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# Linking Change Drivers and the Organizational Change Process: A Review and Synthesis

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ABSTRACT This theory-building article advances prior research related to change drivers and the organizational change process. First, we identify the most frequently identified steps in the organizational change process. Second, we summarize the literature related to change drivers, clarifying each driver, and we link each change driver to the most frequently identified steps in the organizational change process. This allows exploration of the relationship between change drivers and the steps in the change process, as well as discussion of how change drivers vary in terms of their effect. Our contribution to organizational change theory include reviewing and clarifying change drivers in prior research, and linking the drivers to specific steps in the organizational change process.

KEY WORDS: Organizational change, change drivers, change process

## Introduction

As scholars and practitioners we work with organizations and change leaders. In a recent conversation with an experienced change leader in a large organization, it became clear that while the change leader had a motivating, clear vision, he or she had not thought about whether the organization was ready for change, what resources would be necessary to successfully implement change, and how the organization would monitor its implementation, completion and success. This is all too common a story.

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Scholars and practitioners agree that change processes remains complex and challenging for organizations engaged in such initiatives. The pace of change is greater than ever before (By, 2005). Yet, there is limited knowledge about how to plan and implement organizational change (Burke, 2008). Research suggests that failed organizational change initiatives range from one-third to as high as 80% of attempted change efforts (Fisher, 1994; Beer and Nohria, 2000; Higgs and Rowland, 2000; Hirschhorn, 2002; Knodel, 2004; Sirkin *et al.*, 2005; Kotter, 2008). Yet, organizational change is also seen as a constant (Vales, 2007) and a critical skill set for twenty first century leaders and managers (Knowles, 1999; Beer and Nohria, 2000). Better understanding of the organizational change process, its multiple contexts and levels (Scott, 2001), and choices about or during change (Woodman and Pasmore, 2004) could have many positive outcomes, including more effective change implementation.

The change process, while complex and multi-level, is also foreseeable and map-able. Our interest in a multi-level analysis of the organizational change process and change drivers is driving our goal of 'identifying principles that enable a more integrated understanding of phenomenon that unfold across organizational levels' (Klein and Kozlowksi, 2000: 7). A second assumption in this research is that while organizational change certainly unfolds across multiple levels – at some point, the majority, if not all – organizational change initiatives inherently involve change at the individual level. That is, a change occurs in the employees' behaviors, values, or frameworks that underlie and explicitly shape their work for the organization (Katz and Kahn, 1978; March, 1981; Marshak, 1993; Coghlan, 2000; Sullivan et al., 2002). In this article we use the change process steps found most frequently in the literature. These steps include: developing a clear, compelling vision (Kiel, 1994; Schein, 2000; Cummings and Worley, 2004), moving the change vision to the group level (Harvey and Brown, 1996), individual employees' adoption of the change (Cameron and Quinn, 1999; Morgan and Brightman, 2001), sustaining the momentum of the change implementation (Kotter, 1995) and institutionalizing the change (Nadler and Tushman, 1990; Judson, 1991).

In order for a change initiative to be successful, organizations need to allocate adequate resources (Nadler and Tushman, 1990). Vales (2007), for example, found that senior decision makers' ability to use both formal and informal mechanisms that were culturally appropriate to the organization was a key determinant of successful change initiatives. This allocation of resources can result in change drivers (Longo, 2007), which are intended to facilitate the implementation of the desired organizational change. Although there is no agreement with regards to what a change driver is (Porras and Hoffer, 1996; Kemlgor et al., 2000; Pettigrew et al., 2001), Whelan-Berry et al. (2003a) suggest that they are '... events, activities, or behaviors that facilitate the implementation of change' (Whelan-Berry et al., 2003a). We do find that several change drivers have been researched more extensively, including leadership, vision, communication, training (Whelan-Berry et al., 2003a; Somerville and Dyke, 2008; Somerville, 2009), and participation (Whelan-Berry et al., 2003a; Turner Parish et al., 2008). In addition to these drivers, changes in organizational structure and processes and changes in human resource practices have also been repeatedly identified as change drivers (Nadler and Tushman, 1990; Bridges 2003; Somerville and Dyke, 2008; Somerville, 2009). This article moves beyond prior research by examining these frequently researched change drivers and connects them to the steps in the organizational change process most frequently identified in the literature, allowing more specific analysis of the effect of the change drivers.

