

Empowering Middle Managers to Be Transformational Leaders

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The article describes a field study of a large-scale management development program designed to stimulate middle managerial change. The development of a change typology suggests that middle managers are capable of making both transformational and transactional change targeted at themselves, their work unit, and their organization. Those with low levels of self-esteem, job affect, and social support tended to limit their efforts to changing themselves and thus had little impact on the organization. In contrast, individuals with high levels of self-esteem, job affect, and social support were more likely to make transformational changes. Thus the analyses suggest that individual mind-set prior to attending the program moderates the type of change undertaken by the middle managers. The most surprising finding is that those middle managers who were plateaued were most likely to make the most radical changes. The findings have implications for change mastery as well as resistance to change.

Middle managers are fighting for their survival in contemporary organizations. While self-managing teams and participatory management are making obsolete the traditional supervisory responsibilities of middle managers (Dumaine, 1993), information

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technology makes it easier for top management to monitor and control activities directly rather than through middle management (Dopson & Stewart, 1990). To remain viable, the traditional role of middle managers must change (Sherman, 1995). In the words of Floyd and Wooldridge (1994), "More like the Phoenix bird than the dinosaur, a new breed of middle managers—whose roles are more strategic than operational—should be rising from the ashes of the delayed corporation" (p. 48). In their new role, middle managers would successfully generate and mobilize resources around new ideas (Burgelman, 1983; Fulop, 1991; Kanter, 1982), link activities and ideas between technical and institutional levels of organizations (Van Cauwenbergh & Cool, 1982), sell critical issues to top management (Dutton & Ashford, 1993), and participate in strategy making (Guth & MacMillan, 1986; Nonaka, 1988; Westley, 1990). In simple terms, their role must shift from transactional managers charged with maintaining the status quo to transformational leaders (Bass, 1985; Bennis & Nanus, 1985) who stimulate change (Johnson & Frohman, 1989).

Unfortunately, little research has been conducted on the extent to which middle managers can be changed or of the process through which such change may occur (Wooldridge & Floyd, 1990). These issues are explored in a field study of a large-scale management development program at the Ford Motor Company, the purpose of which was to stimulate transformational behaviors in its middle managers. First, the article describes the educational process designed to stimulate transformational behaviors. It then develops and analyzes a typology of middle managerial change. Finally, implications of this work for theory and practice are discussed.

THE TRANSFORMATIONAL LEADERSHIP PROGRAM

The field study was conducted in the Ford Motor Company, an international Fortune 100 manufacturing corporation. Since the early 1980s, this organization has made significant investments in its human capital, contributing to a dramatic organizational turnaround in the 1980s. Like many organizations, it downsized employees during the 1980s, though primarily through attrition and early retirement buyouts in the middle management ranks. In the last decade, a successful effort was made to develop the top 2,000 executives in the company. But as global competition intensified, Ford recognized that transformational leadership at the top of the organization was not enough; similar behaviors were necessary from those in the middle levels. Consistent with the traditional role of middle managers (Fulop, 1991; Kraut, Pedigo, McKenna, & Dunnette, 1989; Labich, 1989), middle managers at Ford were socialized to be largely transactional. This recognition led to the design, development, and implementation of a transformational leadership program for all middle managers, entitled Leadership Education and Development (LEAD; Quinn, Sendelbach, & Spreitzer, 1991).

Program Development

With the charge of radically reorienting the role of middle managers, a steering committee made up of executives from different operating units of the company, with

input from focus groups of middle managers, established the basic criteria for Ford's transformational leadership program. The committee decided that this program should (a) provide integration with other company efforts, (b) reinforce the company's mission, values, and guiding principles, (c) be targeted for all middle managers, (d) be application-oriented, and (e) provide a cross-functional and global perspective.

A joint design team was formed with faculty from the University of Michigan School of Business. Because traditional approaches to management training have been found to have limited ability to effect behavioral change (e.g., Fisher, Merron, & Torbert, 1987; McCall, Lombardo, & Morrison, 1988; Tetrault, Schriesheim, & Neider, 1988; Waters, 1980), the design team concluded that a traditional training approach would not be appropriate for developing transformational leaders (Quinn et al., 1991). The philosophy of traditional training approaches is the dissemination of information from expert to novice. Training experts determine what skills are needed and then "teach" the relevant skills. Because trainees are conditioned to be compliant learners, the role of the middle manager as a conforming transactional manager would simply be reinforced (Quinn et al., 1991). To stimulate transformational behaviors, it would be necessary to design a program based on a different set of assumptions. To encourage real behavioral change, a mind-set change, in conjunction with strategic, cultural, and structural change, would be required (Senge, 1990). The objective of the program, therefore, was to transform, rather than inform, with the goal of helping middle managers alter existing assumptions to redefine their role.

A second conclusion of the joint design team was that extensive data would be collected throughout the program to conduct research on the middle managers. Though the corporate members of the design team were initially cautious about the value of research, the university members of the design team argued that such research would be critical for organizational learning. When the organizational members of the design team saw the benefits of the research as it was fed back into the program, they became strong advocates of the need for the expanded research described in this article.

Program Design

Over a 4-year period, 3,000 middle managers voluntarily participated in LEAD in groups of 50. The program was divided into a 1-week core session followed by a 2½ day follow-up 6 months later.

Core Program

The first part of the core week was structured around parallel strategic, cultural, and structural changes taking place in the larger company. The program began with an in-depth analysis of the rapidly changing, and increasingly competitive, global business environment. Sensitive information about the strategic direction of the company, typically reserved for top management, was shared with the middle managers. Personal reflections and in-depth discussions of the implications of the changing environment and strategic direction were designed to create a sense of urgency about the need for middle managerial change. In addition to the strategic changes described

above, cultural changes were being driven by the organization's newly developed Mission, Values, and Guiding Principles.

At the same time, the organization was loosening its traditional functional structure through use of colocated, cross-functional teams and an eventual move to a matrix structure. At Ford, functions had traditionally been viewed as chimneys, acting as walls, keeping managers from interacting cross-functionally. Consequently, relationships between functions had been strained. During the LEAD program, the middle managers were put into cross-functional learning groups. Through exercises aimed at getting any dysfunctional cross-functional dynamics out on the table, managers from different functions began to see each other not as adversaries but as potential allies. The members of the cross-functional learning groups served as consultants to each other as they commenced their change initiatives, and many continued to communicate with each other after the LEAD program had ended. Consequently, the LEAD program fundamentally affected the experience of organizational structure for middle managers at Ford.

