Understanding failure to change: a pluralistic approach and five patterns

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Abstract
Purpose – The purpose of this paper is to understand failure to change by examining patterns of coherent structure and agency characteristics in changing organizations in specific sectors and to provide specific recommendations for intervention in these patterns.
Design/methodology/approach – A large survey in 367 organizations engaged in different change processes and from different sectors, among employees in different positions.
Findings – The paper finds that there are five patterns among changing organizations, each with their own specific problems, characteristics, and change approaches that require different interventions.
Research limitations/implications – Parsimony in research models and the study of overall relations between variables does not help to understand failure to change. More integrative approaches are needed that take variety among changing organizations into account.
Practical implications – Change agents should not opt for a “one best strategy” for change but choose a contingent change approach that takes into consideration the specific characteristics of their organizations, change processes, and contexts in order to make change more successful.
Originality/value – This paper establishes that successful change cannot be explained by one or a few variables but is contingent on an interplay of agency, structure, and contextual characteristics. Together, these characteristics form constellations that characterize different sectors. The paper provides suggestions for more successful change.

Keywords Organizational change, Change management, Organizational behaviour, Organizational culture

Paper type Research paper

Introduction
Understanding failure to change has been a continuous challenge for researchers from different schools of thought in the field of organizational change. Various studies on planned, management implemented change processes suggest that the failure rate of these processes is more than 70 percent, a percentage that seems stable over the last decade (Davidson, 1993; Senge et al., 1999; Wall, 2005). Although scholars are unanimous about the height of this percentage, there is no such unanimity as to its causes, which may among others focus on resistance to change (Reger et al., 1994), the role of the change manager in managing the process (Kotter, 1996), a lack of participation due to top-down steering (Connor, 1993), organizational culture...
By and large, theories explaining failure to change focus on one of the following three broad categories of characteristics in their explanations: organizational – i.e. features of organizations – contextual – i.e. conditions in which the organization is operating – and change process characteristics – i.e. change approaches and the management of change – (Armenakis and Bedeian, 1999). The three different approaches all have some explanatory value, but none of them can fully account for the problems that organizations face in implementing change. But even within one approach, explanations are often considered in limited constellations, denying the interplay with other factors. They tend to focus on generalizable theory, disconnecting organizations from their context. We need a theory that can shed some light on the interactions between the relevant variables. Distinguishing “archetypes” or patterns of coherent characteristics that commonly occur together helps to better understand the interplay of constructs (Ostroff and Schmitt, 1993; Greenwood and Hinings, 1993). Such patterns show how order emerges from interaction between concepts as a whole and represent “a multidimensional constellation of conceptually different characteristics that commonly occur together” (Meyer et al., 1993, p. 1175).

Despite its usefulness, archetype theory is characterized by some problems that need to be addressed. First, as Kirckpatrick and Ackroyd (2003) argue, there is the problem of generalization. Archetypal theories are developed based on research in organizations run for profit, but are usually generalized to the public sector. This sector, however, operates in an entirely different context and is characterized by different rules of conduct and different, more coercive approaches to change. Second, archetypal theories place a strong emphasis on structural forms as definitive for patterns of organizing. As such, they perceive change as a series of movements within and between structure archetypes induced by changes in the environment, intertwined by long periods of equilibrium (structure “fit”). These changes weaken the legitimacy of the existing archetypes and create opportunities for new and more functional structures when they achieve legitimacy. The underlying assumption here is that organizations are restricted in their opportunities by what the context and the organizational characteristics dictate: a structure perspective (Astley and van de Ven, 1983; Scott, 1995). Structure is often described as “formal structure” in terms of control mechanisms and organization type (Burns and Stalker, 1961), but the importance of social mechanisms such as organizational culture – its beliefs and practices – is also emphasized in the determination of structure. There is little attention in this perspective for underlying processes of managerial actions and interactions. This makes it difficult for these theories to specify exactly how failure to move from one archetype to the next can be explained (Greenwood and Hinings, 1993). The perspective has a rather functionalist character and denies the agency of individuals and that the dynamics of change can be influenced by this; that is, the perspective denies that, for instance, some processes of change may be more coerced in character whereas others are more participatory in character. Agency perspectives take agency variables as central in their analyses and assume that people in organizations are free to choose, both for a specific strategic course of their organization as well as for a specific way of organizing and changing (Astley and van de Ven, 1983). From an agency perspective, organizations are not perceived as relatively static and not

(see Schein, 1999, organization size and (resulting) rigidity (Haveman, 1993) or the relevance of the goals of change (Zorn et al., 1999).
moving, until reorientation of strategy is absolutely necessary for survival. These approaches consider it rather meaningless to talk about equilibrium but instead assume that systems are always in transition (Darwin et al., 2002). The strategies chosen and approaches used for change influence success and failure in changing (Hosking and Morley, 1991; Hosking, 2004).

These problems call for research in public sectors and for an enrichment of archetype theory with agency variables – processes and actions. As Giddens (1984) states, structures are probably simultaneously created by and constrain social action. Structure and agency in other words are strongly interrelated. These interrelations and the fact that structure differs between for instance private and public sectors (Kirckpatrick and Ackroyd, 2003) may imply that specific patterns of coherent structure and agency characteristics characterize specific groups or sectors of changing organizations. Up to now, there has been no research inquiring into such patterns with respect to both structure and agency-related variables and different sectors.

