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Successful organizational change through win-win: How change managers can create mutual benefits

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Abstract

Purpose – This paper aims to show new ways of overcoming resistance during organizational change by applying insights from New Institutional Economics.

Design/methodology/approach – This is a conceptual paper that adapts findings from New Institutional Economics.

Findings – The paper highlights the relevance of interactions between managers and employees for value creation processes: interactions can generate either win–win or lose–lose situations. By altering the restrictions on managers' and employees' behavior, change managers can create mutual benefits for the staff and the firm. The paper thus explicitly considers the individual interests of employees and managers and highlights an approach to link individual interests with the collective interests of the firm by means of appropriate interactions. Additionally, the paper elaborates the relevant factors that determine the success of classical change management measures, like communication or participation, to overcome resistance during organizational change.

Research limitations/implications – The developed framework also indicates important conditions where approaches inspired by management, psychological and sociological theories can be successfully applied and where change management will benefit from being complemented by New Institutional Economics.

Practical implications – Change managers can optimize inter-organizational competition or cooperation to generate a win–win situation by means of appropriate formal or informal restrictions (like incentives or binding mechanisms).

Originality/value – This paper applies insights from New Institutional Economics to show how organizational change can be facilitated by producing mutual benefits. This paper postulates that organizational change often fails or, at the very least, meets with stiff resistance due to dysfunctional interactions within the company. However, such interactions actually contain great opportunities for change managers: by shifting the focus of these interactions, they can generate the potential for win–win situations. In this approach, mutual benefits are a decisive factor in increasing the acceptance to organizational change and overcoming resistance.

Keywords Organisational change, Institutional theory, Strategic management, Incentive management system, Organisational agents and agency

Paper type Conceptual paper

1. Introduction

The key question addressed by this paper is: "How can change managers implement organizational change so that employees and managers feel that their self-interest is

JEL classification – D21, D23, D74, L23

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taken care of during the process?" This paper applies insights from New Institutional Economics to show how organizational change can be facilitated by producing mutual benefits. This paper postulates that organizational change often fails or, at the very least, meets with stiff resistance due to dysfunctional interactions within the company. However, such interactions actually contain great opportunities for change managers: by shifting the focus of these interactions, they can generate the potential for win–win situations. In this approach, mutual benefits are a decisive factor in increasing the acceptance to organizational change and overcoming resistance. This paper highlights an approach for reconstructing change management in a way such that affected managers and employees will have a strong self-interest to change. Historically, few change management approaches consider this explicitly (Maurer, 1996). By creating self-interest in change among staff, the change managers can obviate resistance, which is often a key obstacle during organizational change. As we highlight in the paper, organizational change that occurs due to self-interest motivations does not have to be against the company's interests. Indeed, they are mutually interdependent if change managers create appropriate interactions (Mackenbrock, 2006; Pies *et al.*, 2009, 2010).

Section 2 of this paper presents a review of the extensive literature on the link between individual motives and resistance to organizational change. There is a strong focus in this literature on management, psychological and sociological theories. Approaches that highlight the relevance of institutions from an economic perspective are rare. However, this paper shows that an approach inspired by New Institutional Economics can be a very useful one for helping change managers create mutual benefits through improved cooperation or competition. Additionally, these improvements can be highly effective in achieving collective aims despite different individual goals among managers, employees and shareholders. Change managers can optimize inter-organizational competition or cooperation to generate a win–win situation by means of appropriate formal or informal restrictions (like incentives or binding mechanisms). The resulting framework also indicates important conditions where approaches inspired by management, psychological and sociological theories can be successfully applied and where change management will benefit from being complemented by New Institutional Economics.

2. Resistance to organizational change

There is an extensive body of literature addressing resistance to organizational change. Pardo del Val and Fuentes (2003) summarize many reasons for resistance within a comprehensive literature review. The classification of Pardo del Val and Fuentes (2003) differentiates between reasons for resistance in the formulation and implementation stage of change management. Besides the chronological perspective, the literature overview highlights many personal and organizational causes for resistance. For example, managers and staff may have very different ideas about how the change should be accomplished (Bovey and Andy, 2001b; Dijk and Dick, 2009; Klein and Joann, 1996; Kotter and Schlesinger, 2008; Lines, 2004; Rumelt, 1995; and Zeffane, 1995; and they might even disagree with the notion that change is necessary at all (Barr *et al.*, 1992; Ford *et al.*, 2008; Krüger, 2010; Rumelt, 1995; and Zeffane, 1995). The company may be operating in an environment that is changing so fast that the company is not able to develop and implement suitable change management strategies (Mabin *et al.*, 2001; Rumelt, 1995; and Wadell and Sohal, 1998). Communication within the company may have broken down, negating the change process (Hutt *et al.*, 1995; Morrison and Milliken, 2000; Nemeth, 1997; Proctor and Doukakis, 2003; and Schalk *et al.*, 1998). Perhaps the company's culture itself makes change an anathema (Ford *et al.*, 2001; Hannan and Freeman, 1984; Klein and Joann, 1996; Krüger, 2010; Nemeth, 1997; Rumelt, 1995; and Strebel, 1994). Occasionally, managers' and employees' skills are simply not up to the task of implementing a successful organizational change (Dam *et al.*, 2008; Kotter and Schlesinger, 2008; Mabin *et al.*, 2001; Proctor and Doukakis, 2003; and Rumelt, 1995). In addition to these reasons, motivational problems are an important cause of resistance to organizational change. We focus on this type of problem next.