Participants also had an opportunity to self-assess their own leadership behavior using the Competing Values instrument (Quinn, 1988). At the end of the week, they were then invited to develop a specific change initiative for implementation upon return to their home unit. Contrary to typical company norms, participants were not told what changes to make. Instead, they were asked to assess what they learned and how they saw the business environment, the company, and their work context. They were then asked to design a change initiative that would make a needed and lasting difference. Participants publicly committed to their change initiative in a video to the other members of their learning team. The video was then owned by the team, not the company.

Interim Period and Follow-up Program

The participants had approximately 6 months to implement their change initiative. The 6-month interim period of the design was crucial, for it was during this period that participants were able to test the new mind-sets developed in the core week, to challenge the system, and to attempt change. A small number of managers (1-2%) who attended the core program did not return for the follow-up. In interviews with these managers, they reported that they became disenchanted and cynical about the program during the interim period; they had attempted change but were thwarted by their bosses and consequently saw little value added in attending the follow-up session. One manager said, "No one wants middle managers to be leaders." These casualties illustrate the difficulty of making change in a traditional bureaucratic system. Clearly, some bosses were threatened by a new role for the middle managers. Later in the article, the specific system barriers faced by all managers who participated in LEAD are discussed.

After the 6-month interim period, the participants returned for the follow-up, where they shared successes and failures with their cross-functional learning groups. Particularly important were the coping strategies they discovered for making change in a system that often discourages change. To stimulate organizational learning, partici-

pants met with a senior executive in a session devoted to sharing comments and concerns about the role for middle managers in the company.

Impact of the LEAD Program

From the first session of the program, the results were dramatic (Quinn et al., 1991). One manager, for example, revamped a loan-approval process. The process had just been reduced to 1 week by a consulting firm. The manager decided the company needed a faster cycle time and single-handedly took on the project. She reduced the process to 2 days, then 8 hours, and finally 4 hours. Senior executives immediately started to notice the impact of many such change initiatives. During the outbreak of the Gulf War, when all international travel was restricted and nearly all non-core programs were put on hold, senior executives argued that LEAD was a "best practice" with significant returns on investment. After a 3-month delay, the LEAD program was one of the first restored. The program continued until the entire population of 3,000 managers finished the course in the spring of 1993. The program now continues, in modified form, as a transition program for those newly promoted to middle management. The design of the LEAD program has been highlighted as a best practice in management development in various forums across the country (Quinn, 1990; Quinn & Spreitzer, 1990; Sendelbach & Spreitzer, 1991).

Given the fact that the organizational literature seldom finds a link between training and behavioral change (e.g., Fisher et al., 1987; McCall et al., 1988; Tetrault et al., 1988; Waters, 1980), how do we account for the effects of the LEAD experience? In answering this question, we consider two general factors. The first is need. The participants expressed a strong desire to participate in the LEAD program. Ford was going through significant change and had attended to the higher levels of the organization through a number of developmental programs. Middle managers were overwhelmed by the changes and felt ignored in terms of development. As with most companies, the people in the middle of the organization had never been brought together in any large-scale, cross-company program. Usually such efforts were considered to be too expensive, so the middle levels were largely ignored. Thus the LEAD program was a new and much desired experience.

The second factor to help explain the impact is the design. Most training programs are based on transactional rather than transformational assumptions (Russell & Kuhnert, 1992; Quinn et al., 1991). An analogy to leadership may be helpful. It is not unusual for leaders to call for more empowered behaviors while treating people in disempowering ways. The lack of congruence between words and behaviors guarantees change paralysis. Successful transformational leaders understand that they are the message themselves. LEAD was designed to display congruence between vision and practice. This was accomplished by violating elements in the existing Ford culture. Just a few examples from the discussion above include: (a) sharing confidential and sensitive strategic information, (b) encouraging an unusual level of honesty (including discussions of senior management) in classroom exercises and discussions, (c) surfacing cross-functional conflicts, (d) trusting participants to choose change initiatives that were meaningful to them, and (e) resisting the need to centrally monitor results by

allowing participants to own their video-taped commitments to a specific change initiative.

All of these unconventional behaviors were noted by participants and were seen as part of the message that things really were changing at Ford. The company was seen as investing in middle managers and as treating them as mature adults capable of learning and leading. In short, LEAD was not a transactional training program but a transformational developmental experience for participants who were hungry for assistance in making sense of a changing world. It is not unusual for top management to call for more empowered behaviors from employees while treating them in unempowering ways. The result is no change. Many training programs have a similar failing. The LEAD program was carefully designed to model the behavior that was being taught. Like a successful transformational leader who "walks the talk," the program was designed to mold the kind of change it sought to stimulate.

The Complementary Roles of the Authors

The second author of this article was a member of the joint design team and a key player in the delivery of the program; the depth of his involvement provided richness in understanding and interpreting our findings. In contrast, the first author was not involved in the design or delivery of the program; her role as researcher provided a more detached perspective in designing the research and interpreting the findings. Together the two authors designed and conducted the research, one playing the devil's advocate to the other in making sense of the findings in a rich yet rigorous way. These different perspectives (given our different roles) led to a richer understanding of the research than was possible through either point of view alone; the complementary roles helped us to better manage the multiple realities (Smith, 1982) inherent in field research such as this.

A MODEL OF MIDDLE MANAGERIAL CHANGE

Because the LEAD Program focused considerable effort on stimulating middle managers to become more transformational agents of change, it provides a context for understanding the process of middle managerial change. This research focuses on three questions pertaining to the change process. First, what types of change are middle managers capable of undertaking? Second, what facilitates or inhibits middle managerial change? And, third, what are the outcomes of the different types of middle managerial change? These research questions can be integrated into a general model of middle managerial change. The model suggests that the type of change initiative undertaken by a middle manager depends on both individual characteristics (such as self-esteem and affect about work) and organizational characteristics (such as barriers to change and social support). Thus both individual mind-set and organizational context (Smith, 1982) arguably shape the propensity of middle managers to make transformational change. In turn, this model suggests that transformational change by middle managers influences perceptions of managerial effectiveness and future promotions.

