

Organizational Change, Resistance to Change and Participatory Strategies: A Feedback Perspective

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Abstract

Literature on organizational change considers resistance to change as either a hindrance to successful organizational change or a valuable source for organizational change. This paper introduces a feedback perspective on the relationships between organizational change and employee resistance to organizational change, allowing for reconciling positive and negative causal links between these concepts. Moreover, a feedback perspective allows us to identify strategies that may help to accomplish successful organizational change. On the basis of an inductive case study in a large Austrian service company we built a causal loop diagram that shows the dynamic processes around resistance to organizational change. The causal loop diagram may help to determine in what situations participatory strategies contribute to organizational change in the context of resistance. The value of this research is that it not only contributes to enhancing a systems understanding of resistance to change, but also to understand when the benefits of participatory strategies in terms of the quality of change outweigh the costs of the extra time investments needed.

Keywords

Organizational change, resistance to change, participatory strategies, causal loop diagramming, feedback perspective, systems understanding

Introduction

In order to be successful, organizations must effectively adapt and respond to changes in their environment (Jaramillo, Mulki, Onyemah & Pesquera, 2012). However, researchers and practitioners agree that the majority of organizational change initiatives fail (e.g., Eaton, 2010; Isern & Pung, 2007; Michel, Todnem & Burnes, 2013; Strelbel, 1996). One major reason for failures of organizational change efforts is attributed to employee resistance to organizational change (e.g., Del Val & Fuentes, 2003; Erwin & Garman, 2010; Ford & Ford, 2010; Jaramillo et al., 2012; Michel et al., 2013; Oreg, 2006). The traditional view sees employee resistance to change as something that needs to be overcome or eliminated (Erwin & Garman, 2010; Furst & Cable, 2008). In this view, change succeeds if resisters stop their irrational and self-serving behavior (Ford & Ford, 2009, p. 99). In contrast to this traditional paradigm, recent studies stress the possibility of resistance to change being a valuable resource in accomplishing change (e.g., Ford & Ford, 2009; Ford, Ford & D'Amelio, 2008; Harvey & Broyles, 2010). According to Thomas and Hardy (2011, p. 322) these studies celebrate resistance, as it plays an important role in successful organizational change. Following this modern paradigm, as Bareil (2013) calls it, Ford and Ford (2009, p. 100) define resistance to change as an important form of receiving information from employees, and dismissing this feedback robs you of a powerful tool when implementing change. Hence, the existing literature currently offers two dominant yet contrasting approaches on resistance to change: the demonizing versus the celebrating of resistance to change (Thomas & Hardy, 2011, p. 322).

The reason why the literature on resistance to change is so paradoxical and contradictory (Bareil, 2013, p. 61) has probably to do with the complexity and nonlinearity of the structural relationships between organizational change and resistance to change. According to Burnes (2005) and Shirey (2013), organizational change and resistance to change are both part of complex, nonlinear and dynamic systems. Consequently, they call for complex, nonlinear and dynamic models, as linear and static models cannot fully represent these dynamic systems. This call is also supported by Van de Ven and Sun (2011, p. 71) who attest a need for models that address the interacting complexities of change processes. The objective of this paper is to accommodate this need by building a causal loop diagram capturing the structural relationship between organizational change and resistance to change, in order to facilitate successful organizational change. In fact, causal loop diagrams are known for being able to capture complexity and nonlinearity of organizational phenomena (Sterman, 2000). Causal loop diagrams visualize feedback loops within organizational processes, in which all variables are both cause and effect (Murdoch & Geys, 2014; Senge, 2006, p. 75; Vennix, 1996). Even though a system can contain a very large number of feedback loops, there are only two types: reinforcing and balancing loops (Sterman, 2000). The causal loop diagram developed within this research is based on an inductive case study and was derived by using grounded theory techniques, which are known to be very useful when trying to identify concepts and how they interrelate to each other (e.g., Kopainsky & Luna-Reyes, 2008; Luna-Reyes & Andersen, 2003; Yearworth & White, 2013). Discovering patterns in the data ultimately leads to identifying positive or negative causal links (Kopainsky & Luna-Reyes, 2008, p. 472), which are the building blocks of feedback loops (Sterman, 2000). Empirical data was collected within a large Austrian service company that is confronted with difficulties in adapting to changes taking place in their external environment. Three data collection methods were applied:

1) semi structured interviews, 2) a model-building process, and 3) a group model-building session with employees from top, middle and low level management. Our findings suggest that the relationship between change and resistance is not only positive or negative, but mutually causal, thus nonlinear and complex. We argue that our research not only advances studies of resistance, but also stimulates innovative theorizing by introducing a feedback perspective. This thinking in feedback moves us back to the roots of resistance to change when Kurt Lewin introduced the term as a systems phenomenon (Dent & Galloway Goldberg, 1999, p. 25). However, the concept of resistance to change has been narrowed and pared down since its origin (Burke, 2011, p. 156; Ford et al., 2008, p. 370). By combining different elements in one causal loop diagram this study contributes to again broadening the concept and therefore enhances a systems understanding of resistance to change. Finally, this paper also offers a strategy aimed to facilitate successful organizational change: Decision-makers are advised to adequately and timely regulate the use of participatory strategies by a) continuously perceiving the current state of the system as portrayed by our causal loop diagram, and b) anticipating various reinforcing and balancing effects which can be expected upon taking a specific decision. The section on findings provides a detailed description of identified reinforcing and balancing effects visualized in form of feedback loops. The remainder of this paper is organized as follows. The next section describes our methods of data collection and data analysis in more detail. We then present the causal loop diagram that visualizes the relationship between organizational change and resistance, including the feedback processes that reinforce or balance this resistance. Next, we discuss the contribution of our findings to existing literature and suggest implications for adequately applying participatory strategies to facilitate organizational change. We end with discussing some limitations of the study.

Material and methods

Our empirical data was collected within a large Austrian service company, which has a long and very successful tradition of being a pioneer and key player in its business domain. Nevertheless, for several years, employees at various management levels have been noticing severe changes in the company's external environment and in society in general. New players, for instance, keep appearing on the market increasing the competition in the respective service sector. In recent years, customers' attitudes, tastes and demands have also been changing very rapidly. Moreover, some employees believe that, without successful change, the company is moving away from its desired goals increasing the discrepancy between 'what is' and 'what should be'. Therefore, it seems necessary to adapt to the changes taking place in the external environment in order to succeed and, in the long run, to survive as a company. Unfortunately, this Austrian service company has been confronted with difficulties in successfully initiating and implementing organizational changes. Some employees assume that employee resistance to these changes is one of the major reasons for these difficulties. This led the first author to investigate this case by conducting semi-structured interviews, building a model of the dynamic system underlying their change processes, and having this system being validated in a group model-building session with employees from top, middle and low level management of the company.