The change management literature discusses many reasons why managers and employees may be motivated to resist change. Staff may have a negative world view about organizational change, expecting it to be a win–lose situation. Perhaps, because of the nature of the companies management, the organizational change actually is a win–lose situation in which staff feels unfairly treated and has to sacrifice for some other party (for example, the whole company, the shareholders, other employees or managers). Reasons for win–lose paradigms are manifold, including, for example, that the affected staff will have to learn new skills, and learning is no fun (Sonntag and Stegmaier, 2007). The organizational change can also have a negative impact on employees' perception of their job biographies. Changing the way things are done can imply, almost by necessity, that the previous way was inefficient or ineffective: very often employees will take such an implication personally, even though that was not the intent (Luhmann, 1999; Rumelt, 1995; and Dijk and Dick, 2009). Moreover, companies often relocate employees during organizational change, resulting in friends being separated, adding more stress and discomfort to the process (Lawrence, 1969; Nerdinger *et al.*, 2008; and Dijk and Dick, 2009). Changes often result in managers having less influence and power (Beer and Russel, 1996; Dijk and Dick, 2009). On occasion, managers and employees are expected to institute changes and maintain their usual work volume, a situation that is almost guaranteed to cause resentment and resistance (Beer *et al.*, 1990; Rumelt, 1995; Klein and Joann, 1996; Kotter and Schlesinger, 2008; and Dijk and Dick, 2009).

Although these perceived win–lose situations can potentially reduce motivation and cause resistance against organizational change, the literature has many examples of how change managers can actually motivate employees and managers under these circumstances:

- *Competence and brave leaders*: Dealing with resistance during organizational change depends on the competence of the change managers (Hutt *et al.*, 1995; Mabin *et al.*, 2001; Ford *et al.*, 2008). The motivation of the affected staff increases in a positive sense when change managers are skilled in carrying out complex change. Some scholars note that training and empowering brave leaders are necessary (Burdett, 1999; and Kanter, 1989).
- *Incentives and compensation*: Staff's expectation of direct and implicit costs can result in a lack of motivation (Rumelt, 1995). Change managers can overcome this problem by appropriately compensating affected managers and employees. Beer *et al.* (1990) suggest several practical strategies for reducing resistance by increasing motivation, including support for innovative departments and better career opportunities for managers who implement organizational change successfully.

- *Participation and communication*: Many authors recommend the use of communication and participation in those circumstances where resistance to organizational change develops because of a lack of motivation during the strategy formulation and implementation stage (Waddell and Sohal, 1998; Ford *et al.*, 2008; Lines, 2004; Dijk and Dick, 2009; Klein and Joann, 1996; Bovey and Andy, 2001b; Folger and Skarlicki, 1999). According to these authors, employees and managers will become motivated if they are given sufficient information and allowed to participate in the change process. However, Lawrence (1969) emphasizes that participation is a motivating factor if the needs of managers and employees are respected not only as means but also as acceptable aims: "Participation will never work so long as it is treated as a device to get somebody else to do what you want him to" (Lawrence, 1969, p. 56).

This paper takes a fresh perspective on organizational change by asking the question: Can change managers use organizational change to create mutual benefits that facilitate acceptance of and decrease resistance to change within the workplace? The answer highlights how change managers can use self-interest as an important motivator for affected staff and, furthermore, how change managers are able to motivate staff by classical measures (like communication or participation). This paper also highlights the limitations of compensating employees and managers for their sacrifices from an economic perspective. Finally, we also examine the relevance of competent and brave change managers.

3. Generating win–win through change management

This section applies some conceptual insights from New Institutional Economics theory to show how change managers can create mutual benefits and facilitate organizational change. We apply New Institutional Economics because it considers the individual and collective consequences of interactions between individuals. From that theoretical perspective, interactions are ambivalent. They can promote individual and collective aims or they can cause harm for everyone involved (lose–lose games). To organize interactions in a mutually beneficial way, New Institutional Economics focuses on the restrictions of individual behavior (for example, norms, values, rules and incentives). Systematical changes of the restrictions can switch interactions form lose–lose games to win–win situations (Ménard and Shirley, 2008).

The first subsection is an overview of how employees and managers can interact to establish win–win solutions within organizations. The second subsection summarizes how formal and informal restrictions can be used to adjust individual behavior so as to accomplish collectively desirable interactions for establishing win–win solutions. In the third and last subsection, we combine the possible outcomes from interactions and individually preferred behaviors to create a framework for change managers. This framework will aid them in deciding whether they should *optimize* existing win–win interactions or whether they should completely *change* interactions to create win–win potentials.

3.1 Solutions for cooperation and competition to organize interactions within companies

Historically, the theoretical approach of New Institutional Economics has not been widely applied in the change management literature. We do find one work that recommends using New Institutional Economics as a useful theory to advance change management research (Stock-Homburg, 2007). Additionally, Rumelt (1995) contains a brief discussion of how collective-action problems can reduce the success of change management. Furthermore, Mackenbrock (2006) examines complex turnaround management and discusses competing interests in multi-stakeholder dialogues.

At the center of New Institutional Economics are human social interactions: these emerge when individuals mutually consider the behavior of others (Ménard and Shirley, 2008). This perspective basically differentiates two kinds of interactions: cooperation and competition:

- *Interacting through cooperation*: In the case of a company engaged in mass production, for example, cooperative solutions are necessary across the vertical levels to manage and monitor production (Miller, 1992). Managers make centralized decisions about what should be produced and the quality and quantity of the products; the workers execute these decisions. The division of labor between decision-making and implementation creates mutual benefits for both parties (Alchian and Harold, 1972). Henry Ford's assembly line illustrates the efficiency of vertical cooperation. The workers were able to earn efficiency wages as long as they met Ford's performance targets (Miller, 1992). Henry Ford could make a profit only if the workers were productive, which was not a sure thing because their jobs were exhausting and boring and the risks of absenteeism or quitting were high. Cooperation between workers and their foreman was the critically important key to creating benefits for the company and staff.
- *Interacting through competition*: Companies can also generate mutual benefits by means of competition. Competition can motivate managers and employees to develop their potential. Companies use this strategy, for example, to encourage better performance from managers competing for a higher position on the corporate ladder or from workers by offering higher performance bonuses (Nalebuff and Stiglitz, 1983; for an overview of the literature see Miller, 2008). Output-oriented contracts for workers and managers (for example, piece-rate contracts or performance bonuses) can also lead to competition (Miller and Knot, 1992). Furthermore, the so-called tournaments between employees and managers are another form of competition (for example, competition for advancement tends to increase both employee efforts and willingness to bear risks. Cf. Miller, 2008; Nalebuff and Stiglitz, 1983).