The goal in this paper is to find generalized patterns of organizing and changing in both the private and public sectors, and to try to explain variations between patterns by interrelating organizational and change process variables and linking them to context. By doing so, the study aims to contribute to a better understanding of failure to change and to provide more contingent recommendations for making change more successful. It is proposed in the paper that different organizations from different sectors are engaged in different change processes that are managed differently, differ in their support for change, are confronted with different barriers to change and reflect different “patterns” requiring different recommendations for improvement. In the next section, existing theories on the role of organizational and contextual as well as change process characteristics will be discussed and some propositions will be formulated concerning their relevance for understanding failure to change and their possible interrelations.

Organizational and contextual characteristics for explaining failure to change

Much work has been done on the role of structure in studies of patterns of organizing and changing. Formal structure can be defined as the amount of formalization, centralization and hierarchical control. The more formalization and control, the more mechanistic an organization’s structure. Bureaucratic organizations with mechanistic structures are found to hinder change through too much managerial power, too many rules and procedures and too little attention for the outside world (Burns and Stalker, 1961; Damanpour, 1991; Ostroff and Schmitt, 1993). A large organization size has been found to be related to mechanistic structures and rigid interaction patterns, and therefore to failure to change, although opposite results have also been reported (Haveman, 1993; Elfring and Hulsink, 2003). The ability to engage in face-to-face interactions declines with size and the style of communication is therefore less personal and more formal. The result is fragmentation and differentiation of authority, more coordination and control, more political constraints, and inhibiting power relationships (Haveman, 1993). Structure is also found to be related to sector and change goals. For instance, the market powers that organizations have and the environmental demands that they are confronted with, vary considerably for organizations in different sectors (van de Ven, 1986; Damanpour, 1991). In service organizations, the producer is closer to
the customer, which makes flexible interaction with clients necessary, much more so than in industrial organizations (Damanpour, 1991). Changes focused on turbulent and changing market demands in the private sector may have entirely different requirements for success than changes focused on the internal organization in the public sector (Devos et al., 2007). Moreover, the externally (society) controlled character of change in the public sector may cause a reluctance in managers to delegate authority and may, therefore, lead to much higher levels of bureaucratic control than in organizations in the private sector (Damanpour, 1991). This bureaucracy might hinder change (Burns and Stalker, 1961). Greenwood and Hinings (1993) emphasize the importance of social mechanisms such as culture – beliefs and practices – in the determination of structure. Middle rank leaders play an important role in the creation and change of cultures (Smith, 2003). Leaders shape and reinforce organizational structures and cultures through their actions and interactions with groups (Schein, 1999). Leaders and groups of employees may form coalitions to exert influence on the change process and outcomes in order to promote their interests, goals, and positions (Schein, 1991). The resulting interrelations between groups are of a political nature and can be a source of resistance to change (Morgan, 1986). Organizational structure, culture, and leadership are claimed to influence work satisfaction and technology as well, because they influence cooperation and employees’ locus of control in organizing their work (Lok and Crawford, 1999; Child and Loveridge, 1990).

**Characteristics of change processes for explaining failure to change**

From an agency perspective, organizational characteristics are consequences of managerial perceptions and actions. The design and management of change processes is considered crucial to the success or failure of organizational change. The most dominant distinction between change approaches is of a dual nature and contrasts participative and unilateral approaches (Waldorsee and Griffiths, 2004). The roots of participative approaches can be retraced to the human relations approach. A dominant underlying value is that people are a source of knowledge and experience. Management of change is based on delegation and decentralization while preserving central cohesion (Beer and Nohria, 2000; Boonstra, 2004). It is assumed that people in the organization are willing to change as long as the right approach is chosen. Unilateral approaches see analyzing problems and designing and implementing solutions as the way to change. It is assumed that aspects within the system can be adjusted so that they will function more effectively. As such, the approach reflects technical systems approaches. Examples are Business Process Redesign, Total Quality Management, and Balanced Score Card (Boonstra, 2000).

Drawing on the literature, this paper distinguishes five different change approaches, varying in their underlying assumptions and taking different positions on the participative – unilateral dimension.

Dialogue is a form of generating ideas in which all group members can present their ideas and opinions in order to generate insights that would individually be unattainable (Gustavsen, 1992). The underlying assumption is that changing is a joint process that can only be realized if all actors are brought together in a process of exchanging ideas and developing new values (Senge, 1990; Steyaert et al., 1996). In this view, successful change can only be attained if managers and employees work together on a basis of equality and every participant’s opinion is valued alike.
In programmatic change approaches, change is seen as an iterative process. Programmatic approaches have a rich tradition in the organization development literature (Pettigrew et al., 1992; Kanter et al., 1992; Beer and Nohria, 2000; Boonstra, 2004). They are marked by normative re-educative strategies: change will take place if normative orientations concerning old patterns are changed and commitment to new patterns is developed (Chin and Benne, 1969; Boonstra and Bennebroek Gravenhorst, 1998). Change managers play an important role in influencing and provoking employees to change in a stepwise and participative process. They try to create support for change by inviting employees to participate in the process, defining clear steps, and taking enough time for each step (Burke, 1987; Cotton, 1990; Strauss, 1998).

