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TACTICS OF IMPLEMENTATION

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This study identified implementation tactics used by managers in making planned changes by profiling 91 case studies. Analysis revealed four types of tactics, variations within these tactics, and hybrid tactics. These tactics are described and related to their success rates and conditions surrounding their use. The study found a 100 percent success rate when key executives used an intervention tactic, but observed this tactic in less than 20 percent of the cases. Both the persuasion and participation tactics had 75 percent success rates; persuasion had the highest frequency of use, 42 percent, and participation the lowest, 17 percent. Both made high demands on resources. Implementation by edicts had a 43 percent success rate and a 23 percent frequency of use. Intervention tactics and their variations were effective for all types of changes and under varying levels of time pressure and importance, suggesting that managers should use these tactics more often.

Managers, responding to needs and opportunities, revitalize organizations by setting in place planned changes that alter their organizations' products, services, internal operations, and policies. Researchers have given the process of planned change various labels: planning (Churchman, 1979a), organizational change and regeneration (Lewin, 1947), and decision making (March, 1981). Changes become the proposals for action that managers implement. Implementation is a series of steps taken by responsible organizational agents in planned change processes to elicit compliance needed to install changes.

Previous research has reported many implementation failures (Bardach, 1977; Pressman & Wildavsky, 1973; Schultz & Slevin, 1975; Zand & Sorensen, 1975). These failures can be attributed (1) to individuals or groups who attempt to maintain relationships, sustain existing procedures, or retain control over valued activities that would be altered, and (2) to misunderstandings or disagreements about expected benefits (Greiner, 1970; Kotter, 1979; March, 1981). People in organizations use gesture, delay, and obstruction to contain or block change attempts they find threatening or merely disagreeable (Bardach, 1979). To be successful, managers must devise tactics that neutralize or at least contain people who delay making essential commitments, protect turf, posture, or carry out vendettas.

This paper reports on a long-term research effort that documented the steps or tactics managers take to implement planned changes. The purpose of

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this research was (1) to identify and describe the implementation tactics
managers use, (2) to determine the relative success of these tactics, and (3) to
identify conditions under which various tactics are used. Profiles of 91 case
studies of planned change provided data for this research. I identified imple-
mentation activities in the cases, classified them according to implementa-
tion tactics that had distinct procedures, and determined each tactic’s suc-
cess rate. Finally, I explored the relationships between tactics and contextual
factors to determine if type of change, time pressure, quality of staff support,
perceived importance, and size of budget for change processes led to the use
of particular tactics.

THE STUDY OF IMPLEMENTATION

Implementation research has devised prescriptions based on logic, devel-
oped administrative tools, studied factors that influence adoption, and
explored how changes are put into effect.

The prescriptive approach (e.g. Bennis, 1973; Kotter & Schlesinger, 1979)
advocates the use of particular mechanisms to make changes. For example,
Bourgeois and Brodwin (1984) presented commander, change, collaborator,
cultural, and coercive models as alternative implementation approaches for
executives. Nutt (1983) offered a contingency model that defined sixteen
environments in terms of differences in climate and fitted implementation
approaches described in the literature to each environment. The prescriptive
literature has offered many useful ideas for implementation, but these ideas
are based on logic rather than on data that supports the use of specific
guidelines, recommendations, and assertions.

The tool approach considers the value of techniques, such as t-groups,
that deal with resistance to change and other issues related to implementa-
tion. For instance, Schein’s (1961) studies of brainwashing during the Korean
conflict demonstrated the value of breaking old social ties and establishing
new ones in conversion attempts. Daft and Becker identified the roles of
incentives and other factors that they call “enablers” (1978:8) in promoting
implementation success. Such studies have identified useful ways for manag-
ers to support implementation processes. However, the tool approach cre-
ates the impression that implementation is nothing more than the selection
and use of departmentalization, reward systems, coordination, and the like.

The factor identification approach surveys managers to determine fac-
tors that appear significant and correlates these factors with success and
failure. For instance, Zand and Sorenson (1975) developed questionnaires to
elicit managers’ rankings of factors they believed to be important. Their
questionnaire also sought to determine the extent of organizational compli-
ance with changes, and of internalization or adoption of changes. Research-
ers have often identified factors in such questionnaires by stages in a pre-
scriptive model; for instance, Zand and Sorenson used a model based on the
work of Lewin (1947) and Schein (1961). Other studies of this type have built
models that depicted steps believed to be essential in change processes and
used these models to elicit factors (e.g., Beyer & Trice, 1978). Such studies have found that success seems to be related to a positive balance in managers' feelings between desirable and undesirable factors such as confidence, fear, and understanding. They have also identified the importance of pivotal actors in change processes, and distinguished between intended and actual uses. However, Ginzberg (1975), Lucas (1975), and other reviewers have found little consensus among many well-executed studies as to which of the hundreds of factors that have been identified are crucial to success or precursors to failure.

Others have used case studies to search for implementation approaches (e.g., Argyris, 1970). In fact, much of what we know about implementation comes from field studies of managers attempting to make changes. The ways managers carry out implementations reveal their procedures. The case study approach assumes that managers learn to be effective through "practice heuristics" (Schon, 1983:68) that evolve procedures to deal with implementation and other issues. However, interviews with managers have failed to surface explicit procedures (Keen & Scott-Morton, 1978), forcing researchers to use indirect methods, such as retrospective reconstruction of events. Investigators have studied successful and unsuccessful implementation attempts to try to derive the procedures used. For example, Pressman and Wildavsky (1973) followed the implementation of legislation to detect obstacles that were erected and the rationales behind these obstacles in order to suggest ways to overcome these barriers and enhance prospects for successful implementation. Bardach (1979) construed implementation as a game and described steps that promote winning. Many interesting concepts have emerged from this type of study. However, as Keen and Scott-Morton pointed out, the idiosyncratic nature of case studies limits researchers' abilities to pin down procedures underlying successful implementations. A much larger data base is required to understand the finer points of implementation and distill steps that can be unequivocally linked to success. Because of these limitations, implementation prescriptions offered by Greiner (1970) and others often take the form of reversing the steps used in failed change attempts.

Implementation research has provided valuable guidance and identified pitfalls and opportunities, but has provided few insights into how managers carry out implementation. To extend implementation research, three changes in approach seem essential. First, the relationship between developmental and compliance-enhancing activities must be considered by researchers exploring formulation and goal setting, environmental assessment, option development and selection, evaluation, and other stages of change-making processes. Many process-based studies have failed to capture this relationship, thereby ignoring potentially crucial implementation steps that managers carry out during development. Second, investigators should frame change processes broadly so implementation activities can be seen as part of overall processes. The backdrop of a change process allows implementation steps to stand out in sharp relief, making it relatively easy to identify and classify activities undertaken by managers to elicit the support, cooperation, or
acquiescence required to install changes. Third, past studies of change failed to recognize that, although change processes may continue working their way through organizations, particular managers' involvement with them has beginnings and ends. Fourth, some of the practices often used in case study research have serious limitations. Several studies (Bower, 1970; Mintzberg, Raisinghani, & Theoret, 1976; Soelberg, 1967; Witte, 1972) popularized a technique that immerses a researcher into the raw data describing each case. This type of research allows patterns to emerge by examining and comparing each case to the other cases. This approach is infeasible for large numbers of cases owing to the mass of detail that must be considered. The alternative of limiting data bases to make them manageable produces conclusions of suspect generalizability. Researchers using data bases with few cases may fail to discover important implementation-related steps or fail to recognize the idiosyncratic nature of the steps they do discover. Alternatively, researchers can impose a framework to search for implementation steps instead of allowing patterns to emerge. However, imposing a framework may result in losing important messages that do not fit classification schema. In this research the advantages of systematic description and of using a large data base were thought to outweigh the possibility of lost information.