The term 'change drivers' has been used in two recurring ways in the existing literature. The first is as defined above – there are change drivers that facilitate the implementation of change throughout the organization and, specifically facilitate individual adoption of change initiatives. The other use of the term identifies drivers of the necessity for a change, which is whatever gave birth to the desire or need for change in the organization. Such drivers of the need for change include, for example, increasing globalization, emerging new internet capabilities and changes in consumer behavior (Thompson et al., 2010). Furthermore, new leadership, laws, regulations and competitors can also drive the need for change (for examples see Kehoe, 2000; Anonymous, 2009; Damore, 2009; Cappelli, 2009; Ndofor et al., 2009). However, while there can be a compelling need to change, it does not mean that the related change will actually be successfully implemented.

In our exploration of change drivers and process, we do not look at variance by the nature or type of change, such as a change in organizational culture which is considered a fundamental organizational transformation (Hesselbein, 2002) versus a change in an organization's recruiting process, which can be a relatively minor or incremental organizational change. We acknowledge that it is unlikely that we would be able to determine a single organizational change process model that fits all change initiatives, regardless of their nature or magnitude, and some change drivers may be more important during specific types of change (Whelan-Berry and Somerville, 2009). This article provides a starting point. We focus specifically on change drivers and their impact, in terms of facilitating implementation and adoption of change during organization-wide change implementation. In this article we consider three questions as we review the literature:

- 1. What change drivers are most frequently identified in the literature?
- 2. What is the relationship between change drivers and the most frequently identified steps in the organizational change process?
- 3. How can organizations more effectively use change drivers to successfully implement organizational change?

Our article makes three major contributions. First, we clarify the most common change drivers that have been associated with organizational change implementation in the literature. Second, we then link those change drivers to the organizational change process. Finally, we discuss the use of change drivers from a practice perspective.

#### **Review of Organizational Change Process Literature**

Approach to Review of Existing Research

The primary focus of this article is change drivers and linking them to the most frequent steps in the change process. According to Burke (2008: 23), '[change] process has to do with how the change is planned, launched, more fully implemented, and once into implementation, sustained.' To identify the steps in the organizational change process most frequently found in successful organizational change efforts, we reviewed articles that focused on the change *process*, and building on the prior work, we then looked across levels of analysis for the steps in the organizational change process. Starting with Lewin's seminal work (1951), a number of academics subsequently developed step-based models of organizational level change. These existing change models have several ideas in common.

#### Summary of Steps Identified in the Organizational Change Process Literature

Establishing a clear compelling vision. First, change models typically stress the importance of identifying the reason for the change, creating a related sense of urgency, and specifying and communicating that reason or vision (Kotter, 1995, 2008; Galpin, 1996; Cummings and Worley, 2004). This vision typically describes the desired state, that is, how particular aspects, characteristics, or outcomes of the organization will look after the change. Creating the vision is one part of the change process and may happen with or without widespread employee involvement, and is a critical early step in the change process. Kotter (1995) notes that in every successful transformation there is a vision that is easy to communicate and that appeal to multiple stakeholders. Since our focus is on implementing this clear compelling vision, we do not link the change drivers to this step. We discuss the nature of, and the need for, further study of the change vision later in this article.

Moving the change to the group and individual level. Change models identify the need to 'cascade the change throughout the organization' (Kotter, 1996, 1999) or 'manage the transition' (Cummings and Worley, 2004). This means that the change vision moves to the group and individual levels of the organization, and becomes more specifically understood across different locations, teams and departments. If an organization's change vision is to become 'family-friendly,' for example, that vision may be clear and relatively easy to implement in an accounting or human resources department, but implementation may be much more difficult in a 24/7 production, service, or emergency care facility (Whelan-Berry, 2005).

In terms of the group level, Goodman (1982) identifies the organizational change process at the group level, which includes introduction, adoption, continuation, and maintenance or decline of the change vision and related beliefs or behaviors. A key aspect of the group level process is determining how the change initiative will work in that specific department, team, or location of the organization. Intentionality and attention at this point during change implementation is critical, as this is typically the first level of cascading the initiative or managing the transition identified above (Hinings *et al.*, 1991; Whelan-Berry and Alexander, 2007). Such groups provide a coordinating and linking mechanism to diffuse the change throughout the organization.

