

## **Roles Executives Play: CEOs, Behavioral Complexity, and Firm Performance**

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This paper develops a model of executive leadership consisting of four competing roles: Vision Setter, Motivator, Analyzer, and Task Master. These four roles are operationalized and hypotheses are then tested concerning their relationships to three dimensions of firm performance using data collected from a sample of 916 top managers. Results suggest that CEOs with high “behavioral complexity”—the ability to play multiple, competing roles—produce the best firm performance, particularly with respect to business performance (growth and innovation) and organizational (stakeholder) effectiveness. Executive leadership role had little to do with firms’ financial performance.

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**KEY WORDS:** executives; leadership; top management roles; performance.

### **INTRODUCTION**

Over the past decade, “leadership” has become an icon in the management literature. Both scholarly journals and the popular press abound with pieces heralding the importance of leaders and leadership to the revitalization and success of both business and government organizations (e.g., Bass, 1981; Tichy & Ulrich, 1984; Main, 1987). As part of this trend, the issue of “executive leadership”—especially the key role played by an organization’s chief executive or top manager—has gained increasing notoriety (e.g., Grove, 1983; Iaccoca & Novak, 1984).

Despite the increased attention, however, the literature remains deeply divided regarding the roles and behaviors of effective executive leaders. On the one hand, effective leaders are portrayed as visionary, innovative, dynamic, charismatic, transformational, participative, empower-

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ing, and motivating (e.g., McGregor, 1966; Likert, 1967; Zaleznik, 1977; Burns, 1978; Tichy & Devanna, 1986; Block, 1987; Conger & Kanungo, 1987, 1988). On the other hand, successful leaders are described as being powerful, assertive, decisive, expert, analytical, stable, consistent, and demanding (Katz, 1974; Shetty & Perry, 1976; Kotter, 1982a; Ohmae, 1982; Levinson & Rosenthal, 1984; Bennis & Nanus, 1985; Nulty, 1989).

A reading of *Stodgill's Handbook of Leadership* (Bass, 1981) yields a bewildering array of leadership models. Closer examination, however, will reveal that the vast majority of such models create *dichotomies* of leadership (e.g., Theory X vs. Theory Y; task vs. socioemotional; participative vs. autocratic; transactional vs. transformational): There has been little effort to combine the existing dichotomies into a larger synthesis or examine the extent to which multiple forms of leader behavior are required. Even fewer efforts have been focused specifically on the role of executive leadership and its relationship to performance.

Recently, a few authors have begun to argue that effective leadership requires a balancing and simultaneous mastery of seemingly contradictory or "paradoxical" capabilities — decisiveness and reflectiveness, broad vision and attention to detail, bold moves and incremental adjustment, and a performance as well as people orientation (Mitroff, 1983; Bourgeois & Eisenhardt, 1988; Torbert, 1987; Quinn & Cameron, 1988; Quinn, 1988). Others have stressed the importance of cognitive and behavioral "complexity" (Jacques, 1986; Kegan, 1982; Hooijberg & Quinn, 1991). These studies suggest that effective managers not only think multidimensionally, but are also able to act out a cognitively complex strategy by playing multiple, even competing roles in a highly integrated and complementary way.

This paper applies the "paradox" and "complexity" perspectives specifically to the roles of executive leaders. It argues that CEOs who achieve mastery of diverse and seemingly conflicting roles will deliver higher firm performance than those executives with less encompassing approaches to their jobs. Building upon a review of the literature, the paper first develops an integrative model of executive leadership roles. The model is then operationalized and hypotheses are tested concerning the relationship between leadership roles and firm performance, using data collected from a large sample of top managers.

## LITERATURE

A review of the leadership literature indicates that most work on the topic has focused on middle managers (e.g., Bass, 1981; Yukl, 1981). There has been relatively little work done specifically on executive leadership. This is troublesome since there is reason to believe that the roles and be-

haviors of effective top managers differ from those of middle managers (Katz & Kahn, 1978; Norburn, 1989). Furthermore, most studies of middle-management leadership have used work group productivity or satisfaction as the dependent variable (Bowers & Seashore, 1966; Likert, 1967; Locke & Schweiger, 1979; Cotton et al., 1988). Top managers, however, must also be judged on the basis of corporate performance. This difference in perspective alone might be expected to produce substantially different results (Day & Lord, 1988).

Research and conceptualization relating to the roles and behaviors of top managers can be categorized into three domains: (1) top manager as dynamic vision-setter, (2) top manager as networker and boundary-spanner, and (3) multidimensional views. Each domain is reviewed briefly below.

### Top Manager as Dynamic Vision-Setter

The view of the leader as dynamic vision-setter has been well developed in the sociology and political science literatures (Weber, 1947; Dow, 1969; Willner, 1984; Conger & Kanungo, 1987, 1988). Within the domain of organization and management theory, this school of thought can be traced back to Selznick (1957). He described the executive's role primarily as one emphasizing *effectiveness* (doing the "right thing") over *efficiency* (doing "things right"). Ansoff (1965) continued in this tradition when he delineated three levels of decisions: strategic, administrative, and operational, with top management being primarily concerned with the first level.

This view has been amplified more recently by a number of authors. Zaleznick and Kets de Vries (1975) contrasted the "maximum man" or creative institution builder to the "minimum man" or manager of the status quo. Katz and Kahn (1978) built on a similar theme when they proposed that effective top managers possess the ability to articulate an emotionally meaningful vision or mission. This capability, they theorized, was facilitated by the social distance of the leader, making a simplified and "magical" image of the leader by subordinates possible.

Burns (1978), drawing upon literature in political science, conceptualized two contrasting leadership styles: transactional (based upon resource exchange) and transformational (based upon charisma and emotion). Bennis and Nanus (1985) emphasized not only the importance of a clear compelling vision but also the need for consistency and clarity on the part of the leader. Similarly, the works of Tichy and Devanna (1986) and Kotter (1988) stress not only the creation of a new vision, but also the necessity of institutionalizing the new vision through personal example and organizational design. Most recently, the strategic management literature has begun to recognize the importance of vision to the realization of corpo-

rate strategies (Itami, 1987; Hamel & Prahalad, 1989; Westley & Mintzberg, 1989; Campbell & Yeung, 1991). Indeed, the literature suggests that without a challenging core mission and set of values understood by all employees, the best technical or economic strategy will go unrealized.

In summary, theory and research in this domain emphasize three roles for the executive leader: (1) recognizing the need for departure from the status quo, (2) creating and articulating a compelling vision or “agenda for change,” and (3) institutionalizing the vision through consistent personal example and organizational design.

### **Top Manager as Networker and Boundary-Spanner**

The view of the executive as internal networker and external boundary-spanner is well established in the literature. The former can be traced back to Barnard (1948) who emphasized the executive’s role in maintaining organizational communication and securing essential services from the people in the organization. The external boundary-spanner role has been captured more recently in studies of executive scanning behavior (Aguilar, 1967; Hambrick, 1982; Daft, Sormunen, & Parks, 1988; Jackson & Dutton, 1988). This stream of work has shown environmental scanning to be an important factor in both problem definition and organizational effectiveness.

