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AUTHORS	Daniel J. Adriaenssen Jon-Arild Johannessen
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Daniel J. Adriaenssen (Denmark), Jon-Arild Johannessen (Norway)

Prospect theory as an explanation for resistance to organizational change: some management implications

Abstract

The problem in organizational change projects is that people often resist organizational change. Many change projects in organizations do not reach their goals. The question is why? This paper investigates how prospect theory can be used to explain people's resistance to organizational change. Prospect theory is based on research from Kahneman and Tversky. If we know why people resist organizational change, we as leaders can do something to promote the change project. The objective of this article is to advise managers and leaders on ways of reducing resistance to organizational change. The authors identify seven propositions that explain how managerial strategies reduce organizational change. They recommend seven measures that may be employed by management to obtain support for projects implementing organizational change.

Keywords: resistance, organizational change, prospect theory, change projects, strategies, theory.

JEL Classification: O30.

Introduction

The problem under investigation is people's resistance to organizational change (Griffin & Moorhead, 2014; Harvey, 2010; Evans, 2001). This article investigates the following question: How can prospect theory be used to explain why people resist organizational change? The article aims to identify how managers can reduce resistance to change. It also aims to identify explanations of why people resist organizational change. The key concept of this investigation is how people relate to particular risks that they are experiencing.

Risk relates to our assumptions about potential outcomes and how these outcomes are evaluated by the decision-maker(s) in question (Pollatsek & Tversky, 1970, p. 541; Elster, 1986). Prospect theory was developed by Kahneman and Tversky in 1979 (Kahneman & Tversky, 1979). The theory holds that when people are faced with a risk about which they have limited information, and do not apply rigorous analytical processes, their choices will often be driven by how the information about the situation is framed either by themselves or others (Wolfe, 2008, p. 6).

The core idea of prospect theory is that people make assessments based on what they may gain or lose as the result of making a choice. One example of such a choice might be whether or not to engage actively in a change process within an organization. According to prospect theory, the possibility of losing an existing position will generate a level of resistance that will outweigh the energy and resources a person might expend in order to gain a new position (Kahneman,

2011, pp. 279-280). Most people are averse to losing something that they have already gained.

People's assessments are largely biased, distorted and not wholly reliable. Regardless of this fact, people make considerable use of these assessments in decision-making. Tversky and Kahneman found in the course of the research that led them to develop prospect theory that these assessments were heuristic or "rules of thumb" that people use in decision-making (Tversky & Kahneman, 1974, 1983). A basic assumption in prospect theory is that people use these "rules of thumb" without even realizing that they are doing so.

The content of this article is summarized in Fig. 1, which also shows how the article is structured. This article also includes a separate section that explains concrete measures that may be taken by management. These measures are based on the seven propositions developed during the course of this article.

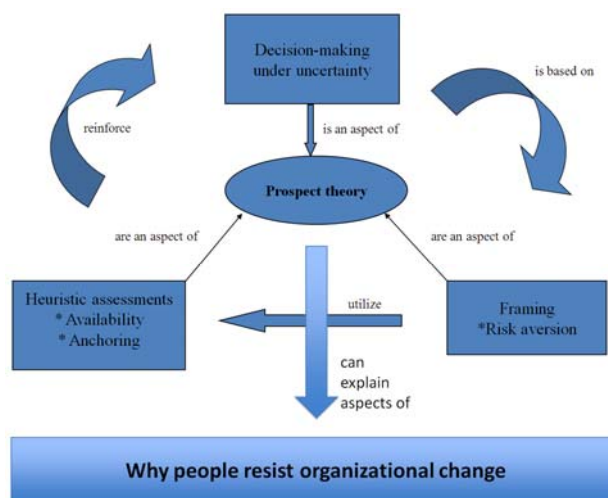


Fig. 1. Prospect theory as an explanation of why people resist organizational change

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 Daniel J. Adriaenssen, Research Fellow, Department of Psychology, Århus University, Denmark.
 Jon-Arild Johannessen, Ph.D., Professor (Full), Kristiania University College and Nord University Business School, Norway.

1. Methodology

The methodology used is described below. For further investigation into the methodology named “conceptual generalization”, we recommend the papers by Adriaenssen & Johannessen (2015) and Bunge (1998, 1999, 2001).

