OCCUPATIONAL FRAME OF REFERENCE AND THE IDENTIFICATION OF CRITICAL ISSUES IN LARGE-SCALE CHANGE EFFORTS

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ABSTRACT: This paper presents the results of a study designed to investigate perceptions of critical issues among key stakeholders in large-scale change process. The sample for this study consisted of 71 researchers, 58 external consultants, 80 internal consultants, and 189 managers with expertise in the area of planned change. While preparing the organization for change and providing program structure were generally perceived to have a positive impact on program success, results indicate that the aforementioned groups of stakeholders have different perceptions concerning the impact of particular issues on the large-scale change process.

Planned organizational change has been defined as a purposeful attempt to influence the status quo of the organization (Hellriegel & Slocum, 1980). A change in the status quo can take many forms, ranging from minor changes in one organizational subsystem or level to large-scale changes that impact many organizational variables and levels. Although the content and objectives of specific types of large-scale change efforts may vary, in general such efforts require changes that encompass the entire organization, occur over a number of years, and involve fundamental changes in ways of thinking about the business, the organization, and how the organization is managed (Nadler, 1988). The difficulty of implementing and managing organization wide, strategic change has led to a surge in studies concerning the management of such efforts.

Information concerning critical issues in large-scale change has come primarily in the form of case studies or consultant reports. While these

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reports provide a wealth of information concerning potential problems and opportunities associated with attempting major organizational change, these sources typically reflect only the thoughts of one type of stakeholder in the change process (e.g., researcher, internal consultant, external consultant, or manager). Although the assumption is often made that these accounts are unbiased and objective reports, there is increasing evidence to suggest that individuals are strongly influenced by their respective roles in the change process (Bianco, 1985; Blackler & Brown, 1980; Gluckstern & Packard, 1977). If this is the case, then the identification of important issues in the change process may depend as much on who you ask as it does on the change process itself.

Given the potential influence of individual frame of reference on the identification of important change program issues, the goal of this research was to identify critical issues in large-scale change efforts and to examine possible differences in perception among key stakeholders regarding these issues.

HYPOTHESES

Certain issues involving the management and implementation of largescale change may be considered critical regardless of one's frame of reference. However, it seems likely that other implementation issues will vary according to the change program roles and occupational training of the individual making the judgement.

For example, Blackler and Brown (1980) suggest that what gets reported about certain change programs may depend heavily on the frame of reference of the case writer. Mirvis and Berg (1977) note the tendency for consultants not to publish reports of change program failure because of possible negative career ramifications. Other research has identified differences between managers and researchers (Duncan, 1974) and internal and external consultants (Beer, 1976). These writings suggest that managers, consultants, and researchers might have very different perceptions of what issues are critical for a successful large-scale change effort. Therefore it is hypothesized that:

H1: The perceived criticality of large-scale change issues will vary according to the occupation of the respondent.

The contrast in frame of reference would seem to be most extreme between managers and researchers. The conflicting orientation of researchers and managers is well documented. For example, Mathias (1983:133) suggests several ways in which the attitudes, orientations and goals of managers and researchers might differ. He argues that researchers are often concerned about fit with the literature and the application of

theories, while managers are more interested in implementation and improving performance.

Duncan (1974) provides further evidence that researchers and managers view management-related issues differently. In a study of researchers and managers, Duncan found that researchers valued validity and preciseness more highly than did managers. In addition, the findings indicate that researchers view researchers, and managers view managers as the most important source of valid management knowledge. Duncan concluded that concerns of this nature may be instrumental in determining the types of problems examined by researchers and the manner in which the investigation is conducted. Practical realities, on the other hand may determine the aspects of scientific research that are abstracted by managers as being important. Given the potentially divergent goals and perceptions of managers and researchers, it is hypothesized that:

H1a: The perceived criticality of large-scale change issues will differ between managers and researchers.

