Organizational changes, trust and information sharing: an empirical study

Information sharing

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Farhan Ahmad

Information Science, Abo Akademi University, Turku, Finland and Edinburgh Business School, Heriot-Watt University, Edinburgh, UK, and Isto Huvila

Department of ALM, Uppsala Universitet, Uppsala, Sweden

Abstract

Purpose – While there is relatively plenty of evidence for the positive impact of communication on the perceptions of organizational change, how organizational changes affect information sharing is relatively unknown. The purpose of this paper is to investigate if a favorable perception of ongoing organizational changes has a positive impact on information sharing and whether trust mediates this relationship.

Design/methodology/approach – A questionnaire (n = 317) was administered to the employees of a large Finnish multinational organization. Partial least square structural equation modeling was used to test the hypotheses based on earlier research findings.

Findings - The results show that a positive perception of recent organizational changes improves information sharing both directly and indirectly, mediated by trust. Consequently, when changes are perceived negatively, employees recoil from information sharing which is known to have negative implications for organizations.

Research limitations/implications – Data were collected in a single organization. The nature of the specific changes in the studied organization and its particularities undoubtedly had an effect on respondents' perceptions. Originality/value - This paper contributes to organizational information management research by elaborating on the relationship between organizational changes and interpersonal information sharing between employees. To the authors' knowledge, this is the first quantitative study confirming the impact of the perception of organizational changes on employee information-sharing behavior.

Keywords Trust, Organizational change, Structural equation modelling, Information behaviour, Information management, Information sharing

Paper type Research paper

Introduction

In the literature, there is a broad consensus that information sharing is important for organizations. Based on a review of observed outcomes of information sharing vs information asymmetry. Tong and Crosno (2015) conclude that, in general, sharing leads to positive outcomes. The benefits are diverse, such as enhanced productivity and creativity. In addition to positive organizational outcomes, individual-level knowledge sharing (in terms of attitudes and actualized behaviors) tends to have a positive impact on individual work performance (Henttonen et al., 2016). As information sharing plays an integral role in organizational success, the means to improve it has emerged as a focal area of investigation. Previous research has identified a number of factors – including organizational culture, diversity, personality, sense of coherence and compensation – that influence information sharing between employees (Ahmad, 2017a; Shin et al., 2007; Yang and Maxwell, 2011).

Recent technological developments, globalization and rising competition have made organizations increasingly dynamic. Deployment of organizational change initiatives meant to reduce costs, develop competitive advantage and adjust organizations to changing market conditions has become a truism (Cameron and Green, 2015; Worrall et al., 2000). Previous studies show that persistent organizational changes not only affect work practices, but also induce variation in employees' attitudes, for example, in their organizational commitment, job satisfaction and extra-role participation (Vakola, 2014; Worrall et al., 2000).



Aslib Journal of Information Management Vol. 71 No. 5, 2019 pp. 677-692 © Emerald Publishing Limited DOI 10.1108/AJIM-05-2018-0122 Although organizational changes are pervasive in today's organizations, and they strongly influence employee behavior, their implications for employees' information-sharing behavior are largely unknown. Whereas there is relatively plenty of evidence of the positive impact of communication on the perceptions of organizational change, to the knowledge of the authors, there is less evidence of how the perception of organizational change affects information sharing. Hypothesizing that there is a similarly positive impact in the opposite direction, the aim of this study is to investigate if a favorable perception of ongoing organizational changes has a positive impact on information sharing.

This study makes a novel contribution to previous research by developing a better understanding of the relationship between information sharing and one of the most critical processes from the perspective of the long-term success of organizations, which is organizational change. Further, as there is plentiful of evidence that trust is a factor that relates both to information sharing and organizational change (e.g. Lines *et al.*, 2005; Liu and Chetal, 2005; Ridings *et al.*, 2002; Wilson, 2010), we investigate its role in the equation. A better understanding of this relationship is not only useful for developing effective information management policies in organizations operating in highly dynamic industries, but it is also critical for the development and successful implementation of change initiatives.