Research falls into two main categories: conceptual generalization and empirical generalization (Bunge, 1998). Conceptual generalization is an investigation whereby the researcher uses other researchers’ empirical findings in conjunction with his or her own process of conceptualization in order to generalize and identify a pattern. This contrasts with empirical generalization, where the researcher investigates a phenomenon or problem that is apparent in empirical data, and only thereafter generalizes in the light of his or her own findings (Bunge, 1998). The starting point for the researcher in the case of both empirical and conceptual generalization is a phenomenon or problem in the social world.

Conceptual generalization and empirical generalization are strategies that are available for answering scientific questions. Which of these strategies one chooses to use is determined largely by the nature of the problem, “the subject matter, and on the state of our knowledge regarding that subject matter” (Bunge, 1998, p. 16).

Conceptual generalization, which is the methodology applied in this paper, is “a procedure applying to the whole cycle of investigation into every problem of knowledge” (Bunge, 1998, p. 9).

2. Literature review: decision-making under uncertainty

At first, it may seem reasonable to assume that people will seek out risk if they are living under poor conditions. This assumption concludes that the situation can’t get worse, so people will take risks in order to improve their life situation. According to prospect theory, however, this intuitive assumption is incorrect. In fact, when a person faces the possibility of losing the rights, power, positions, income, etc., that he or she has already achieved, they will seek to retain what they have achieved and are reluctant to change (Kahneman & Tversky, 2000, p. 22). People avoid participating in change processes for as long as possible, because they risk losing what they have achieved.

The explanation of why people are risk-averse is linked to what is known in prospect theory as the “certainty effect” (Kahneman & Tversky, 2000, p. 17). Very broadly, this effect can be described as a preference for the certain over the possible.

What is different about prospect theory, in contrast to, for example, rational choice theory (Kahneman, 2011), is that prospect theory takes account of how we will act both when we face the loss of rights, positions, etc., and when we face the possibility of gaining the same kinds of rights, positions, etc.

If one is in a situation where one risks losing positions one has gained, one will be willing to take a risk in order to retain one’s current position. If one faces a situation where one has an expectation of gain, then, the probability is great (paradoxically) that one will prefer to secure what one has already achieved.

Prospect theory uses the phrase “reference point” to denote the point at which we take action in the various situations described above. Our assessment of a situation is determined by the position we are in when we undertake the process of assessing the situation. The key psychological concept of prospect theory is that people dislike the idea of losing a position, but like the idea of winning one (Kahneman, 2011, p. 281). The important point here, however, is that people will commit more effort to preventing a loss than achieving a potential gain (Kahneman & Tversky, 2000, p. 22). In addition, Kahneman and Tversky state that people’s commitment increases when they are trying to prevent a loss, but decreases when they are trying to gain something (Kahneman & Tversky, 2000, p. 17). For all practical purposes, this means that the energy and resources a person will use to prevent a loss will increase in proportion to the likely size of the loss. The converse is not true in respect of a gain.

Proposition 1. If management structures their change project to take account of the fact that people will resist change, because they risk losing what they have already achieved, then, the change project will have a greater chance of success.

Practical implications. People will expend more energy and resources on preventing losses than on gaining new positions.

Management implications. Management should be aware that if employees face a situation that offers a potential benefit, then, the likelihood is great that they will prefer instead to secure their existing positions.

The “reflection effect” reverses the “certainty effect”. As a rule of thumb, resistance to change is reversed when the possible gains are between 1.5 and 2.5 times greater than the status quo (Kahneman, 2011, p. 284). It is when gains reach this point that participation in organizational changes comes into consideration. This concerns when one can choose between retaining that which is established and secure, on the one hand, and investing resources in a process of change, on the other. The choice will, in the context of the “reflection effect”, be related to the expectation of future opportunities to choose to participate in change, rather than to retaining a reliable and proven solution.

A third psychological effect that prospect theory refers to is the “isolation effect” (Kahneman & Tversky, 2000, p. 17). This refers to people’s tendency to discard elements that all choice situations have in common, leading to inconsistent preferences. The focus, in this context, is on what separates the choice options, i.e., that which creates a distinction (Tversky, 1972). Among other things, this effect means that choice options are broken down and framed in terms of a probability of loss or possibility of gain. If a change situation is presented as involving a probable loss, then, one will maintain the status quo. However, if the change is presented

as an opportunity to make very large gains, say, more than 100 per cent of what one already has, then, it will be possible to apply the certainty effect and the reflection effect to move someone from a status quo situation to a situation involving investment and commitment to a change project. Presenting information in this way means that people are willing to change, even if they do not have complete information about the outcome.