THEORETICAL FRAMEWORK

Implementation

Managers use implementation to make planned changes in organizations by creating environments in which changes can survive and take root. Planned changes are proposals for action that alter organizations' practices. A change can be adaptive, calling for installation of known practices (Beyer & Trice, 1978); innovative, introducing practices that are new to adopting organizations (Damanpour & Evan, 1984); or radically innovative, introducing practices new to all organizations in the same business or industry (Zaltman, Duncan, & Holbek, 1973). Changes can involve (1) technical innovations resulting from the application and use of technology; (2) administrative innovations dealing with relationships and promulgating new rules, roles, procedures, or structures within organizations; or (3) adaptation of technology or managerial practices used by competing or cooperating organizations.

Previous research has defined implementation in terms of actors, intents, and procedures (Ansoff, 1984; Beyer & Trice, 1978; Daft & Becker, 1978; Zaltman et al., 1973). Implementation is a procedure directed by a manager to install planned change in an organization. There is widespread agreement that managers are the key process actors and that the intent of implementation is to install planned changes, whether they be novel or routine. However, procedural steps in implementation have been difficult to specify because implementation is ubiquitous. Implementation has figured prominently as part of planned change processes labeled decision making (Mintzberg et al.,
1976), strategic management (Schendel & Hofer, 1979), organizational regeneration (March, 1981), change (Zand & Sorensen, 1975), legislation and policy initiatives (Bardach, 1977), and diffusion of innovation (Waters, Salipante, & Notz, 1978). Ansoff made several important distinctions pertinent to these processes of planned change, identifying four procedures, called the entrepreneurial, exploration, control, and implementation subprocesses. From this perspective, implementation can be viewed as a procedure used in a planned change process that lays out steps taken to entice stakeholders to support changes. A coherent set of steps becomes a tactic used by managers to elicit the support, cooperation, or acquiescence needed to insure compliance with planned changes. Tactics should capture the arranging and manuevering steps that managers take to deal with social and political issues provoked by change attempts. In this study emphasis is on identifying and describing tactics and not on measuring behaviors and discrete events such as numbers of meetings, analysis of minutes, timing of change processes, or jockeying of stakeholders.

A Transactional Path Model

To determine how managers who sponsor changes promote compliance, this study examined how responsible agents regulate and control a process of planned change. Because steps taken to promote compliance can be found in any stage of a change process, this study treated each change process as a window through which implementation tactics can be viewed.

The framework used to describe the planned change process was developed by synthesizing stages from related processes (Nutt, 1984a). The recommended staging of activities was derived from the literature on innovation (Zaltman et al., 1973), policy formation (Dunn, 1981), organizational change (Hage & Aiken, 1970), planning (Nutt, 1984a), and decision making (March, 1981). The specifications for stages and essential information in each stage were distilled for these processes. Figure 1 shows the planned change process as a series of transactions, instead of the static events often represented in similar research (Mintzberg et al., 1976). The arrows in Figure 1 show the direction of information flow between a sponsor-manager in the decision mode and a support team in the developmental mode. Development can involve assessing environments to find niches ripe for exploitation; analyzing causal factors lying behind poor performance; offering ways to restructure products or services that overcome performance problems; making lists of equipment or raw material vendors that meet preset criteria; providing assessments of potentially viable options like vendors, sites, programs, and so forth. This transactional representation has an action-taking character that

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1 Readers interested in a detailed discussion of how these stages map to the stages used by others are referred to Nutt (1984a).

2 Support teams can include technical staff, other managers, or even sponsors acting as their own technical advisors. The make-up of support teams working in the developmental mode can shift with every process stage, or a fixed relationship, such as sponsor-controller, can be maintained throughout a change process.
FIGURE 1
The Transactional Planned Change Process \(^{a,b}\)

\[\text{Diagram of the Transactional Planned Change Process}\]

\(^a\) Adapted from Nutt (1979, 1984\(^a\)).

\(^b\) Arrows show direction and type of information flow from authorization, shown as circle, in the decision mode to development stages, shown as boxes, in the developmental mode of the transactional process.

describes how managers intervene during development to promote implementation and deal with other issues. The model is transactional because it identifies information that support teams report when carrying out each stage of a change process. Managers or sponsors receive this information and make decisions as change processes evolve. They take action through these decisions.

**Transactions.** In stage I, formulation, a support team in the developmental mode clarifies the needs and opportunities a manager stipulates in the decision mode. The support team identifies problems and proposes objectives. In stage II, concept development, a sponsor states his or her premises, which identify ways to deal with the problems or respond to the objectives identified in stage I. The support team responds by offering one or more options, which the sponsor considers. In stage III some of the options are selected to
be detailed and offered to the sponsor, who tests them for omissions, misconceptions, and errors. Alternatives that can be modified to overcome the sponsor's objections are subject to evaluation in state IV. The sponsor identifies criteria and the support team applies them to assess the merits of alternatives that survive stage III. In the installation stage the sponsor-manager applies tools such as rewards and incentives, personnel selection and promotion, resource allocation, sanctions, coordination, and delegation to put changes into operation. Stage V begins with an attempt to set in place a preferred option and ends when field performance is judged to be adequate.

**Paths.** The path that transactions take through the model trace the steps in a change process. There are two types of traces (Nutt, 1984a:442). A normative trace identifies what theorists believe should take place during a change process (Churchman, 1979a); it indicates information exchanges and directionality of the exchanges that theorists consider ideal, as shown in Figure 1. A descriptive trace profiles paths actually taken. Managers acting as sponsors can adopt active or passive roles in process management. A passive role would call for delegation. An active sponsor would participate in each stage of a change process, regulating it by acting on the information provided and offering guidance. Between these extremes lie a variety of management approaches. Patterns of information exchanges describe the degree and type of control used to promote compliance and show how managers deal with implementation-related questions. This study analyzed these patterns to identify implementation tactics.

**METHODS**

This research used a multiple case study approach to identify implementation tactics because it captures the best features of both case study and factor identification approaches: firsthand knowledge and rich descriptive information, and the ability to quantify and generalize. The change process framework provided a common standard for representing cases. Cases were described using this framework to permit a search for tactics related to implementation. Information describing contexts was also collected. Contextual factors were used to specify the motivations and conditions associated with each case so implementation tactics identified in the study could be related to these motivations and conditions. Lastly, the study linked outcomes—success or failure—with tactics.

**Process Reconstruction**

The research identified the implementation tactics of managers by reconstructing the nature and sequence of activities found in the cases. This approach is similar to meta-analysis (Glass, McGaw, & Smith, 1982), which attempts to integrate findings from independent studies, using each study as a unit of analysis. In process reconstruction, cases are the units of analysis. However, process reconstruction differs from meta-analysis in that random
sampling of cases is not used because such an approach to case selection is not feasible.