If competition within a company is successfully engendering mutual benefits, why is not all value creation accomplished via this "free market" solution? In reality, we find an appropriate mix of cooperation and competition that tends to generate a stable and effective equilibrium within companies (Pies, 1993) and the expansion of this idea to the ordonomic approach, cf. Pies *et al.* (2009, 2010). Competition, for example, can be extremely powerful for increasing output temporarily. In combination with long-term contracts that ensure cooperation, employees can build up reputation and make responsible decisions about whether it would be better to fulfill short-term targets or to invest effort in building the type of long-term cooperation necessary for, say, productive and profitable R&D (Kreps, 1990). Competition could be counter-productive in the case of a company considering R&D, for example, where employees already have too many incentives to fulfill short-term targets (Lazear, 1989). This would cause an underinvestment of individual efforts in long-term targets. A more complex value chain often requires a combination of cooperation and competition.

In some industries, cooperation among hierarchical levels and competition on the same hierarchical level are linked (Miller, 2008; Hielscher, 2011). Indeed, many traditional organizations (especially those involved in mass production) rely on this kind of organization. In Henry Ford's factory, for example, managers and workers cooperated, while competition between workers and between managers flourished. Cooperative behavior, therefore, between employees on the same hierarchical level can enable the production and distribution of complex services or products. The probability of market success increases tremendously when the R&D department avails itself of the skill and experience of the sales department and when marketing campaigns rely on the R&D department for accurate information about innovative products (for the importance of cooperation between particular departments for supply chain management, see Cooper *et al.* (1997). Competitive solutions can be highly functional between hierarchies as well. Whistle-blowing policies, for example, can prevent corruption, thereby benefiting the entire company. The potential threat of whistle-blowing meaningfully destabilizes the cooperative relationship between supervisors and subordinates in the interest of employees, managers and shareholders (Pies and Beckmann, 2009).

The perspective from New Institutional Economics can be summarized as follows: highly productive companies create value through a functional combination of competitive and cooperative solutions depending on the particular value creation process.

3.2 The acceptance of cooperation and competition

New Institutional Economics illustrate that competition and cooperation not only have a positive effect on the macro level (for example, being competitive, taking profits), but the interactions can also have positive effects on the micro level. Thus, individuals can reach a collective outcome through cooperation or competition that is greater than the sum of the individual outcomes because employees and managers complement each other. Within the literature, this surplus is called positive team externality (Alchian and Demsetz, 1972) or simply "mutual benefits" (Pies *et al.*, 2009, p. 381; p. 2010, p. 268). Individuals can also gain mutual benefits through labor division and emerging effects of specialization. Besides benefits for the value creation process, mutual benefits have another important advantage: employees and managers have self-interest in cooperating or competing.

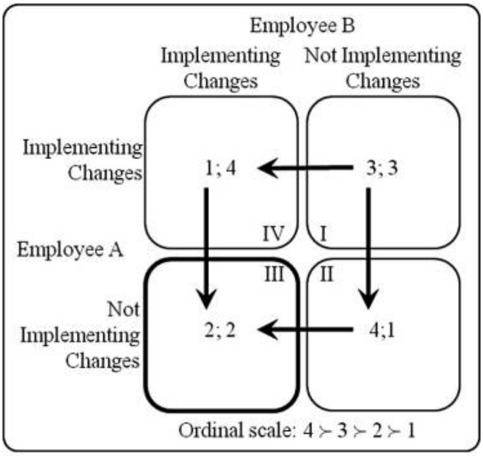
It is challenging, however, for some companies to create mutual benefits because cooperation or competition do not necessarily arise organically. This is because a gap exists between individually rational, i.e. what is best for the individual (for example, saving individual efforts), and collectively desirable behavior, i.e. what is best for the whole company (for example, working in a highly competitive company). This gap is called a social dilemma (Schelling, 1960).

We consider the link between individually rational and collectively desirable behavior from a theoretical perspective that applies methodological individualism and individual rationalism. The theoretical approach makes no ontological statements about theoretical assumptions. Concerning our assumptions, we neither apply, for example, neither Theory X (the staff is lazy and avoids work) nor Theory Y (the staff is self-motivated and solves problems by means of self-control) (McGregor, 1960). These approaches are excellent examples for ontological theories, but are not suitable for our line of argument. Furthermore, we need a reduced theoretical setting of assumptions to develop our implications for the change management research.

First, we want to highlight the gap between individually rational and collectively desirable behavior by examining the effect of social dilemmas on organizational change. Consider, for example, a technology company that wants to be more innovative by making some changes to its organization. This example is particularly interesting because we can discuss both collective and individual interests while fulfilling the company's aim of organizational change. The congruent collective interest of the employees and managers is quite clear: more innovations would be in the interest of the company and its staff. Working in a highly innovative company has several advantages for the staff, for example, wages are higher, jobs are more secure and there are more opportunities for personal fulfillment (Phelps, 2006).

Is it necessarily rational, though, for an individual to implement necessary organizational change? Let us make the methodological assumption that employees and managers perceive implementing organizational change as exhausting (note that this assumption has received much empirical support; for a literature review, see Howell and Higgins, 1990). Thus, it may not be rational to participate in creating mutual benefits, if doing so is linked with personal disadvantages. Our focus, however, is the gap between individually rational (for example, saving individual efforts) and collectively desirable (for example, working in a highly innovative company) behavior. In our example, everyone benefits by working in an innovative company. Every employee or manager would be very pleased if all their colleagues were being innovative: the company is thereby strengthened, ensuring secure and highly paid jobs.