Figure 2 shows a model of how the three effects (certainty effect, reflection effect and isolation effect) can vary in relation to each other, explaining resistance to change during organizational changes.

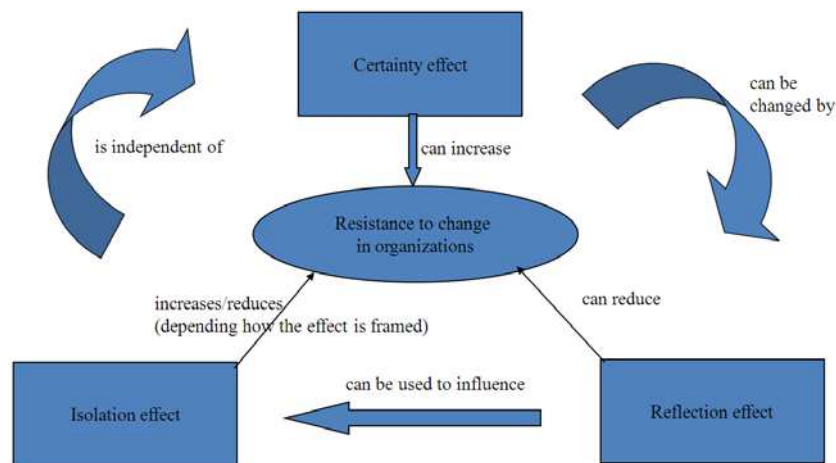


Fig. 2. Resistance to change in organizations

In prospect theory, psychological assessments are related to three elements: losing, winning and the reference point (McDermott, 2001). The reference point is, as a rule, related to expectations or the status quo (Kahneman, 2011, p. 282). What is perceived by some as a large gain may be perceived by others as insignificant (Vis, 2010).

In prospect theory, there is always a reference point related to expectations about a possible gain. This is the basis for assessing whether to seek to secure what you already have or to seek any changes that present themselves.

The practical choices are often complex and involve a risk of loss and a possibility of gain. Consequently, we operate, in effect, with a subjective assessment of expected usefulness in relation to our choices. There are risks and uncertainties associated with choices: the choices are often not that clear-cut and frequently include mixed assessments.

A useful rule of thumb for managers that can encourage people to engage in an organizational change project is to be aware that the expected gains must be about 100 per cent or more in relation to the status quo. The tendency will, then, be to choose the option for potential gains in spite of the fact that

there is still the possibility of loss (Vis, 2010). Experiments have shown that the rate of loss aversion increases with increasing investment, so the more that is at stake, the greater the possibility of gain must also be if one is to choose to fully embark on a change project (McDermott, 2001). However, the loss aversion rate does not increase proportionally with the possibility of loss. For instance, in situations where life is threatened or people are exposed to bankruptcy, the degree of loss aversion is dramatically high. There are certain actions that are unacceptable no matter what the possible final gain (Kahneman, 2011, p. 284). This may explain why some people enter into organizational change processes, while others don't. In practice, the degree of loss aversion can be much greater for some people depending on their life experiences (Vis, 2010). For instance, individuals and groups accustomed to experiencing losses, such as professional gamblers, military officers, financial brokers, vulnerable and marginalized groups, etc., may have a greater tolerance of losses.

Proposition 2. If management presents the changes as an opportunity to achieve a gain of more than 100 per cent of what employees already have (the status quo), then, it is highly probable that employees will consider the change project as positive.

Practical implications. If management wants to reduce resistance to change, then, they should present the possible gain as being more than 100 per cent.

Management implications. Management can reduce resistance to change in organizations by taking advantage of the interaction between the certainty effect, the reflection effect, and the isolation effect.

Literature review: framing

Prospect theory assumes that people do not act on the basis of full information when making decisions. They, instead, usually act on the basis of available information. Following from this, the theory does not assume that people are fully rational when making choices. The theory investigates how people act in practice when making choices, asking, for example, how they use intuition when making choices in uncertain situations. When faced with a choice between an uncertain change that may offer future opportunities and a current status quo situation, people often act on the basis of the proverb “A bird in the hand is worth two in the bush”. In other words, we tend to choose the safe option over the one which is uncertain, but which offers opportunities.