Studies by Kotter (1982b,c) and Kaplan (1984) substantiated the importance of external communication networks to general manager success, but also emphasized the importance of internal networks. In both studies, effective senior managers displayed a broad knowledge of the industry, a long track record and solid working relationships with many people and groups in the industry, and a wide network of contacts within their own company. This network provided the top managers with critical, emerging information, and also provided a sounding board for strategic directions and decisions. Gupta and Govindarajan (1984) and Govindarajan (1989) also demonstrated that experience in general management and extensive industry experience contributed to executive effectiveness regardless of the corporate or environmental context.

In summary, research in this tradition points to the importance of interpersonal skills and in-depth industry knowledge to leadership effectiveness. In terms of leader roles and behaviors, this involves the building of extensive external contacts for information gathering and environmental scanning. It also implies the nurturing of an internal “implementation network” — supportive relationships with key sources of power within the organization needed to implement and adapt strategies.

## Multidimensional Views: Roles, Skills, and Demands

Whereas the first two categories of literature on executive leadership are composed of studies and models that focus on a particular set of roles, there is a body of literature which examines the phenomenon from a decidedly multidimensional perspective. These authors have noted the paradoxical nature and the conflicting demands of the top manager's job. Drucker (1973) summarized this very well by observing that top management requires simultaneously "a thought man, an action man, a people man, and a front man." Mintzberg (1973, 1975) in his landmark study of five CEOs, identified ten *roles* of executive leadership within three main categories, as follows:

- A. Interpersonal roles
  1. Figurehead — ceremonial duties.
  2. Leader — formal authority, informal influence.
  3. Liason — networking with internal and external contacts.
- B. Informational roles
  4. Monitor — scanning the environment.
  5. Disseminator — information transfer.
  6. Spokesman — communication to outside parties.
- C. Decisional roles
  7. Entrepreneur — initiating new ideas or programs.
  8. Disturbance handler — crisis manager.
  9. Resource allocator — time, people, and dollars.
  10. Negotiator — conflict resolver.

Mintzberg (1975) went on to observe that the ten roles form a gestalt, an integrated whole, and that leader effectiveness hinges on the execution of all of the roles simultaneously.

In similar fashion, Katz (1974) identified three basic *skills* essential to effective executive leadership: technical (use of tools and analytical techniques), human (interpersonal skills), and conceptual (understanding the total organization as a system). Finally, Donaldson and Lorsch (1983) explicitly recognized the competing *demands* of top management in their study of 12 industrial companies. Their model posited the need to balance the expectations of the capital market (shareholders and creditors), the product market (customers and competitors), and the organization (employees and managers).

## Need for Integration

Taken as a whole, the literature on executive leadership has been dominated by conceptual work, case-oriented accounts of particular com-

panies, or biographies of specific leaders. And while several authors have articulated overlapping dimensions and typologies, each is in some sense incomplete — none captures the full range of roles associated with the executive leadership construct. This suggests the need for theoretical integration. In the next section, a model of executive leadership roles is developed which incorporates the range of typologies and dimensions described in the above literature.

## **EXECUTIVE LEADERSHIP: A MODEL OF THE COMPETING ROLES**

The model of executive leadership roles proposed here builds upon the Competing Values Framework developed by Quinn and associates (e. g., Quinn, 1981; Quinn & Cameron, 1988). This framework has been validated and used to study managerial leadership (e.g., Quinn, 1988) as well as overall organizational effectiveness (e.g., Quinn & Rohrbaugh, 1983). Using the literature reviewed in the previous section and the concept of “competing values” as the organizing framework, an integrative model of executive leadership is developed consisting of four fundamental roles for top managers. Before embarking on the development of the model, however, a brief description of the Competing Values Framework is necessary (see Fig. 1).

### **The Competing Values Framework**

Note that the two axes in Fig. 1 create four quadrants. The vertical axis ranges from flexibility/spontaneity to predictability/structure, the horizontal axis from internal to external focus. Each quadrant of the framework represents one of four major models of organization and management theory distilled from the literature and empirically validated through multidimensional scaling (Quinn & Rohrbaugh, 1983). The “human relations” model, for example, stresses criteria such as cohesion and morale, along with participation and human resource development. The “open systems” model stresses criteria such as flexibility and innovation as well as growth, resource acquisition, and external support. The “rational goal” model stresses planning and goal setting, productivity and accomplishment. Finally, the “internal process” model stresses information management and documentation, along with efficiency, stability, and control.

Each model has a perceptual opposite. For example, the “human relations” model, which emphasizes flexibility and internal focus, stands in contrast to the “rational goal” model, which stresses control and external focus. Parallels among the models are also important. For example, the “human relations” and “open systems” models share an emphasis on flexi-

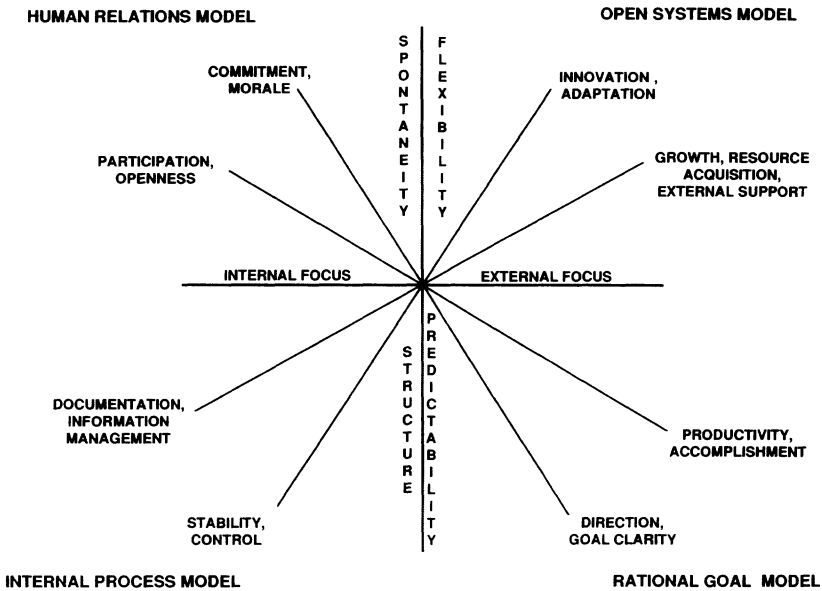


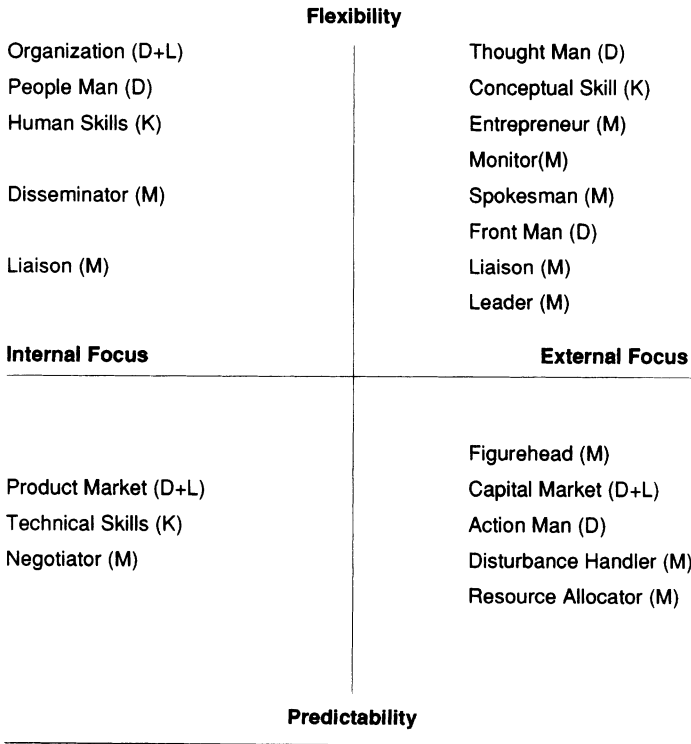
Fig. 1. The competing values framework.

bility while the “open systems” and “rational goal” models have an external focus. The scheme is called the Competing Values Framework because the criteria seem initially to carry a conflicting message: We want our organizations to be adaptable and flexible, but we also want them to be stable and controlled. Research is beginning to suggest, however, that more effective managers and organizations may be able to balance all four of the above conflicting demands, suggesting that high performance requires the simultaneous mastery of seemingly contradictory or paradoxical capabilities (Quinn & Cameron, 1988; Quinn, 1988).

