

THE THEORETICAL DEVELOPMENT AND EMPIRICAL
TESTING OF A MODEL OF ORGANIZATIONAL
EFFECTIVENESS AMONG SELECTED
SUPERMARKETS IN THE STATE
OF OKLAHOMA

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Submitted to the Faculty of the Graduate College
of the Oklahoma State University
in partial fulfillment of the requirements
for the Degree of
DOCTOR OF PHILOSOPHY
December, 1977

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ACKNOWLEDGMENTS

The writer wishes to express his deep appreciation to many professors and associates who have provided their knowledge, sound criticisms and recommendations during the planning and completion of this study.

I express sincere thanks to my Graduate Committee Chairman, Dr. H. Kirk Downey, for his constant support and invaluable suggestions throughout the duration of this study. Thanks are also extended to Dr. Ivan Chapman, Dr. Michael A. Hitt, Dr. Wayne A. Meinhart, Dr. R. Dennis Middlemist, and Dr. Ansel M. Sharp who served as committee members for their support and encouragement.

Special gratitude is also expressed to Mr. Joe Wheeler of Allied Supermarkets, Inc. Without his cooperation, the collection of the data for this study would have been impossible.

Finally, without the confidence, help, and understanding of my wife, Linda, this study could not have become a reality.

Ecclesiastes 4:9-11.

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CHAPTER I

THE PROBLEM

Purpose of the Study

The objective of this study is to develop a new measure of organizational effectiveness. New measures are required because of increased usage of the systems theory paradigm without the commensurate development of appropriate measures. Much current research purports to be based on systems theory, yet the methodologies and measures employed in the research do not flow from the assumptions of systems theory. In order for systems theory to continue to be used in organizational research, new measures must be developed. This study, then, seeks to create these new measures.

In evaluating these measures, it will be necessary to evaluate the results that would be obtained if past measures of effectiveness were employed. These would be compared with the results culminating from the use of newly created measures. Finally, it will be necessary to point out how and why the results are different. It is important to recognize that this study is not questioning the legitimacy or validity of utilizing previous methodologies for measuring organizational effectiveness. They have their strengths and their limitations. However, if systems theory is to be accepted and utilized as a theoretical model for explaining and predicting organizational functioning, then these measures may not be appropriate and new measures must be developed. Or, it is

necessary to show that these measures are consistent with systems theory-based measures.

Need for the Study

The need for this study is basically twofold; first, to meet a theoretical need, and second, to meet a pragmatic one. The theoretical need is portrayed by Price¹ when he discusses the appropriate approach for studying organizational effectiveness. He states that there have been two primary approaches utilized in the past. The goal approach, which defines organizational effectiveness in terms of the degree of goal accomplishment, was the first used. Later, the systems resource approach was employed. This approach evaluated effectiveness in terms of resource procurement. Neither approach has resulted in general measures. Hence, he calls for further study of the issue, and argues that the new studies should present systematic data revealing the validity and reliability of the measures employed in the research.²

Similarly, a recent article by Steers³ reemphasizes this theoretical need. After evaluating seventeen past research studies of organizational effectiveness, he notes several limitations. The major drawback to the use of the measures used by these studies is the difficulty associated with selecting the appropriate evaluative criterion. Past criteria have been unstable, difficult to quantify, situation specific, and constrained by the time perspective being employed by the researcher. When multiple criteria were utilized, it was impossible to resolve the conflict between the mutually exclusive dimensions. Another drawback has been the lack of theoretical relevance of some of the models which were utilized as a basis for the studies.

Finally, he notes that there has been an absence of studies which combine both the macro and micro perspectives in attempting to understand and predict organizational behavior.⁴

Steers goes on to argue that systems theory may well provide the greatest opportunity for understanding organizational functioning and predicting effectiveness. This is made clear by his statement, "... the more relevant models are those that attempt to develop integrating mechanisms by positing how such criteria affect or are affected by other variables...."⁵ It seems clear that Steers is calling for the development of measures of organizational effectiveness which are consistent with the tenets of systems theory. To understand more fully how new measures will be of benefit, it is first necessary to introduce the concepts of systems theory.

Current organizational research and theory views organizations as social systems. Further, researchers employ systems terminology and "systems methodology" in their attempts to understand and predict an organization's actions. The application of general systems theory to organizational theory views organizations as existing in a hierarchy of systems. This implies that the organization is made up of smaller systems while concurrently being itself a part of a larger system. This larger system, with which the organization must interact, is called its environment. The interaction process is one of exchange. The organization obtains resources from its environment, transforms these resources into an output which is valued by the environment, and exports these outputs to the environment in exchange for more resources. As long as the organization is able to exchange this generated output, it is predicted that it will continue to survive. It is likely, however, that

the inputs required by the organization could be transformed into other forms of output. Should these other types of output become more greatly valued than the outcome which the organization is currently generating, the firm faces a major decision point. The firm must adjust its transformation process, or create added value in the minds of those currently in their environment for the output currently being produced. Or, the firm might use some combination of the previous two methods. The alternative is to face extinction as a system.⁶

The systems approach appears to be the mode of thinking currently permeating organizational research. Yet the measures of organizational effectiveness being employed do not have systems theory as their basis. Profitability may be the best evaluative criterion that could be used in certain situations. For instance, when the object of the research is to understand or predict efficiency of operation or worker productivity or similar easily quantifiable problems, profitability may well be the most desirable criterion. However, when the research objective may not be so easily quantified, profitability may not be as appropriate. For instance, the use of profitability has been relatively unsuccessful in predicting appropriate structural considerations, environmental relationships, and other organizational dimensions of interest to theorists. It is, however, these types of dimensions that are of most interest to the organizational theorists. This study, then, seeks to meet this need; the creation of valid and reliable measures which are more suitable to the more macro concerns of organization theory. Further, these measures will be in balance with the systems theory perspective. In sum, the study does not reject the profitability criterion. However, it does reject the notion that the profit criterion is

universal. Further, profitability is not the only acceptable measure of organizational effectiveness.)

The pragmatic need which this study fulfills applies primarily to the organizations actually included in the study. However, there is no reason why other organizations could not profit from the findings as well. It is hoped that the study will provide information which will help the organizations become more aware of their environments. With this awareness should come the opportunity to become more effective. If these new measures are valid, reliable, and more realistic, it would make sense for other organizations to seek to incorporate the findings into their situation.

Organization of the Study

This study is divided into six chapters. Chapter II is a review of the past attempts of measuring organizational effectiveness, and an evaluation of those attempts. Chapter III is the presentation of a model which is consistent with the assumptions of systems theory. Chapter IV contains the methodology that is employed to evaluate the model. Chapter V reports the analysis of the data which was collected. The final chapter, Chapter VI, summarizes the study and presents some conclusions and recommendations for further research.

FOOTNOTES

¹James L. Price, "The Study of Organizational Effectiveness," The Sociological Quarterly, XIII (Winter, 1972), pp. 3-15.

²Ibid., pp. 12-14.

³Richard M. Steers, "Problems in the Measurement of Organizational Effectiveness," Administrative Science Quarterly, XX (December, 1975), pp. 546-558.

⁴Ibid., pp. 552-554.

⁵Ibid., p. 554.

⁶Fremont E. Kast and James E. Rosenzweig, Organization and Management: A Systems Approach (New York, 1974), pp. 101-123.

CHAPTER II

REVIEW OF RELATED LITERATURE

Introduction

There are two purposes of this chapter. First, past studies of organizational effectiveness are reviewed. These studies are grouped into four categories, based on the criteria which they utilized to evaluate organizational effectiveness. The first group, labeled the traditional or classical theorists, hold that the effectiveness of an organization can only be assessed by looking at the economic profitability of an organization. The second group of theorists attempt to evaluate organizational effectiveness by looking at the morale of the workers and the leadership employed by the managers.¹ This group of theorists is referred to as the behaviorists. The third group of researchers is known as multiple criteria researchers, because they attempt to evaluate effectiveness by using measures which combine the previous two approaches. The final category of researchers has been labeled as partial systems theorists. These researchers have come closest to systems perspective, but are still falling somewhat short of a total systems perspective in evaluating effectiveness.

The second purpose of this chapter is to assess the adequacy of these past attempts at measuring effectiveness. Once these two objectives have been accomplished, a new model will be built in Chapter III.

Previous Attempts of Measuring Organizational
Effectiveness

The Traditionalists

The traditional theorists viewed organizational outputs from only one perspective, economic. This view is likely to have stemmed from their background in classical economic theory. Consequently, they relied on a microeconomic model of the firm. [They attempted to develop methods which would maximize the productivity of the organization by ensuring that the resources of the firm were employed as efficiently as possible. It was predicted that these methods would generate maximum profitability. It was assumed that when a firm was maximally productive and efficient, maximum benefits would accrue to all parties.² The owner-manager would receive handsome returns on his investment, the worker would maximize his earnings through piece rate incentive systems, and society would benefit as the firm turned out more products, spurring on the rest of the economy. In sum, the success or effectiveness of an organization was determined by its productivity]

[Such a model implies a closed systems perspective. It ignores the relationship between the organization and the environment in which it exists.] This traditional or classical perspective is usually associated with the organization and management theory pioneers. However, many contemporary theorists have utilized techniques and approaches similar in many respects to the early writers. Their research relies heavily on this closed systems approach. [For instance, Mahoney and Weitzel³ developed a model of organizational effectiveness for units within manufacturing concerns. They proposed that effectiveness was an ultimate

criterion for an organization. However, such a criterion could not be measured unless some intermediate and immediate criteria could be specified and measured. Thus, they proposed 114 characteristics that are often considered criteria of organizational effectiveness. By employing factor analysis, the researchers discovered 24 relatively independent dimensions of effectiveness. Using stepwise regression, they discovered that the effective units within the manufacturing companies scored high on four factors. These factors, productivity-support-utilization, planning, reliability, and initiative, generally would be associated with how efficiently the organization was run. Thus, managers of manufacturing organizations believe that in order for their firm to be effective, it must be run as efficiently as possible.⁴

Similarly, in a research study conducted among British firms, Child⁵ used two evaluative criteria, profitability and growth, in an attempt to model organizational effectiveness. He hypothesized that effectiveness may be dependent upon either universalistic or contingent criteria. Eighty-two British companies located in six industries were studied. Four of the industries studied involved manufacturing (candy, electronics, newspapers, and pharmaceuticals), while the other two involved service (advertising and insurance). The companies were also grouped into clusters around six different size levels ranging from 150 to 6000 total employees.

Data were gathered over the five years prior to the study. The data were standardized across industries in order to provide meaningful comparisons. The data were collected from company records and supplemented where necessary from published reports. (There were three chief categories of financial data collected. First, income which was

defined as net profit after taxes, but before the deduction for depreciation expense. Second, assets, which were defined as fixed assets net of depreciation with current assets added and current liabilities deducted. Third was sales turnover, which is self explanatory.⁶

Using this data, the following calculations were performed for each firm: the average percentage yearly growth in income, assets and sales was computed. Next, an average yearly figure of the percentage of income to sales was calculated. Finally, for the manufacturing concerns, average yearly figures were obtained for the percentage of income to assets.⁷

Data were also gathered from the corporations' senior managers. The managers were asked to rate their company's relative level of performance using five judgmental criteria including profitability and level of growth. The correlation between these two sets of data was high.⁸

Child first used a universalistic paradigm to match organizational characteristics with organizational effectiveness. Of the characteristics studied, Child found only modest support for any of them and hence was forced to conclude that the question of universalistic characteristics leave the problem of effectiveness unresolved.⁹ Thus, [Child then searched for an answer to the effectiveness issue using the contingency model. In similar manner to Burns and Stalker,¹⁰ Child hypothesized that the variability of the environment faced by the firm and the organizational structure of the organization interact to determine the effectiveness of the organization. The profitability data lent tentative support to this hypothesis.¹¹ Using either of these approaches, however, Child's approach is still classical in orientation,

the total reliance on profitability as an indicator of effectiveness.

Another example of this classical ideology is taken from the research conducted by Friedlander and Pickle.¹² Using profitability as one of their major evaluative criteria, they assessed effectiveness among small business organizations; i.e., less than 40 full time employees. A profitable organization was more able to meet the conflicting demands made on it by its employees, owner, and local community.¹³ Implied in this statement is the classical premise, an effective firm is one which is maximally efficient in the utilization of its resources.

In summarizing the traditionalists' viewpoint, several points need to be reemphasized. For a firm to be effective, it must maximize its profitability. This could only be accomplished if the firm was maximally productive in its operations. Emphasis was placed on internal functioning, to the virtual exclusion of external factors. People were viewed as rational beings, and were treated as equal to any other organizational resource. The theorists held a closed systems perspective of the organization. Organizational effectiveness could be measured only in terms of profitability.

The Behaviorists

The next group of theorists who attempted to measure organizational effectiveness used people as their significant organizational variable. This area of research is one in which many of the conflicting and nebulous studies have been conducted which make generalizations about the area difficult. However, many of these theorists hold that organizations exist to meet the needs of individuals who comprise the

organizations. Thus, a significant end of any organization is to meet psychological and sociological needs of workers. Since the beginning of this movement, which was initiated by the work of Mayo and Roth-lishberger in their landmark Hawthorne study, theorists have maintained that there exist important psychological and sociological forces in the work setting.¹⁴ However, herein lies one of the greatest paradoxes in this field of study. Most of these theorists recognize that psychosocial forces exist, and then go on to argue that these forces have a significant impact on the productivity of the organization.¹⁵ Thus, it seems that it would be a desirable thing to do to meet the needs of the workers, but more importantly, it would be counterproductive not to do so. This argument then implies that in order to be effective, an organization must generate positive and satisfying conditions relative to the psychosocial needs of the worker. This theme has been widely researched, probably more so than any other, throughout the evolution of managerial thinking.

Many attempts have been made to build realistic organization models based on the human variable. One of the more interesting models is current and relates specifically to organizational effectiveness. Webb¹⁶ studied the effectiveness of churches within a primarily urban presbytery consisting of more than 55,000 official members in slightly over 100 churches. Webb defined effectiveness in terms of the churches' goal attainment. A list of 28 church goals was obtained from official presbytery goals, from in-depth interviews with numerous clergymen, and from a review of relevant church literature.¹⁷ Employing the methodology of Mahoney and Weitzel,¹⁸ Webb discovered four organizational characteristics which typified the effective church. The effective church was

cohesive, efficient, adaptive, and supportive. The paradox, however, is still present. While it appears that the concern is for the people in the organization, the question of significant note is who in the organization specified the original 28 goals. The leaders of these organizations are the ones with the most to gain from the continued existence of the churches. Further, they have more to lose should the system not remain viable. Hence, the effective organization is one which meets the needs of the people within the organization. This allows the organization to be more efficient, which ensures the continued viability of the system, and continued existence is the goal which the leaders in control of the organization are seeking.

Another example is the work of Blake and Mouton.¹⁹ In order to be effective, they argue that organizations must have managers who display a high degree of concern for people and a high degree of concern for productivity.²⁰ A concern for people is necessary if the firm is to be maximally productive; a goal that lingers unstated by modifying every managerial action.

A final example is taken from the work of Schein.²¹ He argues that the effective organization is one which creates conditions which promote good communication, flexibility, creativity, and genuine psychological commitment. Further, these conditions should be created for more reasons than simply that they would be nice. He states, "... the argument is that the systems work better if"²² Again, the paradox, it is necessary to be concerned about people in order to be more productive.

These few studies are representative of most behaviorally-oriented management literature. The researcher emphasizes the

importance of psychosocial factors and then attempts to establish a relationship between these variables and productivity.]

The Combination Approach

The third major attempt of measuring organizational effectiveness combines the previous two approaches. Georgopoulos and Tannenbaum defined organizational effectiveness as "the extent to which an organization as a social system, given certain resources and means, fulfills its objectives without incapacitating its means and resources and without placing undue strain upon its members."²³ In their study, effectiveness consisted of three dimensions, productivity, flexibility, and lack of strain placed upon organizational members. Productivity was measured by looking at company records and established work standards. Both flexibility and absence of strain were measured by responses to questionnaires. Flexibility was measured in terms of ability to adjust to both internal and external changes. Absence of strain was measured as the perceived absence of tension between supervisory personnel and the workers. Correlation analysis revealed that these criteria were closely interrelated. The authors attempt to measure an organization's effectiveness by taking into account both economic and behavioral factors.²⁴

In similar manner, Mott²⁵ developed a comprehensive model of organizational effectiveness. He viewed effectiveness as the relative ability of the people within the organization to mobilize their centers of power to be appropriately productive, adaptive to changes and capable of handling temporarily unpredicted work overloads. Using questionnaires, productivity was measured as an average of the concern held for

quality, quantity, and the efficiency of the work completed. Similarly, adaptability was measured as the organization's ability to anticipate and solve both internal and external problems. Finally, a measure of ability to handle emergency situations was obtained. These three criteria were interrelated. In this study both economic and behavioral criteria have been taken into consideration.²⁶

In both studies cited above, the researchers contend that neither economic nor behavioral criteria alone account for organizational effectiveness. Rather, they have built more comprehensive models attempting to incorporate both criteria.

