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Homegrown process improvement employing a change message model

Homegrown
process
improvement

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Abstract

Purpose – The purpose of this paper is to provide a framework for the employee-led development of a planned organizational change.

Design/methodology/approach – The authors, as action researchers, aid a large public sector organization through the diagnosis and planning of an organizational change. The data were collected via mixed method web-based surveys, while the change development and implementation planning leveraged change-cynical opinion leaders from within the organization to develop the focal change.

Findings – Communication and participation transformed the cynics into change agents. Furthermore, the described technique can help organizations develop a sense of self-reliance with regards to problem-solving capabilities.

Originality/value – While the importance of communication is well-known, this effort used change communication as an a priori tool in the development of a planned change. This method enabled team members to focus on helping their peers accept the change in addition to meeting operational requirements. Furthermore, using change cynics as the principal participants in the change development enabled the organization to garner support from its toughest critics.

Keywords Organizational change, Communication, Participation, Change management, Public sector organizations

Paper type Case study

Introduction

In today's ever-changing business environment, it is clear that an organization's ability to innovate and implement planned change is a requisite for success, if not survival (Hamel, 2002). Consequently, organizational leaders must determine appropriate methods to develop, introduce, and institutionalize planned change. This task can appear daunting. Many change efforts start out well, but do not succeed because leaders fail to anticipate internal resistance (Beaudan, 2006). Moreover, accumulated failed changes often create cynicism among members, creating a cycle wherein subsequent change efforts become more and more difficult to implement (Stanley *et al.*, 2005).



Even in the wake of successful changes, individuals may experience change fatigue, a sense of being overwhelmed by the sheer number of planned change initiatives they are expected to adopt (Beaudan, 2006; MacIntosh *et al.*, 2007). While much is written regarding change as a necessary organizational competency (Kotter, 2008; Lawler and Worley, 2006), organizational leaders, faced with limited internal resources, may solicit the assistance of external consultants who often implement pre-developed solutions (Armenakis *et al.*, 1990; Gregory *et al.*, 2007). Despite the regular use of consultants for common organizational changes, such as quality management, supply chain management, information technologies, business process reengineering, etc. (Clegg and Walsh, 2004), failure rates of 40-70 percent have been reported for organizational change initiatives (Clegg and Walsh, 2004; Kwahk and Lee, 2008; McKinsey, 2008).

Regardless of the particular change initiative, increasing the change readiness of organizational members has often been suggested as a means to increase the adoption rate of change programs. Within the organizational change literature, employee participation and effective communication are cited as two of the most effective means to increase the change readiness of individuals (Armenakis *et al.*, 1993; Holt *et al.*, 2007; Wanberg and Banas, 2000). The present study chronicles an approach to planned change that combines organizational member participation with a change communication model. In doing so, we provide a framework for employee-led development and describe the implementation of a planned organizational change.

The focal organization of this action research project was a large public organization seeking to improve an existing business process. In this paper, we first review the relevant change management literature, focusing on the effects of employee participation and communication on individual change readiness attitudes. Specific emphasis is placed on the identification and use of opinion leaders within the organization, as well as the application of a change communication model as a development tool. Following the theoretical discussion, we present a case study of a planned change initiative that includes organizational members with informal power. The planned change initiative included:

- a diagnostic phase, during which data from organization members and external customers were collected and analyzed;
- the selection of members for a process improvement team (PIT) that was chartered to develop the change; and
- a description of the PIT discussions and problem solving that forged the content of the change.

Finally, we present the intervention outcomes, beyond the change *per se*, that resulted from the process improvement effort.

Literature review

In the organizational change literature, Lewin's (1951) force field analysis framework conceptualizes the status quo as an equilibrium state resulting from driving and restraining forces. While driving forces direct behavior away from the status quo, restraining forces direct behavior to maintain the status quo. For the equilibrium state to change, driving forces must be increased, while restraining forces must be reduced.

The principles of force field analysis in turn inform Lewin's (1951) three-step model for change. The model recognizes the need to increase driving forces and reduce

restraining forces in order to achieve a new equilibrium. The first step in the model involves unfreezing the status quo. Accordingly, to Lewin, human behavior can be conceptualized as a quasi-stationary equilibrium resulting from driving and restraining forces (Burnes, 2004). In order for new behavior to be adopted, the equilibrium needs to be destabilized (unfrozen). The second step, moving, involves enabling groups and individuals to move toward the desired set of behaviors. The third step, refreezing, seeks to stabilize the new quasi-stationary equilibrium to prevent a return to the previous behavior. In organizational terms, refreezing involves changes to organizational culture norms, policies, and practices (Burnes, 2004; Cummings and Worley, 2005).

Unfreezing, the first step in Lewin's three-step model, involves weakening forces that restrain movement and strengthening driving forces related to the desired change. Sufficiently addressing the unfreezing step is crucial to successful change implementation as failing to provide an effective unfreezing process often results in resistance or outright failure (Armenakis *et al.*, 1993; Schein, 1979). Restraining forces in an organizational change setting can take any number of forms (Pardo del Val and Fuentes, 2003; Rumelt, 1995), including financial and operational restraints (i.e. high change costs, capabilities gaps, embedded routines), as well as organizational member attitudinal restraints (such as denial and cynicism). Restraining forces in the form of negative recipient attitudes toward organizational change can be a significant barrier to change. The concept of change recipient resistance has long been recognized as a significant obstacle to successful change implementation (Coch and French, 1948; Lawrence, 1954; Pardo del Val and Fuentes, 2003; Waddell and Sohal, 1998). Closely related the concept of change resistance is that of change readiness (Armenakis *et al.*, 1993). Change readiness is conceptualized as the cognitive precursor to behaviors of either resistance to or support for a change effort. As such, resistance to change can be reduced, or even avoided, by creating change readiness (Armenakis *et al.*, 1993). Unfreezing efforts related to promoting change readiness may be assisted by using appropriate strategies, including: education and communication, participation and involvement, facilitation and support, and negotiation and agreement (Armenakis *et al.*, 1999; Armenakis *et al.*, 1993; Kotter and Schlesinger, 1979).

As an organization embarks on a change effort, the leadership challenge of influencing individual employee beliefs in order to create readiness for a change is particularly germane. Change readiness is broadly defined as "a collection of thoughts and intentions toward a specific change effort" (Bernerth, 2004, p. 39). The collective change readiness of individuals within an organization represents the readiness of that employee group as a whole. Researchers have focused much of their attention on gaining a better understanding of factors that form an employee's change readiness, hoping to improve the organization's ability to influence the extent of support for a specific change program (Piderit, 2000). The literature documenting the launch and management of change (both research and practitioner oriented) is substantial (Armenakis *et al.*, 1993; Holt *et al.*, 2007). Active participation and persuasive communication are two of the most effective strategies available to change managers to alter individual cognitions and emotions toward a prospective change (Armenakis *et al.*, 1993; Daly and Geyer, 1994; Holt *et al.*, 2007). Participation and communication consistently increase individual readiness for change and lead to positive organizational outcomes (Lines, 2004; Jimmieson *et al.*, 2008; Wanberg and Banas, 2000).

Change message

Armenakis and Harris (2002) have proposed a model for effective organizational change, termed the readiness model. At the heart of the readiness model lie the change message and its conveyance to organizational members. The change message consists of five components regarding the change. Together, the change message and the strategies for message delivery provide a framework for creating employee readiness and motivation to adopt and institutionalize the change (Armenakis and Harris, 2002).

The change message is structured to address the issues which are most important to employees in order to shape their attitudes and intentions to support the change. Employee sentiments elicited by the content of the message combine to shape an individual's motivation – positive (readiness and support) or negative (resistance) – toward the change. The change message consists of five principal components: discrepancy, appropriateness, efficacy, principal support, and valence. Discrepancy addresses why the organization must change.