Some people also tend to be optimistic about any given situation they find themselves in. Such a bias is both a blessing and a risk, says Kahneman (Kahneman, 2011, p. 255). The so-called “pessimists” and “optimists” have been examined and discussed in several empirical studies (Seligman, 2006; Snowdon, 2001; Fox, Ridgewell & Ashwin, 2009). The optimists, Kahneman writes, are “...the inventors, the entrepreneurs. They got to where they are by seeking challenges and taking risks” (Kahneman, 2011, p. 256). Although most of us are risk-averse, some of us are optimists and willing to participate in change processes even though expectations do not offer 100 per cent or greater gains regarding the possible outcome.

Proposition 3. If management discovers who the optimists are and assigns them to the change project, then, the probability is great that the change project will succeed.

Practical implications. We tend to opt for that which is established and safe and discard the opportunity for potential gains. This conservative element in human decision-making may also partly explain why there is a time lag between an assumed necessary change and the impact of change in the organization.

Management implications. It is easier to involve the optimists in a change project than the pessimists. Management should, therefore, search for optimists and let them be the agents of change for the project.

It is the framing aspect of prospect theory that has received most attention (Wolfe, 2008, p. 9). Framing can be understood as the way in which “individuals and groups make sense of their external environment” (Boettcher, 2004, p. 331). We use framing to organize and understand the world around us. Using information frames, we are able to perceive a phenomenon, issue, event, etc., in a new way. Prospect theory argues that framing is used to make choices and assumptions in relation to future outcomes (Tversky & Kahneman, 1981). How information concerning our choices is presented, is an important consideration in the framing phase of prospect theory (McDermott, 2001, p. 21). We can also frame that which is rational, so that it appears reasonable, even though something that is rationally justified might not necessarily have a reasonable justification. Sense and rationality can be contradictory terms, although they may also be congruent.

The most general part of framing in prospect theory concerns how a loss is framed in relation to a gain. This may be achieved by selecting information frames that result in the loss or gain appearing in a different light to an individual.

Losses and gains are considered in relation to the status quo and what will serve one’s own interests or those of the system (Mandel, 2001). The framing or editing of a given situation may be termed prospect theory’s initial phase (McDermott, 2001, p. 20). In many situations, we are not aware of what opportunities exist or the possible outcomes of our choices. Consequently, we often construct possible alternatives and the results of pursuing them before making a decision; this is the creative aspect in any decision-making process. It is during this stage that management should think through the importance of which information frames they will use. In other words, according to prospect theory, we adopt a kind of bias. We have an aversion to losing what we have already gained; therefore, our choices will be influenced by how the choices and the prospective results of these choices are framed. How the information framework is used is, consequently, not an insignificant part of the outcome of how people react to change projects in organizations.

Tversky and Kahneman express this clearly by saying that “...choice depends on the status quo, or reference level: changes of reference point lead to reversals of preference” (Tversky & Kahneman, 2000, p. 143). In our context, this can explain the importance of how information frameworks are presented in relation to the extent of resistance to change in organizations.

One of the principal assumptions of prospect theory that emphasizes the importance of information frames is that “losses and disadvantages have greater impact

on preferences than gains and advantages” (Tversky & Kahneman, 2000, p. 143). Loss aversion in prospect theory has major implications for how people in organizations relate to change and how their preferences change when reference points shift over time. Information frames are concerned with moving the reference point, not providing valid information that is completely reliable.

Proposition 4. If management frames information concerning the change project is representing a large gain for everyone, then, the probability is great that employees will consider the change project in a positive light.

Practical implications. The assumption here is that it is people’s perception of the reference point that will move them in one direction or the other.

Management implications. Management should be cautious about introducing too many changes simultaneously and carrying out rapid changes in succession, because this may easily lead to erratic behavior in organizations. This can lead to a loss of efficiency and increased resistance to change projects in the organization.

Literature review: heuristic assessments

There are four basic heuristic assessments that Tversky and Kahneman have described (Beach & Connolly, 2005, pp. 81-83; Kahneman, 2011; Tversky & Kahneman, 1974, 1983). These are:

- 1) representativeness and randomness;
- 2) anchoring;
- 3) availability;
- 4) validity.