Figure 1 illustrates this situation and the consequences by means of the decision-making process of two representative employees. If Employee B is implementing the difficult but necessary changes, Employee A has to decide if she is also going to do the same. She would prefer implementing little if any change (shown by



Source: Schelling (1960)

Figure 1.
The social dilemma of implementing organizational change

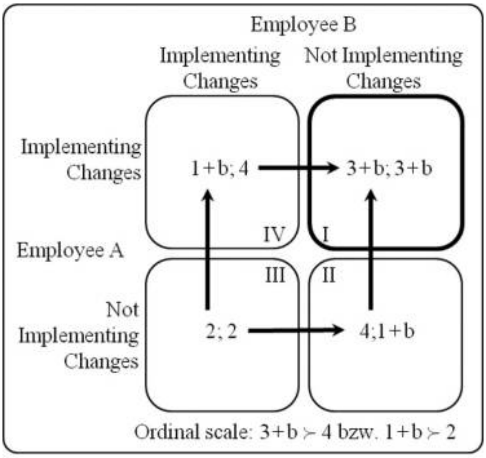
the ordinal payoff: *4* > *3*) because of the individual effort involved: this is rational behavior for Employee A. On the other side, being innovative when their colleague – Employee B – is not implementing change would be a self-damaging strategy too (*2* > *1*): the profits from implementing the collectively desired changes are shared even though the effort was not.

The same holds also for Employee B. If Employee A is implementing change, Employee B will resist implementing change: this is rational for her because of the individual effort required (*4* > *3*). If the other staff are hardly (or not at all) implementing change (for example, Employee A in Figure 1), it is rational to behave in the same way. Thus, Employee B has to make all the effort (2 > 1), while the benefits (of organizational change) would be shared among the staff. Therefore, *not* implementing organizational change is rational for every employee (compare the directions of the arrows in Figure 1). In such a social dilemma, not implementing change is the dominant strategy, and this will lead to competitive disadvantage, higher risk of becoming unemployed and lower wages. This illustrates the Nash equilibrium (*2; 2*) in the left lower corner: the collective desirable aims are not reached.

In the social dilemma, no employee or manager has an incentive to behave in a collectively desirable way. Because of this gap between individually rational and collectively desirable behavior, the staff does not reach its collective aims because everyone is acting rationally. The emerging inefficiencies are not a consequence of irrational behavior. We also see in Figure 1 that there is a Pareto-superior alternative to the Nash equilibrium of (*2; 2*). If everyone implements organizational change to reach the collectively desirable aims, mutual benefits would be realized through team productivity: (*3; 3*) compared to (*2; 2*). But how can the staff obtain these mutual benefits if everybody is behaving in an individually rational way within the social dilemma?

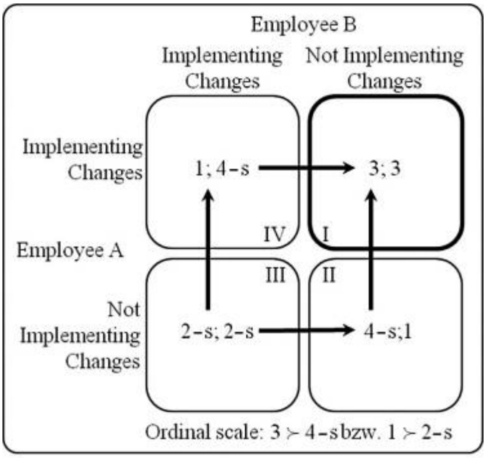
We do not find an answer by trying to optimize the behavior of the employees and managers *within* the social dilemma. Employees and managers are not failing because of their motives. Change managers, however, can reach a Pareto-optimal outcome by changing the restrictions of the situation. These restrictions could motivate the staff to act in a collectively desirable way either by using incentives to reward collectively desirable behavior or by using binding mechanisms to sanction socially undesirable behavior:

- *Incentives*: In the social dilemma described above, functional incentives can overcome the Pareto-inferior equilibrium. Such incentives would have to make changes worth the extra effort expended regardless of the behavior of colleagues (Figure 2: $3+b > 4$, respectively, $1+b > 2$). Employees and managers would accept this approach if mutual benefits are created because of these incentives.
- *Bindings*: An alternate way of creating mutual benefits involves binding mechanisms. Bindings do not reward collectively desirable behavior; rather, they sanction collectively undesirable behavior (Figure 3). As long as the binding mechanisms are credible, the collectively desirable behavior is the superior strategy. If the employees view the sanctions as more unpleasant than the additional effort of being innovative, it is in their interest to cooperate regardless of colleagues' behavior ($3 > 4\text{-}s$, respectively, $1 > 2\text{-}s$). However, companies should not implement binding mechanisms to punish behavior that some managers or shareholders believe to be undesirable. The purpose of binding mechanisms is to reach the collective aims via an amendment of restrictions.



Source: Schelling (1960)

Figure 2. Incentives to overcome the social dilemma of implementing change



Source: Schelling (1960)

Figure 3. Binding mechanisms to overcome the social dilemma of implementing change

> Credible binding mechanisms create an environment within which the staff is willing to invest efforts in collectively reaching Pareto-optimal solutions. In other words, the purpose of bindings is not to make more profit at the employees' expense, but to make it in the employees' best interest that everyone interacts in a collectively desirable way. Bindings prevent hardworking employees or managers from being exploited by their colleagues or by the company.