The Competing Values Framework serves as a useful tool to organize the literature on executive leadership. Figure 2 plots the executive roles identified in the literature review onto the framework. This exercise facilitates a more balanced view of executive leadership roles; the “holes” or “blind spots” of one author are compensated for by the others. For example, while Drucker (1973) effectively covered three of the four quadrants in the framework, the “internal process” model was not represented in his conceptualization. However, the other three authors compensated for this by articulating several items in this quadrant. Similarly, while Donaldson and Lorsch (1983) covered three of the four quadrants with their concept of capital market demand (rational goal quadrant), product market demand

(internal process quadrant), and organization demand (human relations quadrant), there was no articulation of a role or demand in the “open systems” quadrant. Again, however, the other three authors more than made up for this deficiency with several roles ranging from “entrepreneur” to “front man.” Even Mintzberg’s (1975) ten roles, while covering aspects of each of the four quadrants, don’t tap the full range of content associated with each of the quadrants. For example, there is much more to the “internal process” quadrant than the Negotiator role articulated by Mintzberg.

In addition to integrating the current literature, the competing values model also provides linkage back to several well-known approaches in a variety of literatures (Quinn, 1988). Of particular note here is the link to



a D = Drucker (1973)  
 M = Mintzberg (1975)  
 K = Katz (1974)  
 D+L = Donaldson and Lorsch (1983)

Fig. 2. Executive leadership roles from the literature plotted on the competing values framework.



the work of Talcott Parsons (1959). In building a general theory of social action, Parsons argued that there were four functional prerequisites of any system of action: the adaptive function, the goal attainment function, the integrative function, and the pattern-maintenance or tension-management function. While the competing values model emerged from the empirical analysis of managerial perceptions, the similarity of the latter to the four functions of Parsons is striking. Of particular importance is the Parsonian argument that all four functions are required for high performance and ultimately, survival. This reinforces the need for an integrative model of CEO behavior.

### An Integrative Model

When the above literature is integrated, a more complete picture of the range of executive leadership roles emerges (Fig. 3). Each of the quadrants of the model can be thought of as representing a *domain* of action, entailing a particular *demand* on the firm, with a corresponding *role* for top management. The four domains of the model—the future, the organization, the operating system, and the market—match the four quadrants of the Competing Values Framework. Based upon these four domains, the model posits four competing demands which all top managers and executive leaders face:

*Innovation*: the future positioning of the organization in terms of strategic direction, products, and service.

*Commitment*: the development and motivation of people and the maintenance of a distinctive identity and value system.

*Efficiency*: the management of ongoing operations and the critical evaluation of alternative projects and programs.

*Performance*: the execution of plans and the achievement of results in the market place.

The executive leadership roles associated with each of these demands—Vision Setter, Motivator, Analyzer, and Task Master—are described further below.

*The Vision Setter*. The Vision Setter role is one of creating a sense of identity and mission—the definition and articulation of the firm's basic purpose and future direction. To fulfill this role a top manager must spend considerable time monitoring and studying emerging social, economic, and technological trends. Analysis of competitors and markets is also critical. In addition, informal contacts, both external (customers, suppliers, competitors, consultants) and internal (functional managers, line workers), are required to sense emerging trends and pick up "weak signals." The future direction of the organization must thus be based upon a mix of disciplined

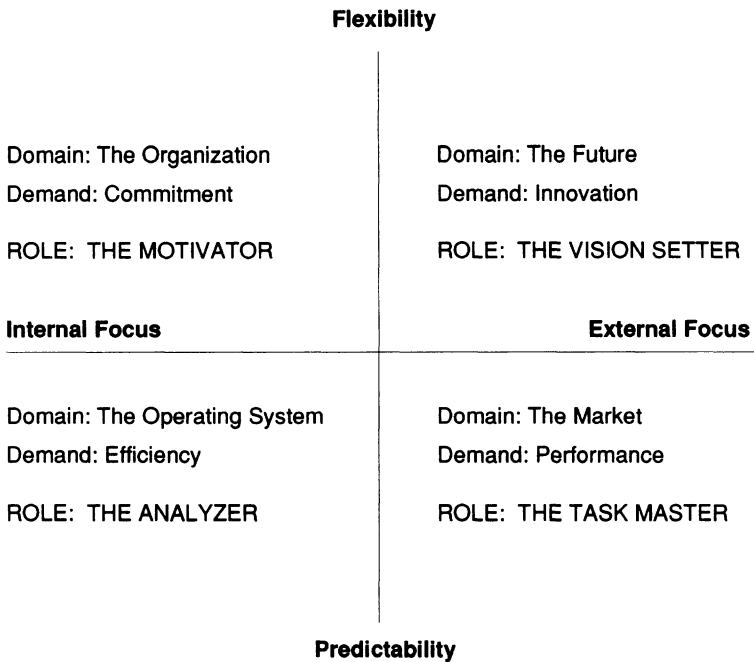


Fig. 3. Executive leadership — a model of the competing roles.

analysis and intuition. Jimmy Carter provides an excellent example of an executive with a strong orientation toward the Vision Setter role. However, the relative ineffectiveness of his administration reveals how important it is that the vision of the future be compelling and serve to create a sense of identity and collective purpose. This ties directly into the next role — that of the Motivator.

*The Motivator.* The Motivator role is fundamentally one of the management of meaning. It involves translating the vision and economic strategy of the firm into a “cause worth fighting for” — a core set of concepts and priorities which infuse and mobilize the entire organization. To fulfill this role, the executive must create a sense of excitement and vitality within the organization. Through innovative structures, programs, and processes, the top manager must challenge people to gain new competencies and achieve higher levels of performance. However, it is also essential to provide a sense of permanence and clarity of purpose. Through personal example, metaphor, anecdote, ceremony, and symbol, the ex-

ecutive emphasizes enduring company values. Seymour Cray, founder of Cray Research, provides an excellent example of an executive strongly oriented toward the Motivator role. The purpose of the company from the very start was to build the fastest computer in the world. Cray reinforced this cause through both organizational and personal action. Each year, he would build a new sailboat and then burn it at the end of the summer. This ritual made it clear to employees that what worked in the past will not work in the future. Success in the supercomputer business depends upon the continual reinvention of the product. Such actions, if done well, provide both the spirit of innovation needed to target broad, new strategic goals and the stability and clarity of purpose needed to achieve current objectives.

