
Micro-foundations as a grounding for readiness-for change in knowledge sharing initiatives

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Abstract: While many organisations are often engaged in conventional change practices that usually involve top-down strategies for creating change, knowledge sharing initiatives differ where most of the complex processes are handled at the human-level. Therefore, knowledge sharing initiatives present a unique type of conundrum where there is a need to closely interconnect human behaviours and the person's readiness to identify the most effective approaches to achieve change. This paper investigates the individual level readiness-for change by studying organisational knowledge sharing initiatives from a micro-foundational perspective. These issues have been largely missing in the knowledge sharing literature which is integral to understanding of how to manage individuals at the micro-level who are experiencing a behavioural change as result of knowledge sharing initiatives. In this study an inductive grounded theory approach is being used to analyse the individuals' level experiences and origins of various influential factors supporting or inhibiting their readiness during knowledge sharing initiatives. The results indicate that asymmetries in communication and lack of awareness to knowledge sharing initiatives are fundamentally constructs akin to micro-level behaviours that have obvious effects on the individuals' readiness-for change.

Keywords: readiness-for change; micro-foundations; knowledge sharing initiatives.

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1 Introduction

During the last two decades knowledge has appeared to be a recurring theme in most branches of management and strategy research (Fullwood et al., 2019; Grant, 1996; Nonaka, 1994). In spite of the many important insights this work has yielded about how to manage knowledge, knowledge sharing initiatives is not an easy task, because not only does it depend on the sharing of knowledge to another person, but largely because knowledge sharing initiatives involves a high degree of change at the individual level.

Substantial evidence suggest that to date a large number of knowledge sharing initiatives have failed to live up to expectations because individuals behaviour change factors are simply overlooked (Patel et al., 2010a; Tomo et al., 2020). This presents an inimitable challenge for organisations deploying knowledge sharing initiatives to identify factors that may influence individuals' readiness-for change. In general, a common factor influencing employees' readiness is their resistance to change (Seggewiss et al., 2019; Gigliotti et al., 2019; Lewis, 2019). Developing readiness-for change has been proposed as a necessary precursor for minimising resistance (Armenakis et al., 2007; Bagrationi and Thurner, 2020). However, in the knowledge sharing literature the concept of readiness-for change, and how to initiate a behavioural change practically has been scarcely examined. This apparent knowledge gap is somewhat due to the fact that the knowledge sharing literature does not attend sufficiently to concepts and theories from organisational change (Patel et al., 2010a) such as readiness-for change to determine the change processes that are integrally involved in the development of knowledge sharing initiatives.

This study puts forward that one of the reasons that behavioural change factors such as readiness-for change are often neglected in the knowledge sharing literature, is that current research focus is predominantly at the macro-level (Felin et al., 2015; Foss et al., 2009). Thus, much of the existing literature on knowledge sharing initiatives has mainly centred on either the structural aspect of homophily (cultural change and communal social behaviours) or primarily a technological one, or a combination of both (Schultze and Orlikowski, 2004). As a consequence, there has been little emphasis on the

micro-level origins or micro-foundations that play a key role in understanding the human dimensions that underpin readiness-for change during knowledge sharing initiatives (Patel et al., 2010a; Gigliotti et al., 2019). Specifically, the behavioural origins or roots of individuals' reactions to change is integral to understanding of how to manage and support employees going through changes in an organisation (Giaefer and Smollan, 2015; Coleman, 1990). Thus, the research question becomes one of determining how do organisations manage, and respond to individual's readiness-for change, while confronted with pressures of implementing new knowledge sharing initiatives?

In addressing this question, this paper highlights the supporting and inhibiting factors of readiness-for change on organisational members by building on the micro-foundational perspective. The study present research findings from an inductive, grounded theory study of readiness-for change behaviours through a case involving the implementation of knowledge sharing initiatives in a large higher educational institution. The paper's contribution to knowledge sharing initiatives arises from qualitative data that is intrinsic to the understanding of the supporting or inhibiting factors of individuals' readiness-for change. The outcomes indicate that communication or the absence of communication and lack of awareness which are fundamentally constructs akin to micro-level processes has some obvious effects on the individual behaviour readiness-for change.