Limited Systems Approach

[A final group of theorists employ models in their studies of organizational effectiveness which include the environment as a significant variable. Although they came close to utilizing a systems perspective, they do not fully incorporate all of its assumptions. For instance, Duncan²⁷ defined effectiveness as consisting of three component parts: goal achievement, integration, and adaptability. Adaptability would be primarily concerned with environmental and organizational interaction; hence, the shift of emphasis reflecting environmental concern. However, the other two aspects of effectiveness are primarily internal processes.²⁸ The accomplishment of worthwhile goals and the integration of the organization for this goal accomplishment once more rings of the efficiency issue. In like manner, Lawrence and Lorsch²⁹ hold that to be effective, an organization must have an appropriate balance between differentiation and integration. The firm must differentiate in order to deal with the complexities of its

technology and environment. At the same time, these activities must be integrated if environment demands are to be met.³⁰ Thus, they are defining effectiveness in the same manner as did Duncan. The organization must be adaptive or responsive to environmental pressures. This responsiveness can only be accomplished through internal processes. In both situations, the importance of the environment is noted but the orientation of the effective organization remains primarily internal.

Yuchtman and Seashore define organizational effectiveness as

...a construct which uses the organization as the focal frame, treats the relationship between the organization and its environment as a central ingredient, provides a classification scheme for both similar and unique organizations, and provides some guidance for the identification of performance variables which are relevant to organizational success.³¹

The key aspect of this definition is that the firm must acquire scarce and valued resources which implies a need to have some control over the external environment. These resources are defined as anything useful or potentially useful to the organization in establishing its relationship with its environment. Thus, the effective firm is the one which can appropriately identify and capture valued resources which will help the organization control its environment.

{ Analysis of the data which were collected resulted in support for their hypothesis that there is an exchange function occurring between the organization and its environment. This finding which is consistent with systems theory, was further shown to be much more closely attuned to competition than to exchange. Thus, [the authors conclude that organizational effectiveness can best be evaluated in terms of the amount of control which an organization wields over its environment or its

bargaining position. The more control which the organization has over its environment, the more effective the organization will be.³²

Summary

In reviewing the four categories of organizational effectiveness models, it is apparent that the models are becoming more complex. The traditionalists viewed the organization solely as an economic entity. Their theories were superseded by the behavioralists who argued that workers had psychosocial needs which the organization should meet. Further, it was only by meeting these needs that adequate productivity would be possible. The multivariable theorists argued that it is necessary to include both psychosocial and economic criteria in a model of organizational effectiveness. The final group began a limited shift of emphasis. They argued that the environment which a firm faces will have a determining effect on the effectiveness of a given organization. This effect may be felt in terms of uncertainty, or need for differentiation, or the need to control the environment, but the environment must somehow be dealt with. Ceteris paribus assumptions were no longer appropriate for studying organizational effectiveness.

Limitations of the Previous Approaches

Introduction

The four approaches are grouped into three categories for evaluation. The categories are: (1) the traditionalists, (2) the behavioralists and combination approach theorists, and (3) the limited systems theorists.

The models reviewed above show a continuous shifting and ever increasing sophistication of managerial theory. Each new model attempted to overcome the limitations associated with previous ones. [The major limitation which has been at the crux of this shifting process has been the failure of the models to predict accurately organizational outcomes and processes. Thus, while many of the models may have predicted effectiveness based on the way the model builder defined effectiveness, the definitions employed may not have been appropriate. Each model shift has employed a new definition of effectiveness and new methodologies for capturing this complex construct.] Each model builder has attempted to overcome deficiencies perceived by him which he believes to exist in the previous approaches. While this has been the goal of the model builders, the results to date have not been satisfactory.

The Traditionalists

[The major criticism leveled at the traditionalists concerned the unrealistic assumptions on which their model was based. The traditionalists assumed that workers were rational beings. Critics argued that people were not rational, they have emotions, values and are subject to group pressures.³³ All of these factors could cause individuals to make decisions which were not those of a "rational man". Further, the traditional viewpoint created the concept of "economic man". However, individuals have many more needs than simply economic ones.³⁴ The traditionalists also take a static view of the environment in which the organization exists. With such a stance, they are able to ignore the impacts which the environment may have on the organization.]

The methodologies employed by these theorists purport to measure

organizational effectiveness. However, they do not. The model used by these researchers to explain organizational functioning is not valid. It makes assumptions about organizations which cannot be met. [The most common measure which these theorists use, profits, may measure productivity or efficiency, but it does not capture the complex effectiveness construct. If the model from which the evaluative criteria is drawn is not reasonable, then it follows that the usefulness of the criteria must be suspect. Profitability is most likely not the exclusive criterion for evaluating organizational effectiveness.]

The Behaviorists and Multiple Criteria Theorists

The models used by these theorists placed people as the central, most important aspect in understanding organizational effectiveness. Although the combination theorists included other variables in their models, the people variable was still of crucial importance. It may be of note to recall that the combination theorists tended to find high correlations between the criteria which they used to evaluate effectiveness. [It may be that the measures, although claiming to measure different dimensions of effectiveness, were actually measuring the same one. Such a finding would not be incongruent with the paradox which seemingly permeates behavioral research.]

The major limitation of these models is aptly raised by Miles.³⁵ He argues that these models are nothing more than an extension of the traditional models. The behavioralistic researchers argue that the manager must be concerned with the whole man, not just his skills and attitudes. Thus, to be effective, organizations would have to give

at least some recognition to individual needs, wants, and desires. Although these motives appear highly moralistic, they are invariably tied back by the researchers to profitability through either productivity or efficiency. If an organization is to be maximally profitable, then it must at least to a degree, respond to the needs of the people within the organization. Behaviorists thus view people as machines, but machines which require special kinds of lubrication. The methodologies employed may have changed, but the goal has not. [The effective firm is one that is most productive and efficiently utilizes its scarce resources.]³⁶

The Limited Systems Theorists

The previous models have emphasized organizational health. These theorists hold that an effective organization is a super firm, capable of handling any situation. This internal orientation, however, may be devastating, should the environment change, catching the organization unaware. [Changing emphasis has increased the organization's awareness of the environment as a significant variable. Unfortunately, these models have failed to take into account fully the assumptions of systems theory necessary to gain the proper perspective. The models have either viewed the environment as something to be adapted to or something to be controlled. Neither stance is appropriate. Instead there exists a reciprocal relationship between an organization and its environment; both are dependent upon each other and both modify and shape each other in their functioning. The models have attempted to specify appropriate internal process adjustment when changes occur within a firm's environment. This is only a partial step. Organizations have

complex interrelationships between themselves and their environments. It is the contention of systems theory and this study that this relationship is crucial to organizational effectiveness. Much work needs to be done, but it is in this relationship that useful effectiveness criteria will eventually be developed.

FOOTNOTES

¹ Charles Perrow, Complex Organizations (Glenview, Illinois, 1972), p. 106.

² Adam Smith, The Wealth of Nations (Chicago, 1962), pp. 9-10.

³ Thomas A. Mahoney and William Weitzel, "Managerial Models of Organizational Effectiveness," Administrative Science Quarterly, XIV (April, 1969), pp. 357-365.

⁴ Ibid., p. 363.

⁵ John Child, "Managerial and Organizational Factors Associated with Company Performance, Part I," Journal of Management Studies, XI, (October, 1974), pp. 175-189.

⁶ Ibid., p. 178.

⁷ Ibid., p. 179.

⁸ Ibid., p. 180.

⁹ Ibid., pp. 175-189.

¹⁰ Tom Burns and G. M. Stalker, The Management of Innovation (London, 1966), p. 125.

¹¹ John Child, "Managerial and Organizational Factors Associated with Company Performance, Part II: A Contingency Analysis," Journal of Management Studies, XII (February, 1975), p. 25.

¹² Frank Friedlander and Hal Pickle, "Components of Effectiveness in Small Organizations," Administrative Science Quarterly, XIII (September, 1968), pp. 288-304.

¹³ Ibid., p. 302.

¹⁴ Elton Mayo, The Human Problems of an Industrial Civilization (New York, 1933), pp. 210-212.

¹⁵ F. J. Roethlisberger and W. J. Dickson, Management and the Worker (Cambridge, Massachusetts, 1939), pp. 185-186.

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- ²⁹ Paul R. Lawrence and Jay W. Lorsch, "Differentiation and Integration in Complex Organizations," Administrative Science Quarterly, XII (June, 1967), pp. 1-47.
- ³⁰ Ibid., p. 38.
- ³¹ Ephraim Yuchtman and Stanley E. Seashore, "A System Resource Approach to Organizational Effectiveness," American Sociological Review, XXXII (December, 1967), pp. 901-902.
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- ³³ Joseph L. Massie, "Management Theory," Handbook of Organizations, ed. James G. March (Chicago, 1965), pp. 405-418.
- ³⁴ Perrow, pp. 199-202.
- ³⁵ Raymond E. Miles, Theories of Management: Implications for Organizational Behavior and Development (New York, 1975), pp. 31-49.
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CHAPTER III

A THEORETICAL BASIS FOR THE MODEL

Definition of Terms

Before the model or the appropriate methodology can be discussed, certain key terms need to be identified and defined. The following list provides the important terms required for this process.

Organization: An organization is an entity that exists in a hierarchy of systems, from the subsystem to the suprasystem level, whose function is basically a transformation process converting inputs into outputs; relying on the process of exchange between itself and its environment.

Constituent: Constituents are individuals, groups and other organizations which exist in the environment of a given firm and impose, or attempt to impose, direction on the firm's activities. There are basically three types of constituents; significant others, who have direct influence over the organization, generalized others, who have indirect influence or minor influence over the organization, and emergent constituents, who are in a state of flux, either becoming more or becoming less influential over the organization.

CMOE: The Comprehensive Measure of Organizational Effectiveness (CMOE) is a construct comprised of two parts. First, constituents have a criterion, or more likely, criteria by which they evaluate the effectiveness of a given organization. These criteria must first be

identified. The second aspect of the CMOE is an evaluation by the constituent of how well the organization is doing with respect to these criteria.

Efficiency: Efficiency is a term commonly used by the traditional theorists in evaluating the output generated by an organization. Using a microeconomic model of the firm, these theorists were concerned with how well a given firm was utilizing the resources which it had available. In this study, efficiency, productivity, and profitability are used interchangeably, because ultimately productivity and profitability are measuring the same process measured by efficiency.

Adaptability: Adaptability is a process assumed to be required of every organization if the organization is to continue to survive in a changing environment. Since an organization exists in an environment and must interact with it, as the environment changes, the organization must adjust or modify its behavior to correspond with the environmental changes.

Combination approach: Several theorists have evaluated the effectiveness of an organization not in terms of a single dimension, but rather from a multidimensional viewpoint. Thus, neither efficiency nor adaptability alone serve as adequate criteria for assessing organizational effectiveness. Instead, the combination approach is employed, which measures effectiveness by combining both efficiency and adaptability with a third criterion, flexibility.

The New Model

Basis for the Model

Previous models which have attempted to evaluate organizational

outcomes have not relied on the systems approach. If the systems approach is a more useful perspective for examining organizations, then the models on which previous studies have been based are somewhat unrealistic. Further, methodologies based on these models would have questionable validity. The model to be used in this paper is designed so that it will overcome this problem. The model has at its foundation the writings of Thompson as found in his book Organizations in Action.¹ The model accepts several of Thompson's key assertions. For instance, Thompson argues that there are basically three methodologies that could be employed in assessing an organization's outcomes. First, an organization could use an efficiency test which would tell the organization whether a given amount of resources had been used to their maximum potential. Unfortunately, such tests are based on two assumptions that rarely can be met. First, the test assumes that standards of desirability can be crystalized; that is, the organization knows precisely what alternatives should be selected and what goals pursued. Secondly, the test assumes that there exists complete knowledge about cause-effect relationships. These assumptions can be met so long as the analysis is limited to a one dimension sphere which would commonly be found in simple closed systems. However, organizations do not fit into this category. Organizations make choices in multidimensional situations and the results of these decisions have multiple effects which vary in intensity, duration, and direction. Unless an organization can meet the assumptions, the use of such a test would be ludicrous.²

The second test proposed by Thompson is called an instrumental test and is more applicable to open systems than the first one. An

instrumental test is not concerned with economic factors, but rather with whether the desired state of affairs has been achieved. In this situation, the organization has incomplete knowledge about cause/effect relationships, but the standards of desirability are still crystalized. Thus, the organization is unable to determine what the optimal course of action might entail; however, it is able to enumerate a number of satisfactory alternatives. Although this test is obviously not as strict as the efficiency test, we would expect to find many more organizations which could meet the assumptions of this test than those which could meet the assumptions of the first test.³

The third possible test that could be used to evaluate organizational effectiveness is called a social test. Such a test becomes appropriate when standards of desirability are ambiguous. By this is meant that the potential outcomes of an organization have multiple dimensions, are mutually interdependent, and often conflicting. Thus, as an organization strives to accomplish one goal, it may be doing so at the expense of other goals. This implies that even if an organization has complete understanding about cause/effect relationships, it still may be unable to choose an appropriate course of action. This problem is, of course, magnified when there is also an absence of knowledge concerning these cause/effect relationships. When such conditions prevail, organizations rely on these social tests.

The social test involves utilizing social referents as anchors for opinions or beliefs about what an effective organization is doing. The organization utilizes two primary referent groups in an effort to demonstrate its own effectiveness. When the environment which the organization faces is relatively stable, the organization will use itself

as the appropriate referent point. In this manner, the organization can utilize measures which reveal improved organizational functioning over a previous time period as indicators of organizational effectiveness.

When the environment of the organization is more turbulent or dynamic, such measures will probably be inappropriate. The reason is simply that with dynamic environments, there is no way that organizations can hope to show improvement on all relevant dimensions. Further, the organizations may have to contend with fluctuating relevant dimensions. As a consequence, organizations choose similar institutions with which to compare themselves and these organizations become the referent group for the organization. Thus, organizations in dynamic environments select areas that are of most importance and are the most visible to members in their environment and attempt to score well on these criteria in comparison to similar organizations. While the social test lacks the precision of either the efficiency or instrumental tests, it may be the only viable alternative.

In proposing these three tests which organizations might employ, Thompson is, to a certain extent, building straw men. That is, although he presents the three as equally viable alternatives, he rejects the first two as having limited usefulness. Few organizations can meet the assumptions required to utilize the first two tests, and hence should not rely on them. Thus, Thompson seems to be advocating the use of the social test.⁴

From this discussion of organizational assessment emerges the conviction of the need for a more useful measure of organizational effectiveness. This measure must guard itself from the pitfalls which have entrapped past attempts at measuring this phenomenon. These traps have

included unsupportable assumptions about organizations and how these organizations function. When some of Thompson's other propositions are examined, new avenues are opened as possible measurement alternatives. It is believed that these newer alternatives which rely on social tests may shed a new light and increased understanding of what makes organizations effective.

Assumptions of the Model

Any model which is constructed must be built upon certain underlying assumptions. The model being utilized in this paper is no exception, and as previously mentioned, is built in accordance with the assumptions of systems theory. In order to fully grasp all of the implications of such assumptions, it is necessary once more to look at some of the statements proposed by Thompson. Relating to organizations and systems theory, Thompson makes the following statement, "We will argue that organizations do some of the basic things they do because they must -- or else! Because they are expected to produce results, their actions are expected to be reasonable or rational. The concepts of rationality brought to bear on organizations establish limits within which organizational action must take place."⁵ This basically means that any organization is assumed to be somewhat constrained and forced to act in a specified rational manner. Organizations have become powerful institutions in society. People have banded together because they have found that an organization is a tool or vehicle which allows them to accomplish tasks which they would be unable to accomplish working alone. This is because organizational action allows for resources to be better coordinated and utilized. The outcomes which the organization

pursues are usually established by the elite within the organization who are able to control the functioning of the organization. Consequently there usually exists a power struggle for control of the organization so that certain particularized ends are pursued rather than some other ones. This implies that it is not the organization which determines its own course of action, but rather it is the elite in control that establish the direction which the organization follows.

The next assumption upon which the model is based is that the organization in question is in actuality a subset of the greater society in which the organization exists. Further, the actions which the organization takes are dictated to the organization by this greater society. Thus, the organization reflects the values, culture and mores of the society of which it is a part. This is hardly surprising when one recognizes that the members of organizations are also members of society. Also, the organization tends to grow, mature and evolve as does the larger society. In addition, society has the ability to terminate an organization's existence and hence wields a great deal of power and influence over the organization. This power results from the fact that society controls the inputs and outputs which the organization must exchange with its environment in order to survive.

This model is also based on a third assumption which arises out of the statements made by Thompson. Although this assumption may not be as readily discernable from the statements, it is of equal importance. Organizations are formed because they provide a means for the achievement of some outcomes which are not possible through individual efforts. They also perform various functions and services which are desired by the environment of which they are a part. As a consequence of this

activity, organizations are able to gain a degree of power over their environments. The exact amount of power which an organization may wield is a subject of widespread debate, and not of significance to the model in this paper. However, a short digression is necessary to clarify this third assumption.

In an interesting paper on this subject, Emerson⁶ argues that the power which an organization holds is the obverse of the dependencies that exist between an organization and others. This dependency is contingent upon the organization's need for the performance of a given task or the obtaining of a particular resource, and the number of sources which can supply this requirement to the organization.⁷ Thus, although the amount of power which an organization may have varies over time and situation, it seems clear that they do have a degree of influence over their environments. Another researcher, Perrow,⁸ makes even stronger statements about the relationship between organizations and society. He states, "Society is adaptive to organizations, to the large, powerful organizations controlled by a few, often overlapping leaders."⁹ Thus, he sees organizations creating and controlling the environments with which they interact so as to maximize the benefit which the organization receives from this interaction. This process holds in simple as well as complex societies, and in fact, the society that is found in any culture at any given point in time is the result of society's adaptations to these powerful organizations.¹⁰

The model employed in this paper neither supports nor fully endorses either of these viewpoints of power. Rather, it is sufficient to note that organizations have some influence over the environment in which they exist. This model assumes that there exists a reciprocal

relationship between an organization and the society within which that organization exists. Society imposes its demands on organizations to conform to the standards, ideals, and values which it currently holds dear; that is, to act rationally. Concurrently, however, organizations are seeking to modify, mold and shape society so as to gain maximum benefit from their interactions with society.