In this article, only anchoring and availability will be discussed, because these are the most relevant in explaining why people oppose change in organizations.

Anchoring. A boat at anchor can move around, but the anchorage will always be its pivot point. To move the anchor point, you have to take up the anchor and physically move it to another place. If you have first dropped anchor, then, you have also chosen the pivot point or the point around which negotiations will revolve. The anchor effect does not concern a lack of or incorrect information; it is an effect that seems to apply even if we have sufficient information (Chapman & Johnson, 2002).

When we are trying to estimate something, such as the probable success of a change project, the development of property prices (Northcraft & Neale, 1987), the benefits of adopting a new idea in an organizational change project, etc., we will often begin by making an initial estimate. This is our so-

called “anchor”. We will, then, make adjustments in relation to the anchor (Beach & Connolly, 2005, pp. 82-83). However, if the anchor is not placed correctly, then, the probability is great that the final results will also differ from what was originally planned. This calls to mind a popular quotation from Ibsen’s *Peer Gynt*: “But, when the starting point is the weakest, the result is often the most original”.

Thus, according to prospect theory, where you set the anchor in relation to a prospect will affect subsequent behavior (Kahneman, 2011, p. 119). Whether one chooses to invest in a change project is also related to the anchor of how project information is framed, i.e., the risk in relation to winning or losing what has already been gained. If you take the risk of investing in a change project, how much is the potential upside? We have seen above that the potential upside should be more than 100 per cent. However, experiments have also shown that the gain should range between as much as 150 and 250 per cent if one is to take the risk of investing in something new. It is the anchor related to risk aversion that is interesting from a change perspective, because it says something about how willing the individual is to engage in a change project.

An interesting aspect from an information perspective is that people consider their potential gains and losses from the anchor that has been set even when it has been set randomly (Chapman & Johnson, 2002, pp. 120-138). It appears that the anchor effect operates in such a way that the end result on average does not vary by more than 55 per cent from the anchor that was originally set. In experiments, this seems to apply even if the anchor is not taken into account (Kahneman, 2011, p. 124). From an information perspective, this is important knowledge for management or those who are selling a change project.

An interesting point related to anchors is that they affect us, although we are aware of this (Wilson & Brekke, 1994, pp. 117-142). Anchors are used to extract and select information, integrate this information and, then, formulate a response to another party (Chapman & Johnson, 2002, p. 126). This says something about the strength of the anchor effect.

Proposition 5. If management uses the anchor effect to control people’s resistance to change, then, the probability is great that employees will engage positively in the change project.

Practical implications. The anchor effect explains aspects of why people oppose changes in organizations and may be used to reduce people’s resistance to change.

Management implications. Management should be aware of the fact that the anchor effect may differ by 55 per cent from a set anchor.

Availability. If information is available at regular intervals, then, it is easy to refer to such information (Beach & Connolly, 2005, p. 82). We say in such situations that the information is available in one's memory. However, it is not only information that is often repeated that is available for retrieval in one's memory; events that have left a deep impression also have the same availability effect. For instance, emotional childhood experiences, air disasters, genocide, pestilence, economic crises, change projects that went wrong resulting in mass dismissals, etc., are easier to recall from memory than, for example, the fact that thousands of people are killed every year in traffic accidents.

It is, therefore, understandable that journalists, historians, and others compare the 2008 economic crisis with the 1930s Depression, because examples from the 1930s Depression can easily be retrieved from memory. However, it is dangerous to make such a comparison if the 1930s Depression can only to a small extent be relevantly compared to the 2008 economic crisis. If politicians initiate measures for the recent economic crisis on the basis of knowledge of initiatives that should have been adopted in the 1930s, this may create more problems than it solves. This example says something about the importance of information availability.

The question "Why do we believe more in one type of information than in another type?" may, among other things, be answered by the fact that some types of information are easier to retrieve from memory than others. In other words, the information we believe in is more "true" than other types of information. In this context, the expression "availability cascades" used by Kuran and Sunstein (Kuran & Sunstein, 1999) is of interest. By this they mean that we are to a certain extent controlled by the image of reality that is constructed by the media, because it is easier to retrieve from memory.