This use of the social-dilemma situation reveals another important feature that cannot be seen directly. The payoffs symbolize how individuals value different outcomes on an ordinal scale: a payoff of *3*, for example, does not mean the same for every employee or manager – these are subjective valuations of different outcomes. An interpersonal comparison is thus not possible (Arrow, 1950). This is not a weakness of the model, however, but instead shows that functional solutions to engender cooperation or competition can create win–win situations despite conflicting individual interests (however, congruent individual aims could simplify complex interactions; for a literature overview, see Jaros, 2010). Collective aims can thus be reformulated as a means for satisfying individual aims. For example, working in a highly innovative company – the collective aim – to receive high wages and have a safe job with self-fulfillment – the individual aims. The congruent satisfaction of individual and company aims is an important ability for companies and may well endow them with a competitive advantage.

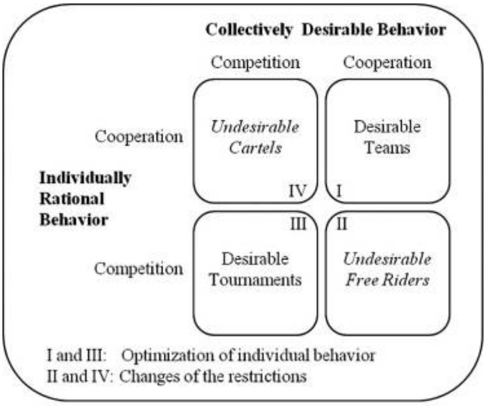
Henry Ford is an excellent role model in learning how to manage big changes by means of incentives and bindings (Miller, 1992). In the process of building his assembly line, he designed many formal and informal restrictions that were highly effective at achieving mutual benefits. These restrictions were successful because they did not solely concentrate on the company's goals, but also considered the self-interest of the staff. In short, the wages he paid were high enough to keep the workers on the job despite the monotonous and hard work on the assembly line (incentive). At the same time, the contractually agreed-to wage kept Ford from exploiting the workers (Ford's self-binding). Ford also set up a department that supervised the quality and quantity of products from the production process and sanctioned shirking (binding services for workers). This department also supervised the workers' private lives in an attempt to reduce absenteeism and improve worker health (binding services for workers).

3.3 Change management conceptualization from a perspective inspired by new institutional economics

We can generalize the example above to illustrate important conditions for successful organizational change. If managers or employees are not forced to make decisions between what is individually rational and what is collectively desirable, organizational change might be successful. A generalized understanding of the social dilemma is that employees and managers will create values through cooperation or competition only if there is no gap between the individually rational and the collectively desirable behavior. As seen in the above example, if the intra-organizational restrictions encourage collectively desirable behavior, the staff can create mutual benefits. Otherwise, managers and employees are caught in a social dilemma, causing a lose–lose situation that cannot be changed through individual behavior.

Taking the two possible ways of interaction (cooperation or competition) and two situations, one where a social dilemma exists and one where is no social dilemma, presents four possibilities (Figure 4). On the horizontal side, this figure shows the collectively desirable interaction necessary to reach a Pareto-superior outcome, and on the vertical side, the individually rational behavior at the status quo. Furthermore, the four-field matrix reveals the cases in which change management can create win–win solutions within the existing restrictions through an optimization of behavior, and the cases in which change management will be able to generate mutual benefits only by changing the restrictions.

3.3.1 Field I – desirable teams. In this case, individuals can reach the Pareto-optimal outcome through cooperative behavior. The team structure creates an environment in



Source: Own figure

Figure 4.
Collectively desirable behavior and individually rational behavior

which it is individually rational to cooperate. Collectively desirable behavior and rational behavior are congruent: the company, its employees and the managers interact in an optimal way. Change managers can implement organizational change within teams if the change process either reduces the individual effort of being cooperative or increases mutual benefits without increasing individual efforts. Employees, for example, will be in favor of change that abolishes unpleasant tasks (for example, changes that increase ergonomy; cf. Biman, 1987 and Helander and George, 1995). Individuals also tend to be in favor of change that increases mutual benefits. Linux development teams are an interesting example for this. The members are highly intrinsically motivated to change existing structures all the time. For them, permanent change is extremely important to self-fulfillment (Hertel *et al.*, 2003). Both measures optimize cooperation within the existing restrictions. Therefore, change managers do not have to adjust the restrictions. An optimization within the existing restrictions is sufficient to increase mutual benefits and implement change management in an easily accepted way. The increase of mutual benefits through optimizing cooperation gives the staff a strong self-interest in organizational change.

3.3.2 Field II – undesirable free riders. The collectively desirable behavior is cooperation, whereas the individually rational behavior is competition. This incongruence leads to unused interaction potential, as in the technology company example above. All parties give up mutual benefits because the situational logic provides strong incentive not to act in the collective interest. In this case, colleagues who are cooperating can be exploited by employees, managers or shareholders. Organizational change can lead to mutual benefits if change managers can alter the dysfunctional restrictions that have made it possible for colleagues who are behaving in a collectively desirable way to be exploited. Managers, employees or shareholders need functional incentives or binding mechanisms to make them behave in a collectively desirable way. Therefore, optimizing the existing restrictions is not sufficient to create self-interest in organizational change. Change managers have to change the restrictions so that employees and managers can implement changes for creating mutual benefits. Depending on the suitable restriction, change managers may apply incentives or bindings to promote cooperative behavior.

3.3.3 Field III – desirable tournaments. In tournaments, the collectively desirable behavior is competition (for example, bonuses for the productive employees and managers, promotion prospects, etc.). Employees or managers compete to reach the collectively desirable outcome: a highly profitable firm that pays high wages and offers job security. Change management can be implemented without adopting restrictions if organizational change reduces the effort needed to win the tournament or increase mutual benefits through better tournaments. Here, approaches to optimize the interactions are functional to attain either end. Compared to optimizing cooperation in teams, managers and employees accept an optimization of tournaments because of self-interest. Changes in that direction will be thus well-accepted.