*The Analyzer.* In the Analyzer role, the top manager focuses on the efficient management of the internal operating system in the interest of serving existing product-markets. To fulfill this role, the executive leader must stop short of making day-to-day management decisions — this is the role of divisional and functional managers. Instead, the top manager sets the context and shapes the decisions made by the operating system. This is accomplished through the critical review and evaluation of proposed projects and programs — by asking difficult questions which force business and functional managers to think about their situation in new ways. The executive leader must also have the ability to integrate conflicting functional perspectives in the interest of the total organization. Harold Geneen was the quintessential Analyzer during his tenure as CEO of ITT. His orientation toward formal analysis coupled with his active role in decision making epitomized the analytical orientation to management. By insuring that the formal systems of the company facilitated the achievement of the firm's vision, the top manager thus achieves strategic control.

*The Task Master.* In the role of the Task Master, the top manager is concerned about firm performance and results. In the narrowest sense, this translates into economic performance and the demands of the capital market. In the broader sense, this translates into social performance — serving the full range of external “stakeholders” associated with the organization. To fulfill this role, the executive must not only influence decisions made at lower levels by contributing specific knowledge and opinions but must also make explicit trade-off decisions and allocate resources to the highest priority activities. Frank Lorenzo of Texas Air provides a wonderful illustration of an executive consumed with the Task Master role. In the final analysis, the Task Master is a “hands on” role with a strong focus on results — getting the job done today.

## RESEARCH HYPOTHESES

While the literature is rich with description of the top manager's job and the roles and behaviors of the executive, there has been very little empirical investigation into the relationship between executive leadership and firm performance. The first set of hypotheses, therefore, relates each of the four leadership roles to several aspects of firm performance (Table I). Recognizing that firm performance is a complex construct, Venkatraman and Ramanujam (1986) proposed three fundamental dimensions:

1. *Financial Performance*. Accounting-based measures such as ROA, ROS, and ROE. These indicators tap current profitability.

2. *Business Performance*. Market- and operation-based measures such as market share, sales growth, and new product development. These indicators tap both the growth and future positioning of the organization.

3. *Organizational Effectiveness*. Stakeholder-based measures such as employee satisfaction, quality, and social responsibility. These indicators tap the non-economic or "stakeholder" aspects of performance.

Since all four roles should be associated with positive outcomes, most of the cells in Table I predict significant relationships between independent and dependent variables. There are only two exceptions: the Vision Setter role in relation to Financial Performance, and the Task Master role in relation to Organizational Effectiveness. Since the former role focuses primarily on the future direction of the organization (business performance), it is not expected to display any significant relationship to current financial performance. Similarly, given the latter's emphasis upon the "bottom line" (financial performance), it is not expected to be related to the broader notion of organizational effectiveness. Thus, the following hypotheses:

*Hypothesis 1a:* The Vision Setter role will be strongly positively associated with Business Performance and positively associated with

**Table I.** Hypothesized Relationships Between Independent and Dependent Variables

Leadership roles	Performance measures		
	Financial performance	Business performance	Organizational effectiveness
Vision setter	<i>c</i>	<i>a</i>	<i>b</i>
Motivator	<i>b</i>	<i>b</i>	<i>a</i>
Analyzer	<i>b</i>	<i>b</i>	<i>b</i>
Task master	<i>a</i>	<i>b</i>	<i>c</i>

*a* = Strong positive relationship.

*b* = Positive relationship.

*c* = No significant relationship.

Organizational Effectiveness, but will not be related to Financial Performance.

*Hypothesis 1b:* The Task Master role will be strongly positively associated with Financial Performance and positively associated with Business Performance, but will not be related to Organizational Effectiveness.

The Motivator and Analyzer roles are expected to be positively related to all three performance dimensions. However, given the Motivator role's emphasis upon participation and involvement, it is expected to be strongly associated with Organizational (stakeholder) Effectiveness. Thus, the following hypotheses:

*Hypothesis 1c:* The Motivator role will be positively associated with Financial and Business Performance but will be strongly related to Organizational Effectiveness.

*Hypothesis 1d:* The Analyzer role will be positively associated with all three performance dimensions.

While this first set of hypotheses has the advantage of isolating statistically the independent effects of each of the four leadership roles, it does not indicate which combinations or configurations of roles work especially well. In their study of 24 CEOs, for example, Jonas, Fry, and Srivastva (1990) found that effective executives must "simultaneously embody the status quo and question it" (p. 40). As the custodian of the firm's history, the CEO must act as a force for stability. However, the leader must also challenge norms, ask frame-breaking questions, and play the maverick to stimulate creativity and innovation. Bourgeois and Eisenhardt (1988) uncovered similar combinations of paradoxical capabilities in their study of strategic decision processes in "high velocity" environments. They found that effective executive leadership in such firms required not only the articulation of a broad vision and bold commitments of resources, but also the ability to maintain flexibility and empower people throughout the organization to take risks and challenge the status quo. The paradoxical nature of executive leadership is also captured by Itami's (1987) concept of "dynamic fit," which states that the role of top management in today's world is both to create and destroy balance. Senior management must send consistent messages and align strategy with structure but must never allow the organization to settle into complacency. As soon as "balance" is achieved it must be destroyed. The organization must be challenged to acquire new competencies so that it might be positioned for the future.

Research also suggests that high performing managers possess heightened levels of cognitive complexity (Jacques, 1986; Kegan, 1982; Streufert & Swezey, 1986), and are able to utilize multiple frames of reference in dealing with problems (Shrivastava & Schneider, 1984; Dreyfus, Dreyfus, & Athanasion, 1986). Furthermore, evidence suggests that leadership ef-

fectiveness demands not only complex thought processes, but also “behavioral complexity”—the ability to act out a wide range of roles in the interpersonal and organizational arena (e.g., Torbert, 1987; Quinn, 1988; Hooijberg & Quinn, 1991). The best top managers should thus possess the ability to play multiple, even competing roles in a highly integrated and complementary way.

Several recent studies have uncovered evidence of the importance of such capability. Denison, Hooijberg, and Quinn (1991), in a study of 176 public utility executives, found that managers were judged more effective by their superiors when their subordinates perceived them as more behaviorally complex. Quinn, Spreitzer, and Hart (1992), in a study of managerial effectiveness in a Fortune 10 company, found that managers who demonstrated competence in opposing quadrants from the Competing Values Framework, were judged more effective by subordinates, peers, and superiors.

Effective executive leadership would therefore appear to require a range of skills which seem, on the surface, to be mutually exclusive—an ability to focus on broad visions for the future while also providing critical evaluation of present plans; to create a sense of excitement and challenge while also focusing on getting the job done today. We propose that it is precisely this “behavioral complexity”—the ability to deal with the competing demands through the mastery of seemingly contradictory or paradoxical roles—which distinguishes the highest performing executives from their more mediocre counterparts. Furthermore, these executives should realize superior performance on multiple dimensions—profitability, growth, future positioning, and stakeholder satisfaction. This leads to a second research hypothesis:

*Hypothesis 2:* The simultaneous use of the Vision Setter, Motivator, Analyzer, and Task Master roles by executives will be associated with high performance on all three performance dimensions—financial, business, and stakeholder.

## **SOME PRELIMINARY EMPIRICAL EVIDENCE**

To provide a preliminary test of the above hypotheses, a set of 16 questionnaire items was designed to tap the four executive leadership roles. The data were then gathered via a survey of top managers from a large sample of firms in the industrial midwest.