For the semi-structured interviews, the ten interviewees were asked about their perceptions of why employee resistance to change seems to exist in the company and which strategies might be able to facilitate successful implementation of future change

initiatives. These interviews took place face-to-face and each lasted between 45 and 70 minutes. The main purpose of the interviews was to collect some first positive and negative causal relationships that could be used when constructing feedback loops (Sterman, 2000). Second, by conducting mainly individual interviews, we aimed to capture many different viewpoints, i.e. to get “as many ideas as possible out on the table” (Andersen & Richardson, 1997, p. 111). A third reason was to become familiar and build rapport with the participants (Vennix, 1996), which indeed proved useful during the group model-building session. All interviews had been tape-recorded, transcribed verbatim and coded. The coding scheme¹ contains codes that represent either (1) definitions of concepts (variables) or (2) relationships between two variables (causal links). Following the guidelines suggested by Luna-Reyes and Andersen (2003), we were mindful not to impose any codes but rather to let them emerge from the interview data. Once codes had been defined, they were applied systematically.

The model building process is based on Sterman’s (2000, p. 157) rationale that interviews are almost never sufficient alone when eliciting causal relationships. They must be supplemented by other sources of data because causal links retrieved by interviews generally show a number of blind spots (Vennix, 1996, p.125). Therefore, the information retrieved from the semi-structured interviews was expanded by a model building process that was initially undertaken with a key-informant and finalized by a group model-building (Vennix, 1996) session with six employees from top, middle and low level management.

The group model-building session served three purposes. First, additional data was collected and added to the preliminary causal loop diagram while employees were drawing on a blackboard. Second, the session proved to be a useful validation tool for the preliminary model structure that was created during the initial model-building process and for the additions made to the causal loop diagram. Third, a shared learning environment was provided to the participants.

The components of the causal loop diagram as well as its verbal descriptions presented in the next section have been entirely derived from our empirical data. Some interview excerpts, which underpin the causal links of the model, have been selected to illustrate our empirical material. The structure of the causal loop diagram emerged during the initial model-building process and the group model-building session. Both helped to ground the evolving causal loop diagram in the mental models (Forrester, 1987) of the people involved.

Findings

Our results reflect participants’ perceptions of relationships between organizational change and employee resistance to organizational change. According to the findings, participatory strategies play a significant role in moderating this relationship. Therefore, this section introduces the perceived interconnectedness of three concepts: 1) organizational change, 2) employee resistance to organizational change and 3) participatory strategies. In order to facilitate the illustration of the various mutual causalities identified by the participants and depicted in a causal loop diagram, this section is split into three parts: First, we concentrate on the relationships between organizational change and resistance to change. Second, the interconnectedness of

¹ The coding scheme and further supplementary material can be obtained by contacting the corresponding author.

participatory strategies with organizational change is illustrated. Third, we describe mutual causalities between resistance to change and participatory strategies. In total, 10 feedback loops are portrayed in our causal loop diagram, three of the loops being responsible for reinforcing behavior and seven of them having balancing effects.

Organizational change and resistance to change

The introduction pointed towards effects resistance to change can have on the success or failure of organizational change. However, empirical data argues for mutual causality by demonstrating that successful change can also have effects on resistance to change via a need for change. According to the participants of this study, all organizational change starts with a need for change that is determined by two variables: the change goals and successful change. Figure 1 graphically depicts the idea that an increase in change goals leads to more need for change, while an increase in successful change² reduces the need for change as successful change brings the company closer to their change goals.

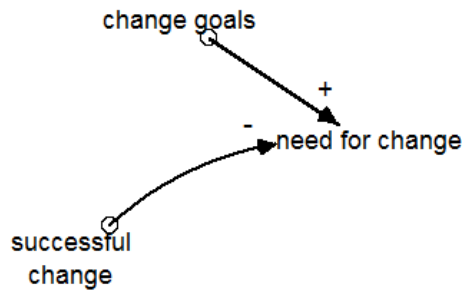


Figure 1³. Need for Change determined by Successful Change and Change Goals.

An increase in need for change eventually fosters employees’ awareness that change is indeed needed. Participants of this study suggest that when employees perceive a need for change because successful change has not yet met the change goals, they will develop a sense of commitment and show support towards finding a solution. Consequently, employees will less likely resist upcoming change initiatives.

More awareness of a problem means less resistance (mid-level manager, man).

If I don’t see any reason for change, it’s hard not to resist. If you want to stop resistance, it’s very important that employees understand the reason and need for change (low-level manager, man).

Participants further posit that low levels of resistance to change facilitate successful change that in turn reduces the need for further change initiatives. These combined

² Empirical data distinguishes between change and successful change in so far as the participants of the study argue that not all change is successful, i.e. capable of bringing the company closer to the desired goal and thus reducing the need for further change.

³ Variables are related by causal links, shown by arrows. The independent variable at the tail (X) has either a positive (+) or negative (-) causal effect on the dependent variable at the point (Y). Positive causal links signify that both variables change in the same direction, i.e. all else equal, if X increases (decreases), Y increases above (decreases below) what it would otherwise have been. A negative polarity indicates that an increase (decrease) in X causes Y to decrease (increase), i.e. all else equal, if X increases (decreases), Y decreases below (increases above) what it would otherwise have been. A link polarity does not describe any behavior, i.e. it does not determine whether Y actually increases or decreases (Sterman, 2000; Vennix, 1996).

individual cause-effect relationships create the Organizational Change loop as illustrated in Figure 2.

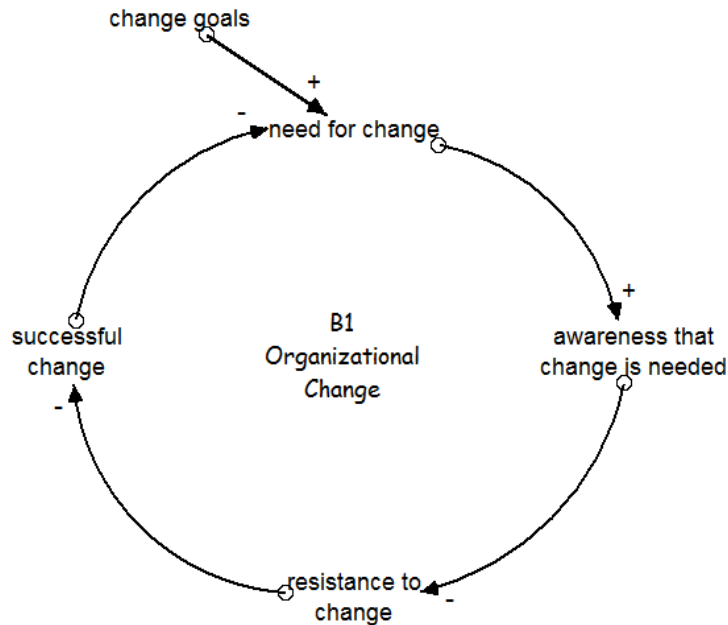


Figure 2⁴. Organizational Change.

This Organizational Change loop in the basic operates according to a very simple problem solving process: altered change goals will lead to a need for change. If employees become aware of this need, they will react supportive and change initiatives can take place successfully. Successful change will decrease the initial need for change as it brings the organization closer to its change goals. The problem seems solved. According to the participants, however, strong need for change can also foster resistance to change through triggering stress. This occurs when employees feel overwhelmed by the magnitude of the anticipated change or involved uncertainty fostering psychological stress or mental overload. Subsequently, stress has a positive effect on resistance to change, as employees start blocking and resisting change initiatives when there is too much tension.