*Individual employee adoption of change*. As previously noted, we assume the translation, and especially the enactment of the change vision, ultimately happens at the individual employee level in situations that experience successful change (Katz

and Kahn, 1978; March, 1981; Marshak, 1993; Coghlan, 2000; Sullivan et al., 2002). While this happens in the context of groups, teams or departments, which create variance in what the vision means based on their specific work (DiBella, 1996; Klein and Kozlowksi, 2000), individual employees must actually change their values, attitudes and behaviors in order for organizational change to be successful (Cameron and Quinn, 1999).

Existing research in the field of psychology provides a strongly supported model of individual change (Prochaska et al., 1992), which has been used in management literature (Matheny, 1998; Grover and Walker, 2003; Madsen, 2003; Whelan-Berry et al., 2003b, Whelan-Berry and Harvey, 2006). This model identifies four stages in the individual change process – precontemplation, contemplation, preparation, action or actually changing, and maintenance. In this step, we focus on the individual actually changing his or her behavior, values or frameworks, which prior research has identified as necessary for successful organizational change (Katz and Kahn, 1978; March, 1981; Marshak, 1993; Coghlan, 2000; Sullivan et al., 2002).

Sustaining the momentum of change implementation. Organizational change models also identify the need to sustain the momentum of change (Kotter, 1995; Galpin, 1996; Armenakis et al., 1999; Cummings and Worley, 2004), meaning the change initiative receives attention and resources, and does not fail due to the urgency of daily operations or lack of attention. Change efforts are often under-resourced, and thus the implementation may be delayed or blocked, which could result in failure of the change initiative. Both group level (Goodman, 1982) and individual level (Prochaska et al., 1992) change models identify the need for sustaining a change. That is, continuing the new behavior. This is particularly important in initiatives that take a considerable length of time to achieve, such as an organizational culture shift, which typically takes five to seven years (Jick, 1995).

Institutionalizing the change. In terms of organizational change models, widespread agreement exists that change initiatives and the related outcomes must be institutionalized, initially identified as Lewin's 're-freezing' (1951). In this step, organizations ensure that the desired change outcomes become part of the organization's culture, ongoing operations and processes (Kotter, 1995; Armenakis et al., 1999; Cummings and Worley, 2004). The group level change process model includes the steps of continuation and maintenance of the change initiative (Goodman, 1982), which are similar to managing the transition, maintaining momentum and institutionalizing the change described above. The next section links the organizational change process described above with change drivers.

#### The Change Drivers and Organizational Change Process

As indicated earlier in this article, 'change drivers are events, activities, or behaviors that facilitate the implementation of change' (Whelan-Berry et al., 2003a). A review of the literature revealed that other words and terms are used to describe what we refer to as change drivers. For example, Jick (1995) referred to 'change accelerators' and 'tactics', Whelan (1997) referred to 'catalysts' and Porras and Hoffer (1996) referred to 'action levers'.

We summarize our review of the change drivers and the organizational change process in Table 1. We then provide a definition and clarification for the change drivers, then we link each change driver to the steps in the change process.

#### Accepted Change Vision

Definition and clarification. A key driver of organizational change is that the change vision is accepted by employees, as well as by other stakeholders. This driver directly involves individual employees and other stakeholders in the change implementation as they accept that the change vision is positive for themselves and the organization. Prior research notes that acceptance of the vision is a key driver of individual employee change and widespread change implementation (Whelan, 1997; Riis et al., 2001; Gradwell, 2004; Brenner, 2008; Palmer and Dunford, 2008). This prior research clarifies that simply establishing a clear, compelling change vision in response to a need to change is not enough; employees, and if relevant, other stakeholders must 'buy-in' to the vision, and agree that the vision is positive for the organization (Whelan, 1997; Whelan-Berry, 2005; Brenner, 2008; Burke, 2008). Clearly how the vision is established, for example whether employees and other stakeholders participate in its creation, can affect acceptance of it, and we address questions regarding the relationship between establishing a clear, compelling vision and acceptance of the vision as a driver later in this article, in the section relating to future research.