Individual Characteristics

Individual mind-set is likely to influence who accepts the charge to become transformational. Individuals with high self-esteem are expected to initiate transformational change because they have more self-confidence about what they can accomplish (Brockner, 1988). Individuals with high self-esteem expect success and as a result are more vigorous and assertive in their actions (Pierce, Gardner, Cummings, & Dunham, 1989). In contrast, individuals low in self-esteem have little faith in their ability to succeed and tend to yield in the face of opposition (Michener, Delamater, & Schwartz, 1990). Further, individuals who have positive affect about their job are expected to initiate transformational change because they have an emotional connection to their work (Spreitzer, 1992). Individuals with more positive work affect take more risks and are more creative in their jobs (Staw & Barsade, 1993), both of which would increase propensity for deeper changes. Finally, individuals who are seen as "high potential" (i.e., those who have been promoted quickly) are expected to embrace the charge for change (Spreitzer, McCall, & Mahoney, in press). Such individuals are attuned to the changing organizational context and are anxious to respond to any strategic effort to reorient middle managers. Furthermore, the allure of the power inherent in transformational behavior is likely to be attractive to this group.

Organizational Characteristics

In addition to individual mind-set, organizational context is also expected to influence middle managerial change. Lewin's (1951) force field analysis suggests that the status quo is maintained when organizational forces restraining change are equal to forces driving change. Middle managers are likely to justify a lack of initiative-taking by acknowledging system barriers to change (Kanter, 1983); these social and organizational structures become rationalizations for not taking action (Smith, 1982). Those who perceive strong barriers to change are less likely to undertake transformational change because they see their work environment as resistant to change and mired in the status quo.

In contrast, those who perceive social support from their coworkers and superiors are expected to undertake transformational change. Social support acts as a buffer or cushion in stressful conditions, giving individuals strength to tackle difficult issues (Kanter, 1982). Three particularly important mechanisms for such support include sharing information, sharing resources, and providing access to key sociopolitical networks (Kanter, 1983). The support of superiors is particularly important for enhancing the middle manager's motivation to take risks and to make change (Dutton & Ashford, 1993).

Outcomes of Middle Managerial Change

In the LEAD program, middle managers were encouraged to redefine their role and initiate transformational change in their organization. Because of the new charge for middle managers in this organization, those managers who undertook transformational change initiatives were expected to be seen as more effective. In addition, because of

the newly espoused role for middle managers in this organization, those middle managers who made more transformational change were expected to be more likely to be promoted within 2 years following the change effort.

METHOD

Data Procedures

Data were collected across three points in time (see Figure 1). At the time of the core program, data on demographics, self-esteem, job affect, and social support were collected. At the time of the follow-up segment, information on the change initiative (magnitude and target), barriers to change, effectiveness, and prior promotion was collected. Finally, approximately two years after the follow-up session, subsequent promotion data were collected. The respondents were assured of confidentiality: No information would be used for selection or evaluation purposes. Surveys were returned directly to the researchers for processing, and only aggregate results were reported back to the organization for use in the LEAD program.

Sample

Because of the extensive qualitative data required to study these Ford change initiatives, resources were only available to collect data from the 191 middle managers who participated in the follow-up sessions during late 1991 and early 1992. Which managers attended a given session was determined as follows. After the middle managers provided information on their availability, a stratified random group of participants for each administration of the program was selected by a training manager to ensure representation across functions, locations, and divisions. Thus the participants in each administration of the program were a microcosm of the population of middle managers in the organization. As a check for selection bias (i.e., to assure that the 191 managers in the sample did not differ significantly from the group of managers who had participated in the program but were not in this study), mean difference tests across the two groups on effectiveness and demographic variables were conducted; no significant differences were found.

Because the data were collected in conjunction with the program, a 100% response rate was achieved at the first two periods of time, minimizing the potential for selection bias in the sample. However, because subsequent promotion data were available only for managers working in North America, the sample was reduced to 153 managers for analyses employing this outcome variable. The managers for whom promotion data were not available were not significantly different from the rest of the sample on any of the variables in the model. Each middle manager was drawn from a separate work unit of the organization representing all functions and divisions. The sample was 94% male, 88% white, and averaged between 41 and 45 years of age. Ninety percent were college educated, with many having some graduate training. Mean company and position tenures in the company were 13 and 3 years respectively.

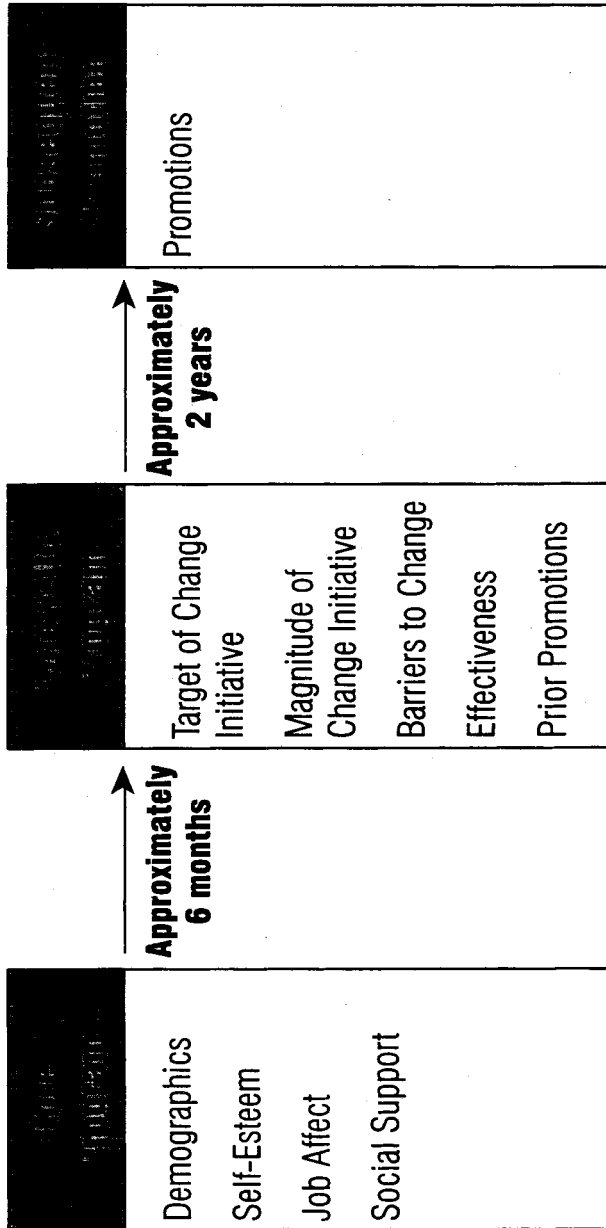


FIGURE 1: Sequence of Data Collection

Measures

Core Program Measures

Gender, age, and education were measured categorically. Gender was coded as female and male. Age was measured across eight categories ranging from younger than 30 to older than 60 with interim categories reflecting progressive 5 year intervals. Education was measured across eight categories ranging from high school to doctoral degree. Self-esteem was assessed with an index created from the summation of 17 yes/no items including "I am proud of my work" (Coopersmith, 1967). High scores indicate more self-esteem ($\alpha = .76$). Job affect was measured on a five-point scale anchored on one end by *never* and on the other end by *most of the time* (Cobb, 1970). Sample items include "Do you feel cheerful?" High scores indicate more positive affect ($\alpha = .75$). Coworker and supervisory social support were each measured with a five-point scale ranging from *absolutely yes* to *absolutely not* (LaRocco, House, & French, 1980). Sample items include "Can you rely on coworkers no matter what?" and "Does your supervisor see that you are taken care of?" Both measures achieved acceptable reliability ($\alpha = .71$, coworker support; $\alpha = .72$, superior support). Scores were recoded so that high scores indicate more support.