If there is too much tension (...) employees will be overwhelmed and begin to block (mid-level manager, man).

Crisis means that some employees close up, i.e. they are not open anymore and close their minds to anything new (mid-level manager, man).

Stress can trap change. This Stress Trap is visualized in Figure 3 adding a new feedback loop to our understanding of the core dynamics behind the structural relationships between organizational change and resistance to change. Within this Stress Trap, resistance produces further resistance, which hampers successful change. Hence, a vicious cycle arises which impedes reaching the change goals. The degree to which

⁴ The ‚B‘ stands for balancing. A loop is called balancing, counteracting or stabilizing when “a change in one element is propagated around the circle until it comes back to change that element in a direction opposite to the initial change” (Meadows, Meadows, Randers & Behrens, 1972, p. 42).

change goals are reached depends on the strength of the Organizational Change Loop relative to that of the Stress Trap.

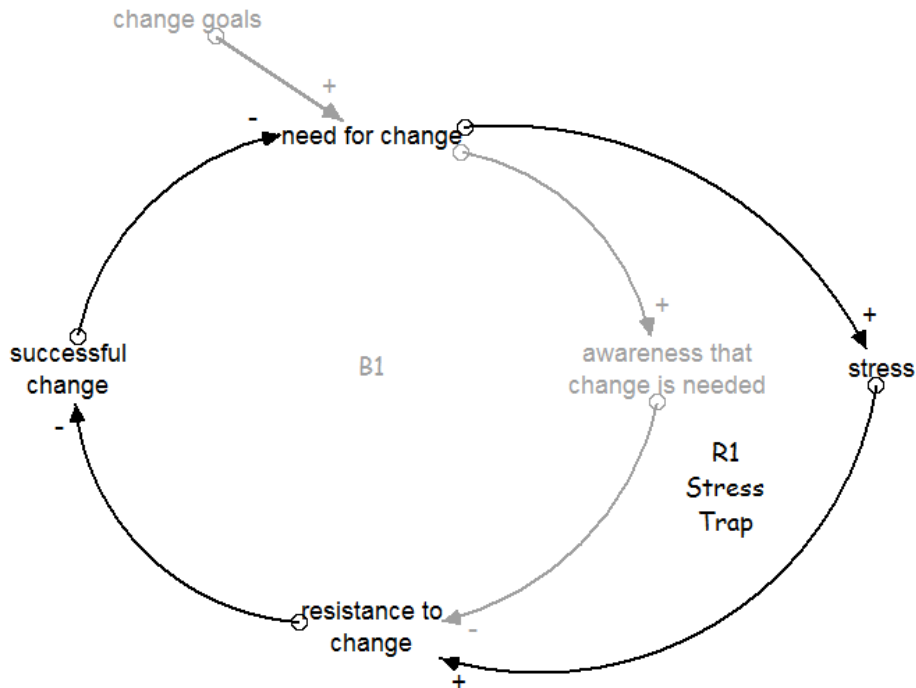


Figure 3⁵. Stress Trap.

Participatory strategies and organizational change

The participants of this study consider the introduction of participatory strategies a useful and appropriate response to resistance. In their view, participatory strategies aggregate a number of activities such as communicating in an open, transparent, comprehensible and honest way, seeking direct conversations, listening to and catering for employees' needs and involving employees in change development and decision-making processes.

[In case of resistance] in a first step you need to get people on board by providing information. In a second step you should ensure a good and strong involvement in the development of the change (mid-level manager, man).

In case of resistance, you need to try to explain why it is so important and necessary to change, why this change is needed and what each individual can do to play a part of this and to explain what consequences we are confronted with if the change is not taking place. Also, it's important to seek direct conversations. Communication is an important aspect, but I think, it doesn't suffice. The next step is to involve employees (mid-level manager, woman).

Our empirical material further illustrates that introducing participatory strategies has an indirect positive effect on successful change as participatory strategies increase the quality of change initiatives. Participants argue that the more resistant employees are involved in the change process, the more thought is given to the change, the more

⁵ The 'R' stands for reinforcing. These loops reinforce, amplify or accelerate whatever is happening in the system (Sterman, 2000).

additional viewpoints come to the surface, the more concerns are shared, and thus the more potential drawbacks of the change initiative can be detected early on. Consequently, the change initiative becomes subject to more critical review and critical analysis. Resistance to change is, in this case, more about being concerned and skeptical and can therefore be a sign that employees care about and give thought to the change initiative and do not blindly accept all idiocy.

Resistance also shows that somebody cares and gives thought to the change and doesn't blindly accept all nonsense (low-level manager, man).

If somebody is enthusiastic, he/she only perceives the positive and might overlook important thing. If somebody is resistant and critical, then I have the advantage that I also get to see negative consequences of the change initiative (mid-level manager, man).

There are really good people in here. If you let them participate, they could really contribute in a great way (mid-level manager, woman).

Resistance to change is therefore also positively connected to successful change via the intermediate variables participatory strategies and quality of change. This addition results in two extra feedback loops, called Quality Flow (Figure 4) and Success Calms (Figure 5). The Quality Flow loop accelerates successful change by increasing the use of participatory strategies. This leads to faster successful change bringing the organization closer to its change goals, which reduces the need for further change initiatives. The latter reduces the strength of the Stress Trap as this vicious trap obtains its strength via a strong need for change.

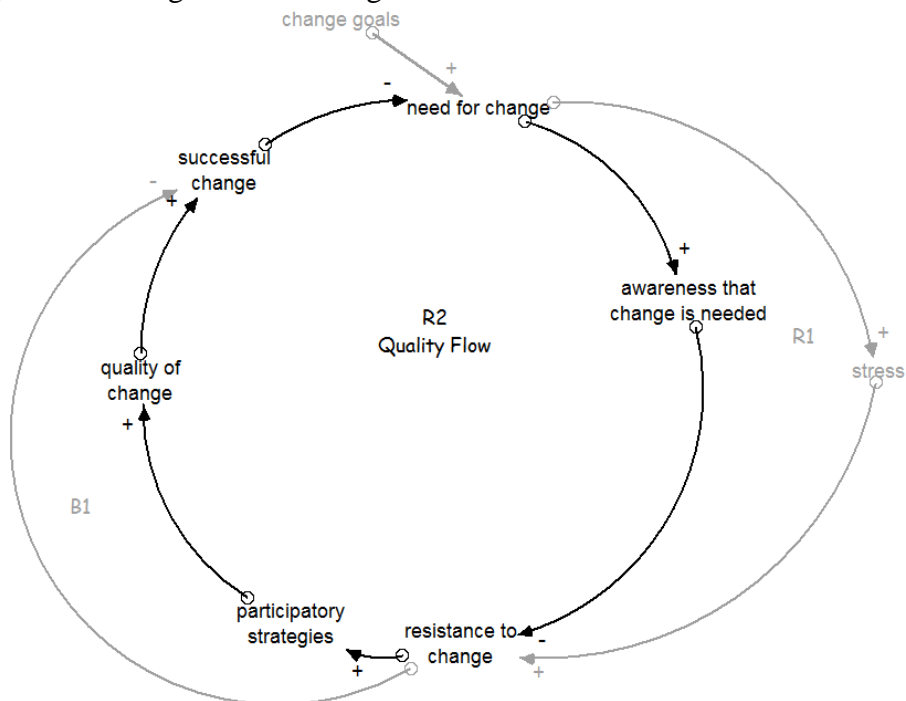


Figure 4. Quality Flow.