Negotiation may provide support in situations characterized by heavily conflicting interests and by different interest groups influencing the change process in order to secure their own interests, goals, and positions (Morgan, 1986; Boonstra and Bennebroek Gravenhorst, 1998). In such cases, it is necessary to achieve a compromise in the negotiation arena and critically examine polarized perceptions and openly discuss differences and tensions resulting from them (de Caluwé and Vermaak, 2002; Boonstra and Bennebroek Gravenhorst, 1998).

Process characteristics are considered crucial in these participative approaches. Change managers and line managers must provide clarity about the change goals and work towards agreement about them. If employees fail to see the reason for change, the outcomes that they can expect and the profits that change may bring them, they will assume a passive or rejecting attitude (Kotter, 1996; Ford and Ford, 1995). Especially in programmatic change, information is seen as a means to legitimize the goals and the chosen change approach, to make the advantages of the changes clear to employees and to stimulate agreement (Armenakis and Harris, 2002). It is also used to increase employees’ willingness to contribute to and support change, and to improve their outcome expectations of the change process (Miller et al., 1994). The assumption is that when change managers fail to share information about the changes and the underlying reasons for change, this will have a highly negative impact on the process (Covin and Kilmann, 1990). Information is also related to the timing of change, the separate phases or steps that will be followed to attain the goals, to prepare employees for what is coming (de Caluwé and Vermaak, 2002).

Systematical approaches have a more unilateral character than the previously described strategies as it is assumed that organizations and people can be changed using rational decision making and the knowledge of experts, specialists, and top managers in change design and planning (Chin and Benne, 1969). Change managers formulate fixed goals and make a design or plan, use fixed procedures and methods, and set deadlines (de Caluwé and Vermaak, 2002).

Unilateral assumptions also underlie power approaches. Here, change managers implement changes top down. The underlying assumption is that management knows best what the organization needs and that employees will shift attitudes about the changes once they are effective. Changes are prescribed and forced and subordinates are expected to adjust their behavior (Chin and Benne, 1969; Waldersee and Griffiths, 2004). Employees have little or no influence on the change process and its goals. This strategy is often related to a lack of support and resistance (Jermier et al., 1994; Folger and Skarlicki, 1999).
The present study
In the previous sections, I described interrelations between organizational and contextual characteristics and between change process characteristics. There is, however, little empirical work on the interrelations between organisational, contextual, and change process characteristics (Self et al., 2007). From the theory described above, we can however hypothesize on some probable interrelations. The assumption in this paper – and in approaches aimed at identifying patterns in changing organizations in general – is that phenomena are both “cause and effect of related phenomena and, ultimately, their own cause” (Roach and Bednar, 1997, p. 674). These approaches therefore do not distinguish between predictor and dependent variables. The assumption is that agency and structure mutually influence each other. Besides, approaches aimed at identifying patterns acknowledge the possibility of a nonlinear relation between variables. Their underlying assumption is that “parts of a social entity take their meaning from the whole and cannot be understood in isolation” (Meyer et al., 1993, p. 1178). Drawing from the theories described above, the paper proposes that organizational characteristics and change approaches form coherent patterns in specific organizational contexts. More specific, it is expected that systematic and power approaches are used more in organizations characterized by mechanistic structures, with less favourable evaluations of leadership and culture, and characterized by political behaviour. It is expected that there is little attention for a thorough process management in these organizations. Although, it is acknowledged that different patterns may be found among organizations in the same sector, it is proposed that a mechanistic, power-based pattern is found more in large-scale organizations, such as public utility and governmental organizations. These organizations work more on goals aimed at the internal organization and have less favourable outcome expectations. In contrast, it is proposed that actors are more positive about work in the organization, evaluate leadership and culture more favourable and experience less political relations in organizations with organic structures. These organizations use participative change approaches and have more attention for clear goals, provide good information, a timing that allows for enough time for each step and little tensions and a favourable outcome of the changes. This pattern may be found more in small organizations working on change goals in relation to turbulent markets, such as on improving customer orientation, reinforcing competitive position, innovation and flexibility, and on organization development.

Method
Sample
We used a questionnaire in our research. The data were gathered using the networks of three Dutch management training institutes. Data were obtained from managing directors, line managers, staff members, employees, consultants, and in some cases members of the Works Council[1], from a total of 507 different departments and business units of 367 organizations differing in size, sector, and the type of change process. All organizations were engaged in extensive second order change processes. These are radical changes aimed at non-routine problems with unclear solutions that often have to do with the attunement of an organization to its changing environment (Ackerman, 1986). On the average, we collected five questionnaires per organization or business unit. In the end, we collected a total of 2,690
questionnaires. In total, 40 percent of these questionnaires were answered by people from organizations in the profit-sector, whereas the other 60 percent of the questionnaires were collected from individuals in non-profit (30 percent) and governmental (30 percent) organizations. Of our total respondents, 68 percent were men and 32 percent were women.