The next two assumptions on which the model is built are quite closely related. These assumptions will resolve the dilemma which is currently being faced; namely, how an organization can cope with the multitude of interactions that exist between itself and society. The organization strives to control its environment while elements in the environment seek to control the organization. Obviously an organization does not deal with every entity that exists within or every aspect of its environment. There are two main reasons why this is so. First, because of the power which the organization has, it simply does not have to be concerned about certain entities or situations. That is, if the organization has achieved coordination among its resources and with this coordination, a degree of power, it will be able to deal more capably with an organized environment. In like manner, certain environmental factors may not have enough power to influence the decision making process within an organization, and hence the organization ignores these pressures. This will, of course, be a function of the organization's power. Secondly, there are simply too many constraints and potential interactions which the firm may have to face; consequently some are ignored because of lack of time or resources.

The above statement implies another very significant assumption of the model, namely scarce resources. Every organization is faced with

limited resources and thus must somehow determine what societal interactions are most important as each interaction will require some of the resources of the organization. Further, going back to Thompson's statements, if an organization chooses not to abide in accordance with the dictates of these interactions, it will cease to survive. It now becomes apparent that a more suitable picture of the model would show the organization existing in two environments simultaneously. First, the organization exists in a general environment where broad general forces cause the changes to the organization by having general ramifications throughout society, affecting other similar organizations as well. The entities and organizations which make up this pattern of interaction have varying amounts of power which they wield as they attempt to influence the behavior of other entities. Secondly, the organization exists in what might be best described by Dill's term, the task environment.¹¹ Here the organization must contend with constituents whose impact will tend to be more specific and more direct. Examples of this constituency for a given organization might include competitors, suppliers, consumers, trade associations, labor unions, stockholders, communities and specific governmental agencies.

It is within this more specific task environment that the bulk of the organization's resources must be brought to bear in meeting societal demands. While the more general environment cannot be totally ignored, its impact generally has less short run significance to the organization. Another aspect that must be kept in mind is that the environment tends to be dynamic rather than static and hence it is impossible to exhaustively enumerate all of the constituency even within the task environment. However, the major members can be identified and as new

powerful entities emerge, they can be included while those which have declined in significance can be excluded from consideration. The model thus has been modified to the extent that the organization is not dealing on a continual basis with its total environment, but rather its task environment.

In summary, there are five assumptions which serve as a foundation for the model developed in this paper. First, organizations form because they provide a way to ends that might not otherwise be possible. As a result, organizations have power. Further, an organization is a tool which can be manipulated to accomplish a number of individual goals. A second assumption is that organizations have an effect on the environment in which they exist. They are able to modify and manipulate their environment subject to the amount of power which they possess. A third assumption makes clear that this power relationship is not unidirectional. Organizations are only subsystems of the environment (or society) of which they are a part. They can be influenced or altered by other organizations or subsystems which comprise the environment. As a result of these two assumptions, a reciprocal relationship is seen between organizations and the environment in which they exist. A fourth assumption is that organizations do not interact with the totality of their environments. Rather, they determine which societal interactions are of most significance, and spend the bulk of their efforts and resources in maintaining these relationships. A final assumption is made that all organizations have limited resources.

The model developed in this paper assumes that these assumptions are valid. If they are not, then the predictions generated by any methodologies based on the model may not be valid. If one accepts the

tenets of systems theory and the current thinking of management theorists, the above assumptions are palatable.

The Actual Model

The underlying theoretical model for this study is depicted pictorially in Figure 1. There are only two types of entities depicted in the model. The first type is the organization whose outcomes are being assessed, hereinafter simply referred to as the focal organization. The second type of entity is referred to as the constituents of the organization. A very limited sample of who these constituents might be would include other organizations, loosely arranged collections of interested persons and social and political forces. These constituents are further divided into three subgroups as noted by their labels X, Y and E.

The first subgroup, designated by X's is called the task environment of the organization. It is the interaction between the organization and these constituents that provides the major focus for this study. Here is where the bulk of the organization's resources must be spent in meeting the demands of these constituents, if it is to remain a viable organization.

The second subset of constituents, the Y's, have a more general impact on the organization. The demands which these constituents place on the organization tend to be placed on all other organizations and constituents as well, so that most organizations of similar type would be in the same position. Further, the demands are usually very slow in occurring, taking an evolutionary type nature. Thus, the organization is usually unconcerned about these forces in its day-to-day functioning.

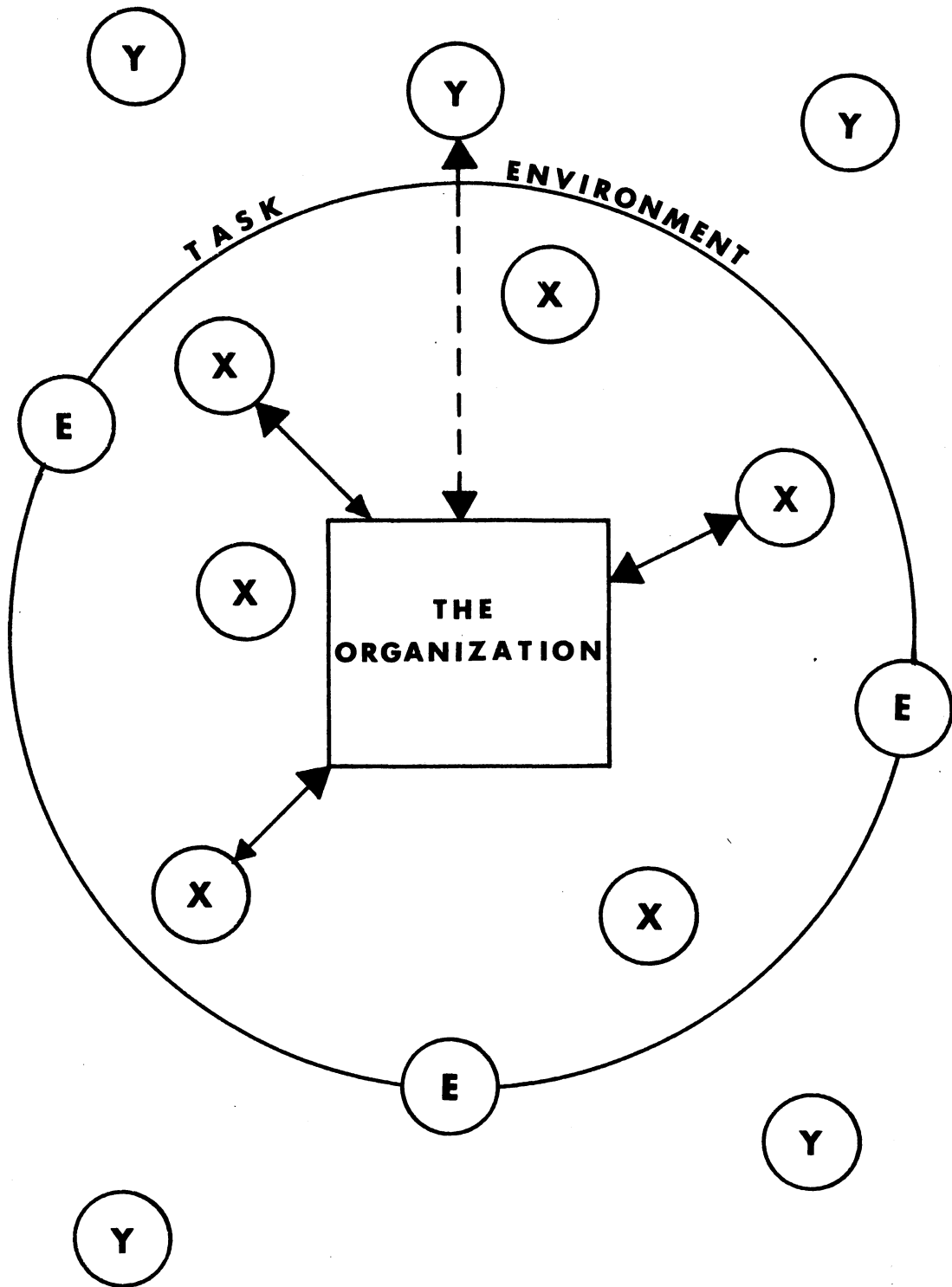


Figure 1. The Model Underlying This Study

The final group of constituents is represented by the letter E which stands for their emergent/exit status. Because of the dynamism that underlies the systems approach, it would be predicted that at any given point in time, there would exist some constituents which are just becoming of significance to the organization and are emerging into its task environment. At the same time, there are probably constituents which are no longer of sufficient importance to spend resources on and are exiting from the task environment. These entities which are just beginning to make their presence felt or which are no longer of significance are in this in-between stage.

The relationships that exist between an organization and its constituents are represented by the four lines. The dashed line indicates that there is a relationship between the organization and some of those entities that exist beyond the boundaries of the task environment. However, as previously mentioned, the impacts of these relationships tend to be very general and slow-moving. The bulk of the relationships occur within the task environment. In accordance with systems theory, it is expected that most of the relationships between the organization and its task environment constituents will be reciprocal. However, there will exist instances where either the organization or a particular constituent will exert a great deal more influence than its counterpart. The specific relationship that exists between the organization and any one of its task environment constituents will be a function of the power, in Emerson's terms, which each one possesses.¹²

This, then, is the model used in this study. To continue as a viable institution, an organization must meet the demands placed on it by its constituency. The constituency which interacts with the

organization is able not only to identify an effective organization, but also to enumerate characteristics of what an effective organization should be.

Justifications of the Model

Upon viewing the model, two questions are raised about its usefulness. First, some may argue that the model has little value because it is based on perceptions of individuals. Further, they point out that the individual is not necessarily speaking for the constituent organization which he represents. Thus, the data used to evaluate the model would be of only limited value, being both subjective and personal. If the critic's statements are assumed to be correct, that the model is perceptual, then instead of destroying the model, he has actually added more validity to it. Individuals make decisions on what they perceive the data to be, not necessarily what it actually states.¹³ In fact, meaning only comes about as a result of the interactions of people and organizations with each other and with differing situations.¹⁴ Thus, perceptions play a key role in determining whether an organization is thought of as effective or not. Previous discussion revealed that organizations are only tools controlled by the power elite within the organization. Hence, if the critic recognizes that this model is perceptual, and that the respondents are individuals who are in the power elite, further credence rather than harm has been given to the model.

Another question which could be raised is the need to establish the relative importance of the constituents to the organization. That is, it may be possible for the organization to be viewed as highly effective by all of its constituency except for one group. Yet because

of the power which this constituent holds over the organization, the fact that it is effective in other areas is immaterial. This constituent has the ability to terminate the organization's existence, and the organization must find some way to deal with this contingency if it is to survive. The methodologies employed do not provide a solution to this problem. The theory does suggest, however, that the organization must meet the constituents' demands if it is to be effective. This is a necessary condition for effectiveness; it is not, however, a sufficient condition.

★ Limitations of the Model

While the model just presented does offer significant advantages over previously generated ones, it still is not the ultimate model. The model is culturally bound. That is, many of the relationships that were just described and some of the assumptions on which the model is based would not necessarily hold if the organization operated in more than one culture or society at the same time. Primitive societies would probably a great deal of difficulty influencing complex organizations which had moved into the less advanced society from a more progressive one. The organization would not be dependent upon the primitive society necessarily for either its inputs or its outputs. Further, the threat of nationalization may be nothing more than idle talk until the developing country does make some significant advances toward a more sophisticated society. On the other hand, the power which the organization wields may be truly awesome. Harbison in his book, Human Resources as the Wealth of Nations, portrays this only too graphically.¹⁵ Thus, the analysis will be limited to the state where

the organization in question is operating or a subsystem of the complex industrialized society which is typified by the contemporary U.S. or Western European countries.

Propositions of the Model

In an effort to evaluate the usefulness of the model, the following four propositions are presented.

1. Constituents identified by the organization as "important constituents" will rate the organization significantly more effective than will other constituents.

2. The results obtained from utilizing the profitability criterion established by the early theorists and used by modern researchers such as Child,¹⁶ are not related to the results obtained by using the CMOE.

3. The results obtained when using a multiple criteria evaluation instrument such as the one developed by Mott¹⁷ are not related to the results obtained when using the CMOE.

FOOTNOTES

- ¹ James D. Thompson, Organizations in Action (New York, 1967), pp. 1-2.
- ² Ibid., pp. 83-86.
- ³ Ibid., p. 86.
- ⁴ Ibid., pp. 87-90.
- ⁵ Ibid., p. 1.
- ⁶ Richard M. Emerson, "Power-Dependence Relations," American Sociological Review, XXVII (February, 1962), pp. 31-40.
- ⁷ Ibid., pp. 31-32.
- ⁸ Charles Perrow, Complex Organizations (Glenview, Illinois, 1972), pp. 199-202.
- ⁹ Ibid., p. 199.
- ¹⁰ Ibid., pp. 200-201.
- ¹¹ William R. Dill, "Environment as an Influence on Managerial Autonomy," Administrative Science Quarterly, II (March, 1958), pp. 409-443.
- ¹² Emerson, pp. 31-40.
- ¹³ A. W. Combs, Anne C. Richards and Fred Richards, Perceptual Psychology (New York, 1976), pp. 1-14.
- ¹⁴ Dennis Brisset and Charles Edgley, editors, Life As Theater, A Dramaturgical Sourcebook (Chicago, 1975), pp. 1-8.
- ¹⁵ Fredrick H. Harbison, Human Resources as the Wealth of Nations (New York, 1973), pp. 112-133.
- ¹⁶ John Child, "Managerial and Organizational Factors Associated with Company Performance, Part I," Journal of Management Studies, XI (October, 1974), pp. 175-189.
- ¹⁷ Paul E. Mott, The Characteristics of Effective Organizations (New York, 1972), pp. 185-189.

CHAPTER IV

OPERATIONALIZATION OF THE MODEL

Research Design

Four different methodologies could be employed to gather data for use in this study.¹ Because the research does not involve the manipulation of any independent variables, experimental research designs would not be appropriate. Both laboratory or field experiments would thus be ruled out as potential research designs. Instead, the methodology is basically a field study. The data was gathered, however, using a survey-type instrument. These two methods in combination provide the optimal answers to the research issues which have been raised by this study.

Kerlinger² defines a field study in the following way: "Field studies are ex post facto scientific inquiries aimed at discovering the relations and interactions among sociological, psychological, and educational variables in real social structures."³ These studies consist of two kinds, exploratory and hypothesis testing. This study, although somewhat of a combination, tends to be more of the latter. From the stated objective of the paper, it is apparent that the goal is to explore more fully what variables are necessary in order for an organization to be effective. Further, it is intended to reveal more fully the relationships between these variables. These objectives will be accomplished by evaluating hypotheses stemming from the model

developed in the previous chapter.

Given the objectives of the paper, the field study appears to be the ideal methodology. However, it does suffer from three significant limitations which should be noted. Noise, which is defined as any extraneous activity which may be clogging the communication channels, may make it difficult for the researcher to separate the variables of interest. Further, the findings may be highly distorted as a result of the extraneous happenings. Because of the after-the-fact nature of the data, it is difficult to support strongly some of the causal statements drawn from the research. A final limitation is that it is often difficult to measure the variables being studied.⁴

Some may question this type of study either because of its lack of rigor or because of its inability to make strong causal statements. However, a quote by Dubin⁵ expresses plainly the importance of this type of study, "In every discipline, but particularly in its early stages of development, purely descriptive research is indispensable."⁶ The application of systems theory to organizational theory and especially to the measure of organizational effectiveness is a new phenomenon. The study being conducted is primarily descriptive in nature. However, this study is needed, and will provide beneficial information not only for organizational theorists but for practitioners as well.

Description of the Samples

The Focal Organization

In order to describe the interactions between the variables in the model, two different sets of data were collected. The first set of data was collected from the focal organizations, which were twenty

supermarkets. These supermarkets were equally divided between two supermarket chains which operate in the state of Oklahoma. The supermarkets were further subdivided such that half of the supermarkets in each chain were located in a metropolitan area, while the other half were located in more rural settings. At the request of top management, specific location and identification of the supermarkets will not be given.

The data set collected from the focal organizations was made up of two component parts. First, information was secured from each store manager as to who their environmental constituents were, and the relative importance of these constituents to the focal organization. This information was obtained by asking the managers to select from a list of potential constituents the ones which they perceived to be of importance to the focal organization's effectiveness. This list is a modified version of the External Environmental Components Chart which was developed by Duncan.⁷ Next the store manager was asked to rank the constituents which he selected in terms of their degree of importance to the focal organization. There were three categories for this ranking: of great importance, of some importance, and of minor importance. The instrument used to collect this data is given in Appendix A.

The second component of the data collected from the focal organizations consisted of two commonly used measures of effectiveness. The first measure was the combination approach measure which incorporates both economic and behavioral evaluative criteria. The instrument employed was the same one developed and used by Mott.⁸ Also included in Appendix A, this questionnaire was administered to each store manager. The second measure involved profitability as an evaluative criterion.