Process reconstruction required three key activities. The first was to conduct interviews with people who were intimately involved with the details of each change. These interviews identified critical steps, determined the order in which these steps were carried out, and fitted sequences of steps to a classification framework to represent key transactions in each planned change process. The second step was to isolate activities undertaken to elicit or promote compliance in these transactions. The third was to analyze the content of cases with similar and dissimilar transactional patterns to distill these compliance-related steps into tactics and to break tactics down into categories called variations.

**Pattern Identification and Classification**

**Identification of cases.** Cases came from organizations that participated in student intern programs. All were service organizations like hospitals, government or nonprofit agencies, charities, and professional societies, so the generalizability of this study’s findings may only extend to such service providers. Because the organizations were widely dispersed across the United States and Canada, a broad range of planned change practice was likely represented.³

A chief executive, operating, or financial officer (CEO, COO, or CFO) of each of the 91 organizations was contacted by the author and asked to participate in a study that would profile one of their changes.⁴ All agreed to participate. The sanctioning executives were asked to select a change that had considerable importance for their organizations; no other guidelines for case selection were offered. Allowing contact persons to select the cases helped to ensure that participants would be cooperative. When executives offered several options, change attempts that added diversity to the data base, both in terms of case types and outcomes, were selected.

**Case-related data collection.** Multiple interviews were conducted in each organization to minimize memory distortion and memory failure, the two most common errors in reconstructing events (Bartlett, 1954). Each organizational contact named two people who were intimately familiar with each selected case for in depth interviews. One interviewee was the sponsor, the manager who had been administratively responsible for the change. Separate interviews with the sponsor and one other participating executive were conducted.⁵ In the unstructured portion⁶ of an interview, the interviewee was

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³ The cases in this study, as in most multiple case studies (e.g., Mintzberg & Waters, 1982), do not represent a random sample. A positive bias may be present because organizations that participate voluntarily are likely to share information about change attempts they believe were high quality.

⁴ In the interviews the author asked the executive to identify a project in which a change was attempted.

⁵ The author pilot-tested the procedure in face-to-face discussions and then carried it out by telephone.

⁶ The next section of this paper discusses the structured portion of the interview.
asked to spell out the sequence of steps that had been taken. The information gleaned from each interview was then summarized by the author using the transactional path model. A path through the model representing the sequence of events recalled by each executive was sketched to provide a picture of each planned change process. The resulting transactional description was then presented to that executive to verify that it accurately represented the process as he or she recalled it. The transactions and their path were modified until the process representation was acceptable to the informant. No more than a week was allowed to elapse between interviews and verification of corresponding path models.

The processes sketched by the two executives were next compared and differences identified. An additional interview reconciled any difference that occurred. In this interview, the executives were asked to modify the transactions until a consensual profile emerged. When differences persisted, others involved in the same change process were interviewed. This interview and other data sources like reports and records were used to determine which version of events seemed the most plausible. If disagreements persisted or if a case lacked detail, that case was to be discarded, but none were. All 91 cases were retained for the classification phase of the study and all met two tests: (1) participants agreed on what had been done, and (2) sufficient detail existed to explain what had been done. Data collection and reduction required about ten hours per case. Data were collected over a period of seven years.

A sample profile. Figure 2 illustrates the type of detail captured in a transactional representation of a planned change with one of the cases in the database. The direction of the arrows in Figure 2 shows the flow of information through the decision mode. The PBX case began when the organization's telephone operators filed a series of grievances concerning workload (step 1). Discussion with Bell system technical staff revealed that the work demands made on the operators were 20 percent below that expected by Bell for their own operators. With this information in mind, the sponsor, who was the CEO, asked an operations research staff specialist to rectify the situation. The specialist could make any change that did not increase operating costs (step 2). At the specialist's request, the sponsor delegated the choice of the terms of work to the PBX operators, making them a part of the decision mode (step 3). The specialist asked the operators to identify schedules, with the understanding that any schedule could be adopted as long as it did not increase costs. A queuing model was used to evaluate the cost of each proposed schedule in step 5. The seventh option proposed was found to have acceptable levels of both cost and satisfaction; no attempt was made to find the least-cost or optimal schedule. In step 6, this recommendation was presented to the CEO. In step 7, a disgruntled supervisor who had not been involved, reluctantly put into effect the schedule the operators and management

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7 When differences emerged, the executives were sent the path models and met to work out their differences.
FIGURE 2
The PBX Case

1. Eliminate problem without extra cost
2. Grievances over workload filed
3. Delegation
4. PBX operators suggest a schedule
5. Test schedule (queuing model)
6. Recommendation
7. Co-optation
8. Grievances stop

STAGE I FORMULATION

HOSPITAL CEO (Sponsor)

PBX OPERATORS

STAGE II INSTALLATION

STAGE III DETAILING

STAGE IV CONSTRUCTION

STAGE V INSTALLATION

STAGE VI COMMISSIONING

* Arrows trace the flow of information from authorization, designated by circles, to development, designated by boxes.

had agreed on. After the new schedule was implemented the grievances stopped, ending the process in step 8. The manager-sponsor was satisfied when the grievances disappeared and expressed no interest in isolating their cause.

Sorting the profiles. In multiple case study research, reliable classification is crucial (Yin, 1981). In an attempt to identify categories that have classification precision, the 91 profiles or transactional path models were repeatedly sorted until distinct categories of implementation-related activities emerged. To make these sorts, two criteria were applied: (1) convergence and divergence, and (2) the importance of the distinctions (Campbell & Fiske, 1959). The convergence-divergence criterion was met when a classification had explicit similarities within categories and explicit differences among
categories. The importance dictum required that the distinctions among categories have practical as well as theoretical importance (McKelvey, 1978).

The transactional path model for each case was reviewed and placed with others that used similar implementation steps. Profiles with ambiguous classifications were reviewed again in an attempt to create new categories or to match existing ones. After each sort, a code number designating a category was placed on the back of each transactional path model to identify it. The sorting process was repeated a year later without reference to the first sort to check intrarater reliability. These classifications matched perfectly. When a second rater sorted the profiles to check interrater reliability, agreement between raters exceeded 90 percent, suggesting that the categories identified were defensible.

**Measuring Effectiveness and Conditions of Use**

Data collected in the structured portions of the interviews with executives allowed preliminary assessments of the merits of implementation tactics. Descriptions of the contexts of cases determined conditions under which each implementation tactic had been used. In addition, each case was classified as to type and as to success or failure. The data on contextual factors, types of changes, and success rates in Table 2 allowed a preliminary assessment of the effectiveness of tactics under the conditions present when the tactics and variations were used.

A review of each case determined its type; three categories emerged from this analysis. In equipment cases, organizations acquired major pieces of equipment. Construction cases had the primary intent of altering the physical features of key facilities. Program cases provided new services or internal operations and had less than one-quarter of their cost allocated to equipment or construction expenses.

The remaining contextual factors were identified with a survey that participating executives filled out at the end of their interviews. The survey asked respondents to indicate whether change attempts had been adopted or rejected and to specify values for the contextual factors. The survey asked

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8 This procedure assumes that a sponsor can define success without using criteria beyond "put into use." The cases bear out this assumption. For example, a new burn center was a failure if the center failed to open; a management information system was not adopted when the organization continued to use its manual system; and a merger was termed a failure when it was not completed.