Follow-up Program Measures and Subsequent Promotion

Because validated measures could not be located, qualitative data on changes initiatives from prior LEAD participants were content analyzed (by two doctoral students who were blind to the topic of the research) to identify relevant dimensions of change and key barriers to change. Two critical dimensions of middle managerial change were identified: the target of the change and the magnitude of the change. Three seven-point items, anchored by *strongly agree* at one end and *strongly disagree* at the other, were used to measure the target of the change. Three change targets emerged: personal change, unit change, and organization change. Higher scores indicate a stronger focus on a specific target. Four five-point items anchored on one end by *strongly agree* and the other by *strongly disagree* were used to measure the magnitude of the change initiative. Actual items are included in the appendix, and a high score indicates more transformational change. In an exploratory factor analysis, these four items loaded onto a single factor achieving adequate reliability ($\alpha = .67$). A scale was constructed from the means of these four items.

From the content analysis described above, items were developed to measure key barriers to change. These are provided in the appendix. Three factors were derived from a factor analysis, and a scale was created for each of the factors using the mean of the individual items. The first scale describes the lack of strategic vision to guide change and the absence of a structure to support change ($\alpha = .77$). The second scale, the presence of embedded conflict factor, reflects three different types of conflict: across functions, across peers, and with subordinates ($\alpha = .66$). The third scale, personal time constraints, did not achieve acceptable reliability ($\alpha = .52$) and is not retained in subsequent analyses (Nunnally, 1978).

An effectiveness measure was administered to a group of the participant's subordinates and his or her immediate superior. Given the diverse jobs represented, no common objective measure of effectiveness was available. A five-point perceived effectiveness measure (Denison, Hooijberg, & Quinn, in press) was used; it includes items such as "meets managerial performance standards." High scores indicate more effectiveness. The scales achieve adequate levels of reliability ($\alpha = .77$, subordinate assessments; $\alpha = .70$, superior assessments). Individual subordinate responses were aggregated following an *F* test to check for consistency in responses. Prior number of promotions was measured with a nine category self-reported question asking the number of promotions in the last 5 years, ranging from zero promotions to eight or more promotions. The promotion variable was assigned a value of one if the manager was promoted within 2 years of his or her participation in LEAD and zero if not so promoted.

Analyses

Our objective was to create a typology of middle managerial change initiatives and then to relate the change types to individual and organizational characteristics and outcomes. Cluster analysis, using Ward's (1963) method, was employed to classify the 191 middle managerial change initiatives. Cases were clustered according to the target and magnitude of change. To more clearly describe and differentiate the five change clusters with respect to the two dimensions, one-way analyses of variance (ANOVAs) were conducted on the target and magnitude dimensions of the change. In addition, to better understand the different types of change, a one-way ANOVA was conducted for each of the variables in the model of middle managerial change. Planned comparisons were then conducted to show significant differences between groups.

RESULTS

A Typology of Change Initiatives

The agglomeration schedule suggests that the five cluster solution was optimal. The five cluster solution is meaningful theoretically; it includes both transactional and transformational change at the level of the individual, work unit, and organization. To describe the five change clusters, the results of the ANOVAs were examined (see Table 1). Significant mean differences were found on each change dimension across the five clusters. An example of an actual change initiative as written by a LEAD participant is provided before the description of the cluster. The resulting typology of middle managerial change initiatives is striking. Forty-six percent of the middle managers, when stimulated, experimented with more transformational behaviors. These data suggest that it is possible to stimulate large proportions of middle managers to experiment with transformational leadership behaviors. Each change type is described below.

TABLE 1
Analysis of Variance for Variables Used in Creating Change Types

	<i>Type 1</i> (n = 32)	<i>Type 2</i> (n = 42)	<i>Type 3</i> (n = 31)	<i>Type 4</i> (n = 21)	<i>Type 5</i> (n = 65)	F Value
Change magnitude						
Extent of change	3.46	3.26	2.97	3.84	4.03	17.75*
Change target						
Individual target	4.28	1.57	1.13	1.43	1.12	183.18*
Work Unit target	2.44	4.00	1.90	4.29	1.74	94.20*
Organization target	1.69	2.05	3.64	3.22	3.84	78.68*

NOTE: Type 1 = Managerial style change; Type 2 = Transactional within unit change; Type 3 = Transactional organization change; Type 4 = Transformational within unit change; 5 = Transformational organizational change.

* $p < .001$.

Type 1: Management Style Change

Example: My initiative involved making major improvements to my personal leadership style. First, I worked to be more open and respectful of employee feedback and ideas. Second, I tried to keep a better balance between coaching and criticism. Third, I attempted to push more responsibility downward by allowing my analysts to be the experts and defer to them.

The changes in this category are alterations in personal management style. Type 1 was the only group to score above 2 on the individual target variable. The majority of the cases described efforts to change from a management style of direction and monitoring to a style of openness, trust, and participation. The new middle managerial mind-set in this cluster tends to be manifested in behaviors such as listening, coaching, and delegating. Some of the initiatives suggested increased sensitivity on customer focus, time management, quality, productivity, and safety. Unlike the other clusters, this cluster was ambiguous in terms of change magnitude; this cluster had a low to medium score on the change magnitude variable. Changes initiatives of this type represented 17% of the sample.

Type 2: Transactional Within Unit Change

Example: We needed to improve productivity and efficiency in our department. Previous attempts to introduce measurement systems had been resisted. Because of the varied and non-standard nature of our workload, it was argued that measurement was not practical. I came up with a new method that measured total department test data rather than total man hours. I was able to get a trial implementation going. I presented the method and the trial results to executive engineers and received enthusiastic approval.