The paper is organised as follows. The second section based on the relevant body of work, reviews the dominant literature on knowledge sharing and looks at the key change barriers to knowledge sharing initiatives as currently portrayed in the literature and the significance of micro-foundations are discussed. Section three describes the data collection and analysis methods for carrying out this research. The next section presents the analysis and discusses the research findings. The final section concludes the study by highlighting the limitation and its contributions in relation to the substantive area of study.

2 Theoretical background

2.1 Defining knowledge sharing

Knowledge sharing in organisations can be defined as the process of disseminating knowledge involving at least two actors, and which has no identifiable starting or ending point (Yoon et al., 2019). Strictly speaking, knowledge cannot be easily shared, since it is under the control of the individual, and is not like a commodity, which can be freely passed around (Hendriks, 1999). Indeed, people's knowing and learning cannot be separated from the specific social relations or context produced thus, making knowledge a complex and problematic concept (Cabrera and Cabrera, 2002). Unlike knowledge transfer, which typically occurs when the movement of knowledge arises between different units, divisions, or organisations rather than individuals (Szulanski and Lee, 2020); knowledge sharing comprises knowledge exchanges between individuals. Likewise, Hendriks (1999) observes that the ability to share knowledge emanates from the fact that communication is made consciously and willingly (or not), in some form or another. This definition is similar to definitions of sharing at the individual level of analysis in cognitive psychology. For instance, according to Mäkelä et al. (2012) "knowledge sharing is a bi-product of interaction: the more extensive interaction there is

between two people, the more opportunities they have for both intentional and serendipitous knowledge sharing” (p.442).

This paper takes as its premise the assertion that knowledge is rooted in individuals and that knowledge sharing is a complex process that goes beyond the mere transfer of knowledge (Blackman, 2018). This is motivated by a limitation of much of the extant literature, namely, that has centred on knowledge sharing initiatives at the macro or organisational level to drive change, such as ‘socio-cultural theories and models’ (Foss and Pedersen, 2019) ‘technologies’ (Tomo et al., 2020) and ‘influencing routines and organisational capabilities’ (Nguyen et al., 2019). However, it is rarely explained how such constructs are related to individual behaviour change and seldom how such behaviour change is manifested in their subsequent behaviour to engage and contribute toward knowledge sharing initiatives (Nonaka, 1994).

2.2 Conventional change literature on knowledge sharing

Knowledge sharing initiatives concern how the processes of knowledge sharing behaviours are influenced through the deployment of “structures and mechanisms that can influence the process of sharing in preferred directions and towards preferred levels” (Foss et al., 2010). Knowledge sharing initiatives cannot be accomplished merely by supplanting tools and technologies with new ones (Gold et al., 2001). Moreover, such a view which have been examined extensively, assumes that organisational knowledge sharing initiatives is a process of implementing growth strategies developed by organisational leaders in order to enhance the organisation technological competencies (Chopra and Gupta, 2019) which are directly linked to the development and growth of the organisation (Spender, 1996; Grant, 1996; Nguyen et al., 2019). Several scholars point to a general recognition that conventional organisational change practices, such as technology based change is of limited use in mitigating the various actions and orientations of lower-level units of individuals (Tomo et al., 2020).

To date, the majority of work on change in the knowledge sharing literature has largely focused on aggregate-level explanations, primarily on communal or cultural change perspectives to better explain how organisational knowledge sharing initiatives can be managed to the best effect (Corcoran and Duane, 2019). This view articulates that success of implementing knowledge sharing initiatives requires a change in the organisation’s culture. Many such writers, who espouse to the cultural change perspective, argue that top management values will be widely shared and strongly held by all organisational members (Lee et al., 2016). Moreover, a general criticism of collective explanation, is that these theories tend to reason in terms of situational and communal circumstances (Blackman, 2018) and do not go very far with respect to accounting for individual interests, knowledge, opinions, expectations (Foss et al., 2010). Balogun and Jenkins (2003) has discussed the limitations of adopting a cultural change perspective. They have argued that it is doubtful that the degree to which culture changes can be consciously managed. As such, a challenge of theorising from constructs at the macro-level (Foss et al., 2010; Will and Mueller, 2020) is that behaviour of single individual’s maybe difficult to observe and thereby neglects an important aspect of human behaviour change.