Literature review

As Pilerot (2012) showed, the term information sharing has been used to refer to a range of collaborative information giving and receiving activities with varying levels of specificity. Sometimes, information sharing is used to refer to the phenomena of giving and receiving (Savolainen, 2007), exchanging (e.g. Burnett, 2000; Hersberger, 2003), reciprocal information sharing (Fulton, 2009; Huotari and Chatman, 2001) and collaborative information seeking (e.g. Hertzum, 2008). In a narrower sense, it can be seen as directive sharing (Talja, 2002) or, as sometimes found in the management literature, top-down dissemination (e.g. Brown and Cregan, 2008). Wittel (2011) proposed that changes in a technology environment could have a broader impact on sharing in general. Earlier, sharing was more markedly a question of exchange, but digital technologies have changed it to a hybrid of exchange and distribution (Wittel, 2011). Considering the specific activities described in different studies, the terms information sharing and knowledge sharing can be used interchangeably (Savolainen, 2017). Some researchers have been doing this for some time (e.g. Ahmad, 2017b; Widén-Wulff, 2007). In this study, we focus on information sharing at the interpersonal level, that is, the exchange of work-related information between employees within an organization.

Earlier research has suggested that, in general, sharing leads to positive outcomes, whereas withholding and asymmetry of information tend to have negative outcomes (Tong and Crosno, 2015). Sharing is a prerequisite for becoming informed (e.g. Khoir *et al.*, 2015); it plays a role in the emergence of social capital (Huvila *et al.*, 2014), it is an integral aspect of information practices (Almehmadi *et al.*, 2014; Du, 2014) and it is critical for successful work in many contexts (Choo *et al.*, 2006). In teams, it contributes to team performance, cohesion and knowledge integration (Mesmer-Magnus and DeChurch, 2009). Information sharing is also important for decision making in groups (Mishra, 2014). Many of the same factors, most notably trust (Wilson, 2010), but also, for instance, social capital (Tötterman and Widén-Wulff, 2007) have also been recognized as antecedents to information sharing. The specific significance of trust has been explained by the critical importance of social integration in information sharing, in comparison to, for instance, technical infrastructures or external incentives (Hall and Widen, 2008).

Positive outcomes have been observed to be related to sharing at both organizational and individual levels (Henttonen *et al.*, 2016). On an organizational level, increased sharing has been suggested to lead to a positive organizational culture (Singh and Soltani, 2010) and changes in organizational culture have been suggested as a means to improve information

sharing (Maras, 2017). In Pilerot's (2014) study, information sharing functioned as a "unifying force" directed toward establishing a discipline of design research by forming a collective understanding of a common project (Pilerot and Limberg, 2011). Furthermore, the social information processing theory suggests that employees' sense of organizational reality builds on how it is communicated with their closest colleagues (Salancik and Pfeffer, 1978), i.e. essentially, information sharing.

There are, however, opposite findings. Kembro and Näslund (2014) reviewed empirical supply-chain management literature and failed to find hard evidence of the positive impact of information sharing in that specific context. Moreover, the review by Tong and Crosno (2015) shows that, in some cases, information sharing with external actors have led, for instance, to decreased performance and trust. A plausible explanation of these contradictory findings is that the benefits of information depend on context and situation. Richardson and Asthana (2005) noted that the degree of information sharing can be placed on a continuum that ranges from overly open to too closed and chaotic, with an ideal level in the middle. Yang and Wu (2015) identified a number of criteria (categorized in four constructs: information quality, system quality, service quality and public system service) according to which their participants from Taiwanese Government agencies assessed the effectiveness of inter-organizational information sharing.

Overall, information sharing and its antecedents and consequences have been investigated from different perspectives. As the reviewed literature shows, there is a broad consensus that trust is both an outcome and an antecedent of information sharing. Nevertheless, what is important from the perspective of this study and its focus, in comparison to many other aspects, is that there is less evidence of how the perception of ongoing organizational changes influences information sharing between employees. Organizational changes are frequent and contribute to organizational dynamism by introducing variation in existing work practices and workplace conditions (Burke, 2017; Skogstad *et al.*, 2007). As information sharing practices are embedded in day-to-day work practices and routines (Forster, 2017; Widen and Karim, 2018), any changes in organizational policies and environment could influence employee information sharing behavior. Nevertheless, this relationship has not been explored before. This study tries to fill this research gap and explores the impact of organizational changes on information sharing in organizations.