Appropriateness is the concurrence that the proposed solution to the discrepancy is the correct solution. Principal support is the belief that both formal and informal leaders within the organization support the change. It refers to the employee's belief that the program has the long-term support of senior management. Personal valence is the perceived personal benefit arising from the organizational change. Finally, efficacy refers to the change recipient's belief as to whether or not he/she can personally perform the job changes required by the organization-wide change and his/her belief that the organization can successfully implement the change. No matter how appropriate the change is, if the employees do not believe they can accomplish what is required, they most likely will not attempt to change (Armenakis and Harris, 2002).

The effectiveness of a change message will likely depend on the degree to which the message content fully addresses each of the five organizational change components as they relate to the change. Delivery of a formal change message, addressing each of the five change sentiments, will likely result in change recipients developing more favorable cognitions about the change than if they were not to receive any change message. The extent to which change recipients develop motivation to adopt the change will likely correspond to the degree to which a change message comprehensively addresses each of the five organizational change components (Armenakis and Harris, 2002).

Examining change readiness from the perspective of these five dimensions can provide valuable insights to change agents. Proponents of change may anticipate likely questions from employees and create an implementation plan with the answers in an effort to reduce change resistance, thereby increasing the chance of a successful change. The elements of the change message help organizational leaders communicate effectively in order to increase change recipient support (Armenakis *et al.*, 2007).

Message conveyance strategies

While the five change components relate to the content of the change message, the means by which a change message is delivered to recipients is equally important. Three change message conveyance strategies found to be effective include participation, persuasive communication, and managing internal and external information (Armenakis and Harris, 2002; Armenakis *et al.*, 1993).

Participation. As early as 1948, Coch and French (1948) in their classic experimental study of employee resistance to organizational change, found employee groups

participating in the change were less resistant to the change, more productive, and less likely to quit their jobs. Active participation is the act of involving individual employees in activities which will expose them to salient information concerning why the change is being enacted and how it will be successfully implemented (Armenakis *et al.*, 1993). Employee participation can be characterized as decision or process control. Decision control is involvement in the determination of the change, whereas process control is the opportunity to agree or disagree with the change (Chawla and Kelloway, 2004; Lines, 2004).

Active participation may possibly be the most effective means of transmitting the elements of the change message because it capitalizes on self-discovery (Armenakis and Harris, 2002; Fishbein and Ajzen, 1975). Active participation can take several forms, including enactive mastery (progressively building skills, knowledge, and efficacy through ongoing involvement and practice), vicarious learning (watching and learning from others), and participation in decision making (Armenakis *et al.*, 1999). Both theoretical and empirical research indicates that active participation is a characteristic of successful change efforts (Amiot *et al.*, 2006). Participation is an effective tool as it empowers employees (Amiot *et al.*, 2006), builds trust, and increases cooperation with the change (Chawla and Kelloway, 2004; Wanberg and Banas, 2000).

Successful planned change requires participation by members at multiple levels of the organization during all stages of implementation (Bunker and Alban, 1997; Fernandez and Rainey, 2006; Greiner, 1967; Johnson and Leavitt, 2001; Pasmore, 1994). The literature indicates that including organizational members can reduce change resistance by creating psychological ownership, promoting the dissemination of critical information, and encouraging employee feedback for fine-tuning the change during implementation (Fernandez and Rainey, 2006).

Ideally, it is desirable to include all affected members in the change development process. However, owing to an organization's size and the complexity of the change, complete participation is often not possible. Fortunately, vicarious participation through representatives in large group change development has been shown to reduce change resistance (Grubbs, 2002; Lines, 2004). Research has also shown that the success of this secondhand participation depends on the credibility and influence of the selected representatives (Lam and Shaubroeck, 2000).

Persuasive communication. Persuasive communication delivers the change message directly to recipients, and may take many forms, including speeches, memos, or other forms of communication (Armenakis and Harris, 2002). In the context of change management, persuasive communication has parallel goals to that of participation. Both seek to inform employees:

- why the organization must change (addressing the change message sentiment of discrepancy); and
- how it will successfully do so (addressing the change message component of efficacy) (Armenakis *et al.*, 1993).

The level of persuasive communication can have an important impact on change recipient beliefs. The communication of specific, relevant information addressing immediate concerns can enable employees to increase their coping potential by providing them with enough information to form realistic views of their situation (Liu and Perrewé, 2005; Richardson and Denton, 1996). In contrast, the absence

of a well-communicated change message can contribute to an environment that is conducive to the psychological precursors of rumor spread, such as uncertainty, thematic importance, and anxiety (Bordia *et al.*, 2006).

Research suggests the anxiety created by “fear of the unknown” is a primary source for initial change resistance (Armenakis and Fredenberger, 1997; Schweiger and DeNisi, 1991). Implicit in this observation is the change recipient’s desire for information to fill perceived knowledge voids (Armenakis and Harris, 2002). If organizational leadership fails to provide adequate information or is not viewed as credible, employees will seek information horizontally from peers (Bordia *et al.*, 2006). Much of this information can be detrimental to the organization (Bordia *et al.*, 2006). Although both negative and positive rumors exist, research suggests that negative rumors are much more prevalent (Bordia *et al.*, 2006; Kamins *et al.*, 1997; Walker and Blaine, 1991). Such negative rumors are associated with unsettled feelings about the future (Smeltzer, 1991; Smeltzer and Zener, 1992) and negative emotions such as fear (Liu and Perrewè, 2005), which can heighten change resistance. Thus, management must provide an ample amount of persuasive communication in order to educate employees, reduce rumors, decrease fears towards the change (Chawla and Kelloway, 2004), and gain greater change acceptance (Wanberg and Banas, 2000).

Opinion leaders. Peer networks have been recognized as a mechanism for spreading both fundamental (e.g. organizational re-structuring) and incremental (e.g. continuous improvement programs) changes (Rogers, 2003; Vitale, 2008). Management’s use of respected peers, or opinion leaders, to increase the probability of successful organizational change has long been recognized in the field of organizational science (Ryan and Gross, 1943). Opinion leaders are characterized as credible, respected peers (Armenakis and Fredenberger, 1997) who “exert an unequal amount of influence on the decisions of others” (Rogers and Cartano, 1962, p. 435). As respected peers, they can act either as horizontal change agents spreading positive change attitudes and information throughout the organization (Armenakis and Fredenberger, 1997; Mohrman *et al.*, 2003) or as leaders of informal networks that resist change (Kahn *et al.*, 2003). During times of uncertainty created by organizational change, employees are likely to turn to influential peers (Ryan and Gross, 1943; Umphress *et al.*, 2003; Vitale, 2008). Thus, the success of a planned change may very well depend on the ability of an organization’s leadership to identify opinion leaders and gain their support (Maienhofer and Finholt, 2002; Rogers, 2003). These opinion leaders are able to more readily influence employees than the formal leaders (Lam and Schaubroeck, 2000).

Research has found that those who are cynical about change are more likely to report that they lack meaningful opportunities to participate in decision making, feel in the dark about what is going at work, and have supervisors who poorly communicate with them (Reichers *et al.*, 1997). Rogers (2003) posits that in an organization where change cynicism is a prevailing sentiment, members will look to those individuals who are cynical as opinion leaders. These cynics will make the best change agents (Armenakis *et al.*, 1999), and we posit that they can be transformed through participation and communication.

Study approach

The present study incorporated the change readiness model as a change development model framework. Specifically, an employee-developed solution was facilitated and analyzed using each of the five message components in an iterative manner throughout

the change development process (Armenakis and Harris, 2002). Additionally, the strategies of participation and persuasive communication were employed to convey the change message to organizational members. The present study moved beyond using the change message as a communication tool and incorporated it as a framework for change development.