The balancing loop Success Calms also tempers stress when an increasing use of participatory strategies emerging from resistance to change leads to high quality change

initiatives boosting successful change, which eventually reduces the need for change. Consequently, stress which employees perceive due to the anticipated change decreases.

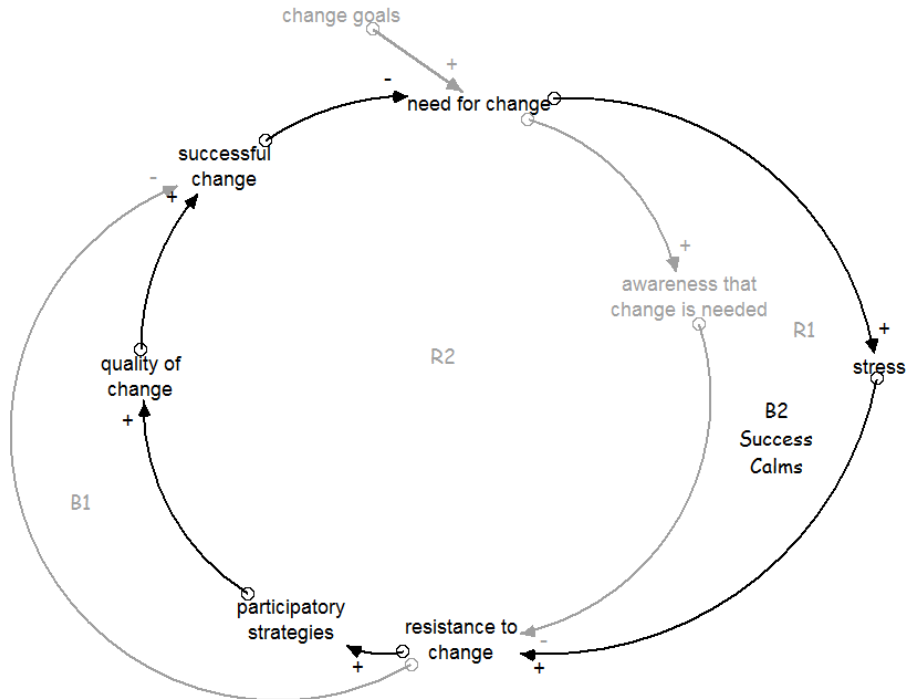


Figure 5. Success Calms.

In sum, the use of participatory strategies tempers the acceleration process of the Stress Trap through enhancing successful change and reducing need for change. However, our findings also highlight that participatory strategies have an important drawback. They are very time-consuming which works against organizational change. The participants in our study argue that the more participatory strategies are applied, the more communication must be offered, conversations conducted, and employees involved in change development and decision-making processes. These activities are very time-consuming and by the time sufficient exchange of information and opinions has been achieved and decisions have been reached, it might be too late to act upon them. All this reduces the efficiency of the change initiative. A negative causal link was therefore introduced from participatory strategies to efficiency of change and a positive causal link from efficiency of change to successful change. This addition created two new feedback loops: 1) the Slow Trap (Figure 6) and 2) the Sense of Urgency loop (Figure 7). The Slow Trap represents a vicious cycle reinforcing the inefficiency of participatory strategies. This trap implies that successful change declines through low levels of efficiency as a result of an increasing use of participatory strategies. Consequently, the need for change grows leading to more stress, stronger resistance, resulting in the use of even more participatory strategies. Hence, the Slow Trap contributes to a continuous growth of a need for change while at the same time reinforcing resistance to it.

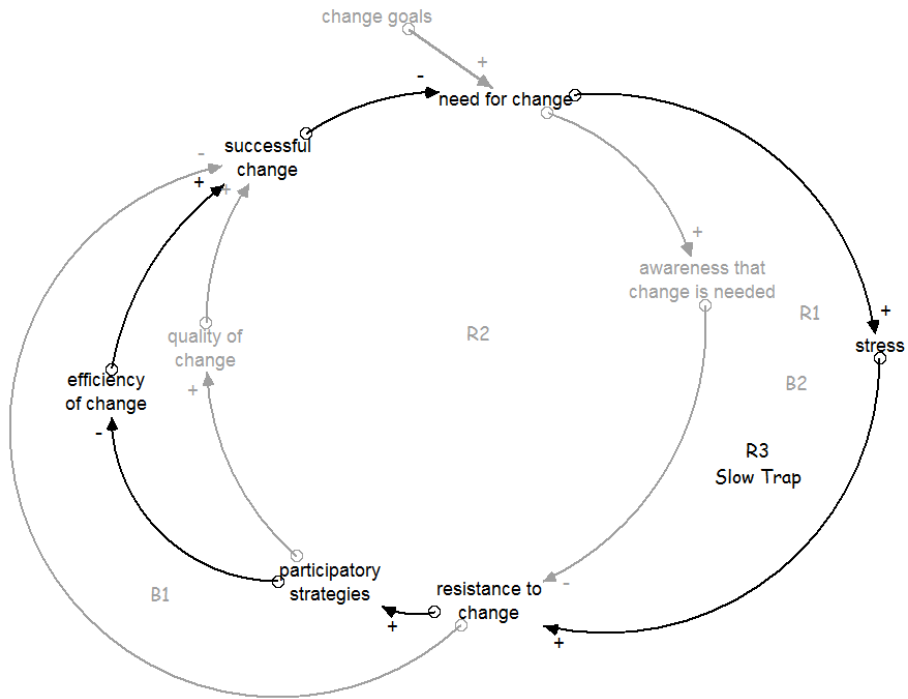


Figure 6. Slow Trap.

The Sense of Urgency loop also implies that low levels of efficiency negatively influence success change and raise the need for change. However, in contrast to the Slow Trap, increasing need for change reduces resistance via fostering awareness that change is needed. Thus, Sense of Urgency limits the use of participatory strategies as a response to their inefficiency.