Linking accepted change vision to organizational change processes. In cases of successful change implementation, the vision is the starting point. The challenge facing change leaders is whether the change vision is then accepted. To be effective as a change driver, the vision must be compelling to and accepted by individual employees (Nadler and Tushman, 1990; Kotter, 1995; Recardo, 1995). The majority of failed change initiatives and their leaders have a vision but often, in these cases, the vision is not specific enough or compelling enough to employees, is not accepted, and employees do not change (Hinings *et al.*, 1991; Whelan-Berry *et al.*, 2003a; Whelan-Berry, 2005). Prior research finds that an accepted change vision is linked more often to the early steps of the change process, specifically moving the vision to the group level and, sometimes, with individual adoption of change initiatives (Hinings *et al.*, 1991; Whelan-Berry *et al.*, 2003a; Whelan-Berry, 2005).

#### Leaders' Change Related Actions

Definition and clarification. Leaders' change related actions are one of the most frequently identified change drivers in the literature (Trice and Beyer, 1991; Schein, 1992; Taylor-Bianco and Schermerhorn, 2006). While top leadership support is critical (Kotter and Heskett, 1992), leadership support from leaders throughout the organization including teams, departments, and locations is critical to successful change implementation. Likewise, lack of such leadership has been

Table 1. Linking organizational change drivers and the steps in organizational change process

Change drivers	Summary definition	Move the change vision to group and individual level	Enable the individual employee adoption of change	Sustain the momentum of change implementation	Institutionalize change
Accepted change vision	Embracing the change vision as positive for employees, stakeholders and/or the organization.	Provides the means to ground or specify the meaning of the vision to various groups, and for individual roles and jobs across the organization.	May move employees to modify behavior. At a minimum, an accepted vision means employees have moved to a point of considering the need to change, and beyond not a lack of awareness that change might be needed. May also lower resistance.		
Leaders' change related actions	Actions by the community of leaders throughout the organization that signal the importance of the change vision and its outcomes and support its implementation.	Signals to groups and individuals the importance of moving forward with adoption and implementation of the change initiative by, for example, recognizing or following up on progress.	May result in individual adoption of change initiative. Or can move employees to understand the change initiative is a priority and is needed for ongoing organizational success.	Signals the ongoing importance of the change initiative through leaders continued focus on and support of the progress of the change initiative.	Enables the chabecome embed the organizatio 'stick' as the ne status quo.
Change related communication	Regular, two-way communication specifically about the change initiative, its implementation, related successes, challenges and their resolution.	Facilitates employee understanding and engagement.	Addresses employees' questions and concerns through two-way communication, which allows individuals to remain committed to the change. It also ensures that any obstacles are properly identified and removed.	Signals the organization's ongoing commitment to the change initiative, communicates successes and challenges, and ongoing change implementation.	

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Table 1. Continued

Change drivers	Summary definition	Move the change vision to group and individual level		Sustain the momentum of change implementation	Institutionalize change
Change related training	Provides an understanding and necessary skills, values and/or frameworks concerning the change initiative.	Allows groups and individuals to develop job or role specific understanding of the change initiative and provides new knowledge, skills and work processes needed for desired change outcomes.			
Change related employee participation	Involves employees in tasks specifically related to the change initiative, such as pilot groups.	Deepens understanding of the change vision and related outcomes, and allows such understanding to become 'local,' specific to a group.	Allows individual employees to more fully experience what the change initiative means for their job/role/function, fostering actual change.		
Aligned human resources practices	Aligns human resources practices, such as performance appraisal and rewards; and recruitment, selection, and socialization of new employees with the change initiative.		Signals management's commitment to the vision by appraising and rewarding new work behaviors and outcomes, and by acknowledging resistance to change in performance feedback and appraisal.	Signals that the change is important to organizational success, and that the recruitment and selection of new employees, orientation, performance evaluations and rewards will be based on the change vision and its related outcomes.	The vision and outcomes beconorm, reflected throughout the appropriate hur resources pract
Aligned organization structure and control processes	Aligns organizational structure, organizational outcome measures, planning, budgeting and reporting systems.	Helps to demonstrate management's interest and commitment to the change initiative.	Facilitates employees acceptance and adoption of change by providing needed structural support and processes.	Facilitates the implementation of the change by incorporating it as necessary in organizational systems and processes.	Helps to ensure groups and indi do not revert to pre-change stat process or appr

noted as a source of change failure (Hinings et al., 1991; Whelan-Berry and Alexander, 2007).