Measures
In order to measure most of the constructs that are considered important in the three theoretical explanations, two existing questionnaires on barriers to organizational change were included into a four-part questionnaire (Bennebroek Gravenhorst et al., 2003; Werkman, 2006). Although these questionnaires measured organizational and process characteristics, some questions concerning contextual characteristics, and outcome variables had to be added.

Organizational characteristics
This part of the questionnaire contained 27 statements that focused on six characteristics:

1. structure;
2. goals and strategy;
3. culture and leadership;
4. political relations;
5. work characteristics; and
6. technology.

Each characteristic was measured by three to six statements. For each statement, the respondents indicated on a five-point Likert scale (1 “strongly disagree,” 2 “disagree,” 3 “do not disagree, do not agree,” 4 “agree,” and 5 “strongly agree”) to what extent they agreed with it.

Contextual characteristics
The second part of our questionnaire contained four items about the context of change processes:

1. organization size;
2. sector represented as the type of industry;
3. sector, represented as profit, non-profit, or public; and
4. the goals of the change process.

Characteristics of change processes
The third part of our questionnaire contained 54 statements that focused on 13 aspects of change processes:

1. dialogue;
2. programmatic approach;
3. negotiation;
4. systematical approach;
(5) power approach;
(6) tensions;
(7) change management;
(8) line managers;
(9) change goals;
(10) information;
(11) support for change;
(12) outcome expectations; and
(13) timing.

Measurement, scale, and procedure were the same here as for the organizational characteristics (see Table I) for scale reliabilities.

**Outcome variables and position**
Lastly, we incorporated some outcome variables and a question to determine the respondents' position:
- earlier change not failed;
- the respondent’s experience with the consequences of the change; and
- the respondent’s position in the organization.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Innovative</th>
<th>Political</th>
<th>Unclear</th>
<th>Skeptical</th>
<th>Cynical</th>
<th>F</th>
<th>p</th>
<th>α</th>
</tr>
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<tr>
<td>Goals and strategy</td>
<td>0.85</td>
<td>0.26</td>
<td>-0.37</td>
<td>-0.08</td>
<td>-1.06</td>
<td>347.56</td>
<td>0.001</td>
<td>0.71</td>
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<td>Technology</td>
<td>0.23</td>
<td>0.07</td>
<td>0.02</td>
<td>-0.12</td>
<td>-0.28</td>
<td>17.63</td>
<td>0.001</td>
<td>0.73</td>
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<td>Structure</td>
<td>0.79</td>
<td>-0.06</td>
<td>0.50</td>
<td>-0.54</td>
<td>-0.60</td>
<td>250.39</td>
<td>0.001</td>
<td>0.66</td>
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<tr>
<td>Culture and leadership</td>
<td>0.98</td>
<td>0.18</td>
<td>0.03</td>
<td>-0.32</td>
<td>-1.13</td>
<td>435.86</td>
<td>0.001</td>
<td>0.82</td>
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<tr>
<td>Work</td>
<td>0.87</td>
<td>0.15</td>
<td>0.05</td>
<td>-0.28</td>
<td>-1.04</td>
<td>316.60</td>
<td>0.001</td>
<td>0.65</td>
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<tr>
<td>Political relations</td>
<td>0.86</td>
<td>0.02</td>
<td>0.22</td>
<td>-0.42</td>
<td>-0.74</td>
<td>240.99</td>
<td>0.001</td>
<td>0.68</td>
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<tr>
<td>Change goals</td>
<td>0.76</td>
<td>0.45</td>
<td>-0.82</td>
<td>-0.07</td>
<td>-1.05</td>
<td>510.53</td>
<td>0.001</td>
<td>0.77</td>
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<tr>
<td>Information</td>
<td>0.85</td>
<td>0.42</td>
<td>-0.68</td>
<td>-0.04</td>
<td>-1.11</td>
<td>516.66</td>
<td>0.001</td>
<td>0.79</td>
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<td>Tensions</td>
<td>0.88</td>
<td>-0.05</td>
<td>0.16</td>
<td>-0.29</td>
<td>-0.74</td>
<td>220.14</td>
<td>0.001</td>
<td>0.65</td>
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<td>Timing</td>
<td>0.91</td>
<td>0.37</td>
<td>-0.42</td>
<td>-0.28</td>
<td>-1.00</td>
<td>412.91</td>
<td>0.001</td>
<td>0.72</td>
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<td>Change management</td>
<td>1.03</td>
<td>0.50</td>
<td>-0.46</td>
<td>-0.28</td>
<td>-1.31</td>
<td>879.61</td>
<td>0.001</td>
<td>0.76</td>
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<td>Line managers</td>
<td>1.16</td>
<td>0.23</td>
<td>-0.22</td>
<td>-0.39</td>
<td>-1.07</td>
<td>594.55</td>
<td>0.001</td>
<td>0.78</td>
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<td>Expected outcome</td>
<td>1.07</td>
<td>0.07</td>
<td>0.12</td>
<td>-0.43</td>
<td>-0.95</td>
<td>420.14</td>
<td>0.001</td>
<td>0.70</td>
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<td>Support</td>
<td>0.90</td>
<td>0.27</td>
<td>-0.15</td>
<td>-0.31</td>
<td>-1.02</td>
<td>351.65</td>
<td>0.001</td>
<td>0.70</td>
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<td>Systematical approach</td>
<td>0.37</td>
<td>0.29</td>
<td>-0.97</td>
<td>0.31</td>
<td>-0.57</td>
<td>187.97</td>
<td>0.001</td>
<td>0.75</td>
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<td>Power approach</td>
<td>-0.66</td>
<td>-0.47</td>
<td>0.02</td>
<td>0.51</td>
<td>0.95</td>
<td>320.95</td>
<td>0.001</td>
<td>0.61</td>
</tr>
<tr>
<td>Negotiation</td>
<td>0.87</td>
<td>0.43</td>
<td>-0.26</td>
<td>-0.32</td>
<td>-1.19</td>
<td>488.08</td>
<td>0.001</td>
<td>0.66</td>
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<tr>
<td>Dialogue</td>
<td>0.86</td>
<td>0.54</td>
<td>-0.22</td>
<td>-0.51</td>
<td>-1.12</td>
<td>572.19</td>
<td>0.001</td>
<td>0.76</td>
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<tr>
<td>Programmatic approach</td>
<td>0.86</td>
<td>0.50</td>
<td>-0.37</td>
<td>-0.35</td>
<td>-1.14</td>
<td>520.65</td>
<td>0.001</td>
<td>0.73</td>
</tr>
<tr>
<td>No. of cases in cluster (total = 2,690)</td>
<td>503</td>
<td>755</td>
<td>423</td>
<td>614</td>
<td>395</td>
<td></td>
<td></td>
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</tr>
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</table>