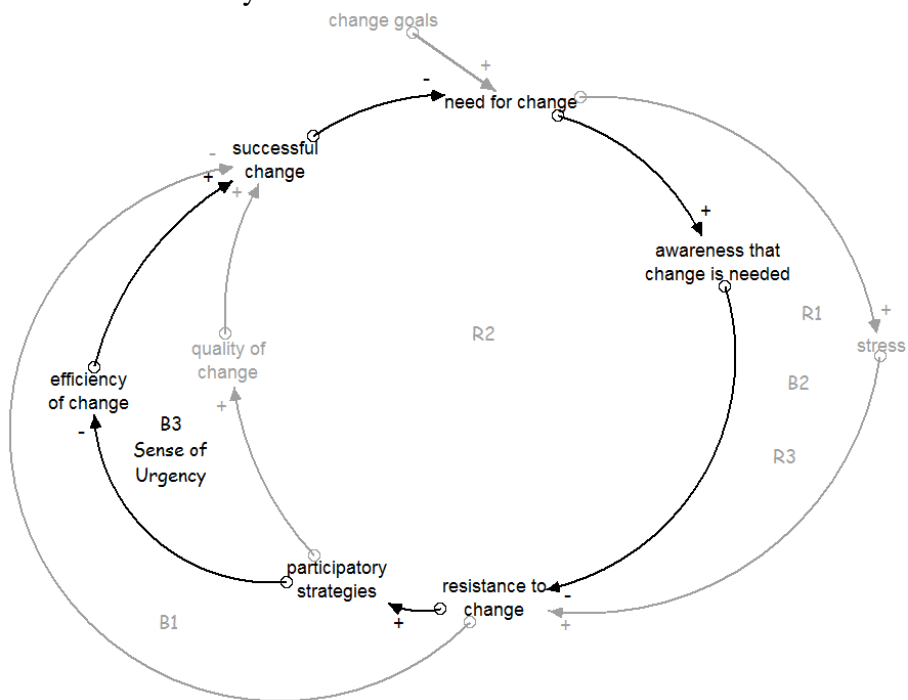


Figure 7. Sense of Urgency.

The degree by which the quality of the change initiatives outweighs the inefficiency of participatory strategies depends on the relative strength of and interactions between the Quality Flow, Success Calms, Sense of Urgency and the Slow Trap.

Resistance to change and participatory strategies

According to the participants of the study, participatory strategies do not only contribute to the success of change via an increased quality of change, but they also have more or less direct tempering effects on employees' resistance to change. Our empirical material points towards four such tempering effects. The first effect has to do with raising awareness. In case of resistance to change, one needs to try to explain why change is so important and necessary, why it is needed, and what consequences are to be expected if the change is not taking place. Empirical data suggests that an atmosphere of open, comprehensible and honest communication can lead to employees understanding the reasons behind change, becoming more aware of the need for change and less likely reacting resistant towards upcoming change initiatives.

[When resistance emerges] contents about WHY and WHAT most probably haven't been articulated in a very transparent way (mid-level manager, man).

If you cannot explain the change so it makes sense that it's a good idea, then the change won't take place (mid-level manager, man).

The use of participatory strategies has a direct effect on awareness that change is needed, this creates a feedback loop which we call Enlightenment. This feedback loop is illustrated in Figure 8 and captures that awareness that change is needed increases due to the application of participatory strategies which in turn leads to a decline in resistance to change. Enlightenment is stabilizing in nature, i.e. it counteracts initially strong resistance to change.

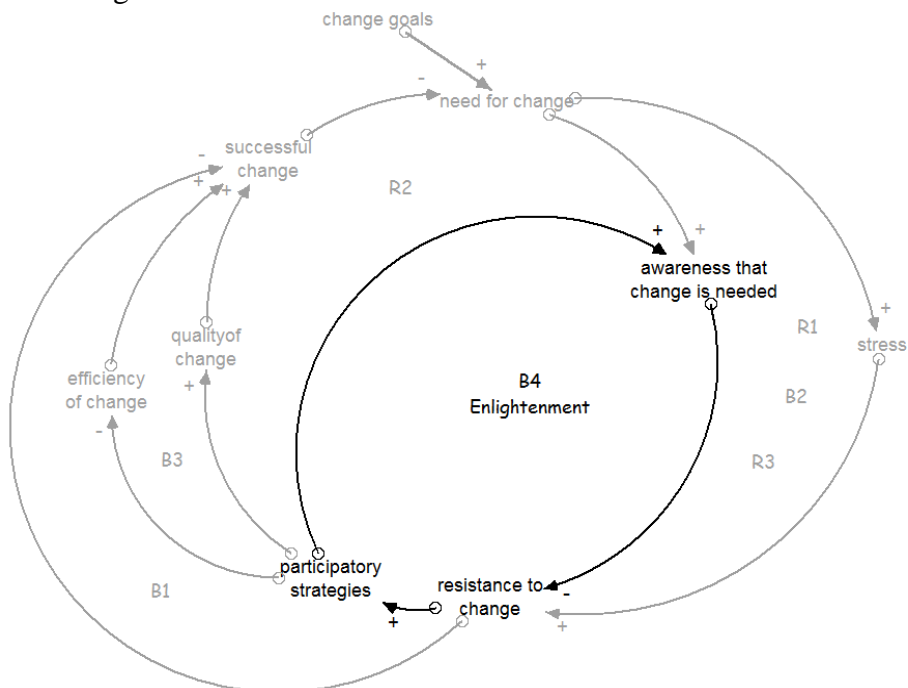


Figure 8. Enlightenment.

[Participatory strategies] lead to more immediate perceptions of employees' own contributions' consequences. In other words, when it's recognized which contribution your own actions create, then you are less resistant (mid-level manager, man).

If an employee is confronted with a change, he/she was not involved in beforehand, then most probably he/she will react resistant (mid-level manager, man).

This results in the balancing loop called Active Contribution (Figure 10). According to this loop, empowerment increases due to an increase in participatory strategies, which in turn leads to a decline in resistance.

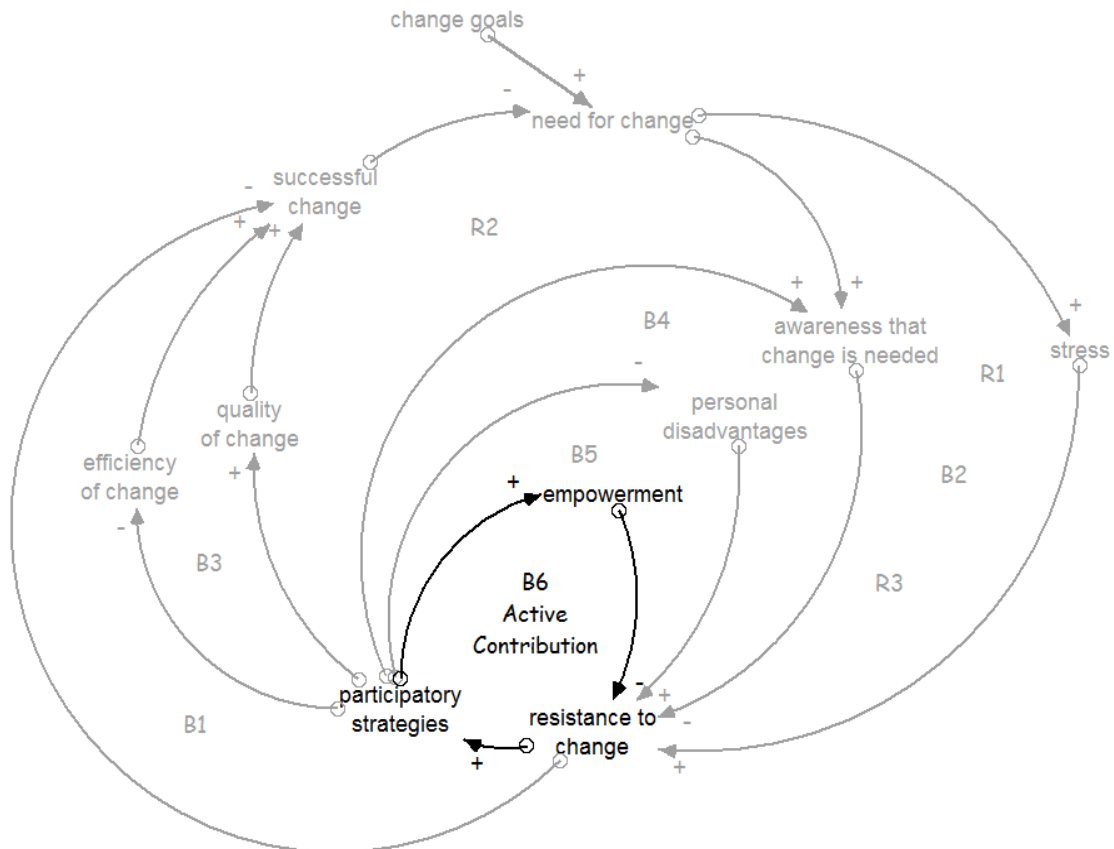


Figure 10. Active Contribution.