Considerable research has noted the high level of effort required by leaders to successfully implement organizational change (Schein, 1992; Morgan and Brightman, 2001; Miller, 2002; Gill, 2003; Fernandez and Rainey, 2006). An important clarification of prior research is that leadership works as a change driver when leaders actively support the change vision or, in other words, leaders 'walk the talk' of the change initiative throughout the change implementation process (Schein, 1999; Hesselbein, 2002; Cameron and Green, 2004), as opposed to providing the vision and walking away to other priorities. It also requires that the leaders demonstrate the actions that they want others to model (Kotter and Heskett, 1992; Cameron and Green, 2004) and manage resistance to change (Beckhard and Harris, 1987; Recardo, 1995; Strebel, 1996).

It could be said that all change drivers result from leaders' change related actions due to the formal power and authority that leaders have in the organization. However, employees are clear that visibly seeing leaders' active involvement in and commitment to the initiative is a change driver, regardless of there being other change drivers and or knowing a leader has allocated resources. It is the leaders' demonstrated belief in and commitment to the change vision and its implementation that is persuasive, which is different than any other or all other drivers combined.

Linking leaders' change related actions to organizational change processes. Various researchers (Waldersee and Eagleson, 2002; Woodward and Hendry, 2004) found that leaders themselves and their interaction with employees are important to the overall change process. Senior leaders must take actions to hold themselves and group leaders accountable for moving the vision to the group and individual levels (Hinings et al., 1991; Whelan-Berry and Alexander, 2007). Employee adoption of the change initiative can be facilitated by leaders persuading employees to personally contribute to it (Strebel, 1996), and actively managing employees' dysfunctional emotions and resistance to the change initiative (Recardo, 1995). Leaders assist in sustaining momentum and institutionalizing the change initiative in numerous ways, such as paying attention to the progress of the change initiative and removing obstacles encountered, developing appropriate structures and establishing necessary monitoring mechanisms (Trice and Beyer, 1991), and communicating the relationship between the change efforts and organizational success (Kotter, 1995).

# Change Related Communication

Definition and clarification. This is one of the most frequently identified change drivers (see Kim et al., 1995; Schneider et al., 1996), and poor communication is a reason given for change failure (Richardson and Denton, 1996). Change related communication focused on building employees' understanding of the need for the change initiative is crucial (Allen-Meyer, 2001; Whelan-Berry et al., 2003a). Further, it is important for the leadership to communicate that the current approach, that is the pre-change state or approach, will not achieve the desired outcomes for the organization (Thompson and Sanders, 1998). Change related communication often acts as a driver by sending a clear message about why the change is needed (Schein, 1985), advising employees of the change vision, as well as related strategies for achieving the change vision (Nadler and Tushman, 1990; Kotter and Heskett, 1992), and further developing employees' understanding of and commitment to the ongoing change implementation (Kotter and Cohen, 2002). It can also, for example, provide the status of the change implementation and address points of resistance (Schein, 1985). Prior research (Nadler and Tushman, 1990) has also found that to be effective, the communication should be two-way, that is, both telling and listening. Change related communication specifically about the change vision and its implementation, most frequently directed to employees, signals that the change and its implementation is being monitored, is progressing, and highlights early and ongoing successes and problems and their resolution.

Linking change related communication to organizational change processes. Prior research supports the notion that communication is important throughout the organizational change process. Once the vision has been developed, it needs to be communicated to both the group and individual levels (Hinings et al., 1991; Whelan-Berry, 2005), explaining and persuading employees that the change is important (Koehler and Pankowski, 1997; Thompson and Sanders, 1998), and increasing understanding and commitment to the change initiative (Kotter and Cohen, 2002; Pollitt, 2004). Communication is often crucial to individual change adoption (Cameron and Green, 2004), and can also address resistance to change (Schein, 1985). In order to sustain the momentum related to the implementation of the change initiative, it is important to communicate regularly about it. Regular communication helps to highlight important issues and motivate organizational members to continue to work on the change initiative (Nadler and Tushman, 1990). Prior research has not empirically explored the link between ongoing communication about the change initiatives and institutionalizing the change initiative.