How easily information may be retrieved from memory when faced with a situation demonstrates the availability proposition's relevance. The availability proposition can be expressed in the following way: the more easily information enters into our consciousness, the greater the likelihood that we will have confidence in that information. In other words, we believe more in the type of information that is available in the memory than information that is not so readily available.

What is important to note concerning the availability proposition is that information does not necessarily need to be credible as long as it is available. It is, inter alia, in such contexts that Kahneman asks us to use System 2 (Kahneman, 2011), which he uses to refer to analytical thinking to check the validity of information. However, it is the availability proposition that prevails,

because most people are not trained in statistics and analysis of information.

Proposition 6. If management uses the information available in the memory of employees and develops an anchor in relation to this information, then, the probability is great that employees will consider the change project in a positive light.

Practical implications. We have a tendency to distort information and believe that the information that is easier to retrieve from memory is more credible than information that emerges after thorough analysis.

Management implications. Management should use information about change projects that can easily be compared with historical or contemporary events that employees can easily identify with.

A variation of the availability proposition is the affect proposition, which concerns how emotionally affected you are by the situation that is being assessed. In other words, the perceived risk of a project may be reduced if you are more emotionally affected by the project. In the real world, "we often face painful trade-offs between benefits and costs" (Kahneman, 2011, p. 140). Whether you choose to engage in a change project or prefer the status quo, may depend on how emotionally affected you are by the project.

Proposition 7. If management succeeds in getting employees emotionally involved in the change process, then, the probability is great that they will consider the perceived risk associated with such changes as small.

Practical implications. Whether people are willing to engage in a change project or try to preserve the status quo, may depend on the extent to which they experience changes as emotionally attractive.

Management implications. To increase the emotional reward of a change, it seems reasonable to assume that management should use the anchor effect and framing.

Specific measures that management can implement

On the basis of the seven propositions described above, the following measures may be considered to reduce resistance to change in organizations.

Decision-making under uncertainty

Risk aversion. As a general rule, people seek to retain what they have already gained and are reluctant to change. We often operate on the basis of intuitive rules and psychological principles that govern the framing of information about our choices. However, these rules and principles are not necessarily rational or logical.

Management can apply this knowledge in order to reduce resistance to change by:

1. Crisis understanding: point out the necessity of the changes.
2. Psychological safety: point out that the proposed changes do not carry any risk of loss for employees.
3. Expectation management: point out the benefits of the changes.

The potential must be more than 100 per cent.

There are three effects that may be employed in effort to reduce resistance to change in organizations. The first is called the “certainty effect”. This implies that one chooses what is certain, i.e., what you already have, rather than that which is probable and offers opportunities, such as engaging in an organizational change project where the outcome is uncertain. The second effect is called the “reflection effect”, which reverses the “certainty effect”, if there are expectations of future gains of more than 100 per cent stemming from the change. The third effect is called the “isolation effect”, which refers to a tendency to discard elements that all choices have in common and to focus on what separates the choices (Kahneman & Tversky, 2000, p. 17).

Management may increase the likelihood that employees will engage with and dedicate themselves to a change project by presenting the changes in such a way that they will lead to improvements in the proposition to employees that accrue to gains of more than 100 per cent across a number of change proposal elements.

Framing

We seek safety. We have a tendency to be conservative in our thinking: we wish to retain that which we have and are reluctant to adopt that which is new. One way for management to engage with this conservative aspect of our thinking may be to engage those who have little risk aversion in relation to the change project as project managers at various levels. The rationale for this strategy is provided by Kahneman. The people who are responsible for the implementation of a change project are often more optimistic than those who are not in this position, and optimists are more positive about change than pessimists. Kahneman underlines this supposition with the following statement: “...the people who have the greatest influence on the lives of others are likely to be optimistic and overconfident, and to take more risks than they realize” (Kahneman, 2011, p. 256).

Management should identify the optimists in the organization, because they will most likely participate in the change project, even though the possible future

gain is not more than 100 per cent. They should also identify the sceptics to the change project and give them responsibility for some of the changes.

Erratic behavior. If management introduces too many consecutive changes, this can easily result in the organization becoming unsettled. Consequently, employees may become reluctant to accept more changes. This may result in alienating those who initially supported the need for change and give more weight to those who are opposed to change.