Hypotheses

Organizational changes and information sharing

Organizational change refers to new ways of organizing and working (Brown and Cregan, 2008). Organizations continually re-evaluate their operational procedures and adjust them to changing market conditions. Radical organizational changes, such as mergers and acquisitions, development of new ventures and change of ownership, occur less frequently (Holbeche, 2006). Conversely, small-scale changes such as adoption of new technologies, adjustment in the organizational structure, and introduction of new personnel policy and benefits are more frequent (Jones et al., 2008). Such changes are meant to enhance organizational performance through incremental improvements in the organization's internal work procedures and, in a general sense, in how things are done in practice. According to Ferwerda (2011), employees' positive perception of organizational changes influences their engagement in extra-role obligations such as information sharing. Moreover, changes also lead to a need for and an orientative seeking of new information (Byström, 1999). Ross (2004) described how the culture of sharing and openness changed due to the perceived and experienced change in New York's Silicon Alley when the internet bubble burst at the turn of the millennium. Stenberg (2012) likewise noted that resistance to ongoing change can impede information sharing. At a more general level, perceptions and attitudes toward change have been found to play a major role in the success of such change as well as in job attitudes, organizational commitment and, for instance, occupational stress (Ferwerda, 2011; Vakola and Nikolaou, 2005). All these factors are commonly known as drivers of information sharing. Based on the previous discussion, we propose the following hypothesis:

H1. Positive perception of change enhances information sharing among employees.

Trust as a mediator

Trust refers to the confidence in the "other party's goodwill" and reflects the "faith in the integrity of the other party" (Piderit and Flowerday, 2014, p. 81).

Change and trust. Organizational changes can transform the existing social relationships and psychological work environment, thereby influencing trust among employees and the management (Self and Schraeder, 2009). Trust is not a static cognitive condition (Schoorman et al., 2007). In dynamic organizational environments, changing events lead to continuous assessment and readjustment of trust. Lines et al. (2005) show that when employees experience changes positively and find such changes to be aligned with their personal goals and interests, their trust in the management of the organization strengthens. In broader terms, a positive perception of change leads to that employees favor the change and accept the insightfulness of management as epitomized in new rules and regulations. At the extreme, every change is a demonstration of the competence and benevolence of the management that defines post-change trust on management (Knoll and Gill, 2011; Lines et al., 2005; Morgan and Zeffane, 2003).

Trust and information sharing. The uncertainty and dynamism of organizational changes also lead to a re-evaluation of trust relationships among employees. Individuals are more likely to trust others in a stable environment (Lines *et al.*, 2005). Conversely, they become more suspicious in an uncertain milieu and try to assess how their peers support their position in newly defined environments. Particularly, the employees with views not aligned with others' risk to lose trust in each other. Negative changes are known to create an environment of fear and insecurity, which, according to Kiefer (2005), leads to social withdrawal. Employees fear to talk openly about their concerns (Ryan and Oestreich, 1998) and hence, their circle of trust becomes smaller and smaller as the situation prolongs. Moreover, previous research shows that a positive perception of change enhances job satisfaction (Rafferty and Griffin, 2006), job commitment (Fedor *et al.*, 2006) and employee well-being (Helliwell and Huang, 2010). All these factors are also known as antecedents of trust in the workplace (Kramer, 2006).

Similarly to the documented relation of organizational change and trust, previous research has also indicated a positive impact of trust on information sharing (Liu and Chetal, 2005; Ridings *et al.*, 2002; Wilson, 2010) and knowledge creation through information sharing. An individual's belief that the co-workers will not take advantage of the received information and will provide reliable information whenever needed is integral to the development of an information-sharing culture in organizations (Gill and Thompson, 2017; Sankowska, 2013). Trust in management is equally important for information sharing because management decisions that protect employees' interests enhance employees' commitment and motivation to get involved in extra-role activities (Allen *et al.*, 2007; Lines *et al.*, 2005).

According to Wilson's (1983) influential theory, people construct knowledge based on their first-hand experiences and by learning second-hand from people they trust. In sum, it has been suggested that social integration, trust and information exchange are closely related to each other (Hall and Widen, 2008). This means that trust, plausibly both horizontal among employees (Bowker and Villamizar, 2017) and vertical toward management (Allen and Wilson, 2003), plays an integral role in the change–information

sharing relationship. Based on these earlier findings, we propose the following second hypothesis:

H2. Trust mediates the relationship between perception of change and information sharing.