The target of these initiatives was the work unit (this cluster had the second highest mean on work unit target). The majority of the cases involved actions to improve things

such as cooperation, information sharing, planning, monitoring progress, productivity savings, safety, quality, or customer satisfaction. Methods included reorganizing, changing procedures, instituting new measures, or setting new priorities. These changes tended to be transactional in nature, involving a concrete, well-understood problem, with few dimensions being changed (this cluster had the second lowest score on change magnitude). Changes of this type tended rather to be incremental improvements to the status quo. Changes of this type represented 21% of the cases.

Type 3: Transactional Organization Change

Example: The job of the Data Base Administrator (DBA) is to protect the data base from errors caused by hardware or software failure and to insure efficient access to the data. DBAs provide service to the data processing organization which consists of application programmers. The initiative was intended to get them to be more customer oriented. We undertook an initiative to increase responsiveness but the early results were negative. We kept at it and did a re-alignment between the DBAs and each of the three application groups in the data processing organization. This greatly increased the customer focus and improved the working relationships.

These changes are similar to Type 2 changes because they were attempts to resolve clearly defined problems, or transactional changes (this cluster had the lowest score on transformational change). Type 3 initiatives used methods similar to those employed in Type 2 initiatives, such as reorganizing, changing procedures, instituting new measures, or setting new priorities. The primary difference is that Type 3 initiatives tend to be aimed at the organization rather than the work group (this cluster had the second highest mean on the organization target variable). These initiatives tended to cut across the boundaries of the manager's group or unit. As a result, their initiatives tended to be broader than did Type 2 initiatives. Changes of this type represented 16% of the cases.

Type 4: Transformational Work Unit Change

Example: We are responsible for three different computer systems that provide divisional information. My department consisted of three stand alone sections. I reorganized it into five "natural work groups." The five natural work groups were set up around a customer focus. Instead of being responsible for a specific computer system, as in the past, the natural work group concept required all team members to be concerned with common data, by vehicle, and to provide a check and balance on data across systems. The result has been more consistent and higher quality data.

Like Type 2 initiatives, these changes tended to be targeted within a middle manager's work unit (this cluster had the highest score on the work unit target variable). But unlike Type 2 initiatives, they tended to be more transformational changes (this cluster had the second highest score on the change magnitude variable). These changes were much broader in scope and involved a reframing or reconceptualization of the status quo. The problem tended not to be well-defined, but ambiguous.

Consequently basic assumptions were questioned about the ways that things were currently done. The structure, relationships, and information all tended to be altered. Type 4 initiatives tend to include claims of high impact on the system and on the bottom line. Changes of this type represented 12% of the sample.

Type 5: Transformational Organization Change

Example: At the end of the LEAD core session, I made a commitment to substantially reduce product complexity on my [product lines]. This would be accomplished by deleting low take rate options, standardizing high take rate options, and logically grouping other related options. Initially I encountered considerable resistance. Then I got lucky in that there were some directives from the top to go in this direction. Now we have buy-in at all levels and across all functional areas. In fact, I am now under pressure to speed up the process.

Like the Type 4 initiatives, this type of change was of significant magnitude, reflecting the reframing of normal operating assumptions (this cluster had the highest score on the change magnitude variable). These initiatives involved a problem that was ambiguous or unclearly defined. Yet these initiatives tended to be targeted at a higher level of analysis than Type 4 initiatives. Like Type 3 initiatives, Type 5 initiatives tended to cross units, functions, or sometimes the entire company (this cluster had the highest score on the organization target variable). These initiatives also tended to involve many people in the process of change. Other examples included eliminating an entire process at a plant, a reduction in workforce while increasing customer focus, involving suppliers in internal cross-functional teams, a competitive benchmarking study that allowed suppliers to critique company processes, a major reduction in conflict across two functions, and development of a new bid strategy that allowed the company to reenter a lost market. Changes of this type represented 34% of the sample, the largest proportion of change initiatives.

Assessing the Model of Middle Managerial Change

Descriptive statistics and correlations for all variables in the model are provided in Table 2. The results of the ANOVAs linking individual and organizational characteristics and outcomes to the change typology are provided in Table 3. In analyzing across the five types of change, no significant differences between types were found on the demographic variables, barriers to change, superior perceptions of effectiveness, and promotions. Whereas there were no a priori expectations about the role of demographics in the change process, the other insignificant findings were unexpected and are discussed below.

Middle managers who perceived many change barriers were expected to make a personal change whereas those who perceived few barriers to change were expected to make more transformational changes. Contrary to expectations, a middle manager's perceptions of the barriers to change were not found to distinguish the type of initiative undertaken. Although all of the managers perceived barriers to change in their work environment, almost half of the managers initiated transformational changes. These

TABLE 2
Mean, Standard Deviations, Alpha Coefficients, and Correlations

Variable	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1. Gender	1.94	.24	(—)	.27	-.13	-.07	.10	.06	-.10	-.15	-.16	-.10	-.02	-.05	.03	-.04	.04	-.19	.12
2. Age	4.70	1.40	(—)	(—)	-.16	-.08	.06	.15	-.10	-.06	-.08	-.51	-.04	-.35	-.16	-.01	.02	.02	-.01
3. Education	5.94	1.57	(—)	(—)	(—)	.00	.05	-.10	-.06	-.03	-.06	-.02	-.08	.04	.10	.01	.03	-.05	-.03
4. Self-esteem	31.33	2.78	(.76)	(.76)	(.76)	-.04	.04	.59	.33	.30	.30	.10	-.11	-.03	-.13	-.02	-.24	.01	.09
5. Structural barrier	3.13	.74	(.77)	(.77)	(.77)	.38	-.08	-.13	-.16	-.16	-.10	-.10	-.06	.04	.02	.10	.10	.03	-.04
6. Conflict barrier	3.16	.85	(.66)	(.66)	(.66)	-.05	-.09	-.10	-.12	-.09	-.14	-.04	-.04	-.14	-.04	.03	-.02	.02	.10
7. Job affect	3.82	.45	(.75)	(.75)	(.75)	.41	.47	.07	.07	.09	.10	.16	-.11	.09	.10	.16	-.11	.05	.11
8. Social support cowork	3.18	.62	(.71)	(.71)	(.71)	.71	.07	.09	.12	.01	.10	-.13	-.06	.13	.00	.14	-.06	.13	.14
9. Social support superior	3.04	.84	(.72)	(.72)	(.72)	-.03	-.03	.16	.07	.09	-.01	-.13	.00	.14	.00	.14	-.09	.01	.04
10. Prior promotion	2.12	.96	(—)	(—)	(—)	(—)	(—)	.11	.36	.08	-.01	-.09	.01	.04	.04	-.07	-.05	.09	.09
11. Effectiveness (subordinates)	3.85	.54	(.77)	(.77)	(.77)	(.77)	(.77)	.25	.02	.04	-.07	-.05	.00	.00	.00	.00	.00	.00	.00
12. Effectiveness (superiors)	3.86	.73	(—)	(—)	(—)	(—)	(—)	(.70)	.22	.10	.00	.00	.00	.00	.00	.00	.00	.00	.00
13. Actual promotion	.13	.34	(—)	(—)	(—)	(—)	(—)	(—)	.06	.10	.01	.01	.01	.01	.01	.01	.01	.01	.01
14. Change magnitude	3.67	.69	(.67)	(.67)	(.67)	(.67)	(.67)	(.67)	.06	.10	.01	.01	.01	.01	.01	.01	.01	.01	.01
15. Individual target	1.78	1.27	(—)	(—)	(—)	(—)	(—)	(—)	.06	.10	.01	.01	.01	.01	.01	.01	.01	.01	.01
16. Work unit target	2.66	1.27	(—)	(—)	(—)	(—)	(—)	(—)	.06	.10	.01	.01	.01	.01	.01	.01	.01	.01	.01
17. Organization target	3.03	1.15	(—)	(—)	(—)	(—)	(—)	(—)	.06	.10	.01	.01	.01	.01	.01	.01	.01	.01	.01