The fourth and final tempering effect is that participatory strategies – when implemented in the form of open, transparent, comprehensible and honest communication – often lead to accumulated trust towards change agents. This study applies Burke’s (2011, p. 156) definition of change agents as “leaders and managers of change and their consultants whether internal or external”. According to our empirical evidence, trust in change agents implies that they are planning and implementing change properly and do what is best for the organization and employees. The participants of this study perceive trust as a counterweight to fears. In this respect, trust in change agents contributes to reducing resistance to change.

Information and transparency create trust. (...) It is important to clarify what the change initiative is all about in order to create mutual trust which finally leads to a space free of fear. Such a space enables a lot (mid-level manager, man).

This is captured in the balancing Social Credit loop that is added to the diagram in Figure 11.

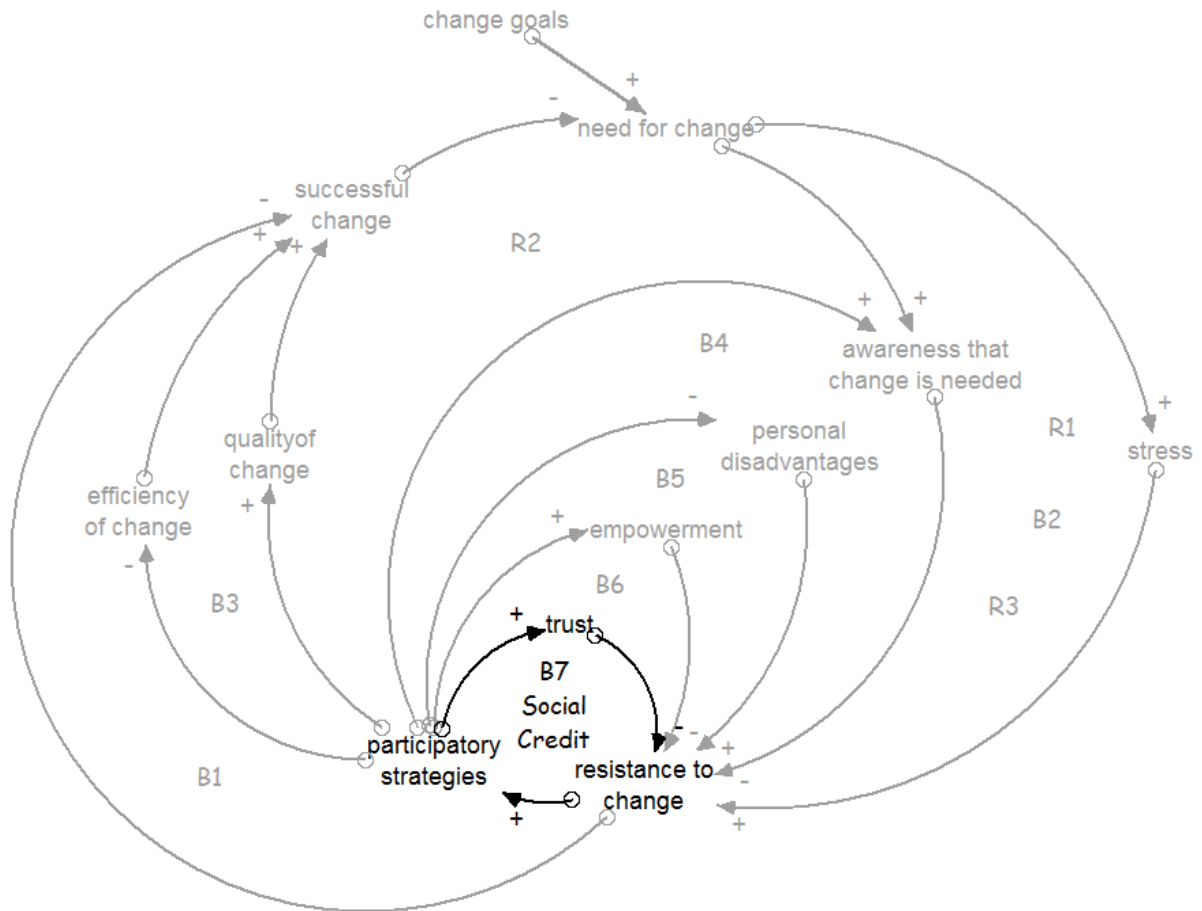


Figure 11. Social Credit.

Discussion

The objective of this paper was to accommodate the need for deeper insight in the structural relationship between organizational change and resistance to change through a systems perspective. Our causal loop diagram provides a start in capturing the non-linear feedback complexity embedded in the dynamic system underlying organizational change and resistance to change. This feedback perspective touches upon the roots of resistance to change when Kurt Lewin introduced the term as a systems concept (Dent & Galloway Goldberg, 1999, p. 25) and suggested “rather than attempting to understand a situation by focusing on one or two elements in isolation, one needs to consider the situation as a whole” (Burnes & Cooke, 2013, p. 411). According to Burke (2011, p. 156), however, many have strayed from Lewin’s origins and narrowed resistance to a psychological phenomenon, instead of enhancing a systems perspective that combines individual forces with the context. This research contributes to again broadening the concept by depicting a causal loop diagram with 10 feedback processes surrounding resistance to change. Some represent processes at the individual level (e.g., stress, empowerment, personal disadvantages, trust), while others resemble processes rather at the organizational level (e.g., need for change, quality of change, efficiency of change).

Combining these different elements in one causal loop diagram, again broadens the concept and therefore enhances a systems understanding of resistance to change.