Because of the sensitive nature of this data, it was collected directly from higher level managers in each supermarket chain. This information was similar to that used by Child in his studies.

The Constituents

The second data set involves the use of another set of samples. These respondents came from the constituents which made up the task environment of the focal organizations. The instruments employed to collect this data were specific to each constituent type (see Appendices B through F). However, in general terms, each of these instruments was constructed in the same manner. Because of widespread disagreements concerning whether the effectiveness construct consists of multiple dimensions, or whether it is more of a "gestalt" variable incapable of being broken into separate parts, both approaches were employed. That is, several questions specific to the constituent type were posed which tap the various dimensions of effectiveness. The responses to these questions were then summed, resulting in a measure of overall organizational effectiveness. Alternatively, several questions were asked which attempted to assess the respondents' perceptions of the overall effectiveness of the organization. The responses to these questions were then averaged, providing a more macro-oriented evaluation of the organization's effectiveness.

Competitors. The competitors of a focal organization were defined as supermarkets which, because of geographic proximity, would be expected to compete with the focal organization for consumers. Specialty

convenience stores such as 7-11, Quick Trip and U-Tot-Em were not included as potential competitors. While stores of this type would probably provide some competition, they are not the type of store in which a consumer would likely buy the week's groceries. The competitors which were included in the sample were selected from the Yellow Pages of the phone book from the city in which the focal organizations were located. A sample of three competitors was desired for each focal organization. While a focal organization would be expected to compete with more than three supermarkets, it was felt that the responses of three competitors would provide suitable representation of the competitor's evaluation of each focal organization. Questionnaires were mailed to 101 competitors. Initial response rate was 26.7% which was raised to 47.5% with a follow-up letter and questionnaire.

Consumers. The sample of consumers selected for each focal organization was obtained using two different methods. For those focal organizations located outside the metropolitan area, the process was relatively simple. Using the telephone directory of the city in which the focal organization was located, a random sample of 50 households was obtained. When the random number indicated that a non-consumer address was to be included in the sample (such as a business, governmental agency, or church), the entry listed immediately following was selected. If this entry was also a non-consumer address, the entry immediately preceding the original selected entry was included. This process continued until an acceptable entry was obtained.

For focal organizations located within the metropolitan area, such

a random selection would be inappropriate, as potential respondents might be included in the sample who lived many miles from the focal organization and would be unfamiliar with its operation. Thus, a different methodology was employed, based upon a recent study conducted by the Progressive Grocer.⁹ This study found that the average consumer travels 1.8 miles to shop for groceries. Using this information as a starting point, a circle was drawn around each focal organization on a city map. With the focal organization as the center, each circle holds a radius of 2.25 miles. It is recognized that the area of the circle was not quite large enough to provide the 1.8 mile average reported in the study above, but the amount of overlap was already significant. This overlap somewhat complicated the data collection process as numerous respondents contacted shopped at more conveniently located supermarkets within the same chain. Further expansion of the circles would have served only to cloud the issue further.

Once the circles had been drawn on the map, a 20 row by 10 column grid was placed over the circle such that the grid completely covered the circle. Next, a 10 digit random number was selected from a table of random numbers. The first two digits were used to determine the row number (1-20). The third digit designated the column number (1-10). At this point, a rectangle within the grid had been selected. If the rectangle was partially within the circle and if the rectangle contained streets, then the search procedure continued until a household was selected from within that rectangle. The fourth and fifth digits (1-20) were used to select a block from within the selected rectangle. The sixth digit was used to determine the side of the street, either odd or even. Using the street directory section of the 1976 City

Directory¹⁰ the number of addresses on the selected side of the street of the selected block were counted. Then the seventh and eighth digits were utilized to select an address from the list. In the event that a business address was selected, the same procedure as mentioned before was followed. In the event that the address was that of an apartment, digits nine and ten were used to select which apartment should be included in the sample. As in the case of the focal organizations located outside the metropolitan area, a sample of 50 potential consumers was selected for each focal organization.

Once these lists were compiled, data was collected from the respondents by means of a telephone survey. Approximately 15% of the data were collected by one interviewer, while the remaining data were collected by 16 different interviewers. Care was taken to train the interviewers in an attempt to minimize variance resulting from different interviewers. A desired response rate of 50% was initially established. However, actual response rate of usable responses ranged from 40% to 50% per focal organization with the overall usable response rate being 47.2%.

Governments. The government constituent with which the focal organization must interact was defined as the County Public Health Department of the county in which the focal organization was located. These Health Departments are charged with the responsibility of overseeing food handling institutions, of which supermarkets are a subset. While the focal organization must also comply with other governmental agencies and their respective rules and regulations, the Public Health

agency interaction is probably the most significant. Further, the other interactions are usually very specific and the number of regulatory agencies large. Therefore, the County Public Health agencies were selected as representative governmental constituents with which the focal organizations must interact. This meant, however, that a census rather than a sample was taken. Each focal organization was evaluated by the respective Public Health Department in whose jurisdiction the organization was located.

Labor Unions. All of the employees in all of the focal organizations are unionized. The employees are represented by two different national unions operating within each store. It was the intent of the researcher to get responses from state level officials within each of the union organizations. This provided for each focal organization being evaluated twice by the union constituency. One union was, however, unwilling to cooperate in the study. Thus, each focal organization has been evaluated by only one of its labor union constituents. While this situation is not necessarily desirable, it is not one which automatically renders the findings useless.

Owners. Both chains of focal organizations are incorporated and their stock is widely held. A survey of this constituent group, stockholders, would thus be not only impractical but also unfruitful. Such a survey would be impractical because stockholder lists would be difficult to obtain. Also, it is unlikely that stockholders could validly differentiate between focal organizations, thus making such a survey

unfruitful. Higher management within the focal organization's chain would play the same role as that of an owner within a smaller organization. Thus, an individual in higher management who is responsible for the actions of each focal organization was asked to evaluate each focal organization from an owner's perspective. Once more a census was conducted rather than a sample.

Suppliers. The final constituent group from which responses were obtained was the suppliers of the focal organizations. A list of suppliers was obtained from one of the chains. This list was supplemented by potential suppliers who were listed in the Yellow Pages of phone books of cities in which the focal organizations were located. Because of the limited number of suppliers and their geographic location, suppliers were asked to evaluate one, two, or three of the focal organizations. Those suppliers which were located in smaller communities were asked to evaluate either one or two focal organizations, depending on their proximity to the stores. Those suppliers located in metropolitan areas were asked to evaluate three focal organizations selected at random. The original response rate was 35.7% of usable returns. This was raised to 48.2% with a followup letter and questionnaire.

Description of the Testing Procedures

Introduction

This study relies on one primary resultant, the CMOE. This score

represents an evaluation of an organization's effectiveness by its constituency. There are several different methodologies that could have been employed to obtain this evaluation. For instance, each constituent could have been asked to write a free form essay describing the effectiveness of a given organization with which the constituent interacts. The limitations of such an approach are obvious. First, because these essays would be time consuming and somewhat difficult to complete, few constituents would be willing to exert the necessary time and energy. Secondly, the essays would be difficult to analyze and may not prove overly useful in differentiating between varying degrees of organizational effectiveness.¹¹

*Another method of evaluating effectiveness may have been possible through some form of ranking system. Ranking systems offer potential advantages in that they force the evaluator to make distinctions between organizations; that is, one must be ranked highest, one lowest, and so forth. Although only a general measure and an ordinal scale, it still offers greater analysis potentials than the free form essay. There are basically two methods of ranking. First is paired comparison ranking. This involves comparing each organization with each other organization, two organizations at a time. The number of times an organization was picked first serves as an indicator of where the organization ranks in comparison to the other organizations. There are two limitations to this approach which make it less desirable for this study. As the number of organizations to be evaluated increases, the number of comparisons to be made makes the process unwieldy. Further, with the survey nature of this study, this type of comparative process may not be feasible.¹²

*The second type of ranking is simply a stratification of the organizations in terms of their effectiveness. While this method is less time consuming and may be more readily acceptable to a questionnaire-based study, it is not as accurate. The loss in accuracy results from the difficulty in ranking organizations which are comparable in effectiveness. That is, it is relatively easy to identify organizations which are either outstandingly effective or ineffective. However, this process becomes progressively more difficult as movement is made toward the mean. While techniques exist for reducing this bias to some degree, it is still a significant problem which cannot be overlooked.¹³

*A third methodology and the one which was utilized to assess organizational effectiveness is some form of rating system. This system could evaluate the construct from either a multidimensional or a unidimensional approach. Using either approach, it would be possible for the evaluator to assign a value, which could then be summed to provide a score for the organization's effectiveness. This rating system is fairly easy to understand and utilize. Care must be taken, however, as ratings have a tendency to portray a much greater accuracy than they actually have.¹⁴

From the above discussion, it is obvious that any methodology employed has both advantages and disadvantages. The rating system seems to offer the most attractive alternatives for the collection of data in this study. As previously noted, the questionnaires were constructed along the same general format. Several questions designed to obtain the overall effectiveness of the organization were asked. Also the respondent was asked to respond to a number of different questions on various subdimensions which are believed to incorporate the major

components of this complex effectiveness construct. These values were then summed, resulting in a rating of the effectiveness of the focal organization.

The Instruments Employed

Competitors

The instrument utilized to collect data from the competitors of the focal organizations is shown in Appendix B. The questionnaire was divided into two parts. The first part evaluated 9 subdimensions of effectiveness, while the second part evaluated effectiveness from a universal stance. The questionnaire utilized was slightly modified as a result of the pretesting process. Two of the questions were clarified as their meaning was being misconstrued. A third question was deleted, as the data which it was generating was redundant and too personal. An additional question was included.

The variables measured in part one of the questionnaire included the focal organization's market share, the effectiveness of its advertising, appropriateness of its customer typing, its location, its accessibility, its pricing policies, and its drawing power. These seven variables were measured by asking the competitors one question for each variable. The other two variables were measured by asking the competitors two questions for each variable. These variables were the focal organization's prestige and its facilities and equipment. These subdimensions were then summed and averaged, providing an evaluation of the focal organization's effectiveness from a competitor's standpoint.

Part two of the questionnaire involved three questions, all measuring the same variable, overall effectiveness. These questions were

then summed and averaged, providing another evaluation of the effectiveness of the focal organization from the perspective of its competitors.

Consumers

The instrument which was utilized to collect data from the consumer constituency of the focal organization is found in Appendix C. The questionnaire consisted of three types of questions. The first type of question was demographic in nature. This data was collected at the request of the focal organizations and is not germane to the purpose of this study. The second type of question measured the 11 subdimensions of effectiveness important to the consumer constituency. The final type of question evaluated the focal organization's effectiveness from a universal approach.

A two-step process was utilized to develop this questionnaire. Data were collected from 102 consumers of a local supermarket during a two day interviewing session. The consumers were asked why they shopped at this particular supermarket. From this list, 11 variables emerged. The next step involved constructing a questionnaire which allowed these variables to be measured. The resulting instrument was pretested and required only minor modification. The wording of two questions were altered to make the meaning clearer. Although the questionnaire consisted of three parts, the demographic parts of the questionnaire will not be discussed.

The second part of the questionnaire consisted of 15 questions designed to measure the 11 subdimensions of effectiveness. Location was the first variable measured, and it required two questions. The next

variable was customer service. For half of the focal organizations, this variable was measured by four questions. On the other half, the variable was measured by only three questions, because these organizations did not provide such a service. The other nine variables were measured by one question each. The variables were prices, product selection, product quality, product arrangement, cleanliness, friendliness of employees, checkout waiting lines, advertisements, and store hours. These variables were then summed and averaged to provide an evaluation of focal organization effectiveness.

The third part of the questionnaire consisted of three questions. These questions were all designed to measure overall focal organization effectiveness. These questions were also summed and averaged, resulting in another evaluation of the focal organization's effectiveness.

Government

The instrument utilized to collect data from the government constituency is found in Appendix D. The questionnaire consisted of two parts. Part one was concerned with the subdimensions of effectiveness, while the second part utilized a more universal approach. After pre-testing, two questions were deleted from the questionnaire, as it was felt that the respondents would not have access to information necessary to complete accurately those questions. County Public Health agencies were selected as representative governmental constituencies because of the large number of interactions between them and the focal organizations.

Part one of the questionnaire measured seven subdimensions of effectiveness. Concern for safety by the focal organization was the first

variable measured. This variable was assessed by three questions. The second variable was also measured by three questions, and dealt with the apparent concern of the focal organization toward cleanliness. The third variable measured was the spirit of compliance which the focal organization had concerning rules, regulations, laws, and so forth. This variable was measured by two questions. The remaining variables were measured by one question each, and included the focal organization's concern for pollution control, its honesty in its weights and scales, its hiring practices, and its advertising practices. These variables were then summed and averaged to give a subdimensional evaluation of the focal organization's effectiveness.

In similar manner, Part II of the questionnaire consisted of two questions measuring the focal organization's overall effectiveness. These two questions were summed and averaged to provide an evaluation from a more general perspective.

Labor Union

The instrument utilized to collect data from the labor union constituent is found in Appendix E. This questionnaire was also divided into two segments. The first segment was utilized to measure nine subdimensions of focal organization effectiveness from a labor union perspective. The second part of the questionnaire was designed to measure effectiveness from a more general frame of reference. The questionnaire was pretested by getting the opinions of leading labor union officials from another industry. Four questions were slightly modified as a result to make their meaning clearer. One question was deleted, as it attempted to measure a subdimension of effectiveness

which is out of the jurisdiction of the labor union.

The first part of the questionnaire measured nine variables. The first variable, focal organization attitude toward union activity within the focal organization, was measured by three questions. Three other questions were designed to measure the willingness on the part of the focal organization to work with the union. The remaining seven variables were each measured with single questions. These variables included the number of grievances, the ability to disseminate information, the utilization of full time employees, communication between focal organization and labor union, number of people from the focal organization actively involved in union activities, speed of the grievance procedure, and the tendency of the focal organization to abuse its power. These variables can then be combined to provide a multidimensional evaluation of focal organization effectiveness from a labor union's perspective.

The second section of the questionnaire consisted of three questions designed to measure the same variable, the focal organization's overall effectiveness. These questions were summed and averaged to provide an overall evaluation.

Owner

The instrument utilized to collect data from the owner constituent is found in Appendix F. This instrument was divided into two sections. The first section looked at effectiveness from a multidimensional perspective while the second section evaluated effectiveness from a universal stance.

The first section consisted of 15 questions measuring subdimensions or variables of effectiveness. The first variable, market share, was

measured by three questions. The next three variables were measured by two questions each. The variables were the focal organization's manager's willingness to comply with the owner's wishes, the focal organization's manager's ability to control people when they were in the focal organization, and the focal organization's utilization of its people. The remaining variables were measured by one question each. These variables were customer complaints, union complaints, budgetary considerations, rainchecks issued, and length of checkout lines. These nine variables were then summed and averaged, providing a multidimensional evaluation of focal organization effectiveness from the owner constituent viewpoint.

In the second part of this questionnaire, the same process was performed. Two questions measuring the focal organization's overall effectiveness were combined and summarized. This provided an overall assessment of effectiveness of the focal organization by the owner.

Supplier

The instrument utilized to collect data from the supplier constituent is found in Appendix G. This questionnaire was divided into two parts. The first part evaluated effectiveness using a multidimensional approach, while the second part used a "Gestalt" approach. The questionnaire was modified slightly after pretesting; two questions were reworded to make them easier to understand and one question was deleted as it asked the obvious and would not provide any differentiation between focal organizations.

The first part of the questionnaire consisted of 14 questions which measured 9 dimensions of effectiveness from the viewpoint of the

the supplier. The first four variables were measured by two questions each. The variables were the nature of orders placed, promotional cooperation, shelf space allocation, and concern in product handling. The remaining variables were account payment, display area, coupon redemption, managerial accessibility, and total sales. Each of these variables was measured by a separate question. These subdimensions were then summed and averaged, providing an evaluation of the effectiveness of the focal organization as assessed by its suppliers.

Part two of this questionnaire consisted of two questions measuring the same variable, focal organizational overall effectiveness. In a similar manner to part one, the responses were summed and averaged, providing another evaluation of effectiveness, but from a more universal point of view.

Once a score had been obtained for each respondent, an averaging process began. All of the scores for each respondent of a given constituency type were averaged. This resulted in an effectiveness score for each organization by constituency type. Next, these scores were averaged to get a single effectiveness score for each organization by its constituents. Using these scores, it is now possible to rank the organizations in terms of their effectiveness. This ranking, the CMOE, is a measure of effectiveness which does not violate the assumptions of systems theory and thus more closely represents reality.

Reliability of the Instruments

In order to accept the findings of the CMOE measure, it is necessary to show that the measures are reliable. Reliability simply means that measures consistently measure whatever it is that they were designed

to measure. Thus, reliability is concerned with the reduction of measurement errors which by their very nature bias the results. Although it is not possible to eliminate totally these errors, steps must be taken to keep them at a minimum. If this is done, the instrument can be said to be reliable.¹⁵

The major source of measurement error comes from the inappropriate sampling of potential content. Thus, a good test of reliability is one which is based on the internal consistency of a given instrument. One such reliability test is coefficient alpha. Coefficient alpha

...represents the expected correlation of one test with an alternate form containing the same number of items. The square root of coefficient alpha is the estimated correlation of a test with errorless true scores. It is so pregnant with meaning that it should routinely be applied to all new tests.¹⁶

From the above quotation, it is obvious that such a test should be widely utilized in basic research such as this study. Further reliability which has been estimated from internal consistency is usually very close to the reliability estimated from correlations between alternate forms. In fact, coefficient alpha sets the upper limit for the reliability of a given instrument.