### **Data Collection**

The sample of firms for this study was selected from the population of all businesses operating from a location in a large metropolitan region in the industrial midwest, as defined by the fourth quarter 1986 records of

the State's Unemployment Insurance Records. This population included organizations of nearly all types and sizes, excluding only farms, railroads, and government operations. The use of unemployment insurance records has been shown to be particularly effective as a sampling frame for small and new firms, precisely those firms that conventional data bases such as Dun and Bradstreet's are poorest at capturing (Birley, 1984). A probability proportional to size (PPS) design was used to select a broadly representative sample of 3546 firms, which reflected the entire regional economy.

A questionnaire covering a wide range of issues was mailed to the Chief Executive Officer or President (by name) of the 3546 firms in the sample in September 1988. The initial mailing was followed by a mail prompt, a second mailing of the questionnaire, a second mail prompt, and extensive telephone follow-up. Nine hundred and sixteen completed surveys were received for a response rate of 25%. Non-response bias was analyzed both with regard to SIC code and size. Overall, response rates were quite similar across categories, although larger firms were slightly more likely to respond than smaller firms.

## Measures

As noted above, *Executive Leadership* was operationalized through 16 items in the questionnaire; four questions were designed specifically to tap each of the four roles in the model (see Appendix). The role items were projective in nature and asked the CEO to respond to each using a 5-point Likert scale ranging from 1 (very infrequently) through 5 (very frequently). To insure both validity and reliability, the 16 items were factor analyzed using Principal Components Analysis and the Kaiser Criterion to estimate the number of factors. Final factor loadings were then determined via varimax rotation. Thirteen of the original 16 items loaded unambiguously on a factor and were retained for analysis. The four factors which emerged clearly reflected the four executive leadership roles postulated in the model, demonstrating their unidimensionality. Details on the factor analyses are available from the authors upon request. Table II contains a summary of the items and descriptive statistics for the resulting factors. Also included is the alpha coefficient for each of the factors, which indicates adequate internal consistency for the preliminary nature of this analysis.

As noted above, *Firm Performance* was conceived as a multidimensional construct, following the work of Venkatraman and Ramanujam (1986). Three dimensions were postulated: financial performance, business performance, and organizational (stakeholder) effectiveness. These three dimensions of performance were operationalized through eight questionnaire items. Respondents were asked to assess their company's

Table II. Executive Leadership Roles (CEO Respondents)

Factor	N	Mean	SD	Alpha	Items included
Vision setter	635	3.42	.84	.56	a. Concentrate on a basic purpose and direction i. Communicate a sense of where the company will be in 20 years j. Study emerging trends
Motivator	642	3.40	.89	.71	k. Challenge people with new goals and aspirations d. Emphasize company values c. Create a sense of excitement
Analyzer	617	3.70	.82	.69	n. Evaluate proposed projects o. Integrate conflicting perspectives m. Question subordinates
Task master	621	3.93	.67	.58	f. Contribute knowledge and options on problems h. Focus on results e. Influence decisions at lower levels g. Make trade-off decisions and allocate resources

performance on each of these eight items, compared to that of other companies in the same market and at a similar stage of development. Comparisons were made on a 7-point scale for each item ranging from 1 (low performer) to 7 (high performer). The eight items included were: (1) profitability/return on assets, (2) cash flow, (3) sales growth, (4) market share, (5) technical product/service design and development, (6) quality of product/service, (7) employee satisfaction, and (8) overall company performance. The eight items were factor analyzed, using the same procedure as described above for the Executive Leadership items. As expected, three valid and reliable factors emerged from this procedure: Financial Performance, Business Performance, and Organizational (Stakeholder) Effectiveness. Table III contains the items and descriptive statistics for each of the three performance factors.

Objective measures of performance (sales, asset base, and profits) were also collected, which enabled the calculation of 3-year average ROA and 3-year average sales growth. However, only one-third of the respondents provided adequate data to compute the necessary percentages and ratios. For those cases where both subjective and objective performance data were available, the correlation between the two was computed to test



Table III. Performance Measures (CEO Respondents)

Factor	N	Mean	SD	Alpha	Items included
Financial performance	651	4.42	1.47	.78	Cash flow Profitability/ROA
Business performance	599	4.44	1.24	.64	Sales growth Product development Market share
Organizational effectiveness	672	5.23	.85	.76	Quality of product Employee satisfaction Overall performance

for convergent validity. When industry effects were controlled for, correlations between the subjective and objective performance measures for profitability and sales growth were highly significant. For example, the correlation between the subjective and objective profitability measures was .55 for manufacturing firms ( $p < .01$ ) and the correlation between the two sales growth measures was .40 for service firms ( $p < .05$ ). The correlations grew in magnitude and significance as more homogeneous subsets were examined. Specifically, performance measure convergence was analyzed sequentially for firms in SIC codes 35 (Machinery), 354 (Metalworking Machinery), and 3544 (Dies, Tools, Jigs, and Fixtures). The correlations increased progressively for the profitability measures ( $r = .74, .78, \text{ and } .99$ , respectively for the 2-, 3-, and 4-digit SIC code designations). These results are consistent with recent research which indicates that subjective assessments of business performance obtained from senior managers correlate strongly with secondary (objective) measures (Dess & Robinson, 1984; Venkatraman & Ramanujam, 1987). Given the general convergence in measures and supporting research, the use of the subjective measures of performance was deemed appropriate for the purposes of this study.

Substantial research evidence also suggests that contingency factors (e.g., environment, firm strategy, structure, technology, size, etc.) interact with a range of executive characteristics to influence effectiveness (Hambrick & Mason, 1984). Indeed, studies have demonstrated the importance of matching executive functional background (Gupta & Govindarajan, 1984), personality (Miller, Kets de Vries, & Toulouse, 1982), and cognitive style (Govindarajan, 1989) to particular environmental and organizational contexts. These results emphasize the appropriateness of a contingency design when studying top manager background and characteristics. However, since behaviorally complex executives were expected to outperform less complex executives regardless of context, environmental and organizational

control variables were employed in lieu of a contingency framework (Hambrick, 1989). Several environmental variables were used to control for industry effects as suggested by Dess, Ireland, and Hitt (1990). The firm's industry environment was conceptualized using the three dimensions proposed by Dess and Beard (1984) — dynamism, complexity, and munificence. Each dimension was operationalized through a single questionnaire item (using a 5-point Likert scale where 1 = strongly disagree and 5 = strongly agree) as follows:

*Dynamism:* The business environment for our company is changing very rapidly.

*Complexity:* The business environment we face is very complex with many organizations whose actions can affect us.

*Munificence:* The markets for our main product will grow next year.

Firm size was used as the organizational control variable as recommended by Fredrickson and Mitchell (1984). This was operationalized as the natural log of total (FTE) employment for the firm in 1988. Analysis was constrained only to those cases where the CEO was the respondent.

## Data Analysis

To test the first set of hypotheses, multiple regression was utilized to examine the impact of the leadership roles on the three dimensions of firm performance, controlling for size and the three environmental variables.

To test the second hypothesis, three different analytical approaches were used to minimize method bias (Jick, 1979; Venkatraman, 1989). First, scores on the four roles were compared, using one-way analysis of variance, for the highest- and lowest-performing firms in the sample. High-performing firms were defined as those scoring above the median on all three performance dimensions; low performers scored below the median on all three dimensions.