3.3.4 Field IV – undesirable cartels. In this case, the collectively desirable behavior is competition and cooperation is collectively undesirable. The latter occurs, for example, when it is rational for both managers and employees to abandon monitoring for purposes of shirking. Monitoring involves effort on the part of managers and, of course, employees who must meet quotas or quality standards. Indeed, cooperation means that managers and employees shirk together in this example. This collectively undesirable cooperation can be compared with market cartels. Competition is normally in the collective interest of every market participant. However, cartels reduce individual effort and profit from the efforts of those who are not members of the cartels. Despite this, cartels are not win–(members) lose (non-members) games; they are lose–lose games for everyone (for the dead weight loss of cartels between companies, see Williamson, 1968; Posner, 1974; Rogerson, 1982; Landes, 1983; and Leslie, 2006). Cartels prevent innovations and reduce the potentials for growth: these negative effects more than outweigh any profit that the cartel members may gain by their shirking behavior (Miller, 1992; and Lawler, 1971). Organizational change can create a win–win situation if restrictions are adjusted so that employees and managers are more likely to compete than cooperate. This can be done by instituting positive incentives to promote collectively desirable behavior or bindings to reduce collectively undesirable cooperation.

4. Discussion

This paper highlights an alternative method for overcoming resistance to organizational change. We differentiate between interactions among staff that cause lose–lose situations (for example, cartels and free riders) and interactions that cause win–win situations (for example, teams and tournaments). Change managers can establish real win–win situations by altering the Pareto-inferior cartels and free rider situations and, therefore, the acceptance of organizational change. It is not sufficient that employees and managers know how they *should* implement organizational change; they must *want* to implement it because of mutual benefits (One exception is Maurer, 1996).

4.1 Change management for enabling or improving interactions

Figure 4 has two important implications for organizational change. First, this figure is suitable as a heuristic to find potential mutual benefits: in relation to this, we discuss the aims and strategy of organizational change. We can also use this heuristic to categorize organizational change measures according to their functionality. Hence, we discuss the means for successfully implementing organizational change.

4.1.1 Organizational change and mutual benefits. First, we differentiate the strategic aspects according to Figure 4 into change management strategies for cartels and free riders and teams and tournaments.

Collectively undesirable cartels or free riders are Pareto-inferior interactions through which the company and staff lose many benefits. Change managers can develop a completely new understanding of organizational change by examining these lose–lose games. Managers and employees do not have to fear organizational change; instead, they can use it as an opportunity to implement Pareto-superior interactions. The central question in accomplishing this is: "What are the congruent collective aims, and how can companies achieve a win–win solution?" If change managers find suitable interactions and restrictions to achieve this, employees and managers will accept these changes out of self-interest. Henry Ford's assembly line is a perfect example of organizational change that found a Pareto-superior interaction. By implementing the assembly line, Ford not only revolutionized the technology of production at that time, but he also revolutionized the way employees and managers interact (Miller, 1992). Besides the technology, his strategy was to organize the factory in such a way that interactions among workers, foremen and management were optimally fitted to the new technology.

Looked at from the perspective of New Institutional Economics, firms strive to optimize interactions among their staff to be competitive and, therefore, enhance the value creation process (Coase, 1937; Williamson, 1973). According to this theory, organizational change is not a strategy to deal with external threats (for example, fast changing environment, stronger competition), but is a way in which interactions can be organized in a mutually beneficial way. Therefore, change managers have to look for interactions characterized by a gap between individually rational and collectively desirable behavior. Then, change management shifts from a defensive to a proactive approach.

The analysis of interactions through the lens of social dilemmas has another advantage: change managers do not have to find consensus among conflicting collective and individual aims. If change managers organize value creation through collectively desirable teams or tournaments, they can overcome the tradeoff between individual aims and the company's goals. The mutual benefits that arise from this far outweigh any effort that employees and managers had to invest in attaining the benefits. With the right restrictions, there is no conflict between individual and collective aims.

Additionally, Figure 4 has some implications for change management strategies for optimizing existing teams or tournaments. According to this heuristic, change management becomes more successful when change managers evaluate the aims of the change while taking into account the existing interactions. Change managers might alter the interactions through non-intended consequences of intentional change management. Managers and employees are caught within a social dilemma, for example, when the organizational change causes disadvantages among participants in tournaments. The consequence might be resistance (for example, boycotting the change project).

It could also affect the interdependence between short-term incentives (like bonuses) and the possibilities to build up reputation in the long run. This interdependence is very important to overcome tradeoffs between company's short- and long-term goals. However, if organizational change has an effect only on one of these incentives, staff will alter their behavior according to the changes. If change managers want to implement organizational change within existing teams or tournaments, they have to consider the effect of these changes on the interactions. If employees or managers get an advantage, organizational change will be successful, otherwise resistance can emerge.

4.1.2 The functionality of organizational change measures. We now differentiate in Figure 4 between change management measures for cartels and free riders and measures for teams and tournaments.

First, cartels and free riders are extremely difficult to overcome by using approaches that do not fundamentally change the dilemma situation. Furthermore, social dilemmas are not only a problem in an environment with individuals who can be classified according to Theory X. Even employees and managers that behave as Theory-Y-individuals might have difficulties to behave in a collectively desirable way if they fear getting exploited. Moreover, new psychological research highlights the necessity of restrictions to overcome social dilemmas for reaching Pareto-superior solutions (for a literature overview, cf. Van Lange *et al.*, 2013). Functional formal or informal incentives or bindings could be designed to change collectively undesirable cartels and free riders into either collectively desirable teams or tournaments, as it is not sufficient to attempt to optimize the behavior within the dilemma. Under functional restrictions, employees and managers do not have to decide between individual aims and congruent collective targets. Functional restrictions generate an environment within which the individual aims can be fulfilled only by collectively desirable interactions.

This perspective highlights the idea that resistance to organizational change is not only a problem of communication, information, learning or different individual aims, but it can also be caused by dysfunctional or missing restrictions that create a gap between individually rational and collectively desirable behavior. The challenge for organizational change is to adjust the restrictions so that employees and managers do not have to decide between individually rational and collectively desirable behavior within the social dilemma. Change managers sometimes have to bind themselves, as exemplified by Ford: he contractually agreed that his workers be paid wages that were twice the going rate. Hence, staff do not fear being exploited by the organization.