Although the roles of external and internal consultants may be similar in many ways, several differences exist that may impact the perception of critical issues in large-scale change efforts. For example, Bianco (1985) notes that the external consultant is often in a better position to introduce new strategies and perspectives, while the motives of internal consultants are often viewed with distrust. Similarly, Hunsacker (1985) suggests that internal consultants may meet with greater resistance to change, and may not be able to establish an adequate power base for bringing about necessary changes. Internal change agents may also be more likely to accept the organizational system as given and accommodate their change tactics to the needs of the organization (Beer, 1976). In general, outside consultants seem to be less dependent on top management than insiders, freer of the cultural constraints of the organization, can take more risks to their careers, and may be more highly trained (French & Bell, 1984).

In light of the fact that internal and external consultants may face such diverse expectations and constraints, it seems reasonable to suggest that these individuals will have differing perceptions concerning the criticality of various large-scale change issues. In other words:

H1b: The perceived criticality of large-scale change issues will differ between internal consultants and external consultants.

METHODS

Measurement

There is no widely accepted definition of large-scale change. However, for the purposes of this research, a large-scale change effort was defined as any planned

effort designed to improve the long-term performance of an entire organization. This definition is consistent with much of the current literature on the topic (see, for example, Nadler, 1988).

A research questionnaire was developed following a comprehensive review of the organizational change literature. More specifically, numerous articles and case studies focusing directly on large-scale change efforts (e.g., Barrett & Cammann, 1984; Greiner, 1967), as well as writings which addressed the general question of "what makes a planned change program successful?" (e.g., Buchanan, 1971; Burke, Clark & Koopman, 1984) were examined in order to include issues cited as important by a variety of sources.

A review of this literature resulted in the generation of over 100 issues identified as potentially important to the success of large-scale change efforts. As a result of a review by ten faculty and doctoral students, as well as a pretest of the questionnaire, 68 items were chosen for the final questionnaire. Respondents were asked to indicate, using a seven-point Likert-type scale, the type of impact which they believe a particular issue has on the ultimate success of most large-scale change programs. The questionnaire also contained items designed to gather background information concerning the experience base of the respondents.

Data Collection

Data were collected via a mailed research questionnaire. The sample consists of individuals with experience in the area of large-scale organizational change. Respondents were selected from a University training program mailing list. In addition to this list, professional journals and recent books were examined in order to identify recognized experts in the field and to identify organizations that are or have been involved in large-scale change programs. Of the 1005 questionnaires mailed, 67 were returned because they were nondeliverable, and 398 were completed and returned for a response rate of 42.3 percent.

The sample is composed of 189 managers, 58 external consultants, 80 internal consultants, and 71 researchers/faculty. Of the managers responding, 89 held positions as senior level managers (positions at the vice-presidential level or above). A total of 91 respondents indicated that they had been involved in only one large-scale improvement program, 254 indicated that they had been involved in several large-scale improvement programs, and 35 indicated that they had knowledge of but had not been directly involved in such a program.

Analysis

In order to assess dimensionality and commonality among the critical issue items and to reduce the number of items for further analysis, responses to the 68 critical issue items were factor analyzed using principal factoring and a varimax rotation. One-way analysis of variance and two-tailed t-tests were used to explore possible differences in factor scores according to the occupation of the respondent.

RESULTS

Factor Analysis of Critical Issues

Exploratory factor analysis was utilized to identify the factor structure which best fit the data. An eight factor solution was judged to be the most

theoretically meaningful and interpretable solution. These factors define categories of critical issues in large-scale change programs. Retained in the final analysis were 51 items with factor loadings greater than .35. Mean scores and alpha coefficients for each of the eight factors are shown in Table 1. A brief description of each factor follows.

TABLE 1 Mean Factor Scores (Overall)

Extremely			No		Extremely	
Negative Impact			Impact		Positive Impact	
1	2	3	4	5	6	7

Factor 1 Stage Setting (m=5.88, alpha=.85)

Factor 6 Program Structure (m=5.25, alpha=.56)

Factor 4
Role of External Stakeholders
(m=4.93, alpha=.84)

Factor 7 Reward System Policies (m=4.64, alpha=.65)

Factor 2 Reliance on Top Managers (m=4.53, alpha=.68)

Factor 8
Program Initiation Philosophy
(m=4.23, alpha=.58)

Factor 3
Underestimation of Resource Needs (m=3.12, alpha=.60)

Factor 5
Reliance on External Consultants (m=3.09, alpha=.70)