9 Measures such as frequency of use and extent to which changes become institutionalized could reveal insights into the degree of adoption. Attempts to collect information for these measures of status proved to be infeasible. For example, when a change in organizational structure was attempted, executives found it impossible to estimate how often the old reporting relationships had been used. To measure frequency of use would have demanded on-site observation, which was infeasible in a retrospective study. Measures of the degree to which objectives were met were also attempted. Initial and final estimates of performance gaps, such as cost or utilization expectations compared to realizations, were collected but proved to have questionable reliability. Records laying out expectations were seldom available making the proportion of objectives realized impossible to gauge. Subjective estimates always moved in favorable directions, even when changes were unsuccessful, making them seem suspect. Disagreements among the executives on these estimates were common and seldom fully resolved.
questions using anchored rating scales to determine importance, staff support, time pressure, and process budgets. Executives were asked to estimate a change's importance on a scale ranging from 4 = critical to 1 = routine; the quality of staff support available on a scale ranging from 4 = good to 1 = poor; and the time pressure to complete the change on a scale ranging from 4 = very high to 0 = none. They were also asked to compare the funds allocated to carry out development with funds for other change attempts they had managed. This scale ranged from 5 = far above to 1 = far below.

The estimate-discuss-estimate procedure was used to improve the precision of these estimates (Gustafson, Shukla, Delbecq, & Wallster, 1973). First, executives filled out surveys. After tabulation, discussions of the average values for time pressure, need to act, staff support, and level of process support brought mutual understandings about the processes to the surface. After discussion, executives filled out the surveys a second time. The analysis used values from this second survey.

Analysis

Statistical analyses of the data treated two kinds of tactic variables—tactics and tactical variations, which were subclassifications within tactics—as factors. Levels for each of the tactical types were correlated with the other factors. Analyses related success rate, perceived importance, staff support, time pressure, and process budgets to the tactic variables. Ten one-way ANOVAs were performed, each using one of the two kinds of tactic variables and one of the context or outcome variables. Both parametric and nonparametric analyses followed an ANOVA format, using F tests and Kruskal-Wallis chi-square approximations, respectively. Similar significance levels for these tests would suggest that the values for the dependent variables meet interval-scale assumptions. Duncan multiple range tests were used to isolate differences in dependent variables associated with levels of tactic variables.¹⁰

IMPLEMENTATION TACTICS USED BY MANAGERS

Several distinct types of implementation tactics and within-tactics variations emerged from the analysis. The nature and degree of their sponsors' involvement in process management were found to be distinguishing features of these tactics. Four implementation tactics were used in 93 percent of the cases. These tactics were called intervention, participation, persuasion, and edict. Each tactic had important variations. Table 1 lists the frequency of use for each tactic and tactical variation and summarizes their salient features. The next subsection lays out the steps used in each of these implementation areas.

¹⁰ In a Duncan multiple range test (DMRT) the equivalent of multiple t tests are conducted for each pair of the levels of the independent variable to find tactics that have similar and dissimilar values for each dependent variable. An .05 level of significance is used. The DMRT controls for the increased probability of generating significant findings by running multiple comparisons.
tactics and their variations. Cases drawn from the data base illustrate their distinctive features.\textsuperscript{11}

\textbf{Implementation by Intervention}

\textbf{The tactic.} Implementation-related steps were found to begin and end in stage V for this tactic (Figure 3). Issues surrounding compliance, such as the arena of inquiry and ideas that must be considered to win over stakeholders, constrained activity in the developmental stages. In these cases, manager-sponsors were careful to acquire sanctions to activate and regulate the process, and to make it clear to all participants, such as other managers, who had control.

To initiate change processes, the manager-sponsors became protagonists by creating rationales for action in the minds of key people. Appraising performance levels (Figure 3, step 1) and demonstrating performance inadequacies

\begin{table}
\caption{Features of Implementation Tactics}
\begin{tabular}{ll}
\hline
\textbf{Tactics and Variations} & \textbf{Frequency of Occurrence}\textsuperscript{a} & \textbf{Salient Features} \\
\hline
Implementation by intervention & 19 & Key executives justify need for change. \\
Norm test & 5 & New norms to judge performance \\
Feasibility test & 7 & Ways performance can be improved \\
Both & 7 & Both performance and norms \\
\hline
Implementation by participation & 17 & Stakeholder representatives determine change features. \\
Token & 2 & Solution framing with partial participation \\
Delegated & 13 & Solution specification with partial participation \\
Complete & 2 & Solution framing with full participation \\
Comprehensive & 0 & Solution specification with full participation \\
\hline
Implementation by persuasion & 42 & Experts attempt to sell a change they devise. \\
Consultants & 13 & Persuasion by consultants \\
Internal staff & 29 & Persuasion by organizational staff \\
\hline
Implementation by edict & 23 & Sponsors issue directives requiring adoption. \\
Change had sponsor significance & 6 & Sponsor has more at stake than the organization \\
Change had organizational significance & 12 & Organization has more at stake than the sponsor \\
Both organizational and sponsor significance & 5 & Both have clear-cut stakes \\
\hline
\end{tabular}
\textsuperscript{a} Percentage of all cases.
\end{table}

\textsuperscript{11} A list of each case in the data base classified by tactics, variations, and contextual factors can be obtained by writing the author.
FIGURE 3
Implementation by Intervention*

Information flows with solid lines depict implementation-related activities and dashed lines nonimplementation-related activities. Boxes represent developmental activities, and circles represent decisions.

by applying new norms (step 2) created these rationales. Sponsor-managers often cited comparable organizations with better performance to justify new performance norms. In addition, they used descriptions of how current practices could be improved to demonstrate the feasibility of changes in step 2. These suggestions defined options that those involved in the change processes had to consider during development (steps 4 and 5). Many interventionists recognized that users were excellent sources of ideas, so during development sponsors often formed task forces made up of users to identify inefficient and ill-advised procedures. Task forces offered ideas or acted as sounding boards, providing commentaries on changes as they evolved. Sponsors, however, retained the power to veto these recommendations. Change processes ended following demonstrations that adopting changes could overcome deficiencies in performance (step 6). Performance monitoring (step 7) followed installation.

In sum, steps in planned change processes using the intervention tactic are:

1. Acquire the authority to manage a change process and appraise performance.
2. Apply new norms to identify performance inadequacies.
3. (a) Justify the new norms, or
   (b) demonstrate the feasibility of improving practices.
4. 5. Development.

The intervention tactic occurred in 19 percent of the cases, making it the third most frequently used approach to implementation (Table 1).

**Variations.** Tactical variations arose in the degree of justification that managers used. The steps in justification involved validating new norms, showing that change was possible, or both. These variations on intervention tactics will be called feasibility tests, norm tests, and dual tests.

Feasibility tests involved showing how organizational practices could be improved. For example, the manager-sponsor in one of the cases demonstrated how the organization's materials' management procedures differed from up-to-date practices of inventory control. The feasibility test was used in 7 percent of all cases and in about 35 percent of the intervention-managed cases (Table 1).

Norm tests occurred when new standards to judge performance were established. For example, a hospital CEO phased out a decentralized approach to the management of patient care. Under the decentralized system, an administrator located in each hospital ward coordinated its use of supplies and of ancillaries like x-ray; its contact with admitting, billing, other wards; and so forth. To phase out this department, the manager-sponsor contended that the administrative costs of competitors were lower because they avoided duplication of effort and diffused the accountability inherent in a decentralized system. The study found this variation in 5 percent of all cases and in about 25 percent of the intervention cases.