The level of reliability acceptable for a given instrument is a function of the type of research being employed.

In early stages of research on predictor tests or hypothesized measures of a construct, one saves time and energy by working with instruments with only modest reliability, for which purposes reliabilities of .60 or .50 would suffice.¹⁷

If significant correlations are found, methods exist for discovering how much the correlation will increase when more reliable measurements are utilized. However, if the desired reliability level is

initially high, the tests may well become excessively time consuming to administer and score. Thus, given the nature of this study, a reliability factor between .50 and .60 will be considered acceptable.

It was not possible to calculate reliability scores for each of the instruments employed in the study the focal organization when the coefficient alpha formula was utilized. This was because three of the constituent types, government, labor union, and owner had only one respondent for each focal organization. There were also some problems resulting from the small sample size of the suppliers, and especially the competitor constituency. As mentioned, these reliability scores were calculated using the coefficient alpha formula:

$$r_{KK} = \frac{K}{K-1} \left(1 - \frac{\sum \sigma_i^2}{\sigma_y^2} \right)$$

where: r_{KK} = reliability score

K = number of items in the instrument

$\sum \sigma_i^2$ = summation of the item variances

σ_y^2 = variance of the instrument scores.

Thus, the respondents were grouped together by type and a reliability score was calculated for each constituent. Table I shows the results of this calculation. As is obvious from the table, the reliability of the instruments exceeds the acceptable minimum level.

One final point about the reliability of the instruments should be noted. Several items from three of the instruments were not included in the analysis of the data. Preliminary reliability measures were not satisfactory for the instruments utilized to collect data from the competitor, government and supplier constituents. An inter-item correlation matrix was constructed for each of these constituents. In each

TABLE I
RELIABILITY SCORES OF THE
INSTRUMENTS EMPLOYED

Constituent	Score
Competitor	.8297
Consumer	.7205
Government	.5802
Labor Union	.8002
Owner	.6048
Supplier	.8384

case, one or more items were found to be either negatively or only weakly correlated with an overall constituent score. Further, it was discovered that this item was negatively or weakly related with the majority of the other items comprising the instrument. These non-correlating items were eliminated from any further analysis.

The supplier constituent instrument contained only one non-relating item. This item was evaluating the focal organization in terms of the number of coupons redeemed. Many of the suppliers surveyed did not use coupons as part of their marketing strategy. Thus they were unable to evaluate in a knowledgeable way the actions of the focal organization in this area.

The competitor constituent instrument contained two items that were neither strongly correlated with the overall competitor score nor with other competitor items. The first item was concerned with the pricing policies of the focal organization. From the data, it appears that the respondents either did not know the pricing patterns of the focal organization, or they felt that because the focal organization was a member of a chain, it had no control over this process. This latter alternative appeared to be the most acceptable. The second item was, to the researcher, a most surprising one. This item was concerned with the facilities of the focal organization. Although it would seem that this would be an important variable to a competitor, in this study the facilities did not discriminate between an effective and an ineffective organization.

The governmental constituency instrument contained three non-correlating items. The first item concerned the focal organization's compliance with licensing regulations. From the data it was evident

that from the government's point of view, a focal organization must comply. Hence, all did and the item did not discriminate. The same was true of a second item, the quality and freshness of the focal organization's products. By definition, the focal organization must have quality and fresh products, and again no discrimination existed. The final item dealt with an area outside the jurisdiction of the governmental agency selected to represent the government constituency. Thus, the responses to the item concerning the hiring practices of the focal organization could not be answered from a knowledgeable basis.

Validity of the Instruments

Not only must the instruments be reliable, they must also be valid. However, there are several different types of validity. One type is called content validity. Content validity is concerned with whether the instrument accurately samples from all the possible content existing in a given field. This type of validity is more common in test construction and would not be of great significance to this situation.¹⁸ A second type of validity is called face validity, which is simply an estimate by an expert in a given field that the instrument actually measures what it purports to measure.¹⁹

A third type of validity is called predictive or concurrent validity, and is concerned with how well an instrument is able to estimate some important form of behavior. In this study the instrument involves the rating of the organizations by their constituents and the behavior to be predicted is organizational effectiveness. The amount of validity is determined by the degree of correspondence between the two measures. Obviously, the higher the correspondence, the greater the relationship

and the more predictive validity associated with the rankings. Predictive validity is, however, of limited usefulness in this particular situation. In order to understand why this is so, it is first necessary to recall the previous discussions which highlighted the deficiencies of past attempts to measure organizational effectiveness. It will be recalled that these attempts used questionable models of the organization and often measured only a limited part of this complex variable, effectiveness. Thus, based on these past studies, there are not any good instruments to measure effectiveness. This makes it impossible to validate the CMOE by comparing it to past organizational effectiveness measures because the past measures are not here considered as being appropriate.²⁰

This problem of predictive validity holds in many other situations as well, and has led to a shift toward emphasis being placed on a fourth type of validity, construct validity. A construct is a variable that is more abstract than it is concrete, which would certainly be the case when organizational effectiveness is at issue. Effectiveness means different things to different people. The various constituents would analyze different organizational activities in assessing an organization's effectiveness. This fact, that the domain of organizational effectiveness encompasses such a large number and variety of variables, explains the diversity in past studies attempting to measure organizational effectiveness. All of these measures have a degree of construct validity. The specific amount of validity is determined by the extent to which the results would have been similar had different or all possible measures been employed. The process of establishing the degree of construct validity which this ranking instrument has goes far

beyond the scope of this research. In fact, the only true test of validity is over long periods of time, when relationships can be more fully explored and evaluated. For purposes of this study, the instrument will be assumed to have some construct validity, by definition, the actual degree of which will be unknown.²¹

The Hypotheses to be Tested

In order to evaluate the model created in this study, the following hypotheses will be tested. The hypotheses are presented verbally and in mathematical notation and have been grouped for ease of evaluation.

- I. A. The competitors' scores tend to be associated with a summation score made up of the other constituent scores.

$$r(\text{comp}, (\text{cons} + \text{govn} + \text{labr} + \text{ownr} + \text{supp})) > 0$$

- B. The consumers' scores tend to be associated with a summation score made up of the other constituent scores.

$$r(\text{cons}, (\text{comp} + \text{govn} + \text{labr} + \text{ownr} + \text{suppl})) > 0$$

- C. The government's scores tend to be associated with a summation score made up of the other constituent scores.

$$r(\text{govn}, (\text{comp} + \text{cons} + \text{labr} + \text{ownr} + \text{supp})) > 0$$

- D. The labor union's scores tend to be associated with a summation score made up of the other constituent scores.

$$r(\text{labr}, (\text{comp} + \text{cons} + \text{govn} + \text{ownr} + \text{supp})) > 0$$

- E. The owners' scores tend to be associated with a summation score made up of the other constituent scores.

$$r(\text{ownr}, (\text{comp} + \text{cons} + \text{govn} + \text{labr} + \text{supp})) > 0$$

- F. The suppliers' scores tend to be associated with a summation

score made up of the other constituent scores.

$$r(\text{supp}, (\text{comp} + \text{cons} + \text{govn} + \text{labr} + \text{ownr})) > 0$$

- II. A. The competitors' scores tend to be associated with the profitability measures employed by Child.²²

$$r(\text{comp}, \text{profit}) > 0$$

- B. The consumers' scores tend to be associated with the profitability measures.

$$r(\text{cons}, \text{profit}) > 0$$

- C. The government's scores tend to be not associated with the profitability measures.

$$r(\text{govn}, \text{profit}) \leq 0$$

- D. The labor union's scores tend to be not associated with the profitability measures.

$$r(\text{labr}, \text{profit}) \leq 0$$

- E. The owners' scores tend to be associated with the profitability measures.

$$r(\text{ownr}, \text{profit}) > 0$$

- F. The suppliers' scores tend to be not associated with the profitability measures.

$$r(\text{supp}, \text{profit}) \leq 0$$

- III. A. The competitors' scores tend to be not associated with the results from the multiple criteria evaluation instrument developed by Mott.²³

$$r(\text{comp}, \text{multiple criteria}) \leq 0$$

- B. The consumers' scores tend to be associated with the multiple criteria results.

$$r(\text{cons}, \text{multiple criteria}) > 0$$

- C. The government's scores tend not to be associated with the multiple criteria results.
 $r(\text{govn}, \text{multiple criteria}) \leq 0$
- D. The labor union's scores tend to be associated with the multiple criteria results.
 $r(\text{labr}, \text{multiple criteria}) > 0$
- E. The owners' scores tend not to be associated with the multiple criteria results.
 $r(\text{ownr}, \text{multiple criteria}) \leq 0$
- F. The suppliers' scores tend not to be associated with the multiple criteria results.
 $r(\text{supp}, \text{multiple criteria}) \leq 0$
- IV. A. The CMOE scores (a summation of the six constituent scores) tend not to be associated with the profitability measures.
 $r(\text{CMOE}, \text{profit}) \leq 0$
- B. The CMOE scores tend not to be associated with the multiple criteria results.
 $r(\text{CMOE}, \text{multiple criteria}) \leq 0$
- V. The CMOE score is a combination measure explained partially by the profitability measures and partially by the multiple criteria results.
 $\text{CMOE} = f(\text{profit}, \text{multiple criteria})$

FOOTNOTES

¹Nan Lin, Foundation of Social Research (New York, 1976), pp. 248-250.

²Fred N. Kerlinger, Foundations of Behavioral Research (New York, 1964), pp. 379-389.

³Ibid., p. 387.

⁴Ibid., pp. 388-390.

⁵Robert Dubin, Theory Building (New York, 1969), pp. 1-95.

⁶Ibid., p. 85.

⁷Robert B. Duncan, "Characteristics of Organizational Environments and Perceived Environmental Uncertainty," Administrative Science Quarterly, XVII (September, 1972), pp. 313-327.

⁸Paul E. Mott, The Characteristics of Effective Organizations (New York, 1972), pp. 185-189.

⁹"Consumer Behavior in the Supermarket," Progressive Grocer, LIV (October, 1975), p. 38.

¹⁰R. L. Polk and Company, 1976 Tulsa City Directory (Dallas, Texas, 1976).

¹¹Dale S. Beach, Personnel: The Management of People at Work (New York, 1975), p. 324.

¹²Ibid., pp. 320-321.

¹³Ibid., pp. 321-322.

¹⁴Ibid., pp. 318-320.

¹⁵Jim C. Nunnally, Psychometric Theory (New York, 1967), pp. 206-235.

¹⁶Ibid., p. 196.

¹⁷Ibid., p. 226.

¹⁸Ibid., pp. 79-83.

¹⁹Ibid., p. 75.

²⁰Ibid., pp. 76-79.

²¹Ibid., pp. 83-92.

²²John Child, "Managerial and Organizational Factors Associated with Company Performance, Part I," Journal of Management Studies, XI (October, 1974), pp. 175-189.

²³Mott, The Characteristics of Effective Organizations, pp. 185-189.

CHAPTER V

ANALYSIS OF THE DATA

Introduction

This chapter involves the evaluation of the hypotheses which were stated in the previous chapter. Basically, two statistical techniques were required to test the 21 hypotheses. The last hypothesis required the use of a step-wise regression statistic. The remaining variables utilized Pearson's correlation. These two statistics were calculated using the SPSS¹ computer package available at the Oklahoma State University Computer Center.

Selection of the Measure

Two different measures of effectiveness were built into each instrument. The first section of each questionnaire was designed to assess the effectiveness of the focal organization from a multidimensional perspective. That is, to be viewed as effective, a focal organization must meet a number of different demands placed on it by a particular constituent. The second section of each questionnaire was designed to assess focal organization effectiveness from a global perspective. That is, what makes an organization effective cannot be segmented, subdivided and reconstituted to produce effectiveness. Table II provides some insight into the solving of this dilemma.

TABLE II
RELATIONSHIP BETWEEN SUBDIMENSIONAL EFFECTIVENESS
SCORES AND GLOBAL EFFECTIVENESS SCORES

Constituent	r (global, subdimensional)
Competitor	.5911**
Consumer	.6857**
Government	.2173
Labor Union	.8468**
Owner	.6254*
Supplier	.6900**

* Significant at the .05 level

** Significant at the .001 level

From Table II, it is apparent that for five of the constituent instruments, the two approaches produce similar results. For these five instruments, the two measures had strong, significant correlations. The subdimensional measures were chosen, however, simply because the reliability of these instruments had already been documented and shown to be well above a minimally acceptable level.

The other instrument, that for the government constituent, presented somewhat of a problem. Although there is a positive relationship between the two measures, the relationship is small and not significant. Thus, a decision had to be made as to which measure should be utilized for further analysis. The subdimensional measure was selected for several reasons. First, all of the instruments employed in this study to tap

constituent responses were designed and tested in the same manner. Thus, it would seem logical that the response patterns obtained from the respondents would be somewhat similar. Secondly, two questions aimed at the global evaluation of effectiveness were the same for all constituents. Therefore, if the response patterns are similar and the global questions identical, the difference may well lie in the sub-dimensional part of the questionnaire. This fact was further supported by a third reason. Although care was taken to ensure anonymity, the government constituency was somewhat reluctant to reply. Reluctant responders may be more likely to point out a few weak points but still evaluate the overall effectiveness of a focal organization as high. A final reason for utilizing the subdimensional measure is that the instrument has sufficient reliability for the type of study being conducted. In sum, the subdimensional measures were used for all of the constituents in further data analysis.

Evaluation of the Hypotheses

The first six hypotheses are all related to the same issue. Table III is presented in order to depict the correlations between some of the variables involved in order to evaluate these hypotheses.

The first hypothesis, I.A., states that the competitors' scores tend to be associated with a summation score summarizing the other constituent scores. From Table III, there is a strong positive correlation between these scores, which is significant at the .05 level. Hence, this first hypothesis would be accepted. Competitors use methods for evaluating focal organization effectiveness which render results consistent with the scores from the other constituents.

TABLE III

THE RELATIONSHIP BETWEEN THE CONSTITUENCY SCORES AND A SUMMATION SCORE:
EXCLUDING ONE CONSTITUENT AT A TIME

	Summation Score without the:					
	Competitor	Consumer	Government	Labor Union	Owner	Supplier
Competitor	.4316*					
Consumer		.2810				
Government			-.2829			
Labor Union				-.0581		
Owner					.3294	
Supplier						-.0976

* Significant at the .05 level

Hypothesis I.B. states that the consumers' scores tend to be associated with a summation score summarizing the other constituent scores. This hypothesis would be rejected. While there is a correlation between these two scores, it is neither strong nor significant. There does exist a relationship between these two measures; however, one cannot be sure that this relationship is not simply the result of chance.

The third hypothesis, I.C., states that the scores generated by the governmental constituency tend to be associated with a summation score summarizing the other constituent scores. This hypothesis would also be rejected. By looking at Table III, one notes an interesting relationship between these two measures. The correlation between the two measures is a little stronger than in the previous situation, but it is still not significant. Also, the relationship is negative. This means that when the remainder of the constituents evaluate a particular focal organization as being high in effectiveness, one would almost be able to predict that the government constituent would evaluate the same focal organization as low in effectiveness. Because the correlation is not significant, however, this is only a general trend, but it is most revealing.

Hypothesis I.D. states that the scores of the labor union constituency tend to be associated with a summation score summarizing the other constituent scores. This hypothesis is also to be rejected. By looking at the correlation coefficient between these two measures, it is apparent that there is little relationship between them. Further, what relationship there is tends to be negative. Thus, the labor union constituency, in a similar manner to the governmental consistency,

evaluates focal organization effectiveness inversely from what the other constituents do. Unlike the governmental constituency, however, this statement may only be made with a great deal less certainty.

The fifth hypothesis, I.E., states that the scores of the owner constituency tend to be associated with a summation score summarizing the other constituent scores. This hypothesis would also be rejected. As in the case of the consumer constituency, there does appear to be a relationship between these two measures. Further, the correlation is even slightly stronger. However, the relationship is not significant, even though it does get very close ($p \leftarrow .078$). Also like the consumer scores, one cannot be sure that the similarity in results is not simply the result of chance occurrences, despite the fact that the correlation appears strong.

The final hypothesis of this first group, I.F., states the scores of the supplier constituency tend to be associated with a summation score summarizing the other constituent scores. This hypothesis is also rejected. In similar fashion to the labor union's scores, there tends to be little relationship between how the supplier constituency evaluates the effectiveness of a focal organization and how the other constituents evaluate the same organization. Further, the relationship that does exist tend to be negative. Thus, a very weak statement could be made stating that the supplier constituent evaluates focal organization effectiveness inversely from the other constituents.

The next twelve hypotheses can also be grouped together. These hypotheses attempt to determine how closely the results obtained from the six constituents related to results that were obtained by utilizing previously developed measures. This group of twelve hypotheses was

subdivided into two groups of six. The first subset compared constituent scores with measures usually associated with the traditional theorists. For this study, the traditional measures chosen were those utilized by Child² in a recent study. The second subset compared the constituent scores with the results obtained from the administration of Mott's³ instrument. This instrument is typical of the multiple criteria research which is popular currently. Table IV is presented to aid in the evaluation of the first subgroup of hypotheses.