¹⁼Extremely negative impact on the ultimate success of most programs

²⁼Moderately negative impact

³⁼Slightly negative impact

⁴⁼No impact on the ultimate success of most programs

⁵⁼Slightly positive impact

⁶⁼Moderately positive impact

⁷⁼Extremely positive impact on the ultimate success of most programs

Factor one ("stage-setting") consists of items concerned with preparing the organization and its employees for beginning a large-scale change effort. The use of committees, creating a vision of the future organization, providing various types of support for employees, encouraging employee involvement, and achieving agreement among top managers before beginning an effort, are examples of the types of issues that define factor 1. These issues were identified by respondents as having a moderately positive impact on the ultimate success of most large-scale change efforts.

Factor 2 ("reliance on top managers") is composed of items which deal with the placement of responsibility for the program. The issue defined by this factor is heavy reliance on top management to structure, implement, and manage the program. Overall, a high degree of reliance on top management for these purposes was viewed as having only a slightly positive impact on large-scale change efforts.

Factor 3 ("underestimation of resource needs") is comprised of issues that reflect the allocation of human and other company resources. More specifically, these items focus on the impact of underestimating or overtaxing company resources in order to attain change program goals. These issues were identified as having a slightly negative impact on a change effort.

Factor 4 ("role of external stakeholders") contains issues related to the role of clients, customers, and shareholders in the change process. The items that define this factor relate to the degree to which external stakeholder concerns are incorporated into the change effort (e.g., seeking advice from external stakeholders before beginning a program or including external stakeholders in specific program activities). This factor was viewed by respondents as having a slightly positive impact on the success of most change efforts.

Factor 5 ("reliance on external consultants") is concerned with the degree of responsibility given to external consultants. The items comprising this factor indicate a high degree of reliance on outside consultants by allowing external consultants to take primary responsibility for the effort by determining program goals and activities. This delegation of responsibility was identified as having a slightly negative impact.

The issues that comprise factor 6 ("program structure") are concerned with program planning and the degree of structure necessary for successful implementation. Establishing specific deadlines and developing detailed, written plans for the achievement of goals are examples of the issues contained in factor 6. These issues were identified as having a slightly positive impact on large-scale change efforts.

Factor 7 ("reward system policies") is composed of items dealing with providing incentives for employees during the program. Changing promotion and selection criteria, hiring or promoting people who will support the program, and tying pay increases to program contributions are examples of issues contained in factor 7. These types of policies were viewed by respondents as having a slightly positive impact on program outcomes.

Finally, factor 8 ("program initiation philosophy") is composed of items related to different program start-up strategies. The issues in this factor focus on the effect of initiating the effort simultaneously throughout the organization versus experimenting in one part of the organization. The respondents indicated that involving the entire organization simultaneously in one type of effort had a slightly positive impact on the ultimate success of most large-scale improvement programs.

In general, then, issues related to preparing the organization for the change effort through careful planning, frequent communication, and involving individuals in decision making (factor 1) were found to have the most positive impact on large-scale change. Providing program structure by establishing performance deadlines and providing detailed plans (factor 6) was also identified as having a positive impact.

... issues related to preparing the organization for the change effort ... and involving individuals in decision making were found to have the most positive impact on large-scale change.

Including external stakeholders in various stages of the change process (factor 4), revising reward system policies to be consistent with the goals of the change effort (factor 7), active participation by top management (factor 2), and intitiating the program organization-wide (factor 8) were thought to have only a slightly positive impact on the ultimate success of most large-scale change efforts. Only two categories of issues were identified as having a slightly negative impact on the ultimate success of most change programs. Unrealistic assessment of resource needs (factor 3), and allowing outside consultants to assume a high level of responsibility for the effort (factor 5) were widely agreed to hurt large-scale change efforts.

Hypothesis tests

A one-way analysis of variance across the four groups of respondents showed that intergroup differences exist for factor 3, the impact of resource needs (p<.05) and factor 5, the role of external consultants (p<.001). This finding offers some support for hypothesis 1.

As shown in Table 2, no significant differences between researchers and managers were identified. Therefore, the data offer no support for hypothesis 1a. However, significant differences in the perceptions of internal consultants and external consultants are identified in Table 3. These

findings are consistent with hypothesis 1b. As one might expect, external consultants believed that the involvement of outside consultants had a more positive impact on large-scale change programs than did internal consultants (factor 5, p<.001). Differences between the subgroups in terms of the perception of the role of top managers also exist (factor 2, p<.1).