Table I. Final cluster centers of five clusters on scores of six organization and 13 change process variables.
As Jones et al. (2008) argue, a respondent’s position in the organization can have a large influence on how she perceives changes. Therefore, position was included as an additional variable in the analysis.

Analysis
First, except for statements of the power approach scale, all negative statements were recoded into positive statements in SPSS. Then, the ratings of the separate statements of the organizational, contextual, and change process characteristics were averaged per characteristic, yielding a scale for each characteristic. Considering the internal consistency of the patterns we hoped to derive, the analysis was done in two stages:

1) The data set contains many variables measured on both nominal and ordinal levels. Considering the aim of retrieving patterns and the assumption of nonlinearity in this paper, a non-linear analysis technique was required that can deal with nominal variables, treat all variables simultaneously and respect their mutual relationships. Therefore, a non-linear form of “factor analysis” was used (Tabachnik and Fidell, 2001) known as categorical principal components analysis (CATPCA; Meulman and Heiser, 1999; Gifi, 1990). CATPCA reduces a number of nominal, ordinal or numerical variables to a smaller number of uncorrelated principal components (see Linting et al. (2007) for an extensive elaboration of CATPCA and its advantages over traditional, linear principal components analysis). The table of object scores, the categories of the variables and the loadings of the variables that CATPCA generates can be presented graphically by plotting them on the dimensions of the solution that explain the majority of the variance accounted for (VAF), thereby providing insight into patterns.

2) An additional cluster analysis was used to validate the CATPCA results, facilitate their interpretation and obtain a typology of changing organizations. Cluster analysis (Everitt et al., 2001) is an explorative method used to identify homogeneous groups of cases based on a set of variables. For each of the clusters, mean scores on the CATPCA-dimensions were computed using the object scores of the respondents and these means were plotted into the CATPCA graph.

Results
Determining interrelations between organizational, change process and contextual characteristics
The first step was to reduce the variables to a limited number of dimensions by determining the interrelations between them. Using Kaiser’s (1960) eigenvalue-greater-than-one criterion and Cattell’s (1966) scree test, we found that two dimensions differentiate optimally between the 2,690 respondents in terms of characteristics of the organization, the change process and the contextual characteristics. A third dimension, however, appeared to add some useful information to the solution; a solution containing three dimensions was therefore chosen (Table II).

The three dimensions[2] are the axes of graphs (Figures 1 and 2) that depict our variables and (groups of) respondents in two-dimensional space. Vectors (arrows) in the graphs reflect (quantified) ordinal variables. Their direction represents the variable’s range of values from low to high. The larger the projection (loading) of a variable on
<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
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<tr>
<td>Goals and strategy</td>
<td>0.637</td>
<td>-0.026</td>
<td>-0.270</td>
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<td>Structure</td>
<td>0.445</td>
<td>-0.399</td>
<td>0.039</td>
</tr>
<tr>
<td>Technology</td>
<td>0.230</td>
<td>-0.146</td>
<td>0.065</td>
</tr>
<tr>
<td>Culture and leadership</td>
<td>0.664</td>
<td>-0.081</td>
<td>-0.247</td>
</tr>
<tr>
<td>Work characteristics</td>
<td>0.617</td>
<td>-0.112</td>
<td>-0.298</td>
</tr>
<tr>
<td>Political relations</td>
<td>0.508</td>
<td>-0.292</td>
<td>0.053</td>
</tr>
<tr>
<td>Size</td>
<td>-0.291</td>
<td>0.471</td>
<td>-0.255</td>
</tr>
<tr>
<td>Service industry</td>
<td>0.080</td>
<td>-0.484</td>
<td>-0.213</td>
</tr>
<tr>
<td>Financial industry</td>
<td>0.163</td>
<td>0.290</td>
<td>-0.791</td>
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<td>New technology</td>
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<td>Imposed from higher order</td>
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<td>Improving customer orientation</td>
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<td>Support for change</td>
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<td>0.653</td>
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<td>0.089</td>
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<tr>
<td>Timing</td>
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<td>0.072</td>
<td>0.050</td>
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<tr>
<td>Earlier change failed</td>
<td>0.208</td>
<td>-0.323</td>
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<tr>
<td>Experience with consequences</td>
<td>0.387</td>
<td>0.227</td>
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Table II. Component loadings and the total VAF of the solution