Within teams or tournaments, change managers can optimize the interactions by providing information, thus reducing the individual effort required, and thereby increasing the individual benefits to teams and tournaments. Enabling more efficient communication between the team members would also interest staff, as mutual benefits are created through team production. Enabling participation is an excellent way of giving employees or managers an opportunity to have their ideas, skills and insights included in team processes, thereby enhancing team productivity. However, change managers should be cautious when evaluating proposals for training or learning. If the affected staff fears that their individual efforts will not result in individual benefits, change managers might create new social dilemmas. Nevertheless, if individuals are interested in training and learning by themselves, or if change managers apply functional restrictions for this social dilemma, the staff may develop self-interest in these measures.

Finally, we point out that social dilemmas and situations where there are needs for optimization can occur simultaneously. We have to differentiate, then, between measures for designing interactions and those that optimize interactions. Change managers should apply a variety of measures in these cases: restrictions that overcome the interaction problems and measures that help employees and managers to optimize their behavior. However, if change managers only apply better restrictions or only measures for optimizing the behavior, organizational change will probably fail or will result in less than all the possible benefits. The staff will behave in a collectively desirable manner, for example, when change managers only apply better restrictions, but they will waste efficiency gains because they are not optimizing their behavior. Conversely, if change managers only apply measures for optimizing behavior, the staff knows how to behave efficiently, i.e. in a collectively desirable way, but it is not rational for them to do so.

4.2 The limits of participation

Many approaches in the literature toward overcoming resistance have a strong focus on communication and participation. Participation, in particular, can motivate employees and improve the efficiency and effectiveness of organizations because of a better flow of information, heightened sense of autonomy and an environment that promotes employee initiative (for a literature overview, cf. Lines, 2004). However, in the economic literature, some authors doubt that participation generates mutual benefits. Heckscher (1995), for example, argues that participation, in general, is not able to support organizational change because it does not alter the win–lose situation within many change programs. Bainbridge (1998, p. 1,004), from a more conceptual perspective, shows that the function of participation is only "monitoring workers and ensuring the flow of efficient information".

In summary, participation has *in general* a positive effect on the individual level because of motivation and *in general* a positive effect on the organizational structure because of an increase in information, autonomy and initiative (Miller and Monge, 1986). Whether participation is able to create win–win during organizational change not only depends on the general effects of participation at the individual and organizational levels but also on another important factor, which is the concept of organizational change itself. If change management has a win–lose perspective (or the staff expects win-lose), the effects of organizational change can outweigh the positive motivational effects arising from participation. Participation may reduce the negative effects for the staff, but does not fundamentally alter the underlying win–lose attitude of the change management project. Change managers should change cartels and free rider behavior to a more beneficial behavior to alter the win–lose situations. In altering these lose–lose situations to win–win situations, change managers will avoid treating the staff just as a sort or "tool" for getting something done (Lawrence, 1969). Moreover, the staff's individual aims can be respected through appropriate interactions that create mutual benefits.

4.3 Competence and brave leaders

Competent change managers are a decisive factor for successful organizational change and dealing with resistance against the changes (Hutt *et al.*, 1995; Mabin *et al.*, 2001; Ford *et al.*, 2008). This paper emphasizes that it is not sufficient to be highly skilled in classical competencies, like strategic management (aims of the organization), social skills (participation, communication, etc.) and optimizing value creation processes (optimizing interactions). Change managers also need to be competent in reconstructing and organizing value creation processes so that competition or cooperation are fostered. Therefore, they also need skills in how to design appropriate formal and informal restrictions to create mutual benefits. Change managers, therefore, also need comprehensive governance skills (Pies *et al.*, 2010).

The theoretical perspective of this paper is that both training and empowering courageous leaders is necessary (Burdett, 1999; and Kanter, 1989). Thinking outside the box and developing win–win potentials needs skill and courage in an environment considered by everyone else to be a "zero-sum game". Change managers have to deal with prejudices against win–win solutions. However, courage is extremely risky if it means that organizational change is implemented against the wishes of the staff, causing win–lose situations in which the people are manipulated to further the goals of the company. In this case, the actions of a brave change manager might cause resistance and, additionally, might reduce his/her credibility, causing employees and managers to resist change even if change management has demonstrated win–win solutions in other projects.

4.4 The limits of incentives and bindings

4.4.1 Incentives. The importance of incentives in successfully implementing organizational change is a frequent topic in the change management literature (Waddell and Sohal, 1998; Kanter, 1989; Kotter and Schlesinger, 2008; and Beer *et al.*, 1990). The framework above reveals in a more differentiated way the conditions under which incentives are an effective means of implementing change and reducing resistance.

Kotter and Schlesinger (2008) criticize bonus systems because companies could be blackmailed by their employees. However, this criticism does not hold up from an economic perspective. Bonuses – as a form of positive incentive – could be an effective way of rewarding collectively desirable behavior in tournaments or teams. If bonuses motivate employees or managers to act in a collectively desirable manner, they will have no incentive to be free riders or join a cartel. Indeed, the absence of bonuses could lead to free riding or cartel formation. From this point of view, the two choices are either to provide bonuses and accomplish a win–win solution or to decide against bonuses and create a social dilemma. In the right circumstances, bonuses can be thought of as a necessary investment toward organizational change.

However, the amount of change that can be accomplished by means of bonuses is limited because of the mutual welfare maximum. The welfare maximum in the above social dilemma is illustrated by ($3; 3$) (Figure 4). Companies have to pay bonuses to cooperating employees and managers to reach this maximum not only when some colleagues are shirking but also when everyone is cooperating in a collectively beneficial way. The latter situation could become quite expensive and, indeed, the additional cost of the bonuses can exceed the welfare maximum: ($3+b; 3+b$). In short, companies can effectively motivate change by means of positive incentives only when these incentives are cost-neutral (for example, self-fulfillment on the job; cf. Shin *et al.* (2012)) or if the work done to earn the bonuses results in such an increase in profits that the firm can permanently afford to pay bonuses. If neither situation pertains, change managers may need to look at binding mechanisms as a viable alternative.

