⁰ The study has demonstrated that when first-line supervisors apply O.B. Mod. techniques to their subordinates, desirable job behaviors leading to improved performance can be accelerated through the use of reinforcement and undesirable behaviors can be decelerated through the use of punishment.

However, the key to the success of the approach depends upon the worker's ability to perceive the contingency that if he behaves a certain way, then his behavior will result in a certain consequence. The if-then contingency pattern used in O.B. Mod. is similar to the contingency approaches used in organizational design and leadership style.

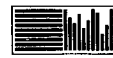
Approaches in the Quantitative Area

Although the examples so far are primarily drawn from organizational behavior, the quantitative areas have also begun to use contingency approaches. Operations research itself is actually based on a situational premise. The starting point in developing any OR model is to account for the situational givens. However, as OR was applied through the years this premise was often abused. Questionable initial assumptions which were often totally divorced from reality were cranked into OR models. However, in recent years with the development of a broader management science approach, more attention is being given to situational factors. Recent books in the management science area

10. Fred Luthans, Robert Ottemann, and David Lyman are currently in the process of writing the study in monograph form. Published results may be available in late 1973 or 1974.

have begun to use a situational framework. For example, Stanley Young states that:

We must know under what conditions it is advisable to move from Linear Programming to rule of thumb and then back to Linear Programming. There is an over-concern with single decision rule, and we must learn how to use different combinations of rules under a variety of operating conditions.¹¹



This article suggests that a contingency approach may be the path out of the existing theoretical jungle in management. The process path was split by the behavioral and quantitative paths. However, neither of these approaches by itself seems capable of leading management out of the jungle. Currently, the systems path seems to be drawing them together toward a unified theoretical development, but by the time the juncture is reached in the future, something may emerge which differs from the sum of the parts. This outcome is predicted to be the contingency theory of management.

The successful contingency approaches in the behavioral and quantitative areas which are beginning to surface are evidence of the potential that a contingency theory may have for leading management out of the theory jungle. The overall goal of a contingency theory of management would be to match quantitative, behavioral, and systems approaches with appropriate situational factors.

Although this goal would be difficult to reach, the contingency theory could serve as an effective framework for development. Fiedler's work proves that it is possible. His contingency model could serve as a prototype. The challenge for the future is to develop a contingency theory for management as a whole.

11. Stanley D. Young, "Organization as a Total System," in Fred Luthans, ed., *Contemporary Readings in Organizational Behavior* (New York: McGraw-Hill Book Company, 1972), p. 109. For other examples see David W. Miller, and Martin K. Starr, *Executive Decisions and Operations Research* (Englewood Cliffs, N.J.: Prentice-Hall, 1970) and Thomas R. Prince, *Information Systems for Management Planning and Control* (Homewood, Ill. Richard D. Irwin, Inc. 1970).