This study was conducted in a public sector organization within the US Department of Defense. The organization had been undergoing many changes in order to meet fiscal restraints and productivity goals in the face of a smaller work force. Approximately, one year prior to the present study, executive leadership made public a list of processes to be improved as part of its transformation efforts. Senior management confided that the large number of impending changes necessitated by the transformation goals was intimidating, in that they were not sure how the frontline employees would react. There was a fear among the organization's leadership that those affected by the changes would be overwhelmed. As the process improvement described in this study was the first among these multiple efforts, leadership felt it was important to establish an early success. Traditionally, the organization utilized a top-down approach to change with little justification given to those affected. That is, employees were expected to implement leader-directed change. These concerns, coupled with the hope of finding a method that could provide a vehicle for future changes, motivated senior leaders to partner with our research team.

The focus of our involvement was to aid in the exploration of options for an improved work request approval and tracking (WRAT) process. The work requests pertained to facility repair and construction activities. This process improvement effort would affect approximately 1,700 individuals in ten geographically separated campuses. When we, as researchers, joined the project, the process for improvement had been identified (i.e. the WRAT), but no actions had taken place that would define the scope or content of the improvement. In exchange for our services, the organization provided access for data collection in the form of web surveys and interviews with selected change agents. Thus, at the request of executive leadership, we began the process improvement effort.

Our involvement with the organization and this study focused on the desired outcome of developing a method to implement change which combined employee involvement and effective change communication. In order to achieve this outcome, our first step was a diagnostic phase (Cummings and Worley, 2005), which used two mixed method surveys directed at customers (sample A) and service providers (sample B), respectively. The second step was the identification and selection of opinion leaders (sample C) to participate in the study. The final step involved utilizing opinion leaders (Vitale, 2008) to develop a planned change based on a change message model (Armenakis and Harris, 2002). The data relating to the behavior and attitudes displayed by opinion leaders were collected via ethnographic observations during a change development event.

Method and analysis of the diagnostic phase

Methodology for sample A, customers

An internet-based survey was administered to users of the WRAT for the purpose of determining customer satisfaction. Customers were defined as the individuals responsible for submitting work requests for workplace facility repairs, as well as their respective managers. In total, 351 customers responded to the survey corresponding to a 14 percent

response rate. The number of work requests physically submitted by survey respondents ranged from 0 to 100 ($M = 10.89$, $SD = 16.78$, median = 6). About 90 percent of the respondents submitted less than 30 requests ($M = 6.92$, $SD = 6.61$, median = 5). About 73 percent of the respondents had worked for the organization for more than ten years.

Measures. Service quality. The updated SERVQUAL instrument (Parasuraman *et al.*, 1991) was used to measure customer satisfaction. This instrument consists of a series of questions relating to five constructs asked with two different frames of reference. The first reference point is perceptions, which relates to the respondent's knowledge of the organization and how he/she believes it will perform. The second reference point is expectations, which involves the respondent comparing the organization's service to that of its competitors, including general contractors and other companies offering maintenance, repair, and construction services.

The five quality constructs include reliability, tangibles, responsiveness, assurance, and empathy. The tangibles construct was revised and rewritten; this adaptation is in line with the original intent of the instrument to be adapted to fit the characteristics and needs of a specific organization (Parasuraman *et al.*, 1998). For example, one question was revised from "They should have up-to-date equipment," in the Parasuraman *et al.* instrument to "When [organization name] finishes their work, it looks professionally finished," in order to account for the nature of construction services. Respondents indicated the extent of their agreement with each statement using a six-point Likert-type scale (1 = strongly disagree, 6 = strongly agree). Parasuraman *et al.* reported a coefficient alpha for reliability (five items), tangibles (four items), responsiveness (four items), assurance (four items), and empathy (five items) of 0.72, 0.83, 0.82, 0.81, and 0.86, respectively. Using an aggregate perception of service quality score, the coefficient alpha was calculated to be 0.96 for this sample.

Overall quality. This was measured using the three overall quality measures developed by Bitner and Huber (1994). Respondents indicated the extent of their agreement with each statement using a five-point Likert-type scale (1 = very poor, 5 = excellent). Bitner and Huber reported item reliabilities of 0.87, 0.88, and 0.78 for the measures of all quality, outstanding quality, and super quality, respectively. The coefficient alpha calculated for our sample was 0.84.

Qualitative perceptions of the WRAT. The following open-ended questions were asked to capture customers' perceptions of strengths and weaknesses of the WRAT process:

- What do you believe are the strengths of the work order process?
- What do you believe are the weaknesses of the work order process?

Methodology for sample B, service providers

Service providers perform facility maintenance, repair, and construction functions for Department of Defense installations. All subordinates and supervisors working in these functions were invited to participate in the study. An organizational diagnostic survey was distributed to employees who would be affected by the change in order to understand and evaluate organizational issues involved with the intervention (Lok and Crawford, 2000). It consisted of a quantitative measure to assess organizational change readiness (Armenakis *et al.*, 2007) and qualitative measures to assess the strengths and weaknesses of the current process, in addition to understanding individual concerns regarding the prospective change. As many of the organization's members deploy frequently

or perform duties away from their home location, the exact number of employees contacted to participate is unknown; however, the number of employees estimated to be available for survey completion is about 725. In total, 193 employees (26 percent) completed surveys. Of the 193 surveys, 44 were incomplete or contained unusable data.

Measures. Perception of service quality. The updated SERVQUAL instrument (Parasuraman *et al.*, 1991) was modified for service providers. The modification reflected only a change in viewpoint and asked service providers to assess their customers' attitudes. For example, the original, "Employees of XYZ are not too busy to respond to customer requests promptly," was revised to read, "Our customers believe that we are too busy to respond to customer requests promptly." Respondents indicated the extent of their agreement with each statement using a six-point Likert-type scale (1 = strongly disagree, 6 = strongly agree). Parasuraman *et al.* reported a coefficient alpha for reliability (five items), tangibles (four items), responsiveness (four items), assurance (four items), and empathy (five items) of 0.72, 0.83, 0.82, 0.81, and 0.86, respectively. Using an aggregate perception of service quality score, the coefficient alpha was calculated to be 0.96 for this sample.

Perceived need for change. Service providers reported their beliefs and opinions regarding perceived need for change using the discrepancy dimension of the Organizational Change Recipients Belief Scale reported by Armenakis *et al.* (2007). The scale was designed to measure change during the adoption or institutionalization stages; however, Armenakis *et al.* (2007) point out that with minor changes the scale will also assess readiness for change prior to implementation. Respondents indicated the extent of their agreement with each statement using a six-point Likert-type scale (1 = strongly disagree, 6 = strongly agree). The reported Cronbach's α from the scale development for the discrepancy dimension ranged from 0.70 to 0.92 (Armenakis *et al.*, 2007). The calculated coefficient alpha for this sample was 0.93.

Open-ended responses. The following open-ended questions were asked in addition to the qualitative measures:

- What are the strengths of the work order process?
- What are the weaknesses of the work order process?
- Do you have any concerns about changing the work order process?

Results and analysis for sample A, customers

Prior to our involvement, the organization regularly collected feedback in the form of point-of-service customer satisfaction assessments. The feedback consistently indicated customers were almost always completely satisfied with the service provided to them. However, the results of the customer service quality questionnaire we administered indicated that customers were not as satisfied with the WRAT process as was portrayed by the point-of-service feedback. Survey results including means, standard deviations, coefficient alphas, and correlations among the variables are shown in Table I. The service quality assessment of customer attitudes validated management's belief with empirical evidence that the process needed to be improved. The mean quality score was 3.57 on a scale of 5, with 22 percent of respondents rating the overall service quality as either poor or very poor, 35 percent rating the service quality as fair, and 43 percent rating the service quality as either good or excellent. A gap score was created by measuring the difference between the service perception and expectation (Parasuraman *et al.*, 1991).

The gap scores indicated the areas which needed the most improvement (reliability and responsiveness). Negative mean scores on individual gap variables indicate actual performance is below expected performance by customers.

In total, 260 customers responded to the open-ended questions. Semi-inductive analysis (Golden-Biddle and Locke, 2006) was used to categorize the open-ended responses into themes. These verbal responses also provided leadership and change development participants with a verbal picture of the future WRAT process.