Beer *et al.* (1990) conclude that companies should reward managers who promote innovation with better career possibilities. Companies should also support departments that are extremely innovative. These are functional incentives from an economic perspective. However, as in the discussion above, these incentives should be either cost-neutral or result in profits that exceed their costs.

According to Waddell and Sohal (1998), change managers could overcome dysfunctional incentives using strategies of participation and communication. An economic perspective could elucidate the conditions under which participation and communication can alter dysfunctional incentives. If cartels or free riders are blocking organizational change, communication and participation are helpful if change managers use the information gained to adjust the restrictions. Change managers could gather a lot of helpful information through participation and communication and use it to improve the efficiency and effectiveness of the restrictions.

4.4.2 Bindings. Bindings should not be interpreted as mechanisms for punishment. On the contrary, they could work in the best interests of employees and managers since their purpose is to establish an environment in which staff does not have to fear exploitation by shirking colleagues. Therefore, bindings with their sanctions should reduce the fear of exploitation by protecting hardworking and ethical employees and managers (Schein, 2003; for a literature review, see Bovey and Andy, 2001a, 2001b).

However, bindings have their limits. Companies can sanction collectively undesirable behavior only if such behavior is observed. Many modern value creation processes require employees who are extremely specialized, meaning that it is sometimes impossible for managers to even know, much less understand, exactly what they are doing, leaving open the opportunity for malfeasance (Aghion and Tirole, 1997). Organizational change can also cause monitoring problems: structures are changed, new processes are implemented. Therefore, monitoring can fail because there is yet no empirical knowledge as to the appropriate efficiency or effectiveness of the changed procedures. Shirking employees or managers could exploit this knowledge gap. Companies that operate in an extremely dynamic environment require highly motivated, innovative, engaged and autonomous employees. These qualities cannot be enforced by bindings because it is nearly impossible to sanction, for example, a lack of intrinsic motivation. If bindings fail, incentives could be an effective alternative in this situation.

5. Conclusion

Incentives and binding mechanisms can be informal. Company culture may militate against free riders or cartels (Kreps, 1990). The organizational change literature focuses on the relevance of corporate culture (Ford *et al.*, 2001; Hannan and Freeman, 1984; Klein and Joann, 1996; Krüger, 2010; Nemeth, 1997; Rumelt, 1995; and Strebel, 1994). The economic perspective of this paper reveals that culture affects the aims of employees and managers: a pervasive culture of change will have an influence on who is hired in the first place. Company culture may encompass informal norms that influence behavior: Are employees and managers who seriously implement organizational change resented because they make everyone else look bad? or Are they admired by their colleagues? Informal norms can have a strong influence on the collectively desirable behavior of employees and managers (Miller, 1992). The impact of organizational culture on promoting interactions that create mutual benefits is a promising topic of further research.

The perspective that changes management can overcome social dilemmas and thereby establish mutual benefits is extremely conducive to productive inter-organizational dialogue about the necessity for and implementation of change. These discourses complement participation, communication or information strategies. Approaches that generate win–win solutions by eliminating free riders and cartels can be a powerful way of reducing resistance. A clear win–win focus by change management thus helps facilitate productive discourse between change managers, employees and managers because individuals have a strong self-interest in organizational change (Maurer, 1996). A functional discourse focuses, therefore, more on the use of necessary restrictions as a means to overcome collectively undesirable behavior rather than on the use of participation, communication and information.

The idea of the discourse is not to concentrate primarily on the aims of the company, the employees or the managers, but on discovering which restrictions are most suited to generating mutual benefits for all. A discourse that concentrates on restrictions to create win–win situations can be more successful than approaches within a win–lose paradigm (Hardy *et al.*, 2005; Pies *et al.*, 2009, 2010). Also, discourses about appropriate restrictions do not necessarily require commitment to the individual aims or targets of the company as many scholars recommend (Shin *et al.*, 2012). Employees and managers have only to commit to the collective aims and the necessary restrictions. A functional discourse uses participation, information, and communication to find congruent collective aims and suitable incentives or bindings to establish mutual benefits and to reduce resistance. Discourse is an effective alternative to negotiating meanings between managers and employees (Thomas *et al.*, 2011). However, employees will only accept win–win solutions if change managers and the company are credible. If the staff believes that the initiators are pursuing a hidden agenda, the idea of win–win will be tarnished and organizational change will fail.

The potential of this approach to organizational change, inspired by New Institutional Economics theory, can be summarized as follows:

- The focus on win–win solutions can help overcome resistance to organizational change by redirecting cartels and free riders into more productive interactions. This interaction-theoretical perspective emphasizes that interactions do not have to be zero-sum games, even though, in many cases, dysfunctional restrictions lead to win–lose or, worse, lose–lose situations. Thus, change managers will win the "hearts and minds" of employees, managers and shareholders if they implement functional restrictions.
- An important condition for win–win solutions is functional restrictions. Note that this does not conflict with approaches that try to optimize the individual behavior within existing interactions. In many cases, change managers can succeed only if they combine approaches that change Pareto-inferior interactions with approaches that optimize individual behavior. The adaptation of restrictions creates the environment in which approaches that try to optimize behavior become effective.
- The approach of this paper enables dealing with pluralistic aims, opinions and motivations. Compared to other approaches that concentrate on congruent aims, change managers taking this interaction-theoretical approach have an opportunity to implement organizational change in a pluralistic environment. Change managers do not have to balance conflicting aims; they can concentrate on mutually accepted restrictions that create win–win solutions.

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