Methods and materials

Data

The sample of this study consisted of managerial- and operational-level employees working in a large Finnish multinational organization. The organization develops power solutions ranging from ship machinery to power plants for marine and energy markets. During the past decade, the organization has gone through several structural and technological changes such as the introduction of Big Data analytics, decentralization of subsidiaries and introduction of new roles due to the expansion of business.

Data were collected in 2016 via an electronic questionnaire administered through the organization's internal online survey system. We received 400 responses, out of which 317 were useable and hence included in this study. Only employees who have experienced change in the last three years were included in this study. Around 65 percent of the respondents were male, and 35 percent were female. Respondents worked in different areas, including marketing, human resources, research and development, sales, communication, engineering and strategy development.

Responses to the questionnaire were measured with a seven-point Likert scale. All variables were measured using scales based on previous studies. The perception of organizational changes was measured with formative indicators adapted from Jones *et al.* (2008) and Parent-Thirion *et al.* (2012).Perception was measured against four commonly occurring small-scale changes – new processes or technologies, new management procedures, new recruitments, new work time arrangements – as identified in Parent-Thirion *et al.* (2012). Employees were first asked whether they had experienced the particular form of change in the last three years or not. Only if they answered positively were they asked to rate their view on the respective change on a scale from 1 (very negative) to 7 (very positive).

Trust was measured using a two-item scale adopted from Ayoko and Pekerti (2008) that measures experienced trust toward colleagues and management. To be able to measure trust and change in a large heterogeneous context and also to be able to measure these constructs as systemic and generic phenomena (Huvila, 2017) rather than as traits related to specific individuals and authorities (e.g. Khvatova *et al.*, 2016), the present study focused on experienced trust and change (i.e. essentially self-beliefs) rather than trust and change as specific actions (McEvily and Tortoriello, 2011).

Interpersonal information sharing includes both sending and receiving information. Davenport and Prusak (1998) established that information and knowledge sharing are two-way processes involving sending and receiving information. In order to measure information sharing, we adopted the scale from Foss *et al.* (2009). We asked respondents about the extent to which they engage in sending and receiving information. Variables used in this study, along with the measurement items and sources, are shown in Table I.

As shown in an earlier study, the size of personal information network defines the information-sharing potential (Ahmad, 2017a, b). A small interpersonal network represents a constrained information environment. Consequently, information network size may act as a suppressor in the proposed hypotheses. The influence of perception of change will not appear if information sharing is already constrained by small network connections. Therefore, we included information network size as a control variable in our model. We measured the size of personal information network using a sociometric technique

AJIM 71,5	Constructs	Loadings	CR	α	AVE
. 2,0	Information sharing I share work-related information with my colleagues in my own organization I share work-related information with my superiors I share work-related information with my junior colleagues in my own	0.74 0.62	0.88	0.80	0.55
682	organization My colleagues in my own organization share a lot of work-related information with me My junior colleagues in my own organization share a lot of information with me My superiors share a lot of work-related information with me	0.67 0.68 0.77 0.74			
	Trust I trust in management at my workplace I trust my co-workers at my workplace	0.90 0.83	0.87	0.66	0.77
Table I.	Perception of organizational changes – formative construct New processes or technologies were introduced in the organization New management procedures were introduced in the organization	_ _ _	_ _ _	_ _ _	_ _ _
Measurement model evaluation results	Recruitment of new employees was carried out Changes in working time arrangements were introduced	_ _	_ _	_ _	_ _

(Hlebec and Kogovšek, 2013). Each respondent was asked to name the individuals who are an important source of work-related advice and professional information (Ibarra, 1992). From this information, we estimated their ego information network size.

Data analysis

Partial least square structural equation modelling (PLS-SEM) was used to analyze the data and to explore both direct and indirect effects of organizational changes on information sharing. PLS-SEM is a second-generation statistical technique that allows the measurement of reliability and validity of constructs and the estimation of the relationships between them simultaneously (Castro and Roldán, 2013). Moreover, this technique is useful for theoretical development and small sample sizes (Hair *et al.*, 2017). We conducted the analysis with Smart PLS 3.0 (Ringle *et al.*, 2015). The measurement model was evaluated before the structural model.