While the above approach examined the importance of each leadership role to multidimensional performance, it did not explicitly test the interactive effect of the four leadership roles. To accomplish this, it was necessary to specify *configurations* of executive leadership (Miller, 1978). Both an inductive (empirical) and a deductive (conceptual) approach were used to classify the cases into distinctive leadership types (Venkatraman, 1989).

Configurations of executive leadership were identified *inductively* using Q-type cluster analysis (Miller, 1978). The four roles were used as the basis for clustering cases into distinct executive leadership "profiles." The Quick Cluster algorithm was used for this purpose; this technique systematically assigns cases to clusters to maximize differences on the clustering

variables (in this case the four leadership roles). The technique is particularly efficient when clustering a large number of cases. This procedure produced three “inductive” leadership profiles which allowed for the general testing of the second hypothesis using analysis of variance and dummy variable regression.

Finally, firms were categorized *a priori* into particular executive leadership profiles using a deductive approach (Hambrick, 1984). In order to provide a direct test of the second hypothesis, it was essential to separate those firms whose CEOs saw their job as requiring the simultaneous mastery of the four leadership roles from those placing less emphasis upon the four roles or those with “unbalanced” profiles — CEOs which emphasized one or two of the roles but not all four. Analysis of variance and dummy variable regression were then used to assess the relationships between these “deductive” leadership types and the three factors of firm performance.

## RESULTS

The results presented in Table II indicated that the top managers in the sample rated the Task Master role as the one they most frequently played (mean = 3.93) while the Vision Setter (mean = 3.42) and Motivator (mean = 3.40) roles were the least frequently pursued. The Analyzer role (mean = 3.70) was somewhere in between. These descriptive results say nothing, however, about the relationship between executive roles and firm performance.

### Hypothesis 1: Leadership Roles and Firm Performance

To understand better the relative importance of each of the executive leadership roles to firm performance, multiple regression analysis was performed using the leadership roles and the controls as independent variables and the three performance factors as dependent variables in three separate regression equations. The results are reported in Table IV.

The control variables were clearly important predictors of performance. Larger firms demonstrated stronger financial and business performance. However, larger firms were less oriented toward organizational (stakeholder) effectiveness than were smaller firms. As might be expected, firms in munificent environments were also better business performers.

Net of the control variables, three of the four executive leadership roles were significant predictors of performance. As expected, the Vision Setter role was a significant predictor of both Business Performance and Organizational Effectiveness, but was not related to Financial Performance.

Table IV. Multiple Regression: Performance on Executive Leadership Roles<sup>a</sup> (*n* = 604)

Roles/controls	Performance measures		
	Financial performance	Business performance	Organizational effectiveness
Vision setter	.01	.12 <sup>c</sup>	.12 <sup>c</sup>
Motivator	.10 <sup>b</sup>	.09 <sup>b</sup>	.23 <sup>d</sup>
Analyzer	-.06	.12 <sup>c</sup>	.09 <sup>b</sup>
Task master	.02	.01	-.04
Dynamism	-.06	-.01	-.06
Complexity	-.02	-.06	-.01
Munificence	.03	.19 <sup>d</sup>	-.05
Size	.12 <sup>c</sup>	.19 <sup>d</sup>	-.11 <sup>c</sup>
Adj <i>R</i> <sup>2</sup>	.01	.16	.11
<i>F</i>	2.06	15.65	10.39
<i>p</i>	.04	.000	.000
<i>SE</i>	1.46	1.13	0.80

<sup>a</sup>Data reported in the table are standardized beta coefficients.

<sup>b</sup>*p* < .10.

<sup>c</sup>*p* < .01.

<sup>d</sup>*p* < .001.

Thus, Hypothesis 1a is only partially confirmed: The Vision Setter role is strongly associated with Business Performance, but is also strongly predictive of Organizational (stakeholder) Effectiveness. Furthermore, while the Task Master role may have been the most frequently played by responding executives, it was not predictive of performance on any dimension. Thus, contrary to Hypothesis 1b, the Task Master role is not strongly associated with Financial Performance nor is it related to Business Performance.

The Analyzer role, however, was a significant predictor of performance but not in the expected manner. It was strongly predictive of Business Performance and somewhat predictive of Organizational Effectiveness, but showed no relationship to Financial Performance. Thus, contrary to Hypothesis 1d, the Analyzer role is strongly predictive of Business Performance but is only weakly related to Organizational Effectiveness and appears to be unrelated to Financial Performance. Surprisingly, the Motivator role was the only one of the four roles which predicted all three dimensions of performance. Consistent with the hypothesis, the strongest relationship was to Organizational Effectiveness. Thus, Hypothesis 1c is confirmed: The Motivator role is positively associated with Financial and Business Performance but is most strongly associated with Organizational Effectiveness.

In interpreting these results, it is important to note that the predictive power of the three equations was dramatically different: Leadership and

the control variables explained only 1% of the variance in Financial Performance, while it explained 11% and 16% of the variance in Organizational Effectiveness and Business Performance, respectively. Thus, it may be that executive leadership has little to do with the short-term financial objectives of the firm since none of the four leadership roles was a strong predictor of Financial Performance. Before drawing such a conclusion, however, it is necessary to move beyond the additive affect of the four roles on single performance dimensions. First, we examine the leadership profiles of firms which demonstrate multidimensional performance, then we explore specific configurations of leadership roles and their affect on the three performance dimensions.

**Hypothesis 2: Configuration and Firm Performance**

Analysis of variance (Table V) clearly indicates that the CEOs of the firms performing above the median on all three performance dimensions saw their jobs as requiring much greater emphasis on the four leadership roles than did the CEOs of low performing firms. Thus, multidimensional performance appears to be fostered by behavioral complexity as reflected by capability in each of the four leadership roles.

These results still tell us little, however, about which *configurations* of roles are associated with high performance. To examine the extent to which the simultaneous mastery of the four leadership roles is related to high performance, Q-type cluster analysis was used to categorize inductively cases into distinctive leadership “profiles.”

*Inductive Leadership Types and Firm Performance.* The Q-type analysis was done sequentially, first solving for two types and ending with the seven-type solution. Since the Quick Cluster program automatically produces groups which are statistically different from one another, the three cluster

**Table V.** Analysis of Variance: Leadership Profiles of High vs. Low Performing Firms

Performance level	Roles			
	Vision setter	Motivator	Analyzer	Task master
High performers (n = 94)	4.27	4.25	4.57	4.67
Low performers (n = 106)	2.58	2.45	2.93	3.48
N	199	199	199	199
F	548.35	568.97	510.44	409.38
p	.000	.000	.000	.000

solution was chosen as the best based upon interpretability of the clusters. The three "inductive" leadership profiles are presented in Table VI, with their associated scores on the four leadership roles. The sample mean on the four roles is also included for comparison. The number of cases in each group is noted in parentheses after the label.

The "High Complexity" group has consistently high scores on each of the four roles (behaviorally complex), while the "Low Complexity" group scores consistently low on the roles. The third group of firms constitutes an "Unbalanced" leadership profile, with the Analyzer and Task Master roles being emphasized at the expense of the Vision Setter and Motivator roles. The latter two types thus reflect different varieties of low behavioral complexity.

For Hypothesis 2 to be confirmed, the High Complexity group should be the best performer on all three performance dimensions, and the Low Complexity group, the worst performer. The Unbalanced group should show mixed results, doing well on some dimensions and not as well on others. To test these relationships, a one-way analysis of variance was performed with the three leadership types as the independent variables and the three performance factors as the dependent variables. The results are presented in Table VII.