(continued)
a dimension, the more of its variance is accounted for by this dimension and the longer the vector. Nominal variables are represented by points: one point for each of their categories. We have labeled the three CATPCA dimensions “change capacity,” “control orientation,” and “development and innovation orientation,” respectively.

**Dimension 1: change capacity**

The first dimension is characterized by high loadings (see values between parentheses) of:

- the organizational characteristics: goals and strategy (0.637), culture and leadership (0.664), and work characteristics (0.617);
- the change process characteristics: negotiation approach (0.684), dialogue (0.690), programmatic strategy (0.704), information (0.665), the timing of the process (0.675), the role of change management (0.795), the role of line managers (0.727), outcome expectation (0.653), support for change (0.648), and the power approach (−0.568); and
- relatively high to high loadings of the outcome variables: earlier change not failed (0.461) and experience with consequences (0.387).

These loadings indicate that the first dimension is a factor whose positive end coincides with positive evaluations of both organizational and change process characteristics, indicating a positive orientation towards change. Therefore, we have labeled this dimension “change capacity.” The sector of food producing organizations has the highest position[3], whereas central government, public utility, non-commercial service industry, and research organizations have the lowest positions on this change capacity dimension. Larger organizations have somewhat lower positions on this dimension. Moreover, members of the executive board have the highest position on this dimension, whereas members of the Works Council have the lowest positions.
Dimension 2: control orientation

The second dimension is characterized by:

- relatively high negative loadings of the organizational characteristics: structure (−0.399), tensions (−0.318), and outcome expectations (−0.309);
- a positive loading on the change process variable: systematical change approach (0.334);
- relatively high loadings of the context variables: organization size (0.471), improving efficiency (0.562), improving customer orientation (0.428), improving flexibility (0.395), and cost saving (0.360); and
- a relatively high negative loading of the outcome variable: earlier change not failed (−0.323).

Because of the contribution of a rigid structure, tensions, a large size and a systematical change approach, and change processes focused on efficiency, flexibility,
and cost saving to this dimension, we have named the second dimension “control orientation.” Governmental organizations, especially regional governments, and public utility organizations have high positions; profit organizations, especially information technology (IT) organizations, but also research and service organizations have low positions on this control orientation axis. Members of staff have high positions on the dimension and consultants have low positions.

**Dimension 3: development and innovation orientation**

The third dimension is characterized by:

- relatively high negative loadings of the change process variables: systematical change approach ($-0.449$) and power approach ($-0.342$); and
- relatively high positive loadings on the context variables: improving innovation capacity ($0.383$), organization development ($0.438$), and improving flexibility ($0.360$), as well as a negative loading on cost saving ($-0.375$).

These loadings suggest that the third dimension is a factor whose positive end coincides with innovation, development and flexibility, an unsystematic approach to
change and a lack of power. Local government and smaller organizations have the highest position on this dimension. Works Councils have a relatively low position and executive boards a moderately high position.

Determining “types” of changing organizations
Cluster analyses were performed on the organization and change approach characteristics. Ward’s hierarchical cluster analysis yielded five main clusters. This solution was optimized by means of a K-means cluster analysis. Table I contains the mean scores of the five clusters and their corresponding F-values[4]. The five groups were labeled as “the innovative cluster,” “the skeptical cluster,” “the cynical cluster,” “the political cluster,” and “the cluster with an unclear change process.”

In the innovative cluster, the average respondent has a positive perspective on all organization variables, that is, those concerning the state of affairs in the organization. This positive context is reflected in their perspective on the way in which change processes are managed. Almost 18 percent of the respondents belong to this cluster.

The systematical cluster, containing 28 percent of the respondents, is characterized by some rules and regulations. Although respondents evaluate most aspects of the change process positively, mean outcome expectation is relatively low and there are some tensions. Remarkably, support for change is evaluated relatively positively.

In the unclear change process cluster (16 percent of the respondents), organizational characteristics are all evaluated as moderately positive except for goals and strategy, which is evaluated negatively. Changes, on the other hand, are experienced as moderately negative. Although organization members evaluate the change course and the information about changes negatively, changing does not evoke much tension. Their mean expected outcome is very moderate.