Management may prevent such erratic behavior by involving employees at an early stage in the planning of changes. In the planning phase, they should frame information so that the change project is presented as a win-win solution, where employees make large gains and risk losing little. In this way everyone is informed about what must be done, why it should be done, how it should be done, and the desired effects of the changes.

Heuristic assessments

Anchoring. Use of the anchor effect for strategic purposes can result in us making choices we would not normally make. Countless experiments have shown that people’s choices correspond to the anchor they use, even though the anchor may be irrelevant, random and evidently incorrectly set (Epley & Gilovich, 2002, p. 139). If you have a strong expectation of future success, then, this expectation, this anchor, influences your behavior in the present (Switzer & Sniezek, 1991). Taking into account the anchor effect can help to reduce resistance to change in organizations (Tversky & Kahneman, 1974). Moreover, it is advantageous to frame your project with a possible future gain of 150–250 per cent in relation to the status quo. An important point concerning the anchor effect is that it controls our behavior, even though we have sufficient information about the situation. Management can use this insight by setting the anchor in such a way that expectations are motivating for the individual.

Availability. The availability proposition developed by Tversky and Kahneman in 1972–1973 (Kahneman, 2011, p. 129) can be expressed in the following simplified form: the easier information is to retrieve from memory, the greater the cognitive authority that information has. If you want to sell a change project, then, it can be advantageous to link it to a media event that has a positive connotation.

Management can reduce resistance to change by linking the change project to a media event that has a strong positive connotation (cascade effect).

Emotional strength. One relies more on information that reinforces our perception of the object, event or action if we are emotionally

attracted to the object. When this happens, we will take greater risks, and we will have a tendency to assign less importance to information that is critical and rely more on information that is positively charged in relation to the change project.

Management should encourage employees to become emotionally connected to the change project, because this will trigger individual commitment and dedication to change.

Conclusion

In this article, we have attempted to answer the following question: how can we use prospect theory to explain why people resist organizational change? To answer this question, seven propositions have been developed.

There are three magnitudes around which the propositions are organized. These are: decision-making under uncertainty, framing, and heuristic assessments (anchoring and availability).

In decision-making under uncertainty, there are two propositions. Proposition one is related to the knowledge that, if people risk losing what they have already achieved, they will resist change. Proposition two says that the probability is high that employees will consider the change project as positive, if they think they achieve a gain of more than 100 per cent of what one already has (the status quo).

In framing, there are also two propositions. The first proposition in framing tells management to discover who the optimists are, and assigns them to the change project. If they do so, then, the

probability is great that the change project will succeed. The second proposition in framing says that management ought to frame information concerning the change project as representing a large gain for everyone. If they do so, then, the probability is great that employees will consider the change project in a positive light.

In heuristic assessments, there are three propositions in two categories: anchoring and availability. We have one proposition in anchoring. This proposition states that if management uses the anchor effect to control people's resistance to change, then, the probability is great that employees will engage positively with the change project.

We have two propositions in availability. The first proposition states that if management uses the information available in the memory of employees, and develops an anchor in relation to this information, then, the probability is great that employees will consider the change project in a positive light.

The second proposition in availability tells that if management succeeds in getting employees emotionally involved in the change process, then, the probability is great that they will consider the perceived risk associated with such changes as small.

Taken together the seven propositions have been compiled into a system, defined here as a "mini-theory", about how resistance to organizational change can be reduced. For each of the seven propositions, we have discussed practical and management implications.