TABLE 2
T-tests For Differences Between Researchers and Managers

Factor	Researchers Mean/SD/N	Managers Mean/SD/N	p-value (2-tail)
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1	5.84/0.57/70	5.89/0.50/187	n.s.
2	4.42/0.69/70	4.59/0.88/187	n.s.
3	3.07/0.76/68	3.03/0.78/186	n.s.
4	5.01/1.08/69	4.86/1.14/181	n.s.
5	3.09/0.84/69	3.06/0.83/186	n.s.
6	5.21/0.95/69	5.32/0.86/185	n.s.
7	4.65/0.78/69	4.56/0.99/185	n.s.
8	4.04/1.08/68	4.25/1.02/183	n.s.

TABLE 3
T-tests For Differences Between External Consultants
and Internal Consultants

Factor	Ext. Con. Mean/SD/N	Int. Con. Mean/SD/N	p-value (2-tail)
which are the state of the stat	5.86/0.56/58	5.93/0.47/79	n.s.
2	4.67/1.02/58	4.39/0.85/79	p<.1
3	3.19/0.88/58	3.34/0.72/78	n.s.
4	5.03/1.13/57	4.95/1.12/79	n.s.
5	3.57/0.99/57	2.82/0.84/79	p<.001
6	5.32/1.11/56	5.05/0.96/78	n.s.
ameliaco 7 00 lo	4.65/1.08/58	4.82/0.95/79	n.s.
To district 8 will attraction or law	4.41/0.99/55	4.41/0.93/79	n.s.

Further analysis revealed that the greatest number of differences exist not between the hypothesized groups, but between internal consultants and managers. These results are shown in Table 4. Internal consultants rated issues related to reward system policies (factor 7) as having a more

... the greatest number of differences exist ... between internal consultants and managers.

positive impact than did managers (p<.1). On the other hand, managers rated issues related to top management responsibility (factor 2), external consultant responsibility (factor 5), and program structure (factor 6) as having a more positive impact than did internal consultants (p<.1, p<.05, and p<.05, respectively). Managers also viewed the underestimation of resource needs as having a more negative impact on the change process than did internal consultants (p<.01).

TABLE 4
T-tests For Differences Between Internal Consultants and Managers

Factor	Int. Con. Mean/SD/N	Managers Mean/SD/N	p-value (2-tail)
	- 00/0 AF/F0	F 00 /0 F0 /10F	
	5.93/0.47/79	5.89/0.50/187	n.s.
2	4.39/0.85/79	4.59/0.88/187	p<.1
3	3.34/0.72/78	3.03/0.78/186	p<.01
4	4.95/1.12/79	4.86/1.14/181	n.s.
5	2.82/0.84/79	3.06/0.83/186	p<.05
6	5.05/0.96/78	5.32/0.86/185	p<.05
7	4.82/0.95/79	4.56/0.99/185	p<.1
8	4.41/0.93/79	4.25/1.02/183	n.s.

DISCUSSION

The data suggest there is a high degree of agreement among diverse stakeholder groups concerning which issues will have a positive or negative impact on the ultimate success of large-scale change programs. Carefully preparing the organization for the change effort was viewed by all groups of respondents as having the most positive impact on the change process. Allowing external consultants to determine program goals and activities and underestimating resource demands were viewed by all groups of respondents as having a negative impact on the success of the change process. Significant intergroup differences were nonetheless observed across several of the factors. A discussion of the results is presented below.

While differences between managers and researchers were hypothesized, none were found. There are several possible reasons for this. First, the area of large-scale change is by its nature an applied area of research, and researchers in this sample were selected specifically for their practical knowledge of large-scale change. Second, the sample is composed of managers who had already demonstrated an interest in attending university seminars that focus on change-related issues. The managers in this particular sample, then, may have a greater tendency to agree with academics than would managers in general.