The data clearly show that the High Complexity group outperformed the other two profiles on all three performance dimensions. The differences were most pronounced with respect to Business Performance and Organizational Effectiveness, but significant differences also existed for Financial Performance. Differences between the Low Complexity and Unbalanced groups, however, were not statistically significant.

Since firm size and competitive environment might have strong moderating effects on leadership configuration, multiple regression was performed including these variables as controls along with dummy variables for the leadership types. Dummy variable coding was utilized with the Low-Complexity type serving as the comparison group. The results are presented in Table VIII.

**Table VI.** Q-Type Cluster Analysis: Inductive Leadership Profiles

Leadership types	Roles			
	Vision setter	Motivator	Analyzer	Task master
High complexity (402)	3.84	3.96	4.09	4.05
Low complexity (160)	2.95	2.69	2.61	3.58
Unbalanced (109)	2.60	2.48	3.82	4.13
Mean	3.42	3.40	3.70	3.93

**Table VII. Analysis of Variance: Inductive Leadership Types and Performance<sup>a</sup>**

Leadership type	Performance measures		
	Financial performance	Business performance	Organizational effectiveness
1. High complexity	4.51 (3)	4.72 (2,3)	5.65 (2,3)
2. Low complexity	4.45	3.97 (1)	5.29 (1)
3. Unbalanced	4.06 (1)	4.16 (1)	5.21 (1)
<i>N</i>	650	651	661
<i>F</i>	3.96	24.84	17.03
<i>p</i>	.02	.000	.000

<sup>a</sup>Data reported in the table are the mean values and the significant ( $p < .08$ ) Scheffé contrasts (in parentheses). For example, the high complexity group is significantly different from both the low complexity (2) and unbalanced (3) groups with respect to business performance.

While the control variables, particularly size and munificence, appeared to be quite important with respect to all three performance factors, the leadership types still showed the same pattern of relationships to performance as in the Analysis of Variance. Indeed, net of the control variables, the High Complexity group was a significant predictor of Business Performance and Organizational Effectiveness compared to the Low Complexity group. The Unbalanced leadership type was not a significant

**Table VIII. Multiple Regression: Performance on Inductive Leadership Types<sup>a</sup> ( $n = 621$ )**

Leadership types/controls	Performance measures		
	Financial performance	Business performance	Organizational effectiveness
High complexity	.01	.21 <sup>d</sup>	.20 <sup>d</sup>
Unbalanced	-.12 <sup>c</sup>	.06	-.05
Dynamism	-.05	.02	-.04
Complexity	-.01	-.04	.01
Munificence	.03	.20 <sup>d</sup>	.08 <sup>b</sup>
Size	.11 <sup>c</sup>	.18 <sup>d</sup>	-.09 <sup>b</sup>
Adj $R^2$	.02	.13	.06
<i>F</i>	3.03	16.57	7.36
<i>p</i>	.006	.000	.000
<i>SE</i>	1.45	1.17	.84

<sup>a</sup>Data reported in the table are standardized beta coefficients. Dummy variable coding was utilized with the low complexity group as the comparison group.

<sup>b</sup> $p < .05$ .

<sup>c</sup> $p < .01$ .

<sup>d</sup> $p < .001$ .

predictor compared to the Low-Complexity group with the exception of Financial Performance, where it displayed a significant negative relationship.

*Deductive Leadership Types and Firm Performance.* The Q-type analysis confirmed the existence of a behaviorally complex leadership profile (High Complexity) and facilitated a general test of the second hypothesis. However, to provide a direct test of the hypothesis it was necessary to define a more restrictive set of leadership types. To accomplish this end, four "deductive" leadership profiles were specified. The leadership roles were partitioned into thirds—high, medium, and low—according to their percentile breaks (Table IX). CEOs who scored in the upper third on all four of the leadership roles were placed in a category labeled "High Complexity." Similarly, those at the medium level on all four factors were labeled "Medium Complexity" and those scoring in the bottom third on all four roles were labeled "Low Complexity." The remaining cases were assigned to a category labeled "Unbalanced" since, by definition, they scored at different levels across the four leadership roles. As can be seen from the number of cases in each group, this is a much more restrictive classification system than the Q-type analysis since only 52 cases were defined as "high complexity" versus 402 cases through the Q-type analysis. Indeed, the vast majority of cases fell into the "unbalanced" category (578).

Again, to confirm the hypothesis, the High Complexity group should be the best performer on all three performance dimensions and the Low Complexity group, the worst performer. The Unbalanced group should again show mixed results, doing well on some dimensions and not as well on others. To explore these relationships, a one-way analysis of variance was again performed with the three leadership types (the Medium Complexity group was omitted so as to make the results comparable to the "inductive" analysis) as the independent variables and the three perform-

Table IX. Deductive Leadership Profiles

Leadership types	Roles			
	Vision setter	Motivator	Analyzer	Task master
High complexity (52)	>3.67	>4.00	>4.00	>4.25
Medium complexity (14)	<3.67, >3.00	<4.00, >3.00	<4.00, >3.33	<4.25, >3.75
Low complexity (31)	<3.00	<3.00	>3.33	>3.75
Unbalanced (578)	N/A	N/A	N/A	N/A



ance factors as the dependent variables. The results are presented in Table X.

Despite the more restrictive classification system, the results are almost identical to those in Table VII. The High Complexity group outperformed the other two types on all three performance dimensions, although the results were not statistically significant with respect to Financial Performance. The Low Complexity group was the poorest performer with respect to both Business Performance and Organizational Effectiveness, while the Unbalanced group fell in the middle.

To control for size and environment effects, multiple regression was again performed with dummy variables for the three leadership types and the control variables included as predictors. Mean effects coding was utilized with the Medium Complexity group serving as the omitted class. The results are presented in Table XI.

As in the previous regression with the inductive leadership types, the control variables proved to be important predictors of firm performance. Net of the control variables, the three leadership types showed only a few significant relationships to performance. Given the smaller number of cases in the High and Low Complexity groups and the "catch-all" nature of the Unbalanced group, this result might have been anticipated. Nonetheless, significant relationships were in the predicted directions. High Complexity leadership was a significant predictor of Organizational Effectiveness while the Low Complexity group was strongly negatively associated with Business Performance and Organizational Effectiveness. There were no significant relationships between leadership type and Financial Performance.

Overall, the results of both the inductive and deductive analyses provide support for Hypothesis 2: The more top managers see their job as requiring the simultaneous mastery of all four leadership roles, the higher

Table X. Analysis of Variance: Deductive Leadership Types and Performance<sup>a</sup>

Leadership type	Performance measures		
	Financial performance	Business performance	Organizational effectiveness
1. High complexity	4.71	4.83 (2)	6.17 (2,3)
2. Low complexity	4.61	3.74 (1,3)	5.11 (3)
3. Unbalanced	4.40	4.46 (2)	5.49 (2)
<i>N</i>	675	677	687
<i>F</i>	0.78	6.47	10.11
<i>p</i>	.51	.000	.000

<sup>a</sup>Data reported in the table are the mean values and the significant ( $p < .08$ ) Scheffé contrasts (in parentheses). For example, the high complexity group is significantly different from only the low complexity group with respect to future positioning.

the performance of the firm on all three performance dimensions. However, the results are clearly strongest for Business Performance and Organizational Effectiveness. Leadership configuration appears to have little to do with Financial Performance.