# Change Related Training

Definition and clarification. Prior research notes that training provides an understanding of the change initiative and related new knowledge, skills or behaviors (Schneider *et al.*, 1994; Alvesson, 2002). Employees learn new technology, processes, work processes or routines, and behaviors which embody the change vision. Further, training often provides meaning for the change vision, that is, what the organizational change vision means at the group level (Bramley, 1989; Carnevale *et al.*, 1990; Goldstein, 1993; Harrison, 1995; Bennet *et al.*, 1999). This is especially important when the change vision is abstract, and needs to be specified for group and/or individual jobs and processes.

Linking change related training to organizational change processes. Prior research has found that training is most frequently associated with developing understanding and necessary skills, values or frameworks related to the change initiative

(Bramley, 1989; Carnevale et al., 1990; Goldstein, 1993; Whelan-Berry et al., 2003a; Whelan-Berry and Alexander, 2005). Change related training has been linked to the steps of moving the change vision to the group or individual level and individual employee adoption of change initiatives (Whelan-Berry et al., 2003a; Whelan-Berry and Alexander, 2005). Change related training has not been linked to sustaining momentum or institutionalizing the change, perhaps because it is most often a one-time event or experience.

#### Employee Participation in Change Related Activities

Definition and clarification. Prior research shows that employee participation in change initiative activities, such as being involved in implementation planning or a pilot program, can deepen the employees' understanding of the change initiative and can also increase commitment to the change initiative (Kennedy, 1994; Howe and Johnson, 1995; Pascale et al., 1997; Whelan-Berry et al., 2003a; Turner Parish et al., 2008). As a specific example, Whelan (1997) found that participation in pilots and in shaping change initiatives altered individual frameworks, increasing understanding and commitment to change initiatives, and increasing employee enthusiasm. What is common to this research is that individual employees are actively involved in tasks specifically related to the change initiative, such as focus groups, pilot efforts, shaping the change implementation, designing change training, although those tasks vary based on the specific change initiative and organization.

Linking change related employee participation to organizational change process. Employee involvement in participatory activities such as planning the change implementation or participating in change initiative pilots can help the change vision move to the group level. As individual employees participate in change related activities, they return to their group with a more detailed understanding of the change initiative, and may be clearer about what the change vision means, its benefits and challenges for their group, and act as change champion or agent within their group. Prior research also links change related employee participation to individual employee adoption of change initiatives (Pascale et al., 1997; Whelan-Berry et al., 2003a; Turner Parish et al., 2008).

#### Aligned Human Resources Practices

Definition and clarification. A number of human resource practices have been identified as change drivers, including training, recruitment, selection and socialization of new employees, changes in performance appraisal criteria, and incentives and rewards. Training was discussed earlier in the article, and we separate training because it has been individually identified in prior research. A key aspect of aligned human resource practices is when employee performance criteria, appraisals and rewards are modified to reflect the change vision, which signals it is imperative that individuals change their behaviors in order for a change initiative to be successful (Cameron and Quinn, 1999), which prior research identifies as critical to change success (Armenakis et al., 1999;

Charan, 2001; Kotter and Cohen, 2002). Along with performance criteria, incentives and rewards, both formal and informal, should be aligned with the organizational change initiative (Williams *et al.*, 1989; Kotter and Heskett, 1992; Hall *et al.*, 1993; Schumacher, 1997; Lindquist, 2000; Cameron and Green, 2004). As change implementation continues, other human resource practices should be aligned as well. As examples, the kinds of employees hired, retained, and promoted (Schneider *et al.*, 1994) or the socialization of new employees (Harrison and Carroll, 1991) send messages about the importance of the change initiative.