NOTE: Reliability coefficients, where applicable, are provided in the diagonal. Correlations higher than .15 are significant at the .05 level of significance (two-tailed test).

TABLE 3
Planned Comparisons Between the Five Types of Change

	<i>Type 1</i> (n = 32)	<i>Type 2</i> (n = 42)	<i>Type 3</i> (n = 31)	<i>Type 4</i> (n = 21)	<i>Type 5</i> (n = 65)	<i>F Value</i>
Demographics						
Gender	1.91	1.95	1.94	2.00	1.95	.74
Age	4.59	4.33	4.52	4.48	4.99	1.87
Education	5.75	5.88	6.06	5.86	5.89	.16
Individual characteristics						
Self-esteem	29.63 ^a	31.62	31.41	31.50	31.67 ^a	3.26***
Job affect	3.67 ^{ab}	3.72 ^{cd}	3.75	3.95 ^{ac}	3.94 ^{bd}	3.20***
Organization characteristics						
Social support coworkers	2.95 ^{ab}	3.06	3.11	3.26 ^a	3.36 ^b	3.02***
Social support supervisor	2.77 ^a	2.86	3.01	3.33 ^a	3.20	2.44**
Structural barrier	3.28	3.03	3.07	3.14	3.15	.60
Embedded conflict barrier	3.04	3.07	3.25	3.25	3.21	.47
Prior promotions	2.03	2.33	2.26	2.43	1.92	1.97*
Change outcomes						
Effectiveness (subordinates)	3.61 ^{ab}	3.84	3.86	4.03 ^a	4.00 ^b	2.85**
Effectiveness (superior)	3.84	3.96	3.84	4.08	3.85	.49
Promotion (%)	.15	.15	.21	.17	.06	1.18

NOTE: Mean scores for each type of change are presented. Groups types with the same superscript are different significantly at $p < .05$.

* $p < .10$. ** $p < .05$. *** $p < .01$.

results suggest that middle managers, regardless of perceived barriers, can make substantial change in an organization.

Second, managers making transformational change were expected to be seen by their bosses as more effective than those making transactional or personal changes. However, no significant differences were found. Given that the traditional role for middle managers is transactional in orientation, some bosses may have been uneasy about middle managers initiating transformational change. Consequently, there may be ambiguity in the minds of the bosses regarding how to evaluate middle managers—in their more traditional role as transactional manager or in their newly developed role as transactional leaders. This ambiguity may account for the nonsignificant findings on supervisor assessments of effectiveness.

Third, the more “high potential” middle managers, those who received frequent promotions in the past 5 years, were expected to embrace the charge to become transformational. However, no significant differences were found on promotion history. In fact, the two groups of managers making transformational change were at opposite ends of the spectrum on promotion history. Those making transformational change targeted at the work unit had the highest promotion rate prior to attending LEAD, whereas those making transformational change targeted at the organization had the lowest promotion rate both prior to attending LEAD and subsequently. A discussion of this complex finding is provided in the section on theoretical implications.

And, fourth, no significant differences across the five change types were found on the three demographic variables. However, the correlations in Table 2 do suggest an interesting trend with regard to demographics. Age is significantly and negatively related to prior and future promotions. Thus older managers are more likely to be plateaued. Given the sample of middle managers, this finding is not surprising; the older managers in our sample by definition would be plateaued as nonplateaued older managers would have been promoted to higher levels of the organizational hierarchy.

What Characteristics Differentiate the Change Types?

The planned comparisons indicate that self-esteem, job affect, social support, and subordinate perceptions of effectiveness do differentiate the transformational change types from the personal management style changes and (to a lesser extent) the transactional changes. Middle managers who made transformational organizational change had significantly higher social support scores and were seen as more effective by their subordinates than were managers making personal change. Similarly, managers making transformational changes had significantly higher job affect scores than those making transactional unit or personal changes. Managers who made personal style changes had lower self-esteem scores than managers making either transactional or transformational change. In sum, most of the significant findings distinguish those who made personal management style changes from those who made more transformational changes.

These findings suggest that those experiencing the most difficulties at the psychological and social levels prior to participating in the LEAD program tended to limit their initiative to personal or management style changes. Their management style may have been the one component of their work environment over which they felt any personal control. However, it is not at all clear that their management style changes were successfully implemented. Given the limited social support from significant others, at the time of the follow-up, individuals making personal changes were assessed by their subordinates as the least effective of any change types. It is not clear whether the LEAD program was able to effectively reach these people to make system changes. However, given their low self-esteem, the most functional response for these people was likely to be a change in their self-concept.