Reliability and validity assessment

In our model, we operationalized information sharing and trust as reflective constructs and perception of organizational changes as a formative construct. In a reflective construct, measurement indicators are caused by the latent variable (Christophersen and Konradt, 2012). These indicators are interchangeable and have strong correlations, as they tend to measure the same thing. In a formative construct, the direction of the relationships between a latent variable and its indicators is opposite, which means that the construct's indicators are its defining characteristics (Jarvis et al., 2003). They do not act as manifestations and are not interchangeable like reflective indicators (Jarvis et al., 2003). We define the perception of organizational changes as a formative construct because employees may have different attitudes toward different organizational changes. An employee can perceive the introduction of a new management procedure as positive, but, at the same time, may have a negative attitude toward another change, for example, work time allocation. This means that indicators of perception of organizational changes are not interchangeable and are not necessarily correlated; hence, the construct should be treated as formative. In the following discussion, we will present the analysis of the quality of the reflective constructs followed by the formative construct.

The reflective constructs – information sharing and trust – were assessed for reliability (indicator reliability, internal consistency reliability) and validity (convergent and discriminant validity). Indicator reliability represents "variation in an item explained by the construct" and can be assessed with the loadings of indicators (Hair *et al.*, 2013, p. 115). As shown in Table I, the loadings of measurement indicators of information sharing and trust are all above the threshold value of 0.60 (Chin, 1998; Henseler *et al.*, 2009), which confirms indicator reliability. Internal consistency reliability, which refers to the "consistency of the results across measurement indicators," was assessed with Cronbach's α and composite reliability values (Hair *et al.*, 2013, p. 116). All the indicators of information sharing and trust have composite reliability values above the recommended value of 0.70 (Hair *et al.*, 2017; Henseler *et al.*, 2009). Although trust has Cronbach's α less than 0.70, it shows a high composite reliability of 0.87, which, according to Henseler *et al.* (2009), is more suitable for assessing reliability than Cronbach's α in structural equation modelling. Overall, tests showed that the reflective measurement model has satisfactory reliability.

To assess convergent validity – the degree to which indicators of the same construct are correlated – average variance extracted (AVE) value of each construct was calculated. As shown in Table I, the AVE value of each construct is above the recommended threshold of 0.50, hence establishing convergent validity (Amaro and Duarte, 2015). Discriminant validity – the degree of distinctness between indicators of different constructs – was assessed using the Fornell and Larcker criterion – the AVE of each construct should be higher than its correlation with other constructs (Wong, 2013). Results are shown in Table II; italic-faced results are higher than all other values within rows and columns, which confirms the discriminant validity of information sharing and trust.

Traditional reliability and validity analysis cannot be used to evaluate the quality of a formative construct, that is, perception of organizational changes. Nevertheless, Petter *et al.* (2007) outlined two methods to assess the quality of formative measurement scales. First, indicators' variance inflation factor (VIF) and tolerance values are computed to detect multicollinearity. Our analysis did not find any collinearity issues, as VIF values of the formative indicators of perception of organizational changes were lower than the recommended threshold of 4, and tolerance of the indicators was higher than 0.50. Second, outer weights of a formative construct's indicators should be significant, or their outer loadings should be above 0.50. Three measurement indicators of perception of organizational changes had significant weights, whereas the fourth one was non-significant but had an outer loading higher than 0.50. Therefore, we retained all the indicators.

The measurement model assessment shows that all reflective and formative constructs are reliable and valid; therefore, we proceed to test the model.

Results

Since the measurement model has provided the evidence of reliability and validity, standardized path coefficients and significance levels were examined for testing hypotheses. To test the direct and indirect effects, we followed the guidelines given by Hair *et al.* (2017) and Zhao *et al.* (2010), and evaluated the complete model at once. Figure 1 shows the path coefficients and significance levels.