Results and analysis for sample B, service providers

Means, standard deviations, coefficient alphas, and correlations among the variables measured in the quantitative survey are shown in Table II. Quantitative item results indicated that 66 percent of the respondents believed that the WRAT process needed to change as evidenced by responses of either slightly agree, agree, or strongly agree to the need to change the WRAT. The survey enabled feedback regarding the strengths and weaknesses of the existing process as perceived by the organizational members. Categorization of the open-ended items into change message components (Table III) using semi-inductive analysis (Golden-Biddle and Locke, 2006) indicated focus areas for management as they planned the development of the new process. The data indicated almost a quarter of the respondents questioned the ability of the organization to execute an improvement to the process. As indicated by the principal support coding in Table III, comments of 10 percent of respondents indicated they perceived management as a hindrance rather than a help.

Inputs for the PIT

Following the data analysis, the next step was to assemble the PIT. Having been informed by the empirical data regarding the strengths and weaknesses of the WRAT,

Table I.
Means, standard deviations, coefficient alphas, and correlations among customer quality variables

	M	SD	1	2	3	4	5	6
1. Overall quality	3.57	0.97	(0.84)					
2. Empathy gap	-0.55	1.25	0.64*	(0.75)				
3. Assurance gap	-0.83	1.03	0.58*	0.71*	(0.81)			
4. Responsiveness gap	-1.18	1.40	0.66*	0.74*	0.62*	(0.89)		
5. Reliability gap	-1.33	1.43	0.73*	0.78*	0.77*	0.84*	(0.94)	
6. Tangible gap	-0.73	1.11	0.57*	0.69*	0.78*	0.63*	0.77*	(0.86)

Notes: Correlation is significant at the *0.01 level (two-tailed); alpha coefficients appear in parenthesis on the diagonal

Table II.
Means, standard deviations, coefficient alphas, and correlations among service provider variables

	M	SD	1	2
1. Perception of service quality	4.93	0.75	(0.96)	
2. Perceived need for change	4.03	1.25	-0.23*	(0.93)

Notes: Correlation is significant at the *0.01 level (two-tailed); alpha coefficients appear in parenthesis on the diagonal

Component	Frequency (%)	Sample response
Discrepancy	75	Any change risks damaging a good process, but I think our current process is in need of improvement, so the risks are worthwhile
Appropriateness	58	Come up with a way to better “weed” out potential job orders for clogging an already inflated system
Organizational efficacy	23	Streamlining this process requires much coordination
Personal valence	13	We could use more modern software to make it easier and faster
Principle support	10	I am concerned about changes mandated from above because those recommendations usually set you back from progress
Individual efficacy	4	Retraining everyone will be a problem

Notes: $n = 84$; the above examples represent a few of the qualitative responses; as many of the respondents included items which were coded into multiple categories, the frequency total exceeds 100 percent

Table III.
Qualitative responses
reflecting change
message components

both management and we, as researchers, set out to test our hypothesis that the change message model could be used as a tool to develop a focal change.

Method and analysis regarding PIT

Selection of opinion leaders

The process for assembling the PIT started with the identification and selection of appropriate members to participate in the team. Initial criteria for individuals to be considered for the team included:

- being an opinion leader at an individual’s respective branch location; and
- cross-functional representation of subject matter experts to ensure inclusion of relevant stakeholders.

The goal was to assemble a team possessing both influential membership and cross-functional expertise in order to provide assurances that the formulated solution would be feasible (Delbecq *et al.*, 1975; Latham *et al.*, 1994; Schulz-Hardt *et al.*, 2006). Furthermore, the inclusion of opinion leaders increases the probability that should the team members support the change, it would have a better chance of adoption back at their branch locations (Smith, 2005). Resource constraints limited the team to 12 individuals.

To identify opinion leaders within each branch, we contacted formal leaders in each branch as formal leaders are often capable of identifying opinion leaders within their organization (Lam and Schaubroek, 2000). Each branch has a similar formal organizational structure, consisting of a leader and a deputy with three to four assistant deputies. We contacted three to four deputies and assistant deputies within each branch via telephone in order to identify the opinion leaders in their branch. In our calls, opinion leaders were described as individuals from whom others may ask advice, or who others observe in response to changes in policy or procedures (Vitale, 2008). To provide additional context, opinion leaders were further defined as individuals who are not necessarily senior in position, but rather they are the individuals who carry

a significant amount of informal influence. Each interviewee was asked to identify three to five potential opinion leaders.

At the conclusion of the interviews, a master list of individuals identified as opinion leaders was generated. Nominees were listed in rank order based upon frequency of nomination. The list was sent to corporate management to select individuals who would participate in the process improvement event. Note that corporate management was not given a reason for the rank ordering to protect the integrity of the process and the characterization of the individuals. Ten individuals from four geographic units were chosen from the list to participate in the process improvement event. Of these ten individuals, three had been identified by all formal leaders at their respective branch, three had been chosen by three of their four respective branch leaders, and four had been nominated by two of their respective branch leaders. Finally, to ensure adequate external stakeholder representation, two key customers were selected to participate on the PIT (Hammer and Champy, 2003).

The senior leadership had indicated a desire for the WRAT process to be standardized throughout the organization's branch locations. The chosen PIT was given decision control over the change and, therefore, possessed authority to determine the scope of the change. However, the final solution was required to meet the following criteria:

- implementable with existing information technology systems;
- executable within 45 days; and
- requiring no additional manpower or money.

With the diagnostic results and the solution criteria, we assembled the opinion leaders to develop an improved WRAT process.

Methodology (PIT)

The ethnographic method of participant observation provided researchers an effective means to gather information relating to how the PIT functioned and to the resulting solution that the team proposed. Three researchers were present throughout the process improvement event. Their identities and purpose were made known to study participants. Their participation in the revised WRAT process development was limited to a presentation of the Armenakis and Harris (2002) change message model and the survey results from samples A and B. Management was absent during the time in which the team engaged in discussing and revising the WRAT process. However, when asked by study participants, the principal investigator would clarify senior management expectations.

Each researcher was instructed to independently take field notes documenting verbal comments vocalized by study participants and note speech qualities such as volume, tone, and rate of speech (Atkinson and Hammersley, 1994). Researchers were also instructed to observe and document non-verbal communication indicating affective reactions of study participants manifest through body language such as posture, gestures, facial expressions, and eye movements. Observations were coded to correspond with the five components of the change message. Observations that were recorded by two or more researchers were included as part of the study record.

At the end of the PIT event, video-recorded exit interviews were conducted with each study participant. Each exit interview took place in a private office with one participant and one researcher. An interview consisted of seven questions. The first five questions were qualitatively oriented, asking participants how effectively the PIT-developed

solution addressed each component of the change message (e.g. discrepancy, appropriateness, principal support, efficacy, and personal valence). The final questions were quantitatively oriented. Buy-in to the solution and intentions to support the change were measured on a ten-point scale. Buy-in was measured with the question, "To what degree do you buy-in to the solution arrived here?" Participants indicated the extent of their agreement with the statement using a ten-point Likert-type scale (1 = not at all, 10 = I am sold). Intention to support change was measured with the question, "How actively will you promote the change solution among your peers?" Participants indicated the extent of their agreement with the statement using a ten-point Likert-type scale (1 = I will offer my opinion if someone asks, 10 = I will talk about it even after they get sick of hearing me talk about it).

Ethnographic observations

The new WRAT process was developed during a two-day process improvement event held at executive leadership's site. The event was facilitated by an individual from the organization's human resource department. He had been formally trained in conflict resolution and had previous experience with process improvement events. A member of the senior management officially started the event, thanking each of the 12 participants for coming and expressing his appreciation for their willingness to help improve the existing process. Participants were charged with developing a standardized and streamlined WRAT process within the existing IT system. Owing to the short timeline requirement for the implementation of any process change, the team was instructed to focus on efforts that were easily implementable.