The differences between internal and external consultants are not surprising. Internal consultants rated issues concerned with placing responsibility for the effort in the hands of external consultants or top management as having a less positive impact on large-scale change efforts than did external consultants. Intuitively, one would guess that internal consultants see a greater role for top management and outside consultants as necessitating a smaller role for themselves. Further, since top managers are usually responsible for contracting with outside consultants, one would expect outside consultants to favor a greater role for top managers.

The observed differences between managers and internal consultants, although not hypothesized, offer insight into a potential conflict between organizational members. The tendency of managers to identify resource constraints as having a more negative influence may be due to the likelihood that managers have more experience than internal consultants in resource allocation decisions and a corresponding greater appreciation for the probable consequences of inadequate resource commitments. Managers and internal consultants also disagreed on the relative impact of reward system policies on the success of the change process. While there are several possible explanations for this finding, it is likely that internal consultants have more training than managers in reward system theories and, therefore, may focus more on these issues.

Managers, as might be expected, showed a tendency to rate issues related to top management involvement in program activities as having a more positive impact than did internal consultants. Managers also viewed outside consultants as having a more positive impact on large-scale change programs than did internal consultants. This difference may be attributable to the possibility that internal consultants view external consultants as competitors (and vice-versa), whereas managers view both internal and external consultants as performing highly similar roles.

Finally, the higher ratings of managers than internal consultants on program structure issues may be a result of differences in the tasks and purposes of these subgroups. Specifically, the provision of detailed plans and program structure may be seen by managers as a desirable and necessary means for coordinating program activities. However, the creation of a highly specified program structure may reduce internal consultants' discretion and power in program activities.

Conclusion and Implications

This research shows that while there is considerable agreement concerning the impact of various issues on the process of large-scale change, the four key groups of stakeholders in this study had different perceptions of the criticality of specific change-related issues.

One might argue that differences among key stakeholders are only important to the extent that they impact the success of large-scale change efforts. According to Blackler and Brown (1980), this is precisely what happened in a change effort at Shell Oil Company's United Kingdom Refining Group. The authors suggest that the divergent interests of the three principal groups of change agents (management, internal consultants, and external researchers) contributed to the failure of that effort. Further, Barone (1986) notes that disparity in personal values "can affect significantly the change team's efforts; it can challenge the harmony and workability of the change agent/manager relationship, upon which the success of the effort rests." (p. 50).

The most significant differences among stakeholders in this study occurred between managers, internal consultants, and external consultants. Because these are the groups one would expect to be directly involved in a change effort, differences in their assessment of the impact of various program issues could easily impact change program outcomes. The inconsistent beliefs of managers and internal consultants would seem to be particularly likely to affect program results. Given the general belief that a high degree of reliance on external consultancy resources has a negative impact on large-scale change efforts (as data on opinions from this survey would suggest), it may be imperative that internal consultants and managers play a greater and more cooperative role.

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This research has several implications for both research and practice. First, researchers and users of research should be aware of possible biases in single-group studies (e.g., studies including external consultants only). Studies of single subgroups offer only part of the picture as evidenced by the perceptual differences among the subgroups identified in this study. Similarly, individuals responsible for managing change should consider the frame of reference and potential biases of individuals who offer advice. Consultant reports and case studies representing one frame of reference may reflect more the occupational biases of the writer than actual critical issues.

The managerial implications of this study are particularly noteworthy. Beer and Walton (1987) state that "theorists and practitioners must move away from programs in which the consultant orchestrates interventions to programs in which general managers, staff groups, and consultants work together to manage change, to redirect organizational efforts and performance." (p. 340) The "team approach" has received much support in the organization development literature (see, for example, Lippitt & Lippitt, 1978). However, inconsistent underlying beliefs, expectations, and goals held by team members can prove fatal to effective cooperation (Boss & McConkey, 1979; Hess, Ferris, Chelte & Fanelli, 1988).

Building a cooperative relationship requires that an honest effort be made to surface critical issue assumptions that stakeholders hold, and that the expectations and roles of stakeholders be clearly defined and carefully discussed. The eight factors identified in this study might serve as a basis for initiating such discussions. It is unrealistic to expect that agreement on important issues can always be reached. However, it is likely that consideration and open discussion of areas of stakeholder agreement and disagreement prior to the initiation of a large-scale change effort will increase the probability of program success.

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