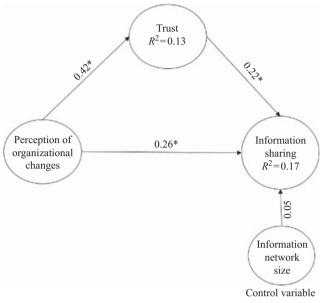
	1	2
Information sharing	0.74	
Trust	0.33	0.88
Note: Italic numbers represent the squ	are roots of the AVEs	

Table II.
Discriminant validity
assessment

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Figure 1. Structural model with mediator



Note: *p<0.01 (two-sided test)

As can be seen from Figure 1, employees' perception of organizational change has a positive relationship with information sharing (β =0.30, p<0.01), which confirms H1. Moreover, the perception of organizational changes positively influences trust (β =0.52, p<0.01), which, in turn, leads to information sharing (β =0.20, p<0.01). The indirect effect of perception of organizational changes (0.10) on information sharing via the mediator construct, trust, was also significant (p<0.01). The results show that trust mediates the relationship between perception of organizational changes and information sharing. Consequently, H2 is also supported. Nevertheless, it is a complementary and partial mediation, as direct and indirect effects are both significant and point to the same direction (Hair et al, 2017; Zhao et al, 2010). It also shows that in addition to trust, there may also be other mediator(s), which can further explain the relationship between perception of organizational change and information sharing.

Overall, we can say that if recent organizational changes are perceived positively, trust between employees and management increases, which consequently enhances information sharing.

Discussion

This study contributes to a better understanding of organizational change and information-sharing relationship. The results show that a positive perception of recent organizational changes improves information sharing both directly and indirectly, mediated by trust. There are, however, some limitations in the present findings. Data were collected in a single organization. The nature of the specific changes in the studied organization and its particularities had undoubtedly an effect on respondents' perceptions. Therefore, it will be important to confirm these findings with studies conducted in other settings, likewise to consider the possible impact of additional variables, particularly control variables, in the model. There are also specific issues, including the impact of the number and type of changes and information sharing, which warrant further inquiry.

The validity of the findings is, however, supported, given that they were in accordance with extant literature on trust, information sharing and organizational change, even though, to our knowledge, this specific relationship had not been investigated empirically before. There is previous evidence of the positive impact of trust on information sharing (Wilson, 2010). Furthermore, since trust, positive perception of the organization and information sharing have all been identified as both outcomes and antecedents of social capital (e.g. Vos and Schoemaker, 2006), it was plausible to expect that these constructs would be linked. In this sense, the present findings support earlier empirical and theoretical research that underline the bidirectional influence of the factors affecting information sharing; for instance, in the notion of social capital. In comparison to earlier findings on the impact of organizational culture on information sharing (Maras, 2017), the present results demonstrate that also positively perceived change in the organization itself (not only in its current culture) can improve information sharing. Moreover, even if our findings show that trust plays a role in the equation, a notable contribution of this study is that the direct link between the perception of change and information sharing is still significant when trust is added to the equation. This means that even if trust mediates the relation, the perception of change is directly linked to information sharing. Although the perception of change and organizational culture have a mutually reinforcing relationship (Austin and Ciaassen, 2008), the impact of organizational changes on information sharing is more evident due to their concrete implications for work practices. It is also plausible that perception of change acts as a boundary condition for the organizational culture—information sharing relationship.

An aspect that makes our findings especially significant is that they can shed light on the dynamics of organizational change and its impact on employees' opportunities to receive information. Because change can lead to a need of orientative seeking of new information and actual seeking (Byström, 1999), change is less likely to yield positive outcomes for the organization if this seeking is hampered by a decline in how colleagues share information. This can be a result of, for instance, negative perceptions or, as Sonnenwald (2006) showed, of high stress, and that situations are perceived as extraordinary and complex. The present findings suggest, however, that a favorable perception of a problematic change can reduce its negative impact by leading to increased trust and sharing of information.

The findings of this study nuance also the earlier observations that environmental stability plays an important role in defining information sharing practices among employees (Ahmad and Widén, 2015; Yang and Maxwell, 2011). Previous research has shown that environmental uncertainty influences not only the flow and direction of information sharing, but also the type of information being shared (Chiang and Feng, 2007). Allen *et al.* (2007) showed that employees become extremely cautious about information sharing, paying special attention to the credibility and source of the information while operating in uncertain environments. Since organizational changes reflect dynamism in an environment (Allen *et al.*, 2007), they constitute a par excellence condition that risk to increase the uncertainty of work – which would, according to the earlier findings, reduce information sharing. The present findings suggest, however, that if changes are perceived in a positive light, employees' trust is not necessarily depleted and information sharing does not decline.