At the conclusion of the introductory presentations, the facilitator opened the meeting and began by asking, "Do you believe that there is a problem with the existing process?" After a few seconds, the majority of the group began to nod their heads in agreement and say yes – until one member, hereafter referred to as team member A, in the corner said no. When asked by the facilitator why he did not believe that there was a problem, and team member A replied: "The process works, we just need to adhere to the current process; I've seen it work." He then elaborated on his statement by saying, "Management does not support the existing process." As he concluded speaking, five other PIT members started speaking at the same time. The facilitator organized the speaking order, and in turn these members, who previously had been nodding their heads in agreement with the need to change the process, vocalized agreement with team member A. Each speaker vocalized his perspective on how management's actions prevented the successful execution of the current WRAT process. A common example arose. The PIT members felt that management hurts the system by focusing on pet projects rather than focusing on a holistic view of all the maintenance, repair, and construction needs of the campus. Such comments by these PIT members were the first of many which corroborated the web-survey results. Management support was a primary concern of the PIT team.

Following the initial exchange described above, our research team presented the advantages of using the five components of the change message as a framework to refer to in the development of the new process (Armenakis and Harris, 2002). These components were presented as questions:

- Is the current process broken? Does it need to be improved?
- Is this new process the right answer?

- How does this new process benefit me?
- Can I do this? Can my organization make this happen?
- Does my leadership support this change?

Table IV illustrates the association between each of the five change message components (Armenakis *et al.*, 1993) and the questions presented to the team. At the conclusion of this instructional period, the PIT agreed that their change proposal should address all five components of the change message model.

Next, the survey findings which had been previously organized into the framework of the change message were presented. The purpose of reviewing the findings was to answer the question of discrepancy in the current process, that is, to provide evidence that the process needed changing. Consistent with Kotter's (2008) work describing persuasive language, relevant quantitative data were presented first for each category (such as service quality ratings or readiness for change) followed by the respective qualitative data. The quantitative data were meant to appeal to each PIT member's cognitive sense that the attitudes measured applied across the organization. After each quantitative result, a corresponding illustrative remark drawn from qualitative responses was also presented. These remarks were intended to appeal to the emotions beyond the numbers (Jackson and Trochim, 2002; Kotter, 2008). For example, part of our presentation related the results of the customer quality assessment. Consequently, we shared the finding that 9 percent of customers rated services as either poor or very poor, 23 percent rated service as fair, and 68 percent rated the services as either good or excellent. Directly after this numerical finding, we shared the qualitative data; which was in this case, process weaknesses as annotated by customers. Therefore, we stated that the survey indicated that 15 percent of customers stated that their work requests took too long to complete. Lastly, we shared sample comments to illustrate the qualitative findings. One customer stated: "Work [requests] sometimes takes years [to complete] or [they] disappear."

Once the researchers had concluded the discussion of the change message and survey results, the facilitator initiated a brainstorming session by asking the PIT to describe which specific human inefficiencies were causing the current process to work less effectively. The problems expressed tended to have an external focus. For example, "management gives our organization too many jobs to accomplish," "our customers don't understand our process," and "we don't have enough resources" were all vocalized by multiple members. The facilitator reminded the PIT members of the solution constraint stipulating no additional manpower and resources. As the PIT members developed the list of human inefficiencies, the majority of the factors corresponded closely with the weaknesses noted in the strength and weakness analysis collected from the survey data.

Because the team was comprised of individuals from the various branches, the initial problem-solving session consisted primarily of exchanging ideas that the members found

Table IV.
Teaching the change
message

Discrepancy	Is the current process broken? Does it need to be improved?
Appropriateness	Is this new process the right answer?
Valence	How does this new process benefit me?
Efficacy	Can I do this? Can my organization make this happen?
Principal support	Does my leadership support this change?

to be working at their own respective branches. As such, they were participating in a form of benchmarking best practices (Tucker *et al.*, 1987). Members from each location discussed how they dealt with these human factors at their sites and then proposed their methods as best practices. Early on in the benchmarking session, one individual proposed using an IT system that was currently in use at their location. This proposal was initially rejected by other PIT members. They did not consider the proposal viable because many of them had been exposed to the beta version of the program and did not like it. 18 months prior, the parent organization had made this IT system available to all branches. The majority of the branches had tried the system, but had subsequently stopped using it because of a variety of programming errors. As vocalized by a majority of the members, their brief exposure to the system was negative. As the group was preparing to reject the IT system idea, team member A spoke to the group once again.

Team member A, who had been silent since his first remarks, first acknowledged the problems of the beta version, and then addressed the appropriateness, efficacy, and valence of the now operational IT system. To address the appropriateness of the system, he asked one of the customers in the PIT, who was from his location, to explain why the system was good. The customer spoke of increased visibility on his work requests (he now could determine the status at any time), he also told the other PIT members that his work requests were approved much faster (approval went from 14 days to four days), and he said that the system was easy to use. After the customer finished speaking, team member A then said, "I'm not a tech guy. I don't like computers – but this system is easy to use." He then pointed to another member from his location and said that he had received help from his colleague and that it was easy to learn the system. He finished his efficacy comments by saying, "If I can learn to use the system, anyone can." Last, he spoke of how he got the work requests faster and was receiving fewer customer complaints. Based upon positive body language, such as head nods in agreement with the speaker, and follow-up questions on how to implement the system, it was evident that his brief remarks had made an impression on the other PIT members. After the remarks of team member A, the other group members reconsidered the use of the IT system as part of the revised WRAT process. Attitudes toward the IT system were changed by him as he employed, (albeit in all likelihood unknowingly), the principles of the change message model.

The event continued over the course of two days with many other ideas proffered, such as customer education programs and work request caps per requesting organization. The final solution presented by the PIT was largely centered on use of the IT system, but it also contained a collaboration of best practices from the various PIT members. At the conclusion of the two-day event, the PIT presented their findings and solutions to executive management for their consideration. Leadership decided to implement the change as outlined.

Having briefly described the events that unfolded during the process improvement project, we will highlight the salient, sometimes unexpected, benefits that emerged from the process. While there are also inherent risks in providing decision control to a group including groupthink (Janis, 1982), in this instance no negative consequences were observed.

Outcomes

Cynics to champions. On the morning of the process improvement event, the opinion leaders, as well as two external customers, assembled together to develop a new

WRAT process. Over the course of 15 minutes, these individuals, who formed the PIT, arrived at the meeting location. By observing the verbal and non-verbal communication of the team members, researchers made a number of observations which provided insights into the attitudes of the participants. A few individuals arrived with a smile and warmly greeted others. However, a majority arrived with a scowl. They did not interact with others as they chose their chairs, and when they sat down, they crossed their arms. The event began with executive leadership entering the room. Upon their entrance, all small talk stopped, and the room was silent. As the lead manager spoke, PIT members glared at him, gave him blank stares, or frowned. Arms remained folded. The group did not offer any non-verbal cues which would indicate support for his message. Instead, team members' facial expressions and body movements indicated hostile attitudes regarding the event. Cynicism about organizational change has been defined as "a pessimistic outlook for successful change and blame placed on those responsible for lacking the motivation and/or the ability to effect successful change" (Wanous *et al.*, 2000). From the negative mood of the participants and the cold reception given executive leadership, it appeared most of the opinion leaders were change cynics. Because of the organization's history of failed change attempts, cynical sentiments among the PIT members would not be surprising (Rogers, 2003).

Over the course of the two-day process improvement event, a significant change occurred in the tone of group discussion and the behavior of group members. These changes in discussion tone and behavior were consistent with diminished cynical attitudes and an increase in positive attitudes regarding the change. So as to accurately assess each member's opinion of the change proposed by the group, individual private exit interviews were arranged. The exit interviews revealed that each team member had formed a positive opinion about the change they had developed. Means, standard deviations, coefficient alphas, and correlations among the variables measured in the exit survey are shown in Table V. With regards to study participant buy-in, interviews revealed that the team had reached a consensus in which all members believed in the appropriateness of the proposed change. There was slightly more variance with intentions to support the change, with two members who were not fully committed. However, the scores indicate the opinion leaders were ready to promote the change.