In contrast, individuals who had the most positive feelings about their job and relationships at work prior to attending LEAD were the ones most likely to make transformational changes. Those making transformational changes came to the LEAD program with the strongest indicators of positive affect: job affect, self-esteem, and social support from coworkers and superiors. They were also perceived as the most effective by their subordinates following participation in LEAD. Prior research on positive affect (Staw & Barsade, 1993) may explain the role of middle managerial mind-set on the magnitude of change undertaken. People, particularly managers because their work tends to be relatively unstructured (Izraeli, 1975), with positive dispositions are found to be better performers (Staw, Bell, & Clausen, 1986) and to have higher scores on helping behavior, risk taking, negotiation skills, creativity, susceptibility to influence, interpersonal relations, and managerial performance than

managers with negative dispositions (Staw & Barsade, 1993). Thus positive affect prior to participation in the LEAD program differentiated who was ultimately affected by the program to make transformational change. Clearly, however, the positive mind-set must be tempered by the reality of the situation for middle managers to be effective change masters (Kanter, 1983).

Theoretical Implications

Because of the limited ability of traditional training programs to effect managerial change (McCall et al., 1988; Senge, 1990), the LEAD program was designed to be different. Rather than teaching managerial skills, the LEAD program was focused on reorienting the role of the middle manager, linking the program to key strategic, structural, and cultural changes simultaneously occurring at Ford. The results of the program were dramatic, stimulating almost half of the sample to experiment with transformational change.

Yet, in spite of LEAD's apparent success, the study tells us as much about resistance to change as it does about change. The research identified structural and cultural encasements that worked against deep change in the middle of the organization. The change typology indicated that those structural and cultural barriers were experienced by all but that, when stimulated by the LEAD program, only those with positive affect, self-esteem, and social support embraced the charge to make transformational change. Those with negative affect, poor self-esteem, and little social support, responded with management style changes that had little affect on the organization. The findings suggest that individual mind-set was a key moderator in determining who embraced change and who resisted it. In total, only 46% of the sample were able to embrace the charge to become more transformational in orientation; more than half of the middle managers made only incremental or personal style changes. In sum, the findings seem to tell us as much about resistance to change at the middle of the organization as they tell us about change mastery.

A deeper look at other findings illuminates additional information about middle managerial resistance to change. First, the correlation matrix shows that prior or current promotions were not related to any of the dimensions of change. The lack of a relationship between promotions and change efforts is likely to send a powerful message to middle managers about the value of deep change in the organization. Second, as described above, the two groups of managers making transformational change were at opposite ends of the spectrum regarding their history of promotions. The managers making transformational change targeting the work unit had the highest promotion rates in the years prior to their participation in LEAD and a moderate rate of subsequent promotion. These individuals appear to be the high potential middle managers. Interestingly, this group of high potentials made the more conservative transformational changes—those aimed at their own work unit. Such changes are likely to be less threatening to one's boss. In contrast, individuals making transformational changes aimed at the organization had the lowest promotion rates prior to LEAD and the lowest rate of subsequent promotion. They apparently are the plateaued middle managers. Needless to say, the finding that those managers receiving the fewest

promotions in the organization were the ones most likely to initiate the most profound changes (i.e., transformational changes targeted at the organization) was unexpected.

One possible explanation for this unexpected finding is that the plateaued middle managers at Ford were sufficiently insecure about their employment prospects so that, in decoding the organizational signals about what is expected to remain employed, they conformed best to the tacit expectations conveyed through the program.¹ Given concerns about job security, these plateaued managers may have initiated transformational change targeted at the organization out of fear for their jobs. Yet anecdotal evidence suggests otherwise. Downsizings initiated prior to the start of LEAD had avoided lay-offs or firings, depending on attrition and early retirement buyouts to reduce the management ranks. Furthermore, no downsizing of the middle managerial ranks was anticipated during the 4-year period the LEAD program was in existence. The interviews and open-ended questions on barriers to change also fail to provide evidence for this hypothesis, as job insecurity never emerged as a barrier to change. Thus support for this explanation is weak.

To help make sense of this finding, the middle managers themselves were asked for their interpretation. Their interpretations guided us in a different direction. Many talked about how LEAD served as an important wake-up call for them as middle managers explaining how LEAD stimulated them to break out of a rut. Through participation in the program and their own introspection, they chose, in their own words, to "do the right thing" rather than the "political thing" or the "easy thing" as in the past. To the present day, participants approach the second author, recounting stories that reflect this rationale. But why does this occur among plateaued managers and not among high potential managers?

On one hand, it may be that these seemingly plateaued middle managers are particularly hardy or resilient in the face of adversity (Kobasa, 1979), given their high scores on self-esteem in spite of low promotion. On the other hand, the LEAD program may have prompted plateaued middle managers to redefine the risk-reward ratio. It may be that a plateaued manager, no longer constrained by the political and ubiquitous race for promotion, can suddenly assume a new perspective regarding his or her role in the organization (Ettington, 1992). With lessened pressure for political conformity, the person may feel able to listen to his or her inner voice regarding the appropriate path for change. Freed from the worry of stepping on other people's toes, the person may feel more comfortable challenging well-entrenched but outmoded assumptions and practices in the organization. They may become an ethical advocate for the common good by asking the questions that others are afraid to ask. The result is an individual who is willing to engage transformational change.

Smith's (1982) work on group conflict provides insight on this seemingly paradoxical finding. He argues that whoever is in power is conservative and wants to maintain the status quo but whoever lacks power seeks change. The high-potential managers were in a more powerful position than were the plateaued managers and more likely to be imprisoned by structural and cultural encasements. Although the high potentials would have liked to have thought "of themselves as free agents, able to make intelligent and informed choices, [they] seemed to be somehow caught in a set of binds that acted as prison walls" (Smith, 1982, p. 4). The high-potential managers had more to lose by

making change at an organizational level than did the less powerful plateaued managers. Given these arguments, it is less surprising to find that the high potential managers targeted their change initiative within their own domain of control (i.e., their work unit), whereas the plateaued managers were able to initiate change outside their domain of control (i.e., the organization).

Practical Implications

These results confirm that in large hierarchies, even the most progressive ones, there are considerable barriers to initiative taking. The potent nature of these barriers accounts for the fact that, under normal conditions, middle managers lean toward transactional behaviors. However, it is possible to stimulate middle managers to redefine their roles and to experiment with more transformational behaviors. The outcomes of the LEAD program suggest that middle managers can, in the face of considerable barriers, alter their behavior to make transformational change. However, not all individuals were equally affected by the LEAD program. Only those with positive affect prior to attending LEAD truly embraced the transformational mission of the program. This finding has several practical implications.