Linking of aligned human resources practices to the organizational change process. Most frequently, changes to align the performance appraisal and related reward systems to reflect the behavior, skills or work embodied by the change initiative have been identified as key drivers of individual change adoption (Armenakis et al., 1999; Schein, 2000; Schneider et al., 1994; Kotter and Cohen, 2002; Cameron and Green, 2004). Alignment of recruitment, selection and socialization of new employees, and the behavioral systems and processes also help to sustain the momentum of the change implementation (Burke, 2008), as well as institutionalize the change (Nadler and Tushman, 1990). According to Kotter (1995: 67), 'Until new behaviors are rooted in social norms and shared values, they are subject to degradation as soon as the pressure for change is removed'.

#### Aligned Structure and Control Processes

Definition and clarification. Beyond human resource practices, this change driver includes structure and organizational processes, such as planning, budgeting and reporting, operations, customer and technology systems. We acknowledge that a different organizational structure may be the change vision itself, and we are not specifically focused on such change initiatives. Many researchers (Hall et al., 1993; Kim et al., 1995; Porras and Hoffer, 1996; Galpin, 1996) have noted that often modifications are required to the organizational structure in order for the change initiative to be successful.

Systems and processes that measure and assess the change initiative, and allow the organization to take corrective action when necessary have been identified as critical by a number of researchers (Vollman, 1996; Hennessey, 1998; Cameron and Green, 2004), signaling to employees that the change initiative is important enough to be monitored, measured and managed. Depending on the nature of the change initiative, planning and budgeting systems (Nadler and Tushman, 1990; Cameron and Green 2004; Worley and Lawler, 2006), policies and procedures (Baker, 1980; Nadler and Tushman, 1990) and or management information systems (Davis, 1984; Hall *et al.*, 1993) may need to be changed in order to support the change and act as change drivers.

Linking aligned structure and control processes to the organizational change process. This change driver is linked to the step of moving the vision to the group level, for example in relation to a unit's performance measurement (see Vollman, 1996; Cameron and Green, 2004; Burke, 2008). There is also a link between this change driver and individual employee adoption to the change, for

example, by providing the structure and/or processes for employees to be successful in the changed organization. It is also linked to sustaining the momentum of the change implementation (Nadler and Tushman, 1990; Bernick, 2001). As organizational members experience the changes in the organization's structures and processes, it provides further evidence that the change is real, potentially reducing resistance (Recardo, 1995), and contributing to successful change implementation (Johnson et al., 2001; Smith, 2003).

## Discussion

In this section we describe our contributions to theory and practice, the limitations in our study, and the directions for future research.

## Contributions to Theory

Change Drivers and the Organizational Change Process. First, we have clarified the change drivers most frequently identified in prior research. This allows future research to be more sharply focused and to continue to distinguish effective change drivers. We have also provided more specific and testable links between change drivers and specific steps in the organizational change process.

Table 1 highlights several aspects of change drivers and their impact in the organizational change process. First, we have begun to separate the creation and establishment of a clear, compelling change vision from acceptance of that vision. Acceptance of a vision means that individuals have progressed from not seeing a need to change or not understanding the proposed change to seeing the change as positive for themselves and/or the organization, thus emphasizing the need to focus on whether the vision is accepted, and not simply having a vision. Change related training, change related employee participation and aligned human resources appraisal and reward systems are the drivers that have been found to be most strongly linked to individual employee adoption of change initiatives, highlighting the need both for these drivers and for individual change to occur if the organizational change is to be successful. Aligned human resources practices and aligned organizational structure and control processes are linked to the steps of sustaining momentum and institutionalizing the change. Leaders' change related actions, change related communication, and aligned structure and control processes are the three drivers that are linked to the majority of the steps in the organizational change process after the vision is established, and should be resourced as change drivers throughout the process.

Change drivers and steps in the change process. While prior research identifies the need for multiple change drivers for successful change implementation (Pettigrew et al., 2001; Whelan-Berry et al., 2003a), we suggest that it is important to have a mix of change drivers across the key steps of the organizational change process. As previously noted, Table 1 highlights that most change drivers have a stronger relationship with certain steps in the organizational change process. One explanation for successful change implementations may be a greater use of change drivers that have a strong relationship with individual employee adoption of

change initiatives, or the use of a driver with a relationship with the majority of the steps in the change process. However, using drivers that are primarily linked to the step of individual change may not be enough to institutionalize the change. Thus, using a mix of drivers that leverage each of the steps in the change process seems important.