Some sponsors addressed both norms and ways practices could be improved. For example, fiscally concerned hospitals were wary of providing burn care services because third party payers, such as Blue Cross and Medicaid, did not cover all of the costs incurred. To overcome this objection one sponsor demonstrated how the cost of burn care could be covered by using a combination of sources—endowments, governmental care cost reimbursements, private insurance, and cheap resident manpower. This sponsor integrated the demonstration of financial feasibility with a description of how successful burn units were operated. The dual test variation was observed in 7 percent of all cases and about 37 percent of the cases implemented by intervention.

**Implementation by Participation**

The tactic. To use participation, manager-sponsors initiated change processes by stipulating needs or opportunities, and then assigning decisions for developmental activities (Figure 4, step 1). For example, a sponsor might cite the need to reduce excessive sick time or retain accreditation or opportunities to centralize activities in space vacated by another department. Articu-
lating such stipulations (step 2) created objectives with varying degrees of explicitness, such as cutting inventory costs by 20 percent or merely reducing these costs. In step 3, sponsors selected task force members to represent certain points of view or to give information thought to be important. Sponsors delegated responsibility for guiding project development processes to task forces. Such delegation specified constraints and expectations and identified support staff. For example, in the PBX case (Figure 2) the task force had latitude to select any schedule they wished, as long as support staff determined that costs would not be increased. In steps 4 and 5, task forces arrived at consensus about specifics, such as protocols or procedures. In step 6, they made recommendations. The cooptation implicit in this delegation became a vehicle to promote compliance in step 7. The process closed with performance monitoring in step 8.

Cases were classified as participative when task forces had the authority to carry out one or more stages of a process and when leaders could not

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**FIGURE 4**

Implementation by Participation

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*a Information flows with solid lines depict implementation-related activities and dashed lines nonimplementation-related activities. Boxes represent developmental activities and circles represent decisions.*
veto the task forces’ views, as in the PBX case. Sponsors made support teams available to provide information requested by task forces.

Steps in change processes using implementation by participation are:
1. Sponsors stipulate needs, opportunities, or both.
2. Sponsors set objectives.
3. Task forces formed by sponsors who
   (a) identify stakeholders,
   (b) delegate responsibility with a statement of expectations and constraints, and
   (c) assign staff support.
4, 5. Development.
6. Recommendations made to sponsor.
7. Acceptance promoted through cooptation.

Participation was the least frequent tactic, with 17 percent of the cases using it (Table 1).

**Variations.** The extent of involvement and the role of task forces defined the key variations in participation-managed implementation, as Figure 5 shows. Type 4, comprehensive participation, calls for delegation of development to fully representative task forces. This approach has the greatest cooptative potential owing to the breadth of the role and extent of participation that it allows task forces, whose memberships include all important stakeholders, such as users and power centers. Comprehensive participation is similar to Likert’s System 4 (Likert, 1967). According to Likert, this approach creates considerable commitment that makes implementation likely. None of the cases used comprehensive participation, suggesting that fully cooptative approaches occur rarely, if at all, in practice.

**FIGURE 5**
**Types of Participation**

<table>
<thead>
<tr>
<th>Extent of stakeholder involvement</th>
<th>Solution-framing</th>
<th>Solution-specifying</th>
</tr>
</thead>
<tbody>
<tr>
<td>Partial</td>
<td>Type 1: Token participation</td>
<td>Type 2: Delegated participation</td>
</tr>
<tr>
<td>Full</td>
<td>Type 3: Complete participation</td>
<td>Type 4: Comprehensive participation</td>
</tr>
</tbody>
</table>
Type 3, complete participation, also calls for full participation but asks tasks forces to frame rather than specify developmental details. For example, users might be asked to set directions or offer ideas, with staff specialists responsible for developing changes in line with the directions set and ideas offered. The Program Planning Method also calls for this type of participation (Delbecq & Van de Ven, 1971). Complete participation seems less cooptative than the comprehensive type because it restricts the role of task forces. Changes that had long-term effects and required broad-term commitments used this type of participation. For example, in an ambulatory surgery case, all users were involved in critiquing the proposed physical structure and procedures. Complete participation appeared infrequently—in 2 percent of all cases and just 14 percent of the participation cases.

Type 2, delegated participation, uses stakeholder representatives to suggest solutions. Strategic planning groups with members drawn from organizations' boards of directors and key executives practice this type of participation (Steiner, 1979). Much of the social planning initiated in the Great Society programs of the 1960s implicitly used delegated participation to develop or modify services (Nutt, 1976). In that era, user representatives were involved in planning processes to lay out details. The PBX project used this type of participation (Figure 2). Not all the operators were involved, but participants were allowed to dictate the terms of a new schedule. In cases in this study, organizations selected benefit packages for aging programs, designed laboratories, made contingency plans for strikes, carried out renovations, and planned service procedures in this manner. In delegated participation, participants were often coopted, but their ability to persuade others to go along with changes hinged on whether the prerogatives of nonparticipants seemed threatened. For example, physicians rejected a seemingly innocuous plan for a pager system that colleagues had devised because it set a precedent of unilateral action. Thus, delegated participation may be less effective than the complete type. Delegated participation appeared in 72 percent of the participation cases and in 13 percent of all the cases (Table 1). Apparently most manager-sponsors believed that giving representatives responsibility for specifying solutions was sufficiently cooptative to gain acceptance.

The least cooptative form of participation is type 1 or token participation. Both the use of representatives and their role seemed to hamper implementation. For example, surveys may be used to frame users' problems. But problems can be misunderstood unless carefully developed sampling procedures are followed. If not, those surveyed may be unaware of stakeholder needs or misrepresent them (Nutt, 1976). Moreover, the members of representative task forces, although personally committed to changes, may fail to convince others. These two limitations suggest that token participation will be the least successful type of participation. The cases verified this speculation. Token participation was not sufficient to ensure adoption of any changes. For example, when the partners of a HMO plan disagreed about the hospital best suited to offer HMO services, Blue Cross—the most powerful
member—unilaterally selected a hospital to salvage the plan. Token participation was infrequent, occurring in only 2 percent of all cases and 14 percent of the participation cases.

Implementation by Persuasion

The tactic. In implementation by persuasion, manager-sponsors made little effort to manage change processes and monitor their progress due to disinterest, lack of knowledge, or powerful or persuasive protagonists. These change processes began with either sponsors or experts stipulating needs or opportunities (step 1, Figure 6). In persuasion implementation there is little, if any, managerial review. Sponsors allow experts to control development. The path in Figure 6 moves around the periphery of the transactional model, illustrating the independence of experts, who stressed options and their justifications in steps 2, 3, and 4. Activities undertaken to pave the way for change were not observed. In step 5 experts presented products for approval. They made attempts to sell options that performed best, using

---

**FIGURE 6**

Implementation by Persuasion

---

Information flows with solid lines depict implementation-related activities and dashed lines nonimplementation-related activities. Boxes represent developmental activities, and circles represent decisions.
projected benefits to argue for adoption in step 6. Sponsors took passive roles, encouraging sales pitches from interested parties so they could weigh imperatives to act. Sponsors became active after sales pitches had been made, often demanding extensive documentation of benefits that required returning to the evaluation stage. Performance monitoring closed the process in step 7.

Steps in change processes using implementation by persuasion are:
1. Sponsors stipulate needs, opportunities, or both, or accept need or opportunity stipulations from experts.
2, 3, 4. Development.
5, 6. Interested parties use persuasion tactics to sell ideas.