In the skeptical cluster, organization members evaluate both organization characteristics and the change process negatively. Here, a negative context is reflected in a negative perspective on change management. Changes are carried out using a power approach and a systematic approach. Of all respondents, 23 percent have a skeptical perspective.

The cynical cluster (15 percent of the respondents) has the most extreme negative scores of all groups on all variables, except on power approach, which has a high score. Both organizational characteristics and characteristics of the change process are evaluated negatively.

For each of the five clusters, we computed the mean scores of the corresponding respondents on the CATPCA dimensions and plotted the resulting cluster quantifications in Figures 1 and 2 to study the relation that they have with contextual characteristics. The innovative cluster has the highest position on the change capacity dimension, and is followed by the political, the unclear, the skeptical, and the cynical clusters, with the latter one at the negative extreme of the dimension. On the control orientation dimension, the largest differentiation occurs between the unclear and the political clusters. These cluster analysis results support our earlier findings. On the development and innovation orientation dimension, the largest differentiation is between the unclear change process cluster and the skeptical cluster, the latter of which has the lowest position on this dimension. This position suggests the existence of a subpattern of public sector organizations trying to instigate innovation or organization development using a rather vague process approach.
Discussion

Determining patterns in changing organizations by combining insights

When we combine our results, we find five patterns in changing organizations that take varying positions on the change capacity and control orientation dimensions. Each of them is characterized by a specific organizational context, specific organizational and change process characteristics and approaches, a striving for specific change goals and operation in specific sectors.

**Innovative pattern.** This most successful pattern shows that a pleasant culture and leadership and pleasant work characteristics (Lok and Crawford, 1999) provide important conditions for the success of organizational change. So does the role of change managers in guiding the process. Change managers here pay attention to a thorough process management (Burke, 1987; Cotton, 1990; Strauss, 1998). They provide clear goals (Kotter, 1996, Ford and Ford, 1995), adequate information about the goals and the process (Armenakis and Harris, 2002; Miller et al., 1994; Covin and Kilmann, 1990), create support and stimulate employees to participate (Burke, 1987; Cotton, 1990). They choose interactive change approaches and refrain from using power. This leads to high outcome expectations and support for change, which reinforces the interactive approach. In contrast to the findings of Child and Loveridge (1990) technology does not seem to be very important. We find this innovative pattern more in smaller, knowledge-intensive, industrial, and food-related companies. Competition in the market may contribute to their need to actively interact with each other and with clients.

**Systematical pattern.** Employees are quite positive about organizational characteristics but there is some control orientation and political behavior. Change managers here do not consider unilateral and participative approaches to be mutually exclusive (Waldersee and Griffiths, 2004), but they combine a systematical change approach with elements of participative approaches, and pay attention to the process of change. This appears to generate a reasonably high change capacity. This pattern is found most in "arena-organizations": medium-sized organizations in the financial industry, regional and local governments and healthcare organizations.

**Unclear change process pattern.** This pattern is remarkable, as it could not be related to the theories described. Employees evaluate organizational characteristics rather positively, but they experience a lack of clarity about the ultimate purpose of the change process. A restricted exchange of information and ideas generates limited support for change but change processes do not evoke tensions. Either people just do not have a clue where to contribute, they trust change managers with the process or they are just not interested. This lack of tensions and interest may reinforce change managers in their actions. Organization members nonetheless expect a moderately favorable outcome. We find this pattern in relatively small organizations in the IT sector and the service industry. A derivative of this pattern can also be found in public sector organizations that are specifically working on development and innovation.

**Skeptical pattern.** This pattern combines low change capacity with moderately high control orientation. In line with Haveman (1993), the large organizations here are characterized by mechanistic structures and bureaucratic control. Their change approach is systematical in conformity with the mechanistic structure and is combined with power approaches. Also in line with Haveman (1993), there is little opportunity for interaction and the exchange of ideas in this pattern and therefore for participative
strategies. Unlike Waldersee (Waldersee and Griffiths, 2004), we find that unilateral change approaches are important barriers to change. The lack of interaction may evoke political behavior and tensions among employees and produce relatively low outcome expectations. We find this pattern in “control-oriented bureaucracies”: large governmental organizations (Damanpour, 1991; Devos et al., 2007) and large public utility organizations. As proposed, change processes in this pattern are often aimed at the internal organization such as improving the efficiency and at cost saving, but also at improving customer orientation.

**Cynical pattern.** Employees are very negative about organizational characteristics. This negativity is reflected in the change process, which is, remarkably, being pushed through in a relatively unsystematic way by apparently solitary operating change managers. Attention for a thorough process management is lacking. As a result, the change capacity in these organizations is low (Jermier et al., 1994; Folger and Skarlicki, 1999). We find this pattern for instance in “professional bureaucracies”: research institutions, non-commercial service industry and central government.

**Position in the organization**
A breakdown of the CATPCA scores by position shows that one’s position in the organization influences one’s perspective. Managing directors in particular have a high positive score on the change capacity dimension, while members of the Works Council have the lowest score on change capacity. Staff members, on average, experience a high control orientation, whereas consultants and employees show the lowest average control orientation. These results suggest that there is a difference between the perspectives of those who manage change and those who are subjected to change. Apparently, it matters for one’s perspective on change processes whether one is in a position to steer change or whether one is merely an “object” of change.