2.3 *Micro-foundations*

In contrast to the macro-view embedded in the traditional approach to change in the knowledge literature, there are those who perceive knowledge sharing initiatives as a micro-foundation, incorporating actions and interactions at the individual-level (Felin et al., 2015; Patel et al., 2010b; Foss, 2009). The importance of understanding micro-foundations and the micro-macro link can be traced far back to Coleman (1990), at least. Micro-foundations implies that to fully grasp “all that exists within an organisation, one must fundamentally begin with an understanding of the individuals that compose the whole, specifically their underlying nature, choices, abilities, propensities, heterogeneity, purposes, expectations and motivations” (Felin and Spender, 2008; Felin and Foss, 2019; Foss and Pedersen, 2019).

Furthermore, the emphasis on micro-foundation is generally geared towards theories of methodological individualism which implies that events are explicable only in terms of individual level actions and their properties. As Elster (1993) point out that methodological individualism exemplifies how human actions are the fundamental ‘building block of collective social phenomena’. Its underlying premise is that an adequate explanation of collective phenomena needs to involve explanatory mechanisms of the participants in those phenomena (Foss et al., 2010). Moreover, a shared core assumption of a change resides primarily as a property of individuals which can manifest to a negative or positive behavioural change (Armenakis et al., 2007). Accordingly, since there are no mechanisms that work “exclusively on the collectivist or macro-level”, this study regards micro-foundations as critical for building an understanding of individual-level foundations for changes at the organisational level.

3 **Readiness-for change**

There is a growing body of empirical evidence to suggest that if knowledge sharing initiatives are to be successful, they need to work through individual level barriers before they are likely to ‘commit to change’ (Ouedraogo and Ouakouak, 2018). Knowledge sharing initiatives are embedded in a certain cognitive and behavioural context, and research studies have shown that individuals’ attitudes toward a change initiative influence their behavioural support for it (Patel et al., 2010a). Behaviour is a “physical action that can be seen or heard” and “also includes mental processes, which cannot be seen or heard” [Matlin, (1995), p.2]. For this research, positive change behaviour is the cognition that is best predicted by enablers or supportive behaviours, and rejection is best predicted by inhibitors or negative behaviours towards knowledge sharing initiatives. In general, creating change is a cognitive state to help ‘minimise resistance’ from any negative behavioural change (Armenakis et al., 1993; Gigliotti et al., 2019). Indeed, resistance can demonstrate disproportionate behaviours, which is a common characteristic of inhibitors and can damage the success to knowledge sharing initiatives. Zaltman and Duncan (1977) defined resistance to change as “any conduct that serves to maintain the status quo in the face of pressure to alter the status quo” (p.63).

Some researchers have argued that individuals are not naturally resistant to change, rather, they resist the burden of change, or the way change is forced upon them (Bagrationi and Thurner, 2020). Resistance can be dependent upon two related factors. First, the degree of control an individual has over change, such as a knowledge sharing

initiatives and their ability to start, modify and stop the change: as control of change increases, resistance decreases (Bagrationi and Thurner, 2020). Second, is the degree of impact the change has on individuals, hence, the higher the impact of change the greater the resistance. Related to this concept, Armenakis et al. (1993) define resistance in behavioural terms but propose that another state precedes it: a cognitive state that they describe as (un) readiness or readiness-for change.

The concept of readiness for change is often seen as a response to traditional change theory (Armenakis et al., 1993), where the models are conducive to more macro organisational-level issues emphasising structural factors that act as barriers and can