During the presentation to management at the conclusion of the event, PIT members had the opportunity to share their proposed process changes. The presentation was prepared and delivered by the team members themselves. During the presentation, we observed multiple behaviors to indicate a change in attitude by PIT members. We saw some PIT members sitting on the edge of their seats during the presentation. We noticed that others frequently spoke up during the presentation to management to support their presenter. We also saw positive facial expressions, such as smiles, and no negative expressions, such as frowns. At the conclusion of the presentation, the senior executive leader asked each individual his feelings regarding their proposed change. In each case,

Table V.
Means, standard deviations, and correlations in exit interview

	M	SD	1	2
1. Degree of buy-in	9.5	0.8		
2. Intentions to support	8.3	2.6	-0.17	

the PIT member's reply reflected enthusiasm and excitement for the change. The change in attitudes was also noticed by executive leadership, who told the researchers that they were impressed by the group's commitment to their solution and their eagerness towards the change.

The negative energy with which PIT members had arrived was replaced with excitement for the change. The attitudes of these opinion leaders, who were initially opposed to the intervention, changed over the course of the two-day event. We posit that their attitudes changed, consistent with the literature (Armenakis *et al.*, 1993; Wanberg and Banas, 2000), due to effective communication and meaningful participation during the process event.

Senior leader buy-in. In her closing comments to the PIT members, the senior executive leader confided that, while she had envisioned a change that was more radical than the solution presented by the team, the team's enthusiasm regarding the change helped her feel confident that the opinion leader-developed solution was appropriate. Her thoughts underscore an important leadership implication for organizations seeking to employ the method outlined in the present study. When delegating control to subordinates to solve problems, leaders must be ready to accept the proposed solution.

Manz and Sims (1987) suggest that the traditional view of a leader is someone who does things to directly influence others. Associated behaviors of the traditional leader include the creation, facilitation, and rejection of new ideas. However, Manz and Sims found that these behaviors are inconsistent with decision-control participation. In contrast, ideal leadership behaviors are centered on establishing environments conducive to self-discovery and innovation, as well as the willingness to relinquish control. In this case study, the senior leader exhibited the appropriate behavior. She supported the work proposed by her PIT despite her initial concern. Notably, there is risk involved when a leader fully empowers a group to determine appropriate solutions to field problems, as group members may lack competence (Leana, 1986) or act opportunistically (Eisenhardt, 1989; Spreitzer and Mishra, 1999). A potential consequence is that the solution may be unacceptable. In this case, had the leader found the solution unacceptable, a rejection of the solution may have resulted in a damaged relationship between the formal leadership and the informal leaders who comprised the PIT. To protect themselves, senior leaders should carefully consider whether the explicit assumptions and constraints placed on the PIT are comprehensive enough to allow a solution meeting the minimum requirements to be satisfactory.

Organic problem-solving process. Perhaps, the most important organizational outcome is the creation and validation of a problem-solving process within the organization. This problem-solving method is unique in two principal ways. First, we used the change message model as an a priori tool in the development of change. By adding the communication goals of the change message (Table IV) to the process constraints given by management, the PIT was required to focus on change adoption in addition to finding an optimal solution to the process problem. The second major contribution was the use of opinion leaders. While the use of opinion leaders to support change is not a new concept (Lam and Schaubroeck, 2007; Smith, 2005; Vishwanath, 2006), utilizing them as the principal participants in change development within an organization cynical to change is noteworthy. Indeed, perhaps the largest single benefit of this approach is the ability to garner support for a change from the very individuals who are traditionally the toughest critics.

Process implementation. Within five months of the PIT event, all four branch locations had fully adopted the revised WRAT process. After this adoption phase, we contacted PIT members for telephone interviews in order to gauge their perceptions regarding the change implementation and their role in it.

During the implementation, the PIT members played the role of change agents. Their responses during the telephone interviews indicated that they had internalized the change message and used it in their interactions with others. We learned that the PIT members actively sought out their co-workers in order to share the change initiative. In their discussions with co-workers, the PIT team members ensured that others recognized the discrepancies in the old system. They also helped others see why changing to the new system was the right thing to do. The PIT members spent time promoting the change by talking about it, sharing training materials provided by headquarters, and helping resolve the concerns of others through one-on-one interactions. These individuals appeared to have internalized their roles as enduring change champions. The PIT members attributed their support of the change to the PIT event. One individual said, "Being a PIT member made me believe in the system." Another said, "The process is definitely better now than it was. The PIT was an awesome learning experience."

Conclusion

We believe that the techniques described in this article will aid organizations as they create and implement planned change. Rather than using external consultants to create change, the organization that we studied chose to develop a process change using its internal resources. The decision to use internal resources was a deliberate choice by management so as to develop an improved process based upon the foundation of employee participation and effective communication. The organization selected opinion leaders – not managers – from its branch locations to collaborate and create the improved process. Most of these informal leaders were initially skeptical of the proposed change; however, through the course of the process improvement event, their attitudes were altered and the majority returned to their branches as change champions, eager to share their experiences with their co-workers.

We posit that their attitudes changed due to their effective communication and participation. Significant groundwork was laid by the organization in order to foster effective communication with the opinion leaders. Data were collected from two diagnostic surveys in order to assess the current process; this information was then presented to the PIT as a basis for change. Furthermore, the communication requirements needed to foster change readiness among all organization employees were introduced to, and carefully considered by, the opinion leaders in the development of its change. The Armenakis and Harris (2002) change message model and its five components (discrepancy, appropriateness, valence, principal support, and efficacy) was used as a guide for the PIT to ensure that the change they were creating would be justifiable to their co-workers at their branch locations.

While the specifics relating to the use of the change message model in developing a solution to an organizational problem may have been unique to this particular organization, the case provides insights which could be applied to broader implementation. The formal inclusion of the change message model as an additional change implementation criterion has important implications for organizational

change planning, communication, and support. Including the change message as a criterion requires a group of decision-making representatives to rigorously identify the benefits of a proposed change to all those affected by the would-be change. As such, the inclusion of the change message as a criterion can promote a more in-depth exchange of information and interests among group members.

An additional implication includes recognizing the importance of including all relevant stakeholders in the creation and discussion of possible solutions; doing so increases the likelihood of receiving greater support from all parties affected by the change. In this case, senior management recognized that its role was not to create and dictate a solution of its own making. Instead, senior management utilized its resources to carefully orchestrate the entire change planning process in a manner that would increase change recipient support. This process involved gathering relevant information related to an organizational problem and then disseminating the information to capable and influential lower level leaders and customer representatives charged with developing a solution to the problem. These managerial roles of performance monitoring, information dissemination, and delegation have all been recognized as fundamental to effective organizational management (Mintzberg, 1975; Haynes, 1980).

As such, the process followed by this particular organization could be adapted by many organizations with the resources to coordinate a similar process. These implications may be useful in informing future theoretical development relating to organizational change plan planning, communication, and support.

Limitations

This research is a case study of a single organization as it sought to develop a change program in support of their transformational goals. While we believe that the methodology depicted within this paper may be applicable to other organizations, care should be taken. We believe that the observed results are consequences of this method; however, as it is a case study, some of the observed results may be due to particularities inherent to the subject organization.