A further contribution of this research lies in the fact that it unites seemingly contradictory perspectives in one model. Our findings suggest that the relationship between resistance and change is not only positive or negative, but allows for resistance to simultaneously affect successful change both negatively and positively. Within the feedback loops Organizational Change and Stress Trap, resistance to change negatively affects successful change via a direct causal link. In this respect, the study supports the traditional paradigm (Bareil, 2013) or demonizing approach (Thomas & Hardy, 2011) of resistance to change, as these loops suggest that resistance opposes successful change. Enlightenment also supports the traditional paradigm in so far as it suggests that once employees become aware of the need for change, their resistance will fade away. This confirms the traditional approach that argues for showing change recipients the errors of their ways and dealing with their misunderstandings (Ford et al., 2008, p. 370). In addition, the feedback loop Compromise suggests that resistance to change should be eliminated by reducing personal disadvantages, which – according to the participants of the study – are mainly based on employees' fears and self-serving interests. In contrast to these traditional views, our causal loop diagram also portrays a positive effect of resistance on successful change within Quality Flow and Success Calms. These loops illustrate that resistance has an indirect positive effect on successful change when participatory strategies increase the quality of the change initiatives through critical review and analysis. This confirms Burke (2011) who states that participatory strategies provide a forum where differences among people are surfaced, confronted, and debated resulting in improved decision-making. Similarly, our model supports Vennix (1996, p. 154) when he claims that cognitive conflict promotes vigilance and “disagreement causes a more thorough investigation of the problem, more information processing and a consideration of more alternatives”. In this respect, participatory strategies emerging from resistance to change can be used to harvest the information feedback from employees (Ford & Ford, 2009, p. 100). Therefore, this study also confirms the modern paradigm (Bareil, 2013) or celebrating approach (Thomas & Hardy, 2011) of resistance to change.

In sum we argue that the reason why the literature on resistance to change is so paradoxical and contradictory (Bareil, 2013, p. 61) has to do with the complexity, mutual causality and nonlinearity of the structural relationships between organizational change and resistance to change. Our findings illustrate that the complexity of these structural relationships can neither be fully accounted for by the traditional nor the modern paradigm of resistance to change. Our causal loop diagram provides a more integral perspective on resistance to change. Hence, our findings illustrate the co-existence of both perspectives allowing for resistance to change to simultaneously affecting successful change both negatively and positively. This is possible as multiple causal paths allow for resistance to change affecting successful change and vice versa. Whether resistance to change hampers or fosters successful change is a function of the relative strength of these different relationships, and the loops of which they are part.

By moving away from the two-paradigm-view of seeing employees' resistance either positive or negative towards change, our findings do not support Bareil's (2013, p. 64) sequential approach for managing resistance: “the modern paradigm first, where resistance to change is considered as a legitimate resource and feedback from the silent majority, and consecutively, only if no behavioral change appears, usually from a

minority, or when speed is essential, from a traditional perspective, where resistance to change is interpreted as a drastic opposition to the change”. According to our findings, the accelerating and stabilizing simultaneous effects circulating around resistance to change suggest that a linear sequence of applying one paradigm at a time is no adequate response to managing resistance.

Instead, our study suggests another approach. Our causal loop diagram grants participatory strategies a significant position in moderating the relationship between successful organizational change and resistance to it. Empirical data suggests deploying participatory strategies in an adequate manner when trying to enhance successful organizational change. This implies that one should not by default opt for participatory strategies every time a change is required in the organization. In fact, not all change is accompanied by high levels of resistance to change. This implies that the Organizational Change loop might just work fine in a lot of the cases in which change is required and employees have positive responses and feel a readiness for change (e.g. supported by Powell & Posner, 1978). However, when the company seems to be stuck in a Stress Trap, the use of participatory strategies cannot only foster successful change via increased quality of change, but can also have tempering effects on resistance to change. Our empirical material points towards four such effects. Participatory strategies can 1) raise awareness that change is needed, 2) reduce employees’ personal disadvantages, 3) create perceived empowerment, and 4) accumulate trust in change agents. These four effects all negatively affect resistance to change (e.g. supported by Chawla & Kelloway, 2004; Erwin & Garman, 2010; Harvey & Broyles, 2010; Jaramillo et al., 2012; Kotter & Schlesinger, 2008). Hence, the more participatory strategies are used, the less resistance towards the change initiatives is to be expected. Still, when applying participatory strategies haphazardly and excessively, there is risk that the company falls into a Slow Trap. In this case, the time-consuming nature of participatory activities negatively affects the efficiency of change and sometimes, urgent changes need to be implemented rather fast. This is supported by Eisenhardt (1990, p. 39 and p. 53) when she argues that “the best strategies are irrelevant if they take too long to formulate” and “a slow strategy is as ineffective as the wrong strategy”. Therefore, fostering participation and actively involving as many employees as possible is not always the best strategy. One important practical implication emerging from studying the conditions and effects embedded in our causal loop diagram is to strategically reduce participatory strategies whenever sufficient trust towards the change agents has been accumulated (through the Social Credit loop). This strategy allows for fast and efficient decision taking when required, while historically accumulated trust ensures employees’ commitment/support and hinders resistance. Thus, at first sight this approach seems to trigger a win-win situation of high efficiency and low resistance. However, this strategy should only be applied scarcely given that a reduction of participatory strategies fosters personal disadvantages and negatively affects the quality of change and the levels of empowerment and awareness that change is needed. In addition, if change leaders repeatedly refrain from applying participation, trust will (eventually) deplete. This strategy reflects Nutt’s (2002, p. 100) suggestion that decision makers who use an edict (i.e., decision without argumentation) must draw on social credit, the store of goodwill they built up by honest dealings and positive accomplishments, and trade it for rapid action. He also highlights that repeated use of an edict exhausts the store of social credit. In addition to this very specific recommendation of adequately and timely regulating the use of participatory strategies, this study also offers managers a model that can be used to check their

situational context of resistance to change. After this diagnosing phase, the system structure can help to explore potential future paths, as it highlights various reinforcing and balancing effects that can be expected upon taking a specific decision.

Finally, this study has some limitations. First, the dynamics that emerge from overall interactions between all the elements of our causal loop diagram is restricted to the mental capacity of the reader. Therefore, we propose future work on quantifying the model structure in order to support the reader in discovering emerging dynamics and reveal potential counter-intuitive behavior resulting from the assumptions in the model (Lane, 2008, p. 6). Second, the intangibility of most model variables reduces the applicability of the practical implications presented above. In other words, it might be tough for managers to adequately and timely regulate the use of participatory strategies when measuring the size of determinants such as trust, need for change, empowerment and stress is a quite challenging endeavor. Third, the inductive approach defined the scope of our model as it has emerged from and was restricted to the empirical data we have collected. Even though the causal loop diagram aims to tell a rich story, there are definitely some important causal links missing which the literature has already identified. For instance, existing literature points out that participatory strategies can also negatively affect resistance, e.g. an increase in involvement can foster resistance (e.g., Bruhn, Zajac & Al-Kazemi, 2001) and providing information can promote resistance (e.g. Oreg, 2006). Also, in certain circumstances, participatory strategies can decrease the quality of change (e.g. Janis, 1972). It is acknowledged that many more aspects can be considered when creating a causal loop diagram of organizational change and resistance to change. Still, Senge (2006, p. 72) warns that “thousands of variables and complex arrays of details can actually distract us from seeing patterns and major interrelationships”. Morecroft (2012, p. 645) confirms this by stating that “very often, smaller models are extremely useful, particularly when their purpose is to aid communication and to build shared understanding of contentious problem situations in business and society”. Therefore, future research might want to concentrate on enhancing the quality/depth rather than the size of the model. Finally, we suggest testing the components of the causal loop diagram in a broader set of cases and with different types of organizational change processes.