In earlier studies, there are also indications that changing work practices and policies signal change in the *status quo*, which can trigger unorthodox (Huvila, 2017), protective and self-interest-driven behavior among employees. Furthermore, as noted in many previous studies, employees resort to egoistic information-related behaviors such as information hoarding when they try to protect their position and authority in the workplace (Ahmad and Widén, 2015; Constant *et al.*, 1996; Yang and Maxwell, 2011). Such behaviors are particularly pertinent during changes such as staff modifications (hiring, firing, or transferring employees), with concrete implications for work duties. There is, however, also opposite evidence suggesting that employees might also engage in constructive and positive novel information sharing

behaviors (e.g. as in Huvila, 2017) when work practices and policies change. Current findings of the positive impact of favorable perception of change to trust and information sharing could be one explanation of why this happens. If a change is perceived in favorable terms, instead of behaving egoistically when they lose trust in their employer and colleagues, people maintain their trust and engage in information sharing, which benefits the whole workplace.

The present findings also have practical implications. Similarly to how earlier literature has stressed the critical importance of information sharing for changing and forming organizational culture (Singh and Soltani, 2010), cohesion (Pilerot, 2014) and "common projects" (Pilerot and Limberg, 2011), our results underscore the formative importance of perceptions of organizational change for information sharing. In practice, the nature of information sharing, both as an outcome and an instrument, underlines the importance of keeping information and perceptions of changing organizational reality aligned. Through their impact on information sharing, organizational changes that are perceived positively can be expected to result in the success of such changes and in the capacity of organizations to evolve and innovate.

In practical terms, these results suggest the importance of implementing measures for addressing perceptions of change in addition to managing change itself. This can be especially important because the negative changes do not necessarily have a direct impact on work performance (e.g. Brown and Cregan, 2008; Johnson and O'Leary-Kelly, 2003). At the same time, however, the detrimental effect of negative perceptions of change through their impact on information sharing has potentially more serious long-term consequences for an organization (e.g. Ross, 2004) than the possible failure of a specific change or realization of its expected benefits. The importance of effective communication of changes and their individual and organizational benefits goes beyond its direct impact on change implementation. Therefore, organizations need to focus on communicating changes not only to make them happen but also to ensure that employees value them positively. By influencing how change is perceived, successful communication of its benefits, rationale and practicalities will have a direct impact not only on what is known about it but also on how employees will proactively share the related necessary information in the future. Combined with earlier insights from change management literature, these findings can be interpreted to suggest that the communication of change to improve its perception could be further complemented by focusing on the development of effective feedback mechanisms. Change management research has shown that employees' negative attitudes and behavioural responses can be reduced by allowing them to voice their concerns and making them feel heard (Piderit, 2000). Therefore, organizations should try to establish a mechanism for employees to provide feedback and express their concerns during the implementation of important changes to curtail the negative implications of change for information sharing.

Conclusions

The main contribution of this study is that it increases our understanding of the links between organizational change and information sharing by showing that if organizational changes are perceived positively, trust between employees and in management will increase, which, consequently, will enhance information sharing. In addition, this analysis shows that the perception of change is linked to information sharing, even when the mediating effect of trust is taken into account. This underlines the importance of ensuring not only the practical success of organizational changes, but also their esteem among employees. If it is not successful, there is a risk that negative perceptions will lead to decreased information sharing, which has been linked in earlier literature to different negative effects for organizations and their stakeholders.

Future research should investigate the relationship between organizational change and information sharing more comprehensively. An important aspect of this relationship to

explore in the future would be whether the extent of experienced changes matters for employee information-sharing behavior. Extensive or continuous organizational changes, even when perceived positively, can create a volatile trust environment, where employees may become static and recoil from sharing information. In addition, it would be interesting to measure possible differences between experiences and beliefs, and actions, i.e. how actual instances of information sharing are influenced by change and trust.

The time aspect, which was not considered in this study, will be important for thoroughly deciphering the dynamics of the relationship between organizational change and information sharing. As the change process proceeds, employees' perception of it may change – their initial positive perception may turn into a negative one and vice versa. What consequences this would have for employees' information sharing needs further investigation. Future research should explore this relationship longitudinally.

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Corresponding author

Farhan Ahmad can be contacted at: fahmad@abo.fi

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