References

- Amiot, C.E., Terry, D.J., Jimmieson, N.L. and Callan, V.J. (2006), "A longitudinal investigation of coping processes during a merger: implications for job satisfaction and organizational identification", *Journal of Management*, Vol. 32 No. 4, pp. 552-74.
- Armenakis, A.A. and Fredenberger, W.B. (1997), "Organizational change readiness practices of business turnaround change agents", *Knowledge and Process Management*, Vol. 4 No. 3, pp. 143-52.
- Armenakis, A.A. and Harris, S.G. (2002), "Crafting a change message to create transformational readiness", *Journal of Organizational Change Management*, Vol. 15 No. 2, pp. 169-83.
- Armenakis, A.A., Harris, S.G. and Feild, H.S. (1999), "Making change permanent: a model for institutionalizing change", in Pasmore, W. and Woodman, R. (Eds), *Research in Organizational Change and Development*, JAI Press, Greenwich, CT, pp. 97-128.
- Armenakis, A.A., Harris, S.G. and Mossholder, K.W. (1993), "Creating readiness for organizational change", *Human Relations*, Vol. 46 No. 6, pp. 681-704.
- Armenakis, A.A., Mossholder, K.W. and Harris, S.G. (1990), "Diagnostic bias in organizational consultation", *Omega*, Vol. 18 No. 6, pp. 563-72.

- Armenakis, A.A., Bernerth, J.B., Pitts, J.P. and Walker, H.J. (2007), "Organizational change recipients' beliefs scale: development of an assessment instrument", *Journal of Applied Behavioral Science*, Vol. 43 No. 4, pp. 481-505.
- Atkinson, P. and Hammersley, M. (1994), "Ethnography and participant observation", in Denzin, N.K. and Lincoln, Y.S. (Eds), *Handbook of Qualitative Research*, Sage, Thousand Oaks, CA, pp. 248-61.
- Beaudan, E. (2006), "Making change last: how to get beyond change fatigue", *Ivey Business Journal Online*, Vol. 70 No. 3, pp. 1-7 (accessed 1 May 2009, from ABI/INFORM Complete database (Document ID: 983077891)).
- Bernerth, J. (2004), "Expanding our understanding of the change message", *Human Resource Development Review*, Vol. 3 No. 1, pp. 36-52.
- Bitner, M.J. and Hubbert, A.R. (1994), "Encounter satisfaction versus overall satisfaction versus quality", in Rust, R. and Oliver, R. (Eds), *Service Quality: New Directions in Theory and Practice*, Sage, Thousand Oaks, CA.
- Bordia, P., Jones, E., Gallois, C., Callan, V.J. and Difonzo, N. (2006), "Management are aliens: rumors and stress during organizational change", *Group & Organization Management*, Vol. 31 No. 5, pp. 601-21.
- Bunker, B.B. and Alban, B.T. (1997), *Large Group Interventions: Engaging the Whole System for Rapid Change*, Jossey-Bass, San Francisco, CA.
- Burnes, B. (2004), "Kurt Lewin and complexity theories: back to the future?", *Journal of Change Management*, Vol. 4 No. 4, pp. 309-25.
- Chawla, A. and Kelloway, E.K. (2004), "Predicting openness and commitment to change", *Leadership and Organization Development Journal*, Vol. 25 Nos 5/6, pp. 485-98.
- Clegg, C. and Walsh, S. (2004), "Change management: time for change!", *European Journal of Work and Organizational Psychology*, Vol. 13 No. 2, pp. 217-39.
- Coch, L. and French, J.R.P. Jr (1948), "Overcoming resistance to change", *Human Relations*, Vol. 1 No. 4, pp. 512-25.
- Cummings, T.G. and Worley, C.G. (2005), *Organization Development and Change*, Thompson South-Western, Mason, OH.
- Daly, J.P. and Geyer, P.D. (1994), "The role of fairness in implementing large-scale change: employee evaluations of process and outcome in seven facility relocations", *Journal of Organizational Behavior*, Vol. 15 No. 7, pp. 623-38.
- Delbecq, A.L., Van de Ven, A.H. and Gustafson, D.H. (1975), *Group Techniques for Program Planning*, Scott, Foresman and Co., Glenview, IL.
- Eisenhardt, K.M. (1989), "Agency theory: an assessment and review", *Academy of Management Review*, Vol. 14 No. 1, pp. 57-74.
- Fernandez, S. and Rainey, H.G. (2006), "Managing successful organizational change in the public sector", *Public Administration Review*, Vol. 66 No. 2, pp. 168-76.
- Fishbein, M. and Ajzen, I. (1975), *Belief, Attitude, Intention, and Behavior: An Introduction to Theory and Research*, Addison-Wesley, Reading, MA.
- Golden-Biddle, K. and Locke, K.D. (2006), *Composing Qualitative Research*, Sage, Thousand Oaks, CA.
- Gregory, B.T., Armenakis, A.A., Moates, K.N., Albritton, M.D. and Harris, S.G. (2007), "Achieving scientific rigor in organizational diagnosis: an application of the diagnostic funnel", *Consulting Psychology Journal: Practice and Research*, Vol. 59 No. 2, pp. 79-90.

-
- Greiner, L.E. (1967), "Patterns of organization change", *Harvard Business Review*, Vol. 45 No. 3, pp. 119-30.
- Grubbs, J.W. (2002), "Participation and change: using large group intervention methods to inform reflective practice in a community of public organizations", *Public Organization Review*, Vol. 2 No. 3, pp. 285-303.
- Hamel, G. (2002), *Leading the Revolution: How to Thrive in Turbulent Times by Making Innovation a Way of Life*, Harvard Business School Press, Boston, MA.
- Hammer, M. and Champy, J. (2003), *Reengineering the Corporation: A Manifesto for Business Revolution*, HarperCollins, New York, NY.
- Haynes, M.E. (1980), "Delegation: there's more to it than letting someone else do it!", *Supervisory Management*, Vol. 25 No. 1, p. 9.
- Holt, D.T., Armenakis, A.A., Feild, H.S. and Harris, S.G. (2007), "Readiness for organizational change", *Journal of Applied Behavioral Science*, Vol. 43 No. 4, pp. 232-55.
- Jackson, K. and Trochim, W. (2002), "Concept mapping as an alternative approach for the analysis of open-ended survey responses", *Organizational Research Methods*, Vol. 5 No. 4, pp. 307-36.
- Janis, I.L. (1982), *Groupthink: Psychological Studies of Policy Decisions and Fiascoes*, Houghton Mifflin, Boston, MA.
- Jimmieson, N.L., Peach, M. and White, K.M. (2008), "Utilizing the theory of planned behavior to inform change management: an investigation of employee intentions to support organizational change", *Journal of Applied Behavioral Science*, Vol. 44 No. 2, pp. 237-62.
- Johnson, G. and Leavitt, W. (2001), "Building on success: transforming organizations through an appreciative inquiry", *Public Personnel Management*, Vol. 30 No. 1, pp. 129-36.
- Kahn, W.A., Cross, R. and Parker, A. (2003), "Layers of diagnosis for planned relational change in organizations", *The Journal of Applied Behavioral Science*, Vol. 39 No. 3, pp. 259-80.
- Kamins, M.A., Folkes, V.S. and Perner, L. (1997), *Journal of Consumer Psychology*, Vol. 6, pp. 165-87.
- Kotter, J.P. (2008), *A Sense of Urgency*, Harvard Business Press, Boston, MA.
- Kotter, J.P. and Schlesinger, L.A. (1979), "Choosing strategies for change", *Harvard Business Review*, Vol. 57 No. 2, pp. 106-14.
- Kwahk, K.-Y. and Lee, J.-N. (2008), "The role of readiness for change in ERP implementation: theoretical bases and empirical validation", *Information & Management*, Vol. 45 No. 4, pp. 474-81.
- Lam, S.K. and Schaubroeck, J. (2000), "A field experiment testing frontline opinion leaders as change agents", *Journal of Applied Psychology*, Vol. 85 No. 6, pp. 987-95.
- Latham, G.P., Winters, D.C. and Locke, E.A. (1994), "Cognitive and motivational effects of participation: a mediator study", *Journal of Organizational Behavior*, Vol. 15 No. 1, p. 49.
- Lawler, E.E. and Worley, C. (2006), *Built to Change: How to Achieve Sustained Organizational Effectiveness*, Jossey-Bass, San Francisco, CA.
- Lawrence, P.R. (1954), "How to deal with resistance to change", *Harvard Business Review*, Vol. 32 No. 3, pp. 49-57.
- Leana, C.R. (1986), "Predictors and consequences of delegation", *Academy of Management Journal*, Vol. 29 No. 4, pp. 754-74.
- Lewin, K. (1951), *Field Theory in Social Science: Selected Theoretical Papers*, Harper & Row, New York, NY.