Conclusion

This study illustrates the need to reconcile the traditional and the modern paradigm in a broader systems perspective and shows how a systems paradigm is able to unite contradictory knowledge. A feedback perspective allows for mapping the broader dynamic system underlying resistance to change. This broader dynamic system consists of the following reinforcing and balancing feedback loops: (1) Organizational Change, (2) Stress Trap, (3) Quality Flow, (4) Success Calms, (5) Slow Trap, (6) Sense of Urgency, (7) Enlightenment, (8) Compromise, (9) Active Contribution, and (10) Social Credit. In addition, our causal loop diagram provides insights into when and how to regulate the use of participatory strategies and its effects on organizational change and resistance. How successful these strategies are depends on the strength of the loops in a given situational context. However, the anticipation of various potential reinforcing and balancing effects, which can be expected upon taking a specific decision, can support decision-makers avoiding obvious traps or even successfully triggering organizational change.

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Appendix 1. Empirical data underpinning causal links.

Causal links	Interview excerpts
<i>Change goals -> need for change</i>	<ul style="list-style-type: none"> • There are many changes happening • Everything is changing out there • The society is changing • We live in a dynamic society, but also in highly dynamic markets • new players are on the market • competition grows • there is a need to offer our customers up-to-date service • without change our company cannot sustain
<i>Successful change -> need for change</i>	<ul style="list-style-type: none"> • Without change the current state stays the same, i.e. the discrepancy between „IS“ and „SHOULD BE“ is growing and growing • I have to change so the customer is happy • Without change, the world is moving away from us. We are continually moving away from our environment in which we operate • [without change] not even the necessary reactive adjustment is taking place • Change is a goal of the company. Without change a company cannot sustain. If change is successful, the company will sustain
<i>Need for change -> awareness that change is needed</i>	<ul style="list-style-type: none"> • The question is whether the employees are aware of the problem.
<i>Awareness that change is needed -> resistance to change</i>	<ul style="list-style-type: none"> • more awareness of a problem means less resistance • if somebody is afraid of collapse, he/she will more likely accept any changes • a higher degree of suffering leads to less resistance • if the change makes sense, resistance is small • the change must make sense, so employees don't react resistant on it • There are many changes where I think „why/what for?“. And that is a key word: need/reason for change. If I don't see any reason for change, it's hard not to resist. If you want to stop resistance, it's very important that employees understand the reason and need for change.
<i>Resistance to change -> successful change</i>	<ul style="list-style-type: none"> • Either I don't follow the change at all or I follow it, because I have to, but I won't do my job very well. • Resistant behavior leads to keeping the status quo • Openness leads to change
<i>Need for change -> stress</i>	<ul style="list-style-type: none"> • I think a crisis would trigger panic. • A decline in number of customers would (...) definitely produce enormous stress.
<i>Stress -> resistance to change</i>	<ul style="list-style-type: none"> • if there is too much tension (...) employees will be overwhelmed and will begin to block, in other words, they will “close the shutter”. • Crisis means that some employees close up, i.e. they are not open anymore, but they close their minds to anything new

<p><i>Resistance to change -> participatory strategies</i></p>	<ul style="list-style-type: none"> • In a first step you need to get people on board by providing information. In a second step you should ensure a good and strong involvement in the development of the change, i.e. participation • in case of resistance, you need to try to explain why it is so important and necessary to change, why this change is needed and what each individual can do to play a part of this and to explain what consequences we are confronted with if the change is not taking place. Also, it's important to seek direct conversations. Communication is an important aspect, but I think, it doesn't suffice. The next step is to involve employees. • In case of resistance you need to explain the change in a very practical way. • One possible strategy is to provide information and establish transparency. That is at least a first step. • In case of resistance, information must be made much more transparent. • Total equality with regard to information is important in case of resistance. • As a first step you need to convince the employees, employees need to understand why. • Here it is necessary, that goals of the change are communicated in a clear and comprehensive way.
<p><i>Participatory strategies -> quality of change</i></p>	<ul style="list-style-type: none"> • there are really good people in here. If you let them participate, they could really contribute in a great way • If employees know why/what for, then there is a lot of willingness to think about change. • [We try] to actively extract the knowledge of the employees. We try to encourage them to share their ideas and suggestions for improvements. • if you don't let employees participate, you may not wonder why you always get the same results. More of the same doesn't lead you to different results. • If somebody is enthusiastic, he/she only perceives the positive and might overlook important things • If somebody is resistant and critical, then I have the advantage that I also get to see negative consequences of the change initiative. • Little resistance leads to fewer critical analysis of the change. • resistance also shows that somebody cares and gives thought to the change and doesn't blindly accept all nonsense. • [Without resistance] there is risk that you might not see whether the change actually does make sense or not or whether the change is efficient or not.
<p><i>Quality of change -> successful change</i></p>	<ul style="list-style-type: none"> • Important messages have potential to steer the change initiative in another, potentially better direction
<p><i>Participatory strategies -> efficiency of change</i> <i>Efficiency of change</i></p>	<p>These two causal links emerged after the interviews had taken place. They were introduced during the initial model-building process and confirmed during the group model-building session.</p>

<i>-> successful change</i>	
<i>Participatory strategies -> awareness that change is needed</i>	<ul style="list-style-type: none"> • [When resistance emerges] contents about WHY and WHAT most probably haven't been articulated in a very transparent way. • Employees have to understand the change initiative. You have to explain your colleagues and employees the change. If you cannot explain the change so it makes sense that it's a good idea, then the change won't take place • It's a lot about background information, why change is needed. The change must make sense.
<i>Participatory strategies -> personal disadvantages</i>	<ul style="list-style-type: none"> • With resistant employees you have to speak most often and you have to "sell" the change to them. For half of them, a compromise could be achieved, so at the end, the change was pleasant for them.
<i>Personal disadvantages -> resistance to change</i>	<ul style="list-style-type: none"> • Resistant behavior is due to fear. Various fears. Fear of personal disadvantage • fear of disadvantages leads to more resistance • employees do not want any personal disadvantages, i.e. reduced satisfaction of personal needs. That is the main fear behind resistance
<i>Participatory strategies -> empowerment</i>	<ul style="list-style-type: none"> • [Participatory strategies] lead to more immediate perceptions of employees' own contributions' consequences. In other words, when it's recognized which contribution your own actions create, then you are less resistant. • An employee who has the perception (no matter how small) that he/she can change something, will be much more confident. When employees have the feeling that things they say are not heard or processed, then the employees lose satisfaction
<i>Empowerment -> resistance to change</i>	<ul style="list-style-type: none"> • If an employee is confronted with a change he/she was not involved in beforehand, then most probably he/she will react resistant.
<i>Participatory strategies -> trust</i>	<ul style="list-style-type: none"> • A very transparent illustration [of the change initiative] creates trust. Trust is seen as counterweight to all the fears that exist • Information and transparency create trust. (...) Therefore it is important to clarify what the change initiative is all about in order to create mutual trust which finally leads to a space free of fear. Such a space enables a lot.
<i>Trust -> resistance to change</i>	<ul style="list-style-type: none"> • Openness promotes trust, trust creates a comfort zone and consequently a more open approach/attitude towards change • The acceptance of the change leader also plays a key role. If he/she is accepted by the group, then it's easier for him/her to "sell" the change than for somebody who is not that accepted or new in the company.