**Understanding failure to change**
This paper shows that failure to change is related to patterns of mechanistic structures, control, unpleasant social structures, unilateral change approaches, and a lack of attention for process characteristics. Change is more successful in organizations characterized by organic structures and loose social structures that use participative and somewhat systematical change approaches and pay attention to a thorough process management. Organizational and contextual characteristics (structure) seem to create a frame within which people act (agency) in ways that confirm the frame (Astley and van de Ven, 1983). It also shows that, although many of the traditional theories still apply, their use is context dependent. If we really want to understand failure to change, then we have to acknowledge complexity, use multiple theoretical perspectives and consider them in their mutual coherence. This means that striving for universal theory and parsimony in research models is not sensible. Explanations focusing on resistance as a barrier to change for example are too simple to understand failure to change when considering for instance the relations between resistance and change approaches. Although structure and agency both operate at the same time and influence each other, only an agency perspective would be useful to break through patterns of failure to change. However, choosing new action alternatives may not be easy. Change managers at the top may not see reason to choose more interactive approaches when they already consider their organization innovative and are convinced that they pay enough
attention to exchange and interaction. Our results suggest a discrepancy between top managers’ “espoused theories,” the theories they embrace and claim to be using, and their “theories in use,” their actual actions. Executive board-members often believe they are using participative approaches, but these are not recognized by their employees (Argyris, 2004). From the perspective of executive board members, changes are handled in a participative and interactive manner when some dozen employees have been consulted. In an organization consisting of hundreds or thousands of employees, however, the majority will probably not experience this as a participative approach.

Implications for change managers
Our innovative configuration provides several suggestions for more successful organizational change by showing how change managers might act in order to contribute to success. The results suggest it would be wise for change managers to choose for a participative change approach and for a thorough process management. Power strategies do not enforce compliance but evoke resistance. Systematic change is only mildly related to positive outcome evaluations and results in skepticism when combined with power strategies. A generic approach may however not be desirable because it denies the impact of context. Organizations differ in their contexts and in their problems, and require a context-specific approach (Buelens and Devos, 2004; Boonstra, 2004).

Change managers introducing participative approaches in a cynical or sceptical context will probably not appear credible. Moreover, unilateral, power-based approaches are often part of a way of acting that has become embedded in the organization. They have become habitual patterns that cannot be changed from one day to the next. Structure, culture, and change strategy seem to be a reflection of the ways in which people perceive things, act and react to rules or changes in their environment and to the actions of others. They influence them to repeat their actions and in the process reinforce others’ (re)actions. For instance, resistance may be induced by a forceful approach (Hosking, 2004), but resistance may also reinforce the choice for a forceful approach. Changing in such a context would require change managers but also employees to explore and change their behavioural patterns and their underlying values and assumptions (Schein, 1991; Argyris, 2004). This may, however, not be easy considering the highly positive evaluations of top management of their own process management.

In systematical contexts, change managers in large organizations try to deal with the conflicts of interest between the many relatively autonomous departments by using systematical change approaches in combination with participative approaches. This approach may fit their goals of improving efficiency and cost saving. However, the focus on uniform, fixed goals, planning, fixed procedures, and a model may not fit the context of relatively autonomous departments with their own contexts, problems, and needs. These organizations may be served with more decentralized determination of goals and procedures and delegation to departments. Systematical approaches may also not fit when these organizations strive for improving customer orientation and flexibility.

In unclear contexts, it would not seem useful to “just like that” choose for interactive strategies either, unless they would be specifically used to define clear change
goals together. Here, a more systematical change approach would probably be useful, as no-one seems to know where the changes are going.

Lastly, although our data provide interesting insights into the interrelations between organizational, context and process characteristics, it would be useful to examine the underlying processes causing these patterns to develop and be preserved by doing case studies.

Notes
1. A council representing workers in labor negotiations.
2. Together, our dimensions have a VAF of 31 percent. The VAF in CATPCA is calculated by dividing the total VAF by the number of variables used, multiplied by 100.
3. The position of a group of respondents (i.e. the quantification of a nominal variable category) is the average of the component scores of these respondents.
4. F-values only indicate the relative importance of a variable for the cluster differences. As clusters are formed by optimizing the between-group differences, F-values no longer have their usual probabilistic interpretation.

References


Meulman, J.J. and Heiser, W.J. (1999), SPSS Categories 10.0, SPSS, Chicago, IL.


**About the author**

Renate A. Werkman specializes in change in organizations, networks, and institutions. Since 1998 she has been working on this topic at the Communication Science and the Public Administration Departments of the University of Amsterdam and at the Department of Public Administration and Organization Studies of the Free University of Amsterdam. In her dissertation (2006), she tried to explain failure to change using a combination of large-scale survey research and several qualitative case studies in changing organizations. Curious about the application possibilities of her work in the “green” public sector and larger networks of public and private actors, she currently works at Wageningen University and Research Center on transformation and transition processes towards sustainability in the public domain. Renate A. Werkman can be contacted at: renate.werkman@wur.nl

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