First, given the findings regarding positive affect and transformational change, senior management must be increasingly sensitive to attitude and morale issues. At the same time, bitterness among middle managers is at an all-time high as their ranks are being decimated by the corporate trend to downsize. "The cynicism out there is frightening. Middle managers have become insecure, and they feel unbelievably hurt. They feel like slaves on the auction block" (Peter Drucker, as quoted in "Caught," 1988, p. 80). If senior management is serious about unleashing the transformational energy of the "frozen middle," it must pay attention to the feelings of middle managers. As these results show, when stimulated to make change, middle managers with negative affect tend to be unsuccessful in their efforts.

Second, developing transformational middle managers may require much more than most senior executives want to consider expending. There is a strong desire to believe that change can be accomplished by writing a memo announcing that people need to behave differently. This proclamation may then be immortalized on a plastic card that people can carry with them wherever they go. However, real change requires real investment. The LEAD program represents creative design, long-term commitment, and heavy expenditure. But the long-term pay-offs can be high. The value of the improvements resulting from the LEAD-inspired change initiatives have been impressive. Perhaps the most telling sign of all is that in the midst of financial crisis, when almost all training and development funding was being cut in the company, Ford preserved funding for the LEAD program.

Third, the findings also suggest that an important resource in many organizations may be unintentionally wasted or consciously destroyed. It is interesting that although many organizations seek to empower people and encourage greater leadership from middle managers, their downsizing efforts are targeted at exactly the people who were found in this sample to make the most transformational change. In this study, it was found that the plateaued managers were most likely to take the greatest risks on behalf

of the company. The assumption that plateaued managers should be the initial targets of downsizing efforts through such things as early retirement buyouts may be terribly destructive to organizational responsiveness. The organization may be losing precisely the people who can enhance the organization's responsiveness through transformational change. Although it is true that many managers may be plateaued and less likely to respond to stimulation, it is likely that every large organization has a small army of plateaued managers waiting to receive a thoughtful, honest, and concerted call to arms.

Limitations and Directions for Future Research

Though this article provides an important first step in understanding the transformational capacities of middle managers in large organizations, it has several limitations. First, the study is primarily exploratory in nature. Only a skeletal theory has been developed on the change process of middle managers. Future research should draw on these exploratory research findings to develop a rich theoretical framework that can then be empirically validated with new data. Second, the generalizability of the findings is limited. In spite of the richness of the data analyzed in this study, the research was nevertheless conducted in a single organization. Because this organization had a manufacturing orientation, generalizability is unknown for more service-oriented companies, not-for-profit companies, or governmental bodies. Generalizability is also limited given the homogeneity of the sample. Eighty-seven percent of the sample were white males in their mid-forties. As such, the leadership program addressed mainly two developmental periods (Levinson, 1978) of white men (i.e., "becoming one's own man" and "mid-life transition"). Thus future research should examine the transformational capacities of middle managers using more heterogeneous samples and across a larger number of firms.

Third, although different pieces of data were collected at different points in time, a number of key pieces of data were collected at the same point in time. Thus causality cannot be ascertained. A final limitation is that managers may not be truthfully reporting information on their change initiative. There were no "independent" observations of actual behavior by the middle managers. The multiple realities of life suggest that what people say about what they have done cannot be relied upon as an accurate account of what they actually did (Smith, 1982); social desirability may confound the results. In spite of the fact that the managers were assured that their individual data would be kept in confidence from the organization, it is possible that individuals had a bias toward reporting more transformational change initiatives. However, given the assurances of confidentiality and the fact that an empirical measure of social desirability was not found to be significantly related to any of the change initiative variables, we do not believe that managers exaggerated their self-reported change initiatives to appear more transformational. Nevertheless, future research should tap multiple assessments of middle managerial change initiatives to discount the possibility of response bias and common method variance. Such data would provide information on the interaction patterns between different groups, providing richer interpretations of the change process (Smith, 1982).

In spite of these limitations, this article does make several contributions to the literature. It offers some initial theoretical notions about the process through which middle managers can become transformational change agents. The study indicates that both individual characteristics and the organizational context influence the propensity of middle managers to embrace transformational change. In this way, the study is a first step in developing a nomological network of middle managerial change in contemporary organizations. The study also offers insights into the process by which the role of middle managers can be transformed and insights on the extent to which middle managers can be empowered to make effective change efforts in contemporary organizations. A particular strength of the study is the richness of the longitudinal data, which includes individual characteristics collected prior to the LEAD program, specific information about the change initiative collected at the follow-up segment of the program, and promotion data collected approximately 2 years following the program. The findings suggest that those with more positive affect prior to attending LEAD were the most likely to respond to the transformational charge. The unexpected finding on the more plateaued managers provides fertile ground for future research on middle managerial change and may serve as a warning signal to organizations that have written off plateaued middle managers as "dead wood."

APPENDIX

Measures

Target of the Change Initiative

1. Personal change
2. Group or unit change
3. Organization change

Magnitude of the Change Initiative

1. High in personal risk
2. Major in scope
3. Revolutionary
4. A change in many dimensions of the current system

Barriers to Change

1. Structural constraints
 - a. Top-down organizational culture: "The culture is too top down oriented and we have little freedom to initiate changes." "The culture discourages change."
 - b. Short-term thinking: "There is too much of a short term focus in the organization—the perspective is too narrow." "The results of the initiative would take too long in coming."
 - c. Lack of top management support: "There is a lack of top management support." "The top management is indecisive—what do they really want?"
 - d. Bureaucratic structure: "There are too many levels to get approval for something new." "There is too much paperwork and red tape."
 - e. Limited rewards for change: "There are few rewards for making change." "There is no incentive for taking risks."
 - f. Lack of vision: "There is a lack of common vision of what the future should look like." "There are competing visions of the future."

- g. Tradition for status quo: "There is no precedence for change initiatives, and there is skepticism that change can occur." "It is too hard to break established habits engrained in the status quo."
2. Embedded conflict
- Functional conflict: "The functional areas have goal conflicts and different priorities." "There is an unwillingness to share information across functions for fear of losing control." "Functions are too competitive."
 - Conflict with subordinates: "There is a lack of interest and commitment in teamwork." "There is a negative attitude among group members because the initiative requires more work in the short run."
 - Conflict across peers: "There is a lot of finger pointing to avoid blame." "There is suspicion that some group members may try to steal the show."
3. Personal time constraints
- Time limitations: "I have no time to think about making changes in the system." "I am too busy fighting fires to be future looking."
 - Non-work commitments: "The project will overlap with personal and family responsibilities." "I am working too many hours already and can't take on more responsibilities."
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NOTE

- We thank the reviewers for their suggestions on this rationale.

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