As can be seen from Table IV, Child utilized three different measures in an effort to evaluate organization effectiveness; the average growth or increase in sales, the average increase in net profits and the average increase in profits to sales. Although eighteen separate hypotheses could have been developed to evaluate the relationships depicted in Table IV, such an approach would have proven to be both unwieldy and unprofitable. In most of the cases, there is adequate consistency to make generalization readily possible. However, it will be necessary to compare each constituent's score with these three measures which Child employed.

The first hypothesis of this subgroup, II.A., states that the competitors' scores tend to be associated with these profitability measures. This hypothesis was rejected, which may seem somewhat surprising. It would be natural to assume that these competitors of the focal organizations would tend to be more leery of and would hence evaluate as more effective the more profitable focal organizations. There is a small but positive relationship between the competitors' scores and average sales increase. This relationship is not significant. When the profitability figures are included, the relationship between the scores

TABLE IV
 THE RELATIONSHIP BETWEEN THE CONSTITUENT SCORES AND THE PROFITABILITY
 MEASURES UTILIZED BY CHILD⁴

	Average Increase in Sales	Average Increase in Profits	Average Increase in Profit to Sales
Competitors	.1904	-.3264	-.3178
Consumers	.0049	-.1533	-.1469
Government	-.1701	-.0806	-.0175
Labor Union	-.1307	-.5789*	-.5450*
Owner	.4824*	-.3293	-.3889*
Supplier	.0967	.1755	.0766

* Significant at the .05 level

becomes stronger, although it still is not significant. However, the direction of the relationship has changed, and the competitors' scores are inversely related to the profitability scores. Thus, it appears that the competitors either do not care about focal organization profitability, or they are not overly concerned by it.

Hypothesis II.B. states that the consumers' scores tend to be associated with these same profitability measures. This hypothesis was also rejected. From Table IV, it is evident that there is virtually no relationship between the consumer scores and either of the three profitability measures. The largest correlation coefficient is .15 and this relationship is negative. The conclusion to be drawn is that the consumer constituent evaluates focal organization effectiveness in a manner not related to the profitability of the organization. This result is not overly surprising.

The third hypothesis, II.C., states that the scores of the governmental constituent are not positively associated with the profitability measures. These scores were predicted to be different because many governmental guidelines meant to protect long-run profitability may do so at the expense of short-run profits. Further, short run profitability may be increased by dubious practices which the governmental constituency is supposed to arrest. This hypothesis was accepted. All of the correlation coefficients were negative, indicating an inverse relationship between these two measures. However, the correlations were not significant. This means that there is no relationship between the two scores. Further, the weakness of the correlation indicates more strongly the absence of a relationship between them.

Hypothesis II.D. states that the scores of the labor union

constituents are not positively associated with the profitability measures. From Table IV, it is obvious that this hypothesis was accepted. In fact, this hypothesis was the easiest of the group to evaluate. The labor union scores significantly correlated negatively, the predicted direction, with two of the profitability measures. It is only when the labor union scores are compared with average sales increase that the relationship became even a bit tenuous. Even here the relationship is negative as predicted. Thus, it is not incongruent with the other relationships; it simply does not provide as much support as desired. There is little doubt, however, that the labor union constituent evaluates focal organization effectiveness much differently from the results of the profitability measures.

Hypothesis II.E. states that the scores of the owner constituent tend to be positively associated with the profitability measures. This hypothesis was rejected. This is by far the most surprising result, the data the most contradictory, and the reason the most elusive. From Table IV, it is noted that the owner constituency scores correlate significantly with two of the profitability measures. The owners' scores are positively related to the average increase in sales. The owners' scores are also negatively related to the average increase in profit to sales. Thus, the owners' scores are significantly related to two of the most commonly used traditional measures, except that the relationships are in opposite directions. In order to resolve this dilemma, attention is turned to the third relationship between these measures. The owners' scores tend to be negatively related to the average increase in profitability. This relationship is strong, though it is not significant, the actual significance level being .078. Thus, the hypothesis was rejected.

The traditional profitability measures of focal organization effectiveness result in different evaluations than those of the owner constituent. A possible reason explaining this will be discussed later.

The final hypothesis in this subset states that the supplier constituency scores are not positively associated with the profitability measures of effectiveness. This hypothesis was accepted. It was predicted that the profitable focal organization would not be overly concerned with maintaining good relations with suppliers, instead making heavy demands upon their suppliers. The relationships, although positive, are quite weak and are insignificant. Thus, the hypothesis that there is no relationship between the supplier scores and the profitability measures would be accepted.

To summarize this first subset of hypotheses, the following should be particularly noted. Three of the hypotheses were rejected, and three were accepted. In all cases the same conclusion was reached, that none of the constituent scores was related to the results that were generated using the profitability measures employed by Child and other traditional theorists. The significance of this point will be discussed later.

Table V is presented as an aid in the evaluation of the second subset of hypotheses. It will be recalled that these hypotheses are concerned with comparing the constituent scores with the results of Mott's multiple criteria instrument.

TABLE V
 THE RELATIONSHIP BETWEEN THE CONSTITUENT SCORES
 AND THE MULTIPLE CRITERIA MEASURE OF
 EFFECTIVENESS DEVELOPED BY MOTT⁵

Constituent	Multiple Criteria
Competitor	.0230
Consumer	-.0470
Government	.3475
Labor Union	.0670
Owner	-.2201
Supplier	.1426

The first hypothesis from this subset, III.A., states that the competitor constituent scores are not positively associated with the multiple criteria scores. This hypothesis was accepted. Table V shows the correlation coefficient between these two measures reveals that the relationship is quite small and is not significant. However, it is positive, indicating that the two measures may be related. However, the appropriate conclusion would be to accept the hypothesis that the competitors' scores tend not to be related to results generated by the multiple criteria instrument.

Hypothesis III.B. states that the scores of the consumer constituent tend to be associated with the multiple criteria results. This hypothesis was rejected. The correlation coefficient once more reveals that the relationship between the two scores is minimal. Further, the relationship is negative, the opposite direction of that predicted.

Although one may be led to conclude there exists an inverse relationship between the two measures, the negative direction may simply be the result of chance. However, it appears obvious that there is little relationship between the two measures.

The third hypothesis, III.C., states that the government constituent scores are not positively associated with those generated by the multiple criteria instrument. This hypothesis was the most difficult to evaluate, and was hesitatingly accepted. From Table V it is noted that the relationship between these two measures is the strongest of all those cited. Further, the relationship is positive, the direction opposite that of the prediction. However, the relationship is not significant at the .05 level; the actual level of significance is .067. Although this correlation is close to being significant, it may be that much of the apparent relationship between the two measures is the result of chance.

Hypothesis III.D. states that the labor union constituent scores tend to be associated with the multiple criteria results. This hypothesis was rejected. Although the correlation is positive and hence in the predicted direction, it is small and not significant. Although a slightly stronger relationship exists between the labor union scores and the multiple criteria scores than was the case when competitor scores were compared to the multiple criteria scores, the conclusion is the same. The multiple criteria scores tend to be unrelated to the labor union scores.

The fifth hypothesis, III.E., states that the scores of the owner constituent are not positively associated with the scores of the multiple criteria questionnaire. This hypothesis was accepted. The

multiple criteria instrument seemed to measure effectiveness from the perspective of how well the people within a focal organization cooperated and worked together. It was the contention of the researcher that an outside evaluator (owner) would be interested in other factors. This data supported this contention, the measures were not related, as the relationship is negative and not significant. The scores of the owner constituency tend to be unrelated to the multiple criteria scores.

Hypothesis III.F., the final hypothesis of this group, states that the supplier constituent scores are not positively associated with the results generated by the multiple criteria instrument. This hypothesis was also accepted. The correlation coefficient for the relationship between these two measures is positive, which is opposite the predicted direction. However, the correlation is weak and is not significant. Hence, the hypothesis that the supplier constituent scores tend not to be associated with the multiple criteria scores would be accepted.

In summary, none of the six constituent scores tended to be significantly associated with the multiple criteria scores. The government scores were somewhat related, but as noted, not significantly. Further, two of the constituent scores were negatively related to the multiple criteria results, although in neither case was the relationship significant. But it is apparent that the constituents tended to be evaluating focal organization effectiveness in a manner unrelated to the methods used by the multiple criteria researchers.

It will be remembered that this was the same conclusion which was drawn after evaluating the first subset of hypotheses. Thus, after evaluating this group of twelve hypotheses, the same consistent

conclusion emerges. The constituent scores tend not to be associated with the measures used in the past which attempted to assess organizational effectiveness. Before discussing the implications of these results, two more hypotheses need to be considered. Table VI is presented to evaluate these two hypotheses.

TABLE VI
THE RELATIONSHIPS BETWEEN PAST ATTEMPTS
OF MEASURING ORGANIZATIONAL
EFFECTIVENESS AND THE CMOE

	CMOE
Average Increase in Sales	.1839
Average Increase in Profits	-.5668*
Average Increase in Profits to Sales	-.5798*
Multiple Criteria Scores	.0801

* Significant at the .05 level

These two hypotheses both utilize the CMOE score. This score is a summation score representing the six constituents. The first hypothesis, IV.A., states that the CMOE scores are not positively associated with the profitability measures used by Child. It would be logical to assume that if the individual constituent scores did not tend to be associated with these profitability scores, then a summation score of

them would also not be positively associated with the profitability measures. This assumption was supported, and by observing the correlation coefficients in Table VI, the above hypothesis would be accepted. Two of the coefficients clearly show by their strong, significant, and negative values that they tend to be negatively related to the profitability measures. This strong inverse relationship is negated somewhat by the correlation coefficient for average increase in sales. This coefficient is positive, indicating that there may be some relationship between these two measures. However, the relationship is weak and it is not significant. Thus, the above hypothesis remains viable and acceptable, the CMOE scores do not tend to be positively associated with the profitability measures.

Hypothesis IV.B. is very similar to IV.A. It states that the CMOE scores are not positively associated with the results generated from the multiple criteria instrument developed by Mott. This hypothesis was also accepted. There are two arguments which lead toward this acceptance. First, as in the previous case, the multiple criteria results tended not to be associated with the individual constituent scores. Thus, if the relationship did not exist individually, there is no reason to assume that it would exist in a summative score. This position is supported by the correlation coefficient found in Table VI. Secondly, evaluation of the coefficient reveals that the relationship, although positive, is weak and not significant. Thus, although the correlation would indicate a relationship between the variables, because of its lack of magnitude, the relationship may simply be the result of chance. Hence, the conclusion would be reached that the CMOE scores tend not to be associated with the results from the multiple criteria instrument.

One final hypothesis will be evaluated in order to gain additional insight into the relationships between these three measures. This hypothesis, V., states that these three measures are not independent measures. In fact, the CMOE score is a measure which is explained by the other two measures, profitability and the multiple criteria instrument. In order to test this hypothesis, a multiple regression model was run. The model used step wise regression with forward inclusion. This meant that the independent variable explaining the most variance was entered into the regression model first. Then the variable which explained the next most variance was entered, and so on. This process continued until a predetermined statistical significance level was obtained, which for this study was .05. The dependent variable used in this regression model was CMOE. The independent variables were Child's profitability measures, average increase in profits, sales, and in profit to sales, and the multiple criteria results. The results of this regression analysis are shown in Table VII.

Before discussing the results revealed in Table VII, a qualifying statement needs to be made. The multiple regression model assumes that the independent variables which are entered into the model are independent of one another. From the list of independent variables to be included in the model it is obvious that the variables are not independent of each other and a great deal of colinearity would be anticipated. In this particular regression model, the relationship between independent variables was not a problem because three of the variables are purported to measure the same thing, profitability. If these measures were combined and this summative measure was regressed along with the multiple criteria score, the results would be little altered.

TABLE VII

A REGRESSION MODEL WITH CMOE AS THE DEPENDENT VARIABLE
AND THE PROFITABILITY SCORES AND MULTIPLE
CRITERIA INSTRUMENTS AS INDEPENDENT
VARIABLES

Variance	Degrees of Freedom	Sum of Squares	Mean Square	F Value
Average Increase in Profit to Sales	1	713.29552	713.29552	
Residual	18	1408.34972	78.24165	9.11657*

* Significant at the .05 level

However, in order to see which variable if any best predicts CMOE scores, the three measures were treated as if they were independent.

As can be seen in Table VII, the only variable included in the regression was one of the profitability measures, average increase in sales to profit. The calculated F value is significant, indicating that there is a relationship between the CMOE scores and the average increase in profit to sales. The R^2 value was .3362. The R^2 value "Measures the proportion of total variation about the mean \bar{Y} explained by the regression."⁶ The closer this R^2 value is to unity, the closer the regression line is to a perfect predictor. Basically, this score would be interpreted to mean that approximately 34% of the variation about the mean would be explained by this variable. This is not overly strong, nor is it unduly weak. This is shown further by looking at the square root of the R^2 score, which is the multiple correlation coefficient.⁷ In this case, the value would be .5798, which indicates

a strong relationship between the variables. Thus, there does appear to be a relationship between these two measures. When one recalls the correlation between the CMOE scores and these measures, it will be remembered that this relationship also existed, and it was negative. Thus, the relationship is an inverse one.

The hypothesis, V., was thus rejected. Only one variable entered into the model explaining a significant amount of variance. Thus, these three measures tend to be independent, and the CMOE scores are not explained by the profitability measures or the results of the multiple criteria instrument.

Post Hoc Analysis

The evaluation of the hypotheses raised several issues which will now be discussed. The issues will be discussed in the same order in which the hypotheses were evaluated.

Relationships Between Constituent Scores

By reexamining the data utilized to evaluate hypotheses I.A. to I.F., and by performing some further calculations, it will be possible to get a better understanding of the relationships between the constituent scores. There are two questions for which an answer is sought. First, what is the nature of this construct, effectiveness? Although each constituent uses different evaluative criteria and is primarily concerned with different aspects of the focal organization's functioning, is there not some underlying factor tying all these constituents together? Secondly, if there is not some underlying factor relating all of the constituents to each other, is there some sort of

TABLE VIII

THE RELATIONSHIP BETWEEN THE CONSTITUENCY SCORES AND A SUMMATION SCORE:
EXCLUDING ONE CONSTITUENT AT A TIME: AN EXPANDED VERSION

	Summation Score without the:					
	Competitor	Consumer	Government	Labor Union	Owner	Supplier
Competitor	.4316*	.6616**	.7477**	.8607**	.7031**	.7021**
Consumer	.4440*	.2810	.5616*	.7100**	.5279*	.5672*
Government	.0096	.0243	-.2829	-.2001	.1476	.0689
Labor Union	.6553**	.5947*	.4036*	-.0581	.5320*	.5609*
Owner	.5720*	.5931*	.7141**	.6494**	.3294	.5753*
Supplier	-.1938	.2487	.2986	.3918*	.1847	-.0976

* Significant at the .05 level

** Significant at the .001 level

a grouping pattern among the constituents? The answer to the first question relies on an expanded version of Table III, which is presented in Table VIII.

By noting the relationships revealed in Table VIII, several conclusions emerge. First, only one of the constituent scores, those of the competitor, were significantly related to the scores generated by summation score which excluded that constituent. Secondly, three other constituents, the consumers, labor union and owner all generated results which were reasonably consistent. Regardless of which constituent scores was removed, these three constituents were each significantly related to the resulting summation score. This was, of course, not true when their own scores were removed, so undoubtedly part of the relationship is with themselves. However, two of these scores also correlated with the summation scores which did not include their constituency's scores. Although the correlations were not significant, they were strong.

A third conclusion concerns the other two constituents. It is evident that both the government and the supplier constituents used evaluative criteria that were not related to any of the criteria used by the other constituents. Further, the criteria used by these two constituents was not the same, and they do not evaluate the focal organization in the same way.

To summarize, with the exception of the competitor constituent, each constituent type evaluated focal organization effectiveness in a different way. There does not seem to be an underlying factor which relates all of these constituents together.

The second question was concerned with whether the constituents

group together in some manner. This can be resolved with the aid of Table IX. This table was constructed by correlating the constituent scores with each other. It reveals that three of the constituent measures are positively related to each other. The competitor scores are significantly correlated with both the consumer and the owner scores. Further, the relationship between the owner scores and consumer scores is strong. Although the correlation is not significant ($p < .072$), this is the highest nonsignificant correlation coefficient in the table. The only other significant relationships are between the government and the owner scores, and between government and supplier scores; both of these relationships are negative. Thus, there is a significant negative relationship between the way the government constituent evaluates a focal organization and the way the owner and supplier constituents evaluate the same organization. Further, the negative relationship is also evident between the government scores and the scores of both consumers and competitors. In both situations, however, the relationships are not significant. There is a small, nonsignificant relationship between the owner and supplier scores.

In sum, three of the constituents tended to evaluate focal organization effectiveness in the same way. The other three constituents evaluated focal organization effectiveness in a different way. However, this evaluation differed for each constituent type. As previously noted, the government and supplier scores are significantly negatively related. Similarly, there is a strong, though not significant, negative relationship between the labor union and supplier scores. Finally, there is a very small and insignificant relationship between the government and labor union scores. The relationship is so small that the influence of chance should certainly not be overlooked.