## DISCUSSION AND CONCLUSIONS

The literature on leadership has been dominated by dualistic thinking; most existing models postulate dichotomies that implicitly or explicitly assert one approach or orientation as being superior to another (e.g., McGregor, 1966; Likert, 1967; Burns, 1978). Given the heavy reliance on "either-or" thinking, most studies tend to ignore the connectedness of polar categories (Bass, 1981). The interpretations become reductionist and linear, ignoring the fact that performance may be the result of patterns of more complex or perhaps even contradictory behaviors (Bobko, 1985; Jacques, 1986; Hooijberg & Quinn, 1991). Given the increasing awareness of this bias, the notion of contradiction and paradox is receiving more attention (Mitroff, 1983; Torbert, 1987; Bourgeois & Eisenhardt, 1988; Quinn & Cameron, 1988).

From the paradoxical perspective, it is argued that effective leaders must be "practical revitalizers" who bring about an interpenetration of continuity and change or "productive teambuilders" who focus simultaneously on task and people (Quinn, Spreitzer, & Hart, 1991). Building on this per-

**Table XI.** Multiple Regression: Performance on Deductive Leadership Types<sup>a</sup> ( $n = 621$ )

Leadership types/Controls	Performance measures		
	Financial performance	Business performance	Organizational effectiveness
High complexity	.01	.09	.17 <sup>b</sup>
Low complexity	.02	-.14 <sup>c</sup>	-.15 <sup>c</sup>
Unbalanced	-.06	-.01	-.02
Dynamism	-.04	-.04	.02
Complexity	-.01	-.03	.01
Munificence	.04	.22 <sup>c</sup>	.11 <sup>b</sup>
Size	.13 <sup>b</sup>	.21 <sup>c</sup>	-.05
Adj $R^2$	.01	.12	.05
$F$	1.87	12.89	5.00
$p$	.07	.000	.000
$SE$	1.46	1.18	.85

<sup>a</sup>Data reported in the table are standardized beta coefficients. Mean effects coding was utilized with the medium complexity group as the omitted class.

<sup>b</sup> $p < .01$ .

<sup>c</sup> $p < .001$ .

spective, Hunt (1991) has argued that leadership research needs to examine more holistic patterns of behavior using multiple measures. Unfortunately, there are still very few empirical studies that attempt such an undertaking. The present study does, however, provide some insight into these issues.

Indeed, the research reported here not only has the advantage of focusing on executive leadership behavior and its relationship to firm performance, but it also identifies, both conceptually and empirically, four juxtaposed roles: Vision Setter, Motivator, Analyzer, and Task Master. More importantly, the findings show that the particular roles played by the top manager are important predictors of firm performance. The results specifically underscore the importance of the Vision Setter and Motivator roles (and to a lesser extent the Analyzer role) to firm performance. This is interesting in that the Task Master role is the most frequently performed role, yet it contributes little, in and of itself, to performance. It is only when the Task Master role is combined with the Vision Setter and Motivator roles, that performance is enhanced. In fact, the unbalanced playing of the Task Master and Analyzer roles appears to hamper performance, particularly with respect to Business Performance and Organizational Effectiveness. The highest levels of performance were achieved by CEOs with high levels of “behavioral complexity”—leaders who were able to play, at a high level, all four roles. That is, they saw themselves as focusing on broad visions for the future while also providing critical evaluation of present plans. They also saw themselves tending to relational issues while simultaneously emphasizing the accomplishment of tasks.

While the findings tend to support the arguments of the emerging paradoxical perspective, they also suggest an interesting insight about situation and context. Executives with high scores on all four roles, achieve high levels of performance regardless of the nature of their firm’s size or competitive environment. This does not suggest that high performers can arbitrarily move from one firm or industry to another, but it does suggest that high behavioral complexity is a somewhat universal capability. Here there is a developmental implication. The capacity to balance competing demands and play all four roles at a high level suggests lengthy experience, hard work, and the development of knowledge and relationships over a long period. This notion is consistent with Quinn’s (1988) thesis pertaining to the mastery of paradoxical demands.

There is another interesting implication in the present work relating to the dependent variables. In the strategy and leadership literature, it is not uncommon, using financial performance (ROA, ROI) as the dependent variable, to conclude that leadership has little impact compared to industry and company influences (e.g., Lieberman & O’Connor, 1972). The results of the present study would seem to reinforce this finding since executive

leadership was not strongly predictive of Financial Performance. Indeed, there is little functional connection between the roles played by the executive and short-term profitability. Environmental context (e.g., dynamism) and organizational factors (e.g., accounting practices) would be expected to have much greater influence over current profits. However, the executive should be expected to have significant impact on the future direction of the firm and its reputation among internal and external stakeholders. This is confirmed by the present study. Executive leadership was a strong predictor of both Business Performance and Organizational Effectiveness. These results are consistent with Day and Lord's (1988) observation that with appropriate methodological corrections most studies indicate much larger leadership effects than initially implied. With respect to financial performance they note that it is unrealistic to expect immediate results, suggesting a lag effect between leadership and profit. Thus, future cross-sectional research on leadership should be wary of using financial performance as a dependent variable. It must either be supplemented with a broader range of performance dimensions (such as business performance and organizational effectiveness) or a longitudinal design must be employed enabling the calculation of lag effects.

While the present study did incorporate organizational and environmental control variables, further research is also needed to clarify the specific relationships between executive leadership and firm performance. Future research could take a contingency approach. For example, do different corporate and business strategies require different executive leadership behaviors? Do firms in different industries, or at different stages of development call for distinct executive leadership "types"? It would also be desirable to collect data from multiple respondents in organizations as a means of validating the top managers' perceptions about executive leadership. Similarly, where possible, the use of secondary, objective measures of performance would be desirable to validate the CEOs' perception of their firms' performance. This work also needs to be extended to other samples of organizations with more refined measures of the four executive leadership roles. We view the data presented here as suggestive but preliminary. Much additional work remains to develop more reliable measures of executive leadership and test them in specific organizational settings.

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**APPENDIX: EXECUTIVE LEADERSHIP ROLE ITEMS**

Listed below are some statements which describe top management roles and behaviors. Please use the following scale to indicate how often you engage in these activities. Place a number from 1 to 6 in the space just before each of the items.

1	2	3	4	5	6
Very infrequently		Occasionally		Very frequently	NA

In my job as Chief Executive or General Manager, I:

- a. Concentrate on our firm’s basic purpose and general direction.
- b. Nurture contacts with people external to the company.
- c. Try to create a sense of excitement within the company.
- d. Emphasize important company values through ceremonies and other events.
- e. Use my position to influence decisions made at lower levels.
- f. Contribute specific knowledge and opinions about problems.
- g. Make trade-off decisions and allocate resources accordingly.
- h. Focus on results—“getting the job done today.”
- i. Communicate a sense of where the company might be in 20 years.
- j. Study emerging social and economic trends.
- k. Challenge our people with new goals and aspirations.
- l. Short-circuit the hierarchy by talking to people throughout the company.
- m. Ask questions which force subordinates to think about problems in new ways.
- n. Evaluate critically proposed projects and programs.
- o. Work to integrate conflicting perspectives and unpopular views.
- p. Set specific, operational targets for our company.

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