Finally, prior research on a given change driver (or drivers) has most often linked the drivers to whether the desired change in that particular organization or study occurred, and thus there is variance in the dependent variable in prior research. Our model provides a way to specifically test the impact of the drivers, and one approach to linking change drivers to a dependent variable (or variables).

#### Contributions to Practice

Management scholars have noted that planning is a critical but highly underutilized skill (Daft, 2005). One explanation for why so many change efforts fail could be a lack of planning and adequate resources, as occurred in our opening story. Often, change initiatives flounder because the ongoing day-to-day business operations take precedence in terms of focus, time and money. Our research highlights that it is important for change leaders to identify at the outset how the change implementation will occur, including how change drivers will be used and when, for example; how and when change communication will occur; or, whether and, if so, what type of training is needed for employees to modify their work frameworks, skills or behaviors. Such planning should also include how the progress of the change will be measured, the criteria for its successful, completed implementation, and its impact on ongoing operations.

Further, many leaders roll out a change vision, only to be surprised when employees resist the change or do not adopt it. A key learning from our research is that some change drivers more directly drive individual adoption of change initiatives. These drivers facilitate employees' understanding of what the change vision means for the employee's specific job so that the employee can then actually change his/her behavior. For example, organizational cultural changes can often be very abstract when the change vision is presented to employees. In these cases, change related participation, training or change related communication could be used to make the change vision more understandable to and accepted by employees.

Similarly, organizations should also use change drivers that institutionalize the change. While there may be clear communication about the change, employee appraisal and reward systems often remain focused on prior or pre-change criteria, thus employees typically continue what they have done in the past. Or, key structures and processes are not modified as part of the change implementation. Such drivers should be in place early enough in the change process to signal the organization's commitment to the change vision and its successful implementation.

#### Conclusion

The authors agree with other researchers that organizational change is not a linear, straightforward process, but it is iterative and complex, with unintended as well as

intended outcomes. Our work highlights several related issues and areas worthy of further study.

Establishing the change vision is a key part of the organizational change process, and the process of establishing the vision and what is most important in the visioning process needs to be more fully understood in research and related practice. Once established, an accepted vision becomes a change driver, which prior research clearly supports can facilitate the ongoing change process. We acknowledge the complexity and methodological issues of this, and feel that this is an important area for future research.

Leaders' change related actions in an organizational change initiative are also very complex, and somewhat tautological. We need to better understand them in terms of executive leadership versus other leaders and managers. There is also need to explore whether the other change drivers identified are seen by employees as 'leaders change related actions', which might explain the frequent proposition that leadership is the primary change driver or that it is sufficient on its own. We need to clearly distinguish leaders' change related actions that foster employee adoption and ongoing implementation of change initiatives such as celebrating or recognizing positive outcomes from the change, from more general leadership tasks or roles such as recognizing ongoing performance. Finally, future research should explore whether more general leadership support moderates the effect of various change drivers.

Our work does not yet consider how these drivers vary in different organizational settings and types of changes, but provides a starting point for such research. Certainly the effect of drivers varies based on the characteristics of the change initiative, such as first-order versus second-order, or the nature and setting of the change initiative. Also we have not addressed the source of the change initiative, for example, in a legislated or mandated change versus an internally conceived and planned change, is the need for and impact of change

We did not look at changes in leadership personnel or employee turnover, and the subsequent hiring of new leaders or employees as a change driver. Prior empirical research (Somerville, 2009) has noted that changes in leadership (Trice and Beyer, 1991; Sliwka, 2007) and employees (Harrison and Carroll, 1991; Alvesson, 2002) can be a change driver, another area worthy of further research.

Our goal remains – to better understand the organizational change process and change drivers, so that organizations can more effectively achieve successful organizational change. We agree with Kotter: 'A 70% failure rate is an enormous drag on a company, a government, an economy, or a society. Investors are obviously hurt, but the pain goes in all directions: to employees, customers, our families' (Kotter, 2008: 13). Sustainable business requires efficient and effective use of resources, especially in instances of large-scale change. We hope to add to current theory and practice by more clearly and specifically linking two key aspects of organizational change, the process and change drivers. Further, we hope this work can help scholars and practitioners in change initiative implementation, resulting in more effective use of resources, as well as successful organizational change initiatives.

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