TABLE IX
 THE RELATIONSHIPS THAT EXIST BETWEEN THE VARIOUS CONSTITUENT
 EFFECTIVENESS SCORES

	Competitor	Consumer	Government	Labor Union	Owner	Supplier
Competitor	1.0000					
Consumer	.5375*	1.0000				
Government	-.1574	-.1210	1.0000			
Labor Union	-.0355	-.1347	.2244	1.0000		
Owner	.4527*	.3389	-.5251*	.0885	1.0000	
Supplier	.1681	-.0017	-.4076*	-.2500	.1772	1.0000

* Significant at the .05 level

The Validity of the Profitability Measures

The next issue to be discussed is concerned with the usefulness of the Child instruments to this particular industry setting. Child utilized growth as evidence of the effective organization; thus he looked at average increase of sales, of profits, and of profits to sales. In an industry where organizations are experiencing steady growth, this may be an appropriate yardstick. However, when the profitability of the organizations fluctuates from year to year, such an instrument may be inappropriate and misleading. To illustrate the importance of this point, consider the following two hypothetical focal organizations. Organization A had relative profits for the last five years of 10.0, 10.1, 10.2, 10.3 and 10.4. During the same time period, Organization B had relative profits of 10.0, 1.0, 5.0, 7.5, and 1.0. Using Child's measure, Organization A would have an average increase in profits of .0115. On the other hand, Organization B would have an average increase in profits of .9333. Not many people, looking only at the raw data, would argue that Organization B was more effective than Organization A. Yet in this situation, that is the conclusion which would be drawn using Child's measures. An evaluation of the profitability data being utilized in this study will reveal that fluctuations of this nature are occurring. A more suitable profitability measure may be to calculate average profitability for each focal organization and compare that measure with the constituent scores and the CMOE score. Table X is presented so that these new relationships can be evaluated.

The focal organizations were split into two groups because financial data was available for only four years for one of the focal organization chains. This does not, however, overly complicate the analysis. There

TABLE X
THE RELATIONSHIP BETWEEN THE CONSTITUENT AND
CMOE SCORES AND AVERAGE PROFITABILITY

Constituent	Average Profitability	
	Focal Organization X	Focal Organization Y
Competitors	.6018*	.7293*
Consumers	-.0997	.4020
Government	-.0610	-.8344**
Labor Union	.1083	-.5313
Owner	.5497*	.4919
Supplier	.4749	.8573**
CMOE	.5358	.1529

* Significant at .05 level

** Significant at .001 level

appears to be a greater degree of relationship between this new measure of profitability and the constituent scores than when the Child instruments were employed. Focal Organization X had two significant relationships, the competitor scores and the owner score, which were significantly related with average profitability. Focal Organization Y had three significant relationships, although one, the government score, was negative. The two positive correlations were the competitors' scores and the supplier scores. The relationship between the CMOE scores and average profitability was the same as when Child's measures were used.

In the previous section it was noted that there tends to be a

relationship between three constituent scores, competitor, consumer and owner. The relationship between these three scores breaks down a bit when compared to average profitability. For Focal Organization Y, the correlation coefficients for competitor, consumer and owner were strong and positive; however, only one was significant. For Focal Organization X, the relationship is even less stable. The competitor and owner scores were both strong, positive and significant, indicating agreement. The consumer score, however, was weak, negative and insignificant, meaning that the measures may not be as closely related as once thought.

The most surprising finding is the relationship between the supplier score and average profitability. For one focal organization, the correlation coefficient is highly significant. For the other, the relationship is strong positive, and almost significant.

To summarize, Child's profitability figures may have been more appropriate had the focal organizations been operating in more of a growth industry. In this situation, however, average profitability may have provided a more appropriate measure. Some of the hypotheses would have been answered in a different manner were average profitability used. However, even with the use of this measure, the conclusion still remains that the CMOE scores tend not to be associated with the profitability scores typical of the traditional theorists.

The Relationship Between Past Effectiveness

Measures

The final issue to be discussed is concerned with the relationships between the profitability measures and the multiple criteria results.

Both measures claim to be evaluating organizational effectiveness. Hence, the correlation between the two measures would be expected to be high. The results of Table XI are most revealing.

TABLE XI
THE RELATIONSHIP BETWEEN THE PROFITABILITY
AND THE MULTIPLE CRITERIA MEASURES

	Multiple Criteria Measures
Average Increase in Sales	-.3247
Average Increase in Profits	-.1335
Average Increase in Profits to Sales	-.1425
Focal Organization X Average Profits	-.0767
Focal Organization Y Average Profits	-.0662

As can be readily seen from the above table, the correlation coefficients are all negative and not significant. These two measures do not seem to be related with one another.

FOOTNOTES

¹Norman H. Nie, C. Hadlai Hull, Jean G. Jenkins, Karin Steinbrenner, and Dale H. Brent, SPSS: Statistical Package for the Social Sciences, Second Edition (New York, 1975), pp. 276-367.

²John Child, "Managerial and Organizational Factors Associated with Company Performance, Part I," Journal of Management Studies, XI (October, 1974), pp. 175-189.

³Paul E. Mott, The Characteristics of Effective Organizations (New York, 1972), pp. 185-189.

⁴Child, pp. 175-189.

⁵Mott, pp. 185-189.

⁶Norman Draper and Harry Smith, Applied Regression Analysis (New York, 1966), p. 26.

⁷Ibid., p. 62.

CHAPTER VI

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

[The issue of organizational effectiveness has been a topic which has been widely discussed and debated. It is an area, however, that has not been widely researched. Even a cursory review of literature in the area will offer suggestions for why this may be. The issue is a most complex one, as evidenced by the diversity in the attempts to explain organizational effectiveness. The variables to be included in the study are not apparent. The relationship between these variables may be impossible to predict. Generally, the theorists who have studied organizational effectiveness can be grouped into four general types.]

[The first type of theorist might be labeled a traditionalist, and would employ a microeconomic model of the organization and would evaluate effectiveness in terms of productivity, efficiency and/or profitability. The second type of theorist is labeled a behavioralist. This type of theorist notes the importance of the psychosocial variables which exist in the organization and the effect which these variables have on effectiveness. They define effectiveness in terms of productivity, efficiency, or profitability. Thus, these theorists also rely on a microeconomic model of the organization. The third type of theorist is the multiple criteria theorist, who tends to evaluate effectiveness in terms of both psychosocial variables and productivity,

efficiency, or profitability variables. It seems clear that this third group of theorists also relies on a microeconomic model of the organization. A final group of theorists has begun a limited shift, is referred to as limited systems theorists. Realizing the limitations associated with using a microeconomic model of the organization to explain organizational functioning, these theorists have begun rejecting some of the premises upon which the microeconomic model is built. These premises are being replaced with those from systems theory. It is the contention of this study that theory development needs to continue in this direction.

[The introduction of general systems theory to the study of organizations has had a profound effect on organizational theory. Systems theory has permeated virtually all research conducted today in organizations. Proponents and critics alike have adopted the assumptions, precepts, and terminology of systems theory. It is most unlikely that a journal article published this year in the study of organizations could be found which has not been influenced by, if not built upon the the systems theory viewpoint. Systems theory provides the foundation for development of models which are significantly different from the microeconomic models of the past. However, the methodologies which are being employed to test these models tend to be inconsistent with the assumptions of systems theory. Methodologies appropriate when microeconomic models of the organization are employed become inappropriate when a systems theory based model of the organization is employed.]

[The theoretical model developed in this study is consistent with the assumptions of general systems theory. The methodologies developed for this study came from the theoretical model and are also consistent

with systems theory assumptions. It seems logical, then, that the findings of this study are the findings which result from employing systems theory. One may discount these findings only by discounting systems theory. However, if systems theory is to continue as a useful explanatory theory of organizational behavior, measures such as those developed in this study must be employed.

Conclusions

There are three primary conclusions to be drawn from this study. The first conclusion offers support for some of the ideas set forth in Thompson's¹ book. This conclusion is based on the finding that three of the constituent scores tend to be related to one another, while the other three tended to be unrelated. This finding provides support for the theoretical model which was developed earlier.

It may be recalled that Thompson² argued that the effective organization must do two things. First, it must identify its important constituents. Second, the organization must interact with these constituents in such a way as to ensure organizational success. This implies the need to stratify the constituents into a hierarchy of relative importance. The organization then would be in a better position to determine its strategy for meeting demands placed on it by its constituents. Those of most importance to organizational success must receive the most attention in terms of ensuring that the interaction between the organization and the constituent is appropriate. It would follow that other constituents, which comparatively would be ignored by the organization, would tend to evaluate the organization differently than would the constituents deemed to be important.]

The data offers some support for these ideas. The focal organizations tended to be evaluated in the same way by the competitor, consumer and owner constituents. Although the relationship was not totally significant, it did seem to exist. The other three constituent scores tended not to be related. Thus, the following conclusions appear logical. The focal organization views the group of three constituents as being most significant to the organization in terms of survival. Thus, much of the focal organization's resources are invested in the interactions between the focal organization and these constituents. The remaining three constituents, government, labor union, and supplier, are viewed as less threatening to the focal organization and hence the interaction becomes a low priority item. The effect is a different evaluation of the focal organization's effectiveness by these constituents.

The next conclusion is based on the logical ending of a series of small steps. By tracing through four steps, it will be shown that from a systems theory perspective the constituents of a focal organization determines its effectiveness.

The first step in this process serves as a foundation point. If methodologies employed in assessing organizational effectivenesses are derived from models which inaccurately describe the organization, then the results of these methodologies must be suspect. The model of organizational functioning used by both the traditional and multiple criteria theorists is microeconomic, and their respective methodologies are consistent with this model. However, the organizations being evaluated violate some of the assumptions which the microeconomic model holds about organizational functioning. The organizations are more

accurately described by systems theory. However, as noted, the use of either profitability or multiple criteria measures would be inappropriate because both of these measures are incongruent with a model built on systems theory. In sum, when using systems theory, profitability and multiple criteria measures render misleading results.

The second step in this process is the recognition that the CMOE measures are consistent with organizational models built on systems theory premises. Thus, if systems theory is appropriate to describe these organizations and their behavior, then these measures should be useful in obtaining data about their functioning. Further, these measures are for the most part both valid and reliable. This being the case, credence should be given to these results, even though other measures may result in somewhat different findings.

The third step in the process is the realization that organizations are continually being evaluated. Constituents with which a given organization interacts are capable of and do evaluate the effectiveness of that organization. Whether this evaluation is desired or not is immaterial; it takes place. Constituents are evaluating the focal organization to ensure that the results of the interaction between them are as beneficial as possible to the constituent. Thus, it would seem to be in the best interest of the organization also to seek to ensure that the interactions are appropriate for the organization. If an organization is going to be evaluated, then it is important to be prepared for the evaluation process.

The final step in this process is the recognition of the impact which the environment (the constituents) of an organization has on the effectiveness of the organization. Organizations exist in situations

of exchange between themselves and their environments. They must draw resources from the environment and they must export outputs into the environment. Survival of the organization is dependent upon the production of outputs which have more value to the environment than other outputs that could be generated with the inputs. Although the organization can establish some power over its environment, it cannot neglect the interactions between itself and its environment. To do so would likely be dysfunctional, or counterproductive.

[In sum, measures based on microeconomic models which do not accurately describe the organization in question result in misleading findings about organizational effectiveness. The measures developed in this paper are consistent with systems theory, which states that organizations exist in environments comprised of constituents with which they must interact. Thus, to evaluate the effectiveness of an organization using systems theory, it is not only appropriate, but also desirable to ask the constituents with which the organization must deal.]

The final conclusion to be drawn deals with the relationship between the three measures. The multiple criteria measures and the profitability measures purport to measure organizational effectiveness, yet they generate results which are not related to each other. The reason for this discrepancy may be a lack of reliability, the inappropriateness of the measures, or perhaps a combination of both of these facts. Further, neither of these measures is positively related with the CMOE scores. Because both the profitability and multiple criteria measures are derived from microeconomic models, and the CMOE is consistent with a systems theory based model, this finding is hardly surprising. Thus, the CMOE scores are a different and more desirable

measure of organizational effectiveness than these two previously employed measures.

The purpose of this study was to create a new measure of organizational effectiveness, a measure which was consistent with systems theory and one which was reliable and valid. With the development of the CMOE, this purpose has been accomplished.

Recommendations

There are basically five recommendations that seem appropriate as a result of this study. The first concerns the application of this methodology and these measures to other types of research. One very common phrase found in much contemporary research is a disclaimer recognizing the limitation of the measure, e.g. profitability. Yet the researcher uses this measure because other suitable measures are not available. While CMOE or other systems theory consistent measures may not be as convenient to obtain, they produce results which are significantly different. It thus seems apparent that future research needs to utilize these systems-based measures if organizational effectiveness is to be understood and predicted.

A second recommendation is the replication of this study in other industrial settings and in other geographical regions. This study was conducted among a sample of supermarkets located in the northeastern quadrant of Oklahoma. The findings may be specific to the sample. While this is not the contention of the researcher, further study could provide support for the findings. Further, this study was culturally bound. It would be most enlightening to see if the relationships have a more universal application.

It is also recommended that additional study be conducted to develop a methodology for identifying the constituency of a particular organization. The effective organizations are able to identify most of the important constituents, but this is not an easy task. The problem is further complicated by the dynamism of the environments faced by many organizations today. Thus, not only must the constituents be identified, there needs to be a method developed for tracing their short and long run interactions with the organization. Such information would be most useful to an organization as it strives to determine, given its limited resources, which interactions are of most importance to the organization.

The fourth recommendation also encourages further study. One of the limitations of this study is that it does not go far enough. To be effective, an organization must meet the demands placed on it by its constituency. This is, however, only a necessary condition; it is not sufficient. What is lacking is a determination of who are the most significant constituents. That is, an organization may be meeting all constituent demands except for one. However, if this constituent is the most important and powerful constituent with which the organization must interact, the organization would likely not be effective. What is needed is some method of weighing the constituents such that their relative importance to the organization is reflected in their respective weightings. This seems to be the next step in understanding organizational effectiveness.

The final recommendation concerns the organizations involved in the study, but would be applicable to other practitioners as well. It seems clear from the results of the study that business organizations

need to pay increasingly more attention to the individuals, groups, and organizations with which they interact. Relying exclusively on profitability as an evaluative criteria may be a most unwise stance if the organization is to assess accurately the environment within which it exists. Yet it is within the context of this environment that the continued survival of the organization will be determined.

As noted, organizations are being evaluated by their constituents. Hence, it would be wise for the supermarkets to determine what evaluative criteria are being employed by these constituents. This knowledge would help the supermarkets determine how to meet optimally the expectations which the constituents have for them. This would ensure that the interactions taking place are in the best interest of the supermarket.

Finally, the supermarkets need to recognize the relative dynamism associated with their industry. While the environment appears fairly stable, new constituents are forming, such as technological innovations, and more vocal consumer advocacy groups. The organization that is outward and forward looking will be in a much better position to interact with these emerging constituents as they grow in power.

FOOTNOTES

¹James D. Thompson, Organizations in Action (New York, 1967), pp. 1-3.

²Ibid., pp. 26-38.

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APPENDIXES

APPENDIX A

MOTT'S MULTIPLE CRITERIA EFFECTIVENESS

INSTRUMENT

Instructions:

Please answer the following questions to the best of your ability. Your responses will be kept in strictest confidence. Only summary data will be reported and documented.

SECTION I

In this section of the questionnaire you are asked to consider different groups, individuals, or organizations on whom your supermarket must depend if it is to be effective.

Part A

Supermarkets must interact with a number of different groups, individuals, and organizations in order to be effective. The following list contains potential groups, individuals, or organizations with whom your store may interact. Place a check mark () in Column A beside those factors which in your judgment are necessary for the store to interact with in order to be effective. The groups, individuals, and organizations have been placed into categories only to aid your reading and should not be viewed as a guide for completing the questionnaire.

Column A		Column B
_____	Customers:	_____
_____	1. Actual users of product	_____
_____	Suppliers:	_____
_____	2. Product suppliers	_____
_____	3. Equipment suppliers	_____
_____	4. Labor supply	_____
_____	Competitors:	_____
_____	5. Competitors for suppliers	_____
_____	6. Competitors for customers	_____
_____	Socio-Political:	_____
_____	7. Government regulatory control over your industry	_____
_____	8. Public political attitude toward your industry and its products	_____
_____	9. Relationship with trade unions with jurisdiction in the supermarket.	_____
_____	Financial:	_____
_____	10. Owner's expectations of performance	_____
_____	11. Lending institution's evaluation of store	_____
_____	Technological	_____
_____	12. Meeting new technological requirements of your industry and related industries in production of product/service.	_____
_____	13. Improving and developing new products by implementing new technological advances in your industry	_____
_____	Miscellaneous: Please list any other groups, individuals or organizations not noted above	_____
_____	14. _____	_____
_____	15. _____	_____
_____	16. _____	_____

Part B

Of the groups, individuals, and organizations which you checked in Column A of the previous section of the questionnaire, please indicate the importance which you would assign to each group, individual, or organization by placing a number in Column B for that factor. The numbers are:

- 1 means OF GREAT IMPORTANCE
- 2 means OF SOME IMPORTANCE
- 3 means OF MINOR IMPORTANCE

Thus, if you have checked actual users of product as being a necessary individual with whom your supermarket must interact, and you believe this interaction is of great importance, place a 1 in Column B next to "actual users of product."

SECTION II

In this section of the questionnaire, you are asked to respond to questions about the current and past operations of your store.

Every worker produces something in his work. It may be a "product" or a "service". But sometimes it is very difficult to identify the product or service. We would like you to think carefully of the things that you produce in your work and of the things produced by those people who work around you in your organizations.