Persuasion, the most frequently applied implementation tactic, occurred in 42 percent of the cases (Table 1).

Variations. The key variation in implementation by persuasion involved types of expert. Observation revealed two types of distinctions among experts. First was a distinction between content and process experts. Content experts were familiar with topics or systems; process experts sold procedures prescribing how to carry out processes and had no specific outcomes in mind. Content experts included consultants who sold turn-key plans to sponsors. Process experts were used when development was entrusted to organizational staffers thought to be skilled in procedures. This process-content distinction was often blurred in the cases, in part because sponsors encouraged experts to stress content (Nutt, 1984b).

The second distinction was between consultants and internal staff. Internal staff carried out development in 70 percent of the persuasion cases and 29 percent of all cases, making this variation the most widely used of all the variations in implementation tactics. When internal staff carried out processes, sponsors believed their organizations had experts skilled in either procedure or content. For example, a sponsor asked a staff member to study existing family-practice outpatient programs and recommend one to their organization. Internal staff purchased equipment, developed management procedures, planned construction and renovations, and designed accounting and other systems.

Organizations hired consultants to carry out processes in 30 percent of the persuasion cases. Consultants who were experts in specific content areas were used when manager-sponsors had little knowledge of or expertise in topics. Organizations also used consultants for projects that involved high technology, such as high-risk neonatology centers and information systems. Consultants with process expertise were used to develop construction plans and carry out specialized developmental activities, such as site selection and evaluations.

Implementation by Edict

The tactic. Implementation by edict involved sponsors’ using control and personal power while avoiding any form of participation. This tactic
had three key features. First, sponsors' control of change processes was intermittent with no common theme. There was no recognizable pattern in sponsors' monitoring and no formal delegations of responsibility. Experts and users had little power. Second, sponsors did not discuss changes with users or attempt to rationalize the need for changes; they expected user compliance. They demonstrated neither imperatives for changes nor their feasibility. The justification steps found in the intervention tactic were not observed. Third, sponsors issued adoption directives by managerial fiat even when lengthy developmental processes occurred. Sponsors merely announced changes and prescribed expected behavior using memoranda, formal presentations, or on-the-job instructions that dictated the expected behavior of users. Sponsors applying power in this way used implementation by edict.

The steps associated with edict implementations in change processes shown in Figure 7 are:

1. Sponsors stipulate needs or opportunities.
2. 3. Development.
4. Sponsors issue directives.

Edicts were used in 23 percent of the cases (Table 1).

**FIGURE 7**

Implementation by Edict*

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*Information flows with solid lines depict implementation-related activities, and dashed lines nonimplementation-related activities. Boxes represent development activities, and circles represent decisions.
Variations. The study identified three notable variations in the use of power tactics. These variations were based on whether changes had individual or organizational significance, or both. Sponsors had personal vested interests in several of the edict-implemented changes. Some changes were identified with sponsors to the extent that failures to adopt them would have hindered these managers' upward mobility. For example, a hospital CEO, hoping to alleviate disturbing malpractice incidents, announced a patient relations department by having the head of this new department make a presentation to key executives. Other sponsors saw themselves as acting in their organizations' best interests by issuing edicts because they thought the changes had special significance. For instance, a sponsor used a memorandum to announce a new pricing policy for an emergency room, hoping to stem recent losses of business to freestanding urgent care centers. Still others believed that their interests and their organizations' interests were synonymous. In the case of a helicopter transport system, for example, both the plans of a key competitor and the CEO's pet idea provided imperatives to act.

In about 25 percent of the cases of implementation through edicts and in 6 percent of all cases sponsors had more at stake than their organizations. Changes had clear-cut organizational significance with modest or minimal implications for sponsors in half of the edict cases and 12 percent of all cases. Organizations and sponsors shared equal stakes in changes in about 25 percent of the edict-implemented cases and in 5 percent of all cases. Sponsors were found to have important stakes in half of the cases of implementation by edict.

Combined Tactics as Hybrids

In hybrid cases, sponsors switched implementation tactics. Two or more of the basic tactics appeared in these cases. For example, some sponsors took responsibility away from experts, creating persuasion-intervention hybrid tactics. Other combinations included participation-intervention and persuasion-participation. The tactics used, their order, and their relative emphasis all seem important. However, there were too few hybrid cases to show if the use of combinations meant managers were groping for correct tactics, with the last tactics used being their choice, or if the combinations themselves gave improved leverage. Hybrids may signal managerial errors or the emergence of different implementation needs at different stages of development. Only 7 of 91 cases, or 7 percent of the cases in the data base, were classified as hybrids, suggesting that the type is rare.

SUCCESS OF TACTICS AND CONDITIONS OF USE

Adoption Rates

The study determined tactic success by treating the tactic options in Table 1 as independent variables and adoption as the dependent variable.
ANOVA results indicated that both tactics and tactical variations were correlated with adoption ($p < .005$ and $p < .05$, respectively).

The intervention tactic had a 100 percent success rate, followed by participation with 84 percent, persuasion with 73 percent, and edicts with 43 percent. A Duncan multiple range test found that the success rates for the intervention and edict tactics were significantly different. The persuasion and participation tactics were similar but distinct from the intervention and edict tactics ($p < .05$). This suggests that intervention has the best prospects of success, edict the worst, and persuasion and participation similar, intermediate prospects. The success rates for the tactical variations followed this ordering: Tactical variations for the intervention tactic had success rates that were better than or equal to those for variations on the participation tactics; variations on participation tactics were better than or equal to the persuasion variations; and the persuasion variations were better than the variations on implementation through edicts.

The most successful tactical variations were (1) the intervention variations, including use of norm, feasibility, or both norm and feasibility tests, and (2) the token and complete participation variations (Table 2). If adoption is considered the measure of success, the intervention tactical variations seem clearly superior to all others. The success of token and complete participation is difficult to interpret because there were only two cases for each type. Delegated participation, or solution-seeking by representatives, had success rates similar to those of the persuasion variations, according to the Duncan multiple range test. This decline in rate of success suggests that participation may lose its cooptative power unless task forces involve most, if not all, of the people whom changes affect. When representatives were used, participation became much like persuasion, both in terms of approach—representatives selling changes—and likelihood of success. All of the edict variations fared poorly, with success ranging from 30 to 60 percent.

**Contextual Factors and Conditions of Use**

Table 2 shows the values obtained for the contextual factors sorted by tactic and variation. The analysis of these contextual factors was carried out to determine relationships between conditions surrounding changes and use of implementation tactics. Specifying these conditions helped to qualify the success rates observed for the tactics and their variations. In this analysis, perceived importance and time pressure associated with changes did not lead to the use of particular tactics or tactical variations, but budgets for change processes and staff support did seem to influence managers’ selection of tactics.