- Lines, R. (2004), "Influence of participation in strategic change: resistance, organizational commitment and change goal achievement", *Journal of Change Management*, Vol. 4 No. 3, pp. 193-215.
- Liu, Y. and Perrewé, P.L. (2005), "Another look at the role of emotion in the organizational change: a process model", *Human Resource Management Review*, Vol. 15 No. 4, pp. 263-80.
- Lok, P. and Crawford, J. (2000), "The application of a diagnostic model and surveys in organizational development", *Journal of Managerial Psychology*, Vol. 15 No. 2, pp. 108-21.
- McKinsey (2008), "Creating organizational transformations", available at: www.mckinseyquarterly.com/Organization/Change_Management/Creating_organizational_transformations_McKinsey_Global_Survey_results_2195?gp=1 (accessed 10 January 2010).
- MacIntosh, R., Beech, N., McQueen, J. and Reid, I. (2007), "Overcoming change fatigue: lessons from Glasgow's National Health Service", *The Journal of Business Strategy*, Vol. 28 No. 6, pp. 18-24.
- Maienhofer, D. and Finholt, T. (2002), "Optimal targets for change agents: a computer simulation of innovation diffusion", *Computational and Mathematical Organization Theory*, Vol. 8 No. 4, pp. 259-81.
- Manz, C. and Sims, H. Jr (1987), "Leading workers to lead themselves: the external leadership of self-managing work teams", *Administrative Science Quarterly*, Vol. 32 No. 1, pp. 106-29.
- Mintzberg, H. (1975), "The manager's job: folklore and fact", *Harvard Business Review*, Vol. 53 No. 4, pp. 49-61.
- Mohrman, S.A., Tenkasi, R.V. and Mohrman, A.M. Jr (2003), "The role of networks in fundamental organizational change: a grounded analysis", *The Journal of Applied Behavioral Science*, Vol. 39 No. 3, pp. 301-24.
- Parasuraman, A., Berry, L.L. and Zeithaml, V.A. (1991), "Refinement and reassessment of the SERVQUAL scale", *Journal of Retailing*, Vol. 67 No. 4, pp. 420-50.
- Parasuraman, A., Zeithaml, V.A. and Berry, L.L. (1988), "SERVQUAL: a multiple-item scale for measuring consumer perceptions", *Journal of Retailing*, Vol. 64 No. 1, pp. 12-40.
- Pardo del Val, M. and Fuentes, C.M. (2003), "Resistance to change: a literature review and empirical study", *Management Decision*, Vol. 41 No. 2, pp. 148-55.
- Pasmore, W.A. (1994), *Creating Strategic Change: Designing the Flexible, High-performing Organization*, Wiley, New York, NY.
- Piderit, S.K. (2000), "Rethinking resistance and recognizing ambivalence: a multidimensional view of attitude toward an organizational change", *Academy of Management Review*, Vol. 25 No. 4, pp. 783-94.
- Reichers, A.E., Wanous, J.P. and Austin, J.T. (1997), "Understanding and managing cynicism about organizational change", *Academy of Management Executive*, Vol. 11 No. 1, pp. 48-59.
- Richardson, P. and Denton, D.K. (1996), "Communicating change", *Human Resource Management*, Vol. 35 No. 2, pp. 203-16.
- Rogers, E.M. (2003), *Diffusion of Innovations*, 5th ed., The Free Press, New York, NY.
- Rogers, E.M. and Cartano, D.G. (1962), "Methods of measuring opinion leadership", *Public Opinion Quarterly*, Vol. 26 No. 3, pp. 435-41.
- Rumelt, R.P. (1995), "Inertia and transformation", in Montgomery, C.A. (Ed.), *Resource-based and Evolutionary Theories of the Firm: Towards a Synthesis*, Kluwer Academic Publishers, Boston, MA, pp. 101-32.

-
- Ryan, B. and Gross, N.C. (1943), "The diffusion of hybrid seed corn in two rural communities", *Rural Sociology*, Vol. 8 No. 1, pp. 15-24.
- Schein, E. (1979), "Personal change through interpersonal relationships", in Bennis, W.G. (Ed.), *Essays in Interpersonal Dynamics*, Dorsey Press, Homewood, IL, pp. 129-62.
- Schulz-Hardt, S., Brodbeck, F.C., Mojzisch, A., Kerschreiter, R. and Frey, D. (2006), "Group decision making in hidden profile situations: dissent as a facilitator for decision quality", *Journal of Personality and Social Psychology*, Vol. 91 No. 6, pp. 1080-93.
- Schweiger, D. and DeNisi, A. (1991), "Communication with employees following a merger: a longitudinal field experiment", *Academy of Management Journal*, Vol. 34 No. 1, pp. 110-35.
- Smeltzer, L.R. (1991), "An analysis of strategies for announcing organization-wide change", *Group & Organization Management*, Vol. 16 No. 1, pp. 5-24.
- Smeltzer, L.R. and Zener, M.F. (1992), "Development of a model for announcing major layoffs", *Group & Organization Management*, Vol. 17 No. 4, pp. 446-72.
- Smith, P.A.C. (2005), "Knowledge sharing and strategic capital: the importance and identification of opinion leaders", *The Learning Organization*, Vol. 12 No. 6, pp. 563-74.
- Spreitzer, G.M. and Mishra, A.K. (1999), "Giving up control without losing control: trust and its substitutes' effects on managers' involving employees in decision making", *Group & Organization Management*, Vol. 24 No. 2, p. 155.
- Stanley, D.J., Meyer, J.P. and Topolnitsky, L. (2005), "Employee cynicism and resistance to organizational change", *Journal of Business and Psychology*, Vol. 19 No. 4, pp. 429-59.
- Tucker, F., Zivan, S. and Camp, R. (1987), "How to measure yourself against the best", *Harvard Business Review*, Vol. 65 No. 1, pp. 8-10.
- Umphress, E.E., Labianca, G., Brass, D.J., Kass, E. and Scholten, L. (2003), "The role of instrumental and expressive social ties in employees' perceptions of organizational justice", *Organization Science*, Vol. 14 No. 6, pp. 738-53.
- Vishwanath, A. (2006), "The effect of the number of opinion seekers and leaders on technology attitudes and choices", *Human Communications Research*, Vol. 32 No. 3, pp. 322-50.
- Vitale, D.C. (2008), "Organizational change recipients and choosing an opinion leader: a mixed methods investigation", PhD dissertation, Auburn University, Dissertations and Theses @ Auburn University (database online, publication number AAT 3333166), available at: www.proquest.com (accessed 7 May 2009).
- Waddell, D. and Sohal, A.S. (1998), "Resistance: a constructive tool for change management", *Management Decision*, Vol. 36 No. 8, p. 543.
- Walker, C.J. and Blaine, B. (1991), "The virulence of dread rumors: a field experiment", *Language and Communication*, Vol. 11 No. 4, pp. 291-7.
- Wanberg, C.R. and Banas, J.T. (2000), "Predictors and outcomes of openness to changes in a reorganizing workplace", *Journal of Applied Psychology*, Vol. 85 No. 1, pp. 132-42.
- Wanous, J.P., Reichers, A.E. and Austin, J.T. (2000), "Cynicism about organizational change: measurement, antecedents, and correlates", *Group & Organization Management*, Vol. 25 No. 2, pp. 132-53.

Further reading

- Rousseau, D.M., Sitkin, S.B., Burt, R.S. and Camerer, C. (1998), "Not so different after all: a cross-discipline view of trust", *Academy of Management Review*, Vol. 23 No. 3, pp. 292-404.

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