- a. Thinking now of the various things produced by the people you know in your organization, how much are they producing?
 - _____ 1. Their production is very low
 - _____ 2. It is fairly low
 - _____ 3. It is neither high nor low
 - _____ 4. It is fairly high
 - _____ 5. It is very high

- b. How good would you say is the quality of the products or services produced by the people you know in your organization?
 - _____ 1. Their products or services are of poor quality
 - _____ 2. Their quality is not too good
 - _____ 3. Fair quality
 - _____ 4. Good quality
 - _____ 5. Excellent quality

- c. Do the people in your division seem to get maximum output from the resources (money, people, equipment, etc.) they have available? That is, how efficiently do they do their work?
 - _____ 1. They do not work efficiently at all
 - _____ 2. Not too efficient
 - _____ 3. Fairly efficient
 - _____ 4. They are very efficient
 - _____ 5. They are extremely efficient

- d. How good a job is done by the people in your organization in anticipating problems that may come up in the future and preventing them from occurring or minimizing their effects?
 - _____ 1. They do a poor job in anticipating problems
 - _____ 2. Not too good a job
 - _____ 3. A fair job
 - _____ 4. They do a very good job
 - _____ 5. They do an excellent job in anticipating problems.

- e. From time to time newer ways are discovered to organize work, and newer equipment and techniques are found with which to do the work. How good a job do the people in your division do at keeping up with those changes that could affect the way they do their work?
- 1. They do a poor job of keeping up to date
 - 2. Not too good a job
 - 3. A fair job
 - 4. They do a good job
 - 5. They do an excellent job of keeping up to date.
- f. When changes are made in the routines or equipment, how quickly do the people in your organization accept and adjust to these changes?
- 1. Most people accept and adjust to them very slowly
 - 2. Rather slowly
 - 3. Fairly rapidly
 - 4. They adjust very rapidly, but not immediately
 - 5. Most people accept and adjust to them immediately.
- g. What proportion of the people in your organization readily accept and adjust to these changes?
- 1. Considerably less than half of the people accept and adjust to these changes rapidly
 - 2. Slightly less than half do.
 - 3. The majority do.
 - 4. Considerably more than half do.
 - 5. Practically everyone accepts and adjusts to these changes readily.
- h. From time to time emergencies arise, such as crash programs, schedules being moved ahead, or a breakdown in the flow of work occurs. When these emergencies occur, they casue work overloads for many people. Some work groups cope with these emergencies more readily and successfully than others. How good a job do the people in your organization do at coping with these situations?
- 1. They do a poor job of handling emergency situations.
 - 2. They do not do very well
 - 3. They do a fair job
 - 4. They do a good job
 - 5. They do an excellent job of handling these situations.

APPENDIX B

INSTRUMENT USED TO COLLECT DATA FROM THE
COMPETITOR CONSTITUENT

Please answer the following questions to the best of your ability. Your responses will be kept in strictest confidence.

Section I

Given the large number of supermarkets that exist today, there is a great deal of competition between stores. Each supermarket must be aware of the actions of his competitors if that supermarket is itself to succeed. Because of your location, it is predicted that one of your competitors is the Humpty supermarket located at _____ . Compared with other supermarkets with which you are familiar, including your own store, how would you judge this supermarket? Place a check mark (✓) in the space provided which most closely represents your judgment of this supermarket.

In comparison to other supermarkets:	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1. This supermarket captures an above average share of its market	_____	_____	_____	_____	_____
2. This supermarket has very effective advertising.	_____	_____	_____	_____	_____
3. This supermarket has been successful in determining the appropriate type of customer and appealing to them.	_____	_____	_____	_____	_____
4. This supermarket tends to have inadequate facilities.	_____	_____	_____	_____	_____
5. This supermarket has a highly desirable location.	_____	_____	_____	_____	_____
6. This supermarket has an adequate and easily accessible parking lot.	_____	_____	_____	_____	_____
7. This supermarket tends to be a leader in the utilization of new technological innovations (cash registers, etc.)	_____	_____	_____	_____	_____
8. This supermarket follows normal pricing policies.	_____	_____	_____	_____	_____
9. This supermarket tends to have very strong drawing power.	_____	_____	_____	_____	_____
10. This supermarket has a significant advantage over others because of the specialty departments which it operates.	_____	_____	_____	_____	_____
11. This supermarket is usually thought of as being prestigious.	_____	_____	_____	_____	_____

Section II

Please answer the following questions by placing a check mark (✓) in the space provided for the response which most closely represents your opinion.

12. How closely does this supermarket approximate what you believe an "ideal" supermarket would be like?
- very closely approximates an "ideal" supermarket
 - above average approximation of an "ideal" supermarket
 - average approximation of an "ideal" supermarket
 - below average approximation of an "ideal" supermarket
 - significantly below average approximation of an "ideal" supermarket
13. Of the supermarkets that you are familiar with, would you rate this store in the
- Top 20%
 - Next 20%
 - Middle 20%
 - Next 20%
 - Lowest 20%
14. In my opinion, this supermarket offers
- Very significant competition
 - Significant competition
 - Some competition
 - Little competition
 - No competition

APPENDIX C

INSTRUMENT USED TO COLLECT DATA FROM THE
CONSUMER CONSTITUENT

Hello, my name is _____. I am a student at Oklahoma State University in Stillwater. We are conducting an independent survey among the supermarkets in _____. Could I take a few minutes of your time to get your responses to a few brief questions?

1. Do you shop at the _____ Supermarket located at _____?
2. Is this supermarket (a) your regular supermarket, (b) one you occasionally use, (c) one you shop at to buy specials, or (d) one you've never shopped at

In the following few statements please rate the amount of agreement which you have with the statement. Rate each statement from 1 to 5. A rating of 1 would mean that you strongly disagree with the statement. A rating of 5 would mean that you strongly agree with the statement. We are interested in your opinions and how you judge this supermarket.

In comparison to other supermarkets:

3. This Humpty/Safeway has a more desirable location.
4. This Humpty/Safeway has a wider product selection.
5. This Humpty/Safeway has higher prices.
6. This Humpty/Safeway has a more desirable layout or arrangement of its products.
7. This Humpty/Safeway is cleaner.
8. This Humpty/Safeway's products are of higher quality.
9. This Humpty/Safeway has a better check cashing policy.
10. This Humpty/Safeway has friendlier employees.
11. This Humpty/Safeway has longer checkout lines.
12. This Humpty/Safeway provides better carryout service.
13. This Humpty/Safeway offers convenience, being located near other types of stores.
14. This Humpty/Safeway tends to have fewer desirable advertised bargains or specials.
15. This Humpty/Safeway offers greater convenience because it is open more hours.
16. This Humpty/Safeway has better customer games (For example, Bingo Bucks)
17. This Humpty/Safeway has a better refund policy on the return of damaged or spoiled products.
18. What percentage of your groceries would you estimate you buy from this supermarket?
(1) 0-20% (2) 21-40% (3) 41-60% (4) 61-80% (5) 81-100%
19. Overall, how would you rate the effectiveness of this supermarket?
(1) Highly effective (2) effective (3) neither effective nor ineffective
(4) ineffective (5) highly ineffective
20. Of the supermarkets you are familiar with, where would you rank this store?
(1) top 20% (2) next 20% (3) middle 20% (4) next 20% (5) lowest 20%
21. How many people are in your family? _____
22. In what age bracket is the head of the household?
(1) less than 19 (2) 20-29 (3) 30-44 (4) 45-59 (5) 60 or over
23. In what range does your family's yearly income fall?
(1) less than 6000 (2) 6001-9000 (3) 9001-12,000 (4) 12,000-15,000
(5) 15,001-18,000 (6) 18,001-21,000 (7) greater than 21,000 (8) No response

APPENDIX D

INSTRUMENT USED TO COLLECT DATA FROM THE
GOVERNMENT CONSTITUENT

Instructions:

Please answer the following questions to the best of your ability. Your responses will be kept in strictest confidence.

Section I

Supermarkets must comply with a number of rules, laws and regulations if they are to continue as successful organizations. Compared with other supermarkets with which you are familiar, how would you judge the compliance of the Humpty Supermarket located at _____? Place a check mark (✓) in the blank which most closely represents your judgment of this supermarket.

In comparison with other supermarkets:

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1. The overall attitude of this supermarket toward safety is above average	_____	_____	_____	_____	_____
2. The tendency of this supermarket to stack displays dangerously high is evident	_____	_____	_____	_____	_____
3. This supermarket has wide aisles	_____	_____	_____	_____	_____
4. This supermarket provides clean and adequate employee restroom facilities	_____	_____	_____	_____	_____
5. This supermarket is more concerned about pollution control in its disposal of pasteboard boxes.	_____	_____	_____	_____	_____
6. We receive few complaints concerning this supermarket's weight and scale honesty	_____	_____	_____	_____	_____
7. This supermarket makes an effort to comply with licensing regulations	_____	_____	_____	_____	_____
8. This supermarket makes an effort to enforce the law concerning sale of beer, cigarettes, etc.	_____	_____	_____	_____	_____
9. The hiring practices of this supermarket evidence an effort to comply with the law	_____	_____	_____	_____	_____
10. This supermarket does not tend to use deceptive or misleading advertising	_____	_____	_____	_____	_____

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
11. This supermarket appears to be concerned about cleanliness	_____	_____	_____	_____	_____
12. This supermarket's products appear to have quality and freshness	_____	_____	_____	_____	_____

Section II

When answering the following questions, think of the whole operation of this supermarket. Please place a check mark (✓) by your chosen response.

13. Overall, how would you rate the effectiveness of this supermarket?

- _____ Highly effective
- _____ Effective
- _____ Neither effective nor ineffective
- _____ Ineffective
- _____ Highly ineffective

14. Of the supermarkets that you are familiar with, would you rank this supermarket in the:

- _____ Top 20%
- _____ Next 20%
- _____ Middle 20%
- _____ Next 20%
- _____ Lowest 20%

APPENDIX E

INSTRUMENT USED TO COLLECT DATA FROM THE
LABOR UNION CONSTITUENT

Instructions:

Please answer the following questions to the best of your ability. Your responses will be kept in strictest confidence.

Section I

Supermarkets hire a large number of skilled employees. In order to continue to be successful, they must provide good work situations and opportunities for these employees. Compared with other supermarkets with which you are familiar, how would you judge the concern shown by the Humpty Supermarket located at _____ . Place a check mark (✓) in the blank which most closely represents your judgment of this supermarket.

In comparison to other supermarkets:	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1. The number of grievances initiated within this supermarket is more than average	_____	_____	_____	_____	_____
2. Management does not hinder union information from being disseminated in this supermarket.	_____	_____	_____	_____	_____
3. The willingness of this supermarket to employ full time as opposed to part time employees is average.	_____	_____	_____	_____	_____
4. The store manager in this supermarket allows adequate communication between himself and union officials.	_____	_____	_____	_____	_____
5. The number of people from this store actively involved in union activities is above average	_____	_____	_____	_____	_____
6. The grievance procedure within this supermarket takes too much time.	_____	_____	_____	_____	_____
7. The store manager of this supermarket has tried to work with rather than against the union	_____	_____	_____	_____	_____
8. This supermarket allows for union business to be conducted during working hours.	_____	_____	_____	_____	_____
9. This supermarket will provide repayment of time loss due to time taken off to conduct union business.	_____	_____	_____	_____	_____

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
10. This supermarket has a tendency to try to circumvent the seniority system in promoting employees	_____	_____	_____	_____	_____
11. This supermarket often attempts to get around paying higher wages by taking job classification systems and changing job titles.	_____	_____	_____	_____	_____
12. This supermarket tends to abuse the power which it holds.	_____	_____	_____	_____	_____
13. In this supermarket, the store manager has little concern for the problems of the union steward	_____	_____	_____	_____	_____
14. The store manager of this supermarket has tried to undermine the union position through direct dealings with the workers	_____	_____	_____	_____	_____

Section II

Please answer the following questions by placing a check mark (✓) in the space provided for the response which most closely represents your opinion.

15. Does this supermarket try to live up to its agreements?
- _____ Always
 _____ Usually
 _____ Half and half
 _____ Frequently does not
 _____ Rarely
16. On the whole, how would you rate the effectiveness of this supermarket in showing concern for their employees?
- _____ Highly effective
 _____ Effective
 _____ Neither effective nor ineffective
 _____ Ineffective
 _____ Highly ineffective
17. Of the supermarkets that you are familiar with, would you rank this supermarket in the
- _____ Top 20%
 _____ Next 20%
 _____ Middle 20%
 _____ Next 20%
 _____ Lowest 20%

APPENDIX F

INSTRUMENT USED TO COLLECT DATA FROM THE
OWNER CONSTITUENT

Instructions:

Please answer the following questions to the best of your ability. Your responses will be kept in strictest confidence.

Section I

Every supermarket in the Safeway chain is obviously responsible to higher level management for its actions. However, some of the stores perform better than others. Compared to other supermarkets within the Safeway chain, how would you judge the performance of Safeway Store Number _____. Place a check mark (✓) in the blank which most closely represents your judgment of this supermarket.

In comparison to other supermarkets within the Safeway chain:

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1. This supermarket's profitability is above average.	_____	_____	_____	_____	_____
2. This supermarket's share of the market within its potential drawing region is acceptable.	_____	_____	_____	_____	_____
3. This supermarket usually meets its sales targets.	_____	_____	_____	_____	_____
4. This supermarket uses its manpower wisely.	_____	_____	_____	_____	_____
5. Few customer complaints are heard from this supermarket.	_____	_____	_____	_____	_____
6. This supermarket rarely exceeds its budget.	_____	_____	_____	_____	_____
7. This supermarket tends to issue more rainchecks.	_____	_____	_____	_____	_____
8. The store manager of this supermarket willingly follows top management advice.	_____	_____	_____	_____	_____
9. This supermarket tends to be unwilling to follow suggested price lines.	_____	_____	_____	_____	_____
10. Waiting lines are too long within this supermarket.	_____	_____	_____	_____	_____
11. This store tends to accept too many bad checks.	_____	_____	_____	_____	_____
12. This store suffers higher losses from shrinkage (e.g. shoplifting, employee theft, etc.)	_____	_____	_____	_____	_____

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
13. Few union complaints are leveled against this supermarket	_____	_____	_____	_____	_____
14. The worker turnover within this supermarket is above average.	_____	_____	_____	_____	_____
15. This supermarket is adequately tapping the potential which exists in its market place.	_____	_____	_____	_____	_____

Section II

Please answer the following questions by placing a check mark (✓) in the space provided for the response which most closely represents your opinion.

16. On the whole, how would you rate the effectiveness of this supermarket?

_____ Highly effective
 _____ Effective
 _____ Neither effective nor ineffective
 _____ Ineffective
 _____ Highly ineffective

17. Of the supermarkets that you are familiar with, would you rank this supermarket in the

_____ Top 20%
 _____ Next 20%
 _____ Middle 20%
 _____ Next 20%
 _____ Lowest 20%

APPENDIX G

INSTRUMENT USED TO COLLECT DATA FROM THE
SUPPLIER CONSTITUENT

Instructions:

Please answer the following questions to the best of your ability. Your responses will be kept in strictest confidence.

Section I

Because supermarkets do not manufacture many of the products which they sell, they must rely on a number of other organizations if they are to be successful. Compared to other supermarkets with which you are familiar, how would you judge the effectiveness of the Humpty Supermarket located at _____ . Place a check mark (✓) in the blank which most closely represents your judgment of this supermarket.

In comparison to other supermarkets:	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1. This supermarket pays its account with above average promptness.	_____	_____	_____	_____	_____
2. This supermarket takes an average number of quantity discounts.	_____	_____	_____	_____	_____
3. This supermarket gives unfair shelf space allocation to its suppliers	_____	_____	_____	_____	_____
4. This supermarket positions products within the shelf space allocated fairly	_____	_____	_____	_____	_____
5. This supermarket is unwilling to provide adequate display areas.	_____	_____	_____	_____	_____
6. This supermarket gives adequate cooperation concerning promotional consideration.	_____	_____	_____	_____	_____
7. This supermarket is unwilling to share in the cost of these promotional activities.	_____	_____	_____	_____	_____
8. This supermarket redeems an above average number of coupons.	_____	_____	_____	_____	_____
9. This supermarket provides inadequate truck unloading facilities.	_____	_____	_____	_____	_____
10. This supermarket tends to place frequent orders of a small size.	_____	_____	_____	_____	_____
11. The store manager of this supermarket is readily accessible to route salesmen	_____	_____	_____	_____	_____
12. The total sales of this supermarket are above average.	_____	_____	_____	_____	_____

- | | Strongly
Agree | Agree | Neutral | Disagree | Strongly
Disagree |
|-----------------------------------------------------------------------------------------|-------------------|-------|---------|----------|----------------------|
| 13. This supermarket tends to return more damaged products than do other stores | _____ | _____ | _____ | _____ | _____ |
| 14. The number of short or over claims filed by this supermarket is higher than average | _____ | _____ | _____ | _____ | _____ |

Section II

Please answer the following questions by placing a check mark (✓) in the space provided for the response which most closely represents your opinion.

15. On the whole, how would you rate the effectiveness of this supermarket in comparison to other supermarkets with which you are familiar?
- _____ Highly effective
 _____ Effective
 _____ Neither effective nor ineffective
 _____ Ineffective
 _____ Highly ineffective
16. Of the supermarkets that you are familiar with, would you rank this supermarket in the
- _____ Top 20%
 _____ Next 20%
 _____ Middle 20%
 _____ Next 20%
 _____ Lowest 20%

VITA

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Doctor of Philosophy

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