When variations of intervention or persuasion tactics were used, process budgets were above average ($p < .02$). Delegated participation, or development of solutions using representatives, had process budget demands below those of other changes. Both token participation, or framing of solutions using representatives, and implementation by edict for changes with high significance to sponsors also had low budget demands. Perhaps sponsors
### TABLE 2
Performance and Characteristics of the Implementation Tactics

<table>
<thead>
<tr>
<th>Tactics and Variations</th>
<th>Number of Cases</th>
<th>Success Rate</th>
<th>Contextual Factors</th>
<th>Types</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Perceived&lt;sup&gt;a&lt;/sup&gt;</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Importance</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Staff&lt;sup&gt;b&lt;/sup&gt;</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Support</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Time&lt;sup&gt;c&lt;/sup&gt;</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Pressure</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Process&lt;sup&gt;d&lt;/sup&gt;</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Budget</td>
<td>Program</td>
</tr>
<tr>
<td>Intervention</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Norm test</td>
<td>4</td>
<td>100%</td>
<td>3.50</td>
<td>4.00</td>
</tr>
<tr>
<td>Feasibility test</td>
<td>6</td>
<td>100%</td>
<td>2.84</td>
<td>3.50</td>
</tr>
<tr>
<td>Both tests</td>
<td>6</td>
<td>100%</td>
<td>3.17</td>
<td>2.80</td>
</tr>
<tr>
<td>Overall success</td>
<td>16</td>
<td>100%</td>
<td>3.13</td>
<td>3.40</td>
</tr>
<tr>
<td>Participation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Token</td>
<td>2</td>
<td>100%</td>
<td>3.00</td>
<td>2.50</td>
</tr>
<tr>
<td>Delegated</td>
<td>10</td>
<td>80%</td>
<td>2.78</td>
<td>3.45</td>
</tr>
<tr>
<td>Complete</td>
<td>2</td>
<td>100%</td>
<td>3.00</td>
<td>3.50</td>
</tr>
<tr>
<td>Comprehensive</td>
<td>None</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall success</td>
<td>14</td>
<td>84%</td>
<td>2.85</td>
<td>3.31</td>
</tr>
<tr>
<td>Persuasion</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>By staff</td>
<td>24</td>
<td>74%</td>
<td>2.67</td>
<td>3.59</td>
</tr>
<tr>
<td>By consultants</td>
<td>11</td>
<td>64%</td>
<td>3.40</td>
<td>3.60</td>
</tr>
<tr>
<td>Overall success</td>
<td>35</td>
<td>73%</td>
<td>2.89</td>
<td>3.59</td>
</tr>
<tr>
<td>Edict</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sponsor significance</td>
<td>5</td>
<td>60%</td>
<td>2.20</td>
<td>3.60</td>
</tr>
<tr>
<td>Organizational significance</td>
<td>10</td>
<td>30%</td>
<td>2.75</td>
<td>2.75</td>
</tr>
<tr>
<td>Both</td>
<td>4</td>
<td>50%</td>
<td>2.75</td>
<td>3.25</td>
</tr>
<tr>
<td>Overall success</td>
<td>19</td>
<td>43%</td>
<td>2.59</td>
<td>3.12</td>
</tr>
<tr>
<td>Totals</td>
<td>84</td>
<td>71%*</td>
<td>2.87</td>
<td>3.37*</td>
</tr>
</tbody>
</table>

<sup>a</sup> Scale points are: 4 = critical, 3 = very important, 2 = important, 1 = routine.

<sup>b</sup> Scale points are: 4 = good, 3 = satisfactory, 2 = marginal, 1 = poor.

<sup>c</sup> Scale points are: 4 = very high, 3 = high, 2 = moderate, 1 = low, 0 = absent.

<sup>d</sup> Scale points are: 4 = very high, 3 = high, 2 = moderate, 1 = low, 0 = absent.

* p < .05

** p < .02

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kept the budgets of changes significant to them and implemented by edicts low to hide their interests. Large process budgets might draw unwanted attention. Cases of token participation may be pro forma attempts at involvement designed to minimize costs, which may explain their relatively low process budgets. More cases are needed to explain the high success rates and low costs associated with token participation.

Cases that used complete participation, or fully representative solution framing, had budgets that were far above those of typical changes. Using task forces that were fully representative to define problems or comment on plans resulted in large budgets, but was effective, as the 100 percent adoption rate for this variation indicates. Costs of involving large numbers of people may account for these comparatively high process budgets. Delegated participation, with solutions framed by representatives, was less costly but also less effective because task force members had to resort to persuasion to sell their ideas. Persuasion by several task force members succeeded only a bit more often than persuasion by single experts, as the data in Table 2 verifies.

The quality of staff support was related to the tactical variations (p < .05). Staff support perceived to be satisfactory to good characterized all but organizationally significant edicts and token participation (framing with representatives). Respondents designated support as marginal for organizationally significant edicts and as just below satisfactory for token participation. This suggests that sponsors using edicts may underestimate the need for good staff support when changes have organizational significance but do not when changes have personal significance. The personal involvement of sponsors heightens attention and entices them to recruit capable people to help carry out changes. When such heightened interest was lacking, sponsors used staff thought to be less capable.

Sponsors seemed to underestimate needs for staff support when they used delegated participation, or representatives devising solutions. They may have believed that task forces were self-sufficient and failed to see the need for staff to support development of solutions. The demands of solution development were high here compared to the demands created by framing solutions in token and complete participation.

The study also classified changes as equipment, construction, and program types, as discussed earlier in this paper. Equipment changes often captured the attention of key administrators because they typically cost $500,000 or more. Development focused on determining the value of equipment innovations or updating. Construction projects involved changes in the physical features of key facilities. Development stressed physical features and rationales that supported needs to alter, add to, or build new facilities. Large budgets of 10 million and more and significance throughout organizations were typical. The category program change described installing new services or internal operations that involved minor equipment and construction expenditures, if any, of less than a quarter of the budget. Most program changes had only incidental equipment or construction costs. The emphasis was to modify or devise new institutional practices that developed software,
procedures, protocols, and the like for services like detoxification units, or for internal operations, like security programs. These changes stressed procedural development and allocated the bulk of their budgets for this purpose.

Program changes were the most common, representing 60 percent of the cases. About 25 percent were construction changes and 16 percent were equipment changes. Unlike Damanpour and Evan (1984), this study found no relationship between implementation tactics and type of change. Managers do not appear to favor particular tactics to implement program, equipment, or construction changes.

CONCLUSIONS

This research led to several insights about the practice of implementation that offer guidelines for managers and suggest topics meritig further research. Key conclusions concern implementation practices and the effectiveness of implementation tactics under particular conditions of use.

The Nature of Managerial Implementation

The intervention tactic. The intervention tactic is similar to the change agent prescriptions of Lewin (1947) and Schein (1964), with some important distinctions. In practice, change agents were manager-sponsors who took control of planned change processes. Consultants were never observed. Steps were similar to the Lewin-Schein implementation procedure of unfreezing, change, and refreezing (Dalton, 1970). However, managers in this study were found to be far more aggressive than organizational development (OD) specialists acknowledge as either necessary or desirable. Behaving in line with the prescriptions of Kotter and Schlesinger (1979), successful implementers carefully monitored entire change processes, regulating and controlling social and political issues as they arose. Managers using the intervention tactic were quite good at creating new norms in systems they sought to change. They offered new definitions of acceptable performance, justified these new norms, and showed how practices could be improved. Through these steps, sponsors were able to stipulate needs, thereby eliminating ambiguity, deal with scale, self-educate, collect essential data to deflect threats, manage resentment, build confidence, and reinforce what was wanted. These are all key forces identified by Zand and Sorensen (1975) in their study of implementation in the Lewin-Schein process frame. Only one of the managers had any exposure to the OD literature, suggesting that these practices evolved from practice-based heuristics, as suggested by Schön (1983).