References

1. Adriaenssen, D.J. & Johannessen, J-A. (2015). Conceptual generalization: Methodological reflections in social science, a systemic viewpoint, *Kybernetes: The International Journal of Cybernetics, Systems and Management Sciences*, 44 (4), pp. 588-605.
2. Beach, L.R. & Connolly, T. (2005). *The psychology of decision making: People in organizations*. London: Sage.
3. Boettcher, W.A. (2004). The prospects for prospect theory: An empirical evaluation of international relations applications of framing and loss aversion, *Political Psychology*, 25 (3), pp. 331-362.
4. Bunge, M. (1974). *Sense and reference*. Dordrecht: Reidel.
5. Bunge, M. (1998). *Philosophy of science: From problem to theory: Vol. 1*. New Brunswick, NJ: Transaction.
6. Bunge, M. (1999). *The sociology-philosophy connection*. New Brunswick, NJ: Transaction.
7. Bunge, M. (2001). *Philosophy in crisis: The need for reconstruction*. Amherst, NY: Prometheus Books.
8. Chapman, G.B. & Johnson, E.J. (2002). Incorporating the irrelevant: Anchors in judgments of belief and value. In T. Gilovich, D. Griffin & D. Kahneman (Eds.), *Heuristics and biases: The psychology of intuitive judgment*. Cambridge: Cambridge University Press, pp. 120-138
9. Elster, J. (1986). *Rational choice*. New York: New York University Press.
10. Epley, N. & Gilovich, T. (2002). Putting adjustment back in the anchoring and adjustment heuristic. In T. Gilovich, D. Griffin & D. Kahneman (Eds.), *Heuristics and biases: The psychology of intuitive judgment*. Cambridge: Cambridge University Press, pp. 139-149.
11. Evans, R. (2001). *The human side of school change*. London: Jossey-Bass.
12. Fox, E., Ridgewell, A. & Ashwin, C. (2009). Looking on the bright side: Biased attention and the human serotonin transporter gene, *Proceedings of the Royal Society B*, 276, pp. 1747-1751.
13. Griffin, R. & Moorhead, G. (2014). *Organizational behavior: Managing people and organizations*, Mason, OH: South Western Cengage Learning, pp. 543-546.
14. Harvey, T.R. (2010). *Resistance to change*. London: R & L Education.

15. Kahneman, D. (2011). *Thinking fast and slow*. New York: Allen Lane.
16. Kahneman, D. & Tversky, A. (1979). An analysis of decision under risk, *Econometrica, Journal of the Econometric Society*, 47 (2), pp. 263-292.
17. Kahneman, D. & Tversky, A. (2000). Prospect theory: An analysis of decision under risk. In D. Kahneman, & A. Tversky (Eds.), *Choices, values and frames*. Cambridge: Cambridge University Press, pp. 17-43.
18. Kuran, T. & Sunstein, C.R. (1999). Availabilities cascades and risk regulation, *Stanford Law Review*, 51, pp. 683-768.
19. Mandel, D.R. (2001). Gain-loss framing and choice: Separating outcome formulations from descriptor formulations, *Organizational Behavior and Human Decision Processes*, 85 (1), pp. 56-76.
20. Northcraft, G.B. & Neale, M.A. (1987). Experts, amateurs, and real estate: An anchoring-and-adjustment perspective on property pricing decisions, *Organizational Behavior and Human Decision Processes*, 39, pp. 84-97.
21. Pollatsek, A. & Tversky, A. (1970). A theory of risk, *Journal of Mathematical Psychology*, 7, pp. 540-553.
22. Seligman, M.E.P. (2006). *Learned optimism*. New York: Vintage Books.
23. Snowdon, D. (2001). *Aging with grace: What the nun study teaches us about leading longer, healthier, and more meaningful lives*. New York: Bantam Books.
24. Switzer, F. & Sniezek, J.A. (1991). Judgment processes in motivation: Anchoring and adjustment effects on judgment and behavior, *Organizational Behavior and Human Decision Processes*, 49, pp. 208-229.
25. Tversky, A. (1972). Elimination by aspects: A theory of choice, *Psychological Review*, 79, pp. 281-299.
26. Tversky, A. & Kahneman, D. (1974). Judgment under uncertainty: Heuristics and biases, *Science*, 185, pp. 1124-1131.
27. Tversky, A. & Kahneman, D. (1981). The framing of decisions and the psychology of choice, *Science*, 211, pp. 453-458.
28. Tversky, A. & Kahneman, D. (1983). Extensional versus intuitive reasoning. The conjunction fallacy in probability judgment, *Psychological Review*, 90, pp. 293-315.
29. Tversky, A. & Kahneman, D. (2000). Loss aversion in riskless choice. In D. Kahneman, & A. Tversky (Eds.), *Choices, values and frames*. Cambridge: Cambridge University Press, pp.143-158.
30. Vis, B. (2010). *Politics of risk-taking*. Amsterdam: Amsterdam University Press, pp. 109-133.
31. Wilson, T.D. & Brekke, N. (1994). Mental contamination and mental correction: Unwanted influences on judgment and evaluations, *Psychological Bulletin*, 116, pp. 117-142.
32. Wolfe, W.M. (2008). *Winning the war of words*. London: Praeger.