The participation tactics. The origins of participation as an implementation tactic can be traced to the classic study by Coch and French (1948), who found that people reacted more favorably and became more committed when they participated in change-making processes than when they did not. This tactic mandates forming task forces that represent key stakeholders. Manager-sponsors delegate their development prerogatives to the task forces. The Delbecq, Van de Ven, and Gustafson (1975) approach to planned change is typical of many contemporary approaches that make these prescriptions.
Managers who used participation tactics were aware of the participation literature and often said that they used participation because of this knowledge. However, the study observed no instance of full or comprehensive participation and thus cannot specify the details of such a tactic. Typically, managers scaled down the scope of participation. Representatives acted as agents for stakeholders in more than 85 percent of the participation-implemented projects. In those few cases where full involvement occurred, participants had narrow roles. They commented on issues that helped frame problems by interpreting their own needs or critiquing proposed solutions.

The benefits of participation seem contingent on what task forces are asked to do and the scope of the involvement of key people. Representatives can help, but the power of cooptation drops dramatically for those not directly involved. The effects of cooptation decline both when representatives of a large group of stakeholders are involved and when the role of a task force is limited. All tactics but comprehensive participation have these limitations. However, comprehensive participation, or full representation of stakeholders in devising solutions, was not observed and may seldom, if ever, arise in practice owing to its cost. Even the complete participation type, full participation of stakeholders for a part of the process, can be difficult to carry out because affected parties are often numerous and diffuse. The parties involved in a prison siting are an example. The leverage from delegated participation stemmed from representatives, but the number of individuals affected by the change that could be involved limited the power of cooptation. Participation should be more carefully defined in future research to account for participants' roles and the extent of their involvement.

The persuasion tactic. Operations researchers and others who call for experts to guide development activities in planned change processes advocate a sales approach to implementation. For example, Churchman (1979b) argued that implementation depends on anticipating and countering moral, aesthetic, religious, and political objections to proposed changes. According to these views, implementation should hinge on experts who determine what should be done and use rational arguments to convince managers to go along. Organizations like the National Science Foundation, the Ford Foundation, and the National Institute of Health apply this type of implementation in their peer review procedures. Experts select the grants and contracts they will support—their products. The controversial Operation Research Society of America guidelines, published in 1971, also called for experts to vigorously sell ideas they find desirable. As a result, many of the planned change processes devised by management scientists and operations researchers have experts recommending and managers reacting. Implementation is seen as an educational process (Churchman, 1975). When changes are not adopted, failure is often attributed to managers who did not understand developmental processes or their products (Churchman & Schainblatt, 1965; Duncan, 1974).

Sponsors extensively delegated development to experts. More than 40 percent of the cases used expert-managed development processes. Managers
gave experts broad responsibility, but withheld approval until the experts could demonstrate value. This forced experts to devise well-constructed rationales. The frequency with which persuasion tactics were used to justify decisions to adopt changes suggests that many sponsors see development as an activity that internal staff or consultants should carry out. Forcing experts to gather arguments for adopting changes at the expense of gaining the acceptance of stakeholders may account for many of the failures of implementation by persuasion.

Future research should consider how consultants influence persuasion-based processes. Sponsors can use consultants or internal staff, but seem to prefer internal staff. Consultants play vital roles in many organizations, but their activities and the benefits they create are shrouded in secrecy. More study of consultants and their role in implementation seems essential.

The edict tactic. Issuing edicts requires sponsors to use one or more of the reward, legitimate, expert, informational, and referent power types identified by French and Raven (1959). The authority to offer rewards or to remove irritants is called reward power. To apply this type of power, managers must have control over financial and nonfinancial incentives that can be used to entice others to adopt plans. Legitimate power is based on sponsors’ rights to take action in organizations. Expert power flows from a track record of successes and a reputation for candid and honest dealings. Expert power requires both credibility and trust, but informational power, in which managers offer their insights or cite anecdotes, requires only that they have the trust of other organizational members. Referent power stems from the attractions people have for others that lead them to label these individuals as charismatic. Sponsors drew on one or more of these power bases when carrying out edicts (Nutt, 1983). For example, legitimate power was applied when sponsors used legitimate prerogatives to make changes. When carrying out edicts, sponsors trade social credit for action and risk failure if their power proves to be insufficient. However, the frequent use of power can strain organizations and gradually drain manager-sponsors' stores of social credit.

Contingency use of tactics. Research is needed to determine if contingency use of implementation tactics is desirable. All forms of implementation were found to have some degree of success. Because some ways to manage planned change processes are more costly and less timely than others, future research could develop and test conditions in which each implementation tactic can be effective, creating a contingency model.

Tactic Effectiveness and Conditions of Use

The study identified a variety of interventionist tactics such as challenging existing norms, offering viable ideas, or both, and found all to produce 100 percent success rates. The most common participation tactic—representatives providing solutions—implicitly used persuasion-like tactics and had success rates of about 75 percent, similar to those for persuasion tactics.
Edicts fared poorly, failing more often than they succeeded, whether changes had personal significance for sponsors, organizational significance, or both. The only participation variation that employed full representation of affected parties occurred infrequently, perhaps because complete participation demanded process budgets far above what other changes required. Generating solutions with delegated participation required modest process budgets, but was less effective than complete participation, seemingly because representatives had to use persuasion to sell changes they devised. Managers underestimated needs for staff support in delegated participation. Apparently, sponsors allocate too little staff support when they enlarge the role of task forces to include solution development. Token participation, framing with representatives, had marginal staff support and small process budgets, suggesting pro forma attempts at cooptation and efforts to minimize implementation costs.

Edicts motivated by sponsors' interests had small budgets, apparently to avoid drawing undue attention to changes and sponsors' vested interests. When an edict was used for changes with organizational significance, managers provided only marginal staff support, but respondents termed staff support satisfactory for changes of some significance to sponsors. Sponsors appear to reserve the best staff for their pet change attempts.

Success was guaranteed when sponsor-managers were actively involved in applying interventionist tactics. The 100 percent success rates for intervention and its modest resource demands make this implementation tactic highly desirable and worthy of active promotion among managers. Persuasion was successful in three-quarters of the cases in which managers used it. This tactic demanded strong staff support and seemed to require high process budgets compared to intervention. Surprisingly, implementation by persuasion was not limited to changes that sponsors considered of little importance and under low time pressure. Managers did not deem only throw-away changes appropriate for experts to manage, as some theorists have implied (e.g., March, 1981). Participation was found to be no more effective than persuasion, and the two required comparable staff and process budget support.

All of the tactics were used under varying levels of time pressure and perceived importance and for each of the change types. This suggests that time pressure, importance, and change type do not influence managers' selections of implementation tactics.

Future researchers should be wary of pragmatic measures, such as the one used in this research, rate of adoption. The PBX case demonstrates the reason for this caveat. What was the origin of the grievances? At the conclusion of the change process no one had any idea. The sponsor saw the symptoms disappear and so judged the change a success. But if the origin of the grievances were an autocratic PBX supervisor, the grievances might recur. What appeared to be a pragmatic change may have merely papered over issues that could emerge again in problems seemingly unrelated to the earlier ones. Implementation has pragmatic importance, but the key step in planned change processes may be formulation. Future research should devise
ways to measure the likelihood and consequences of incorrect stipulation of needs or opportunities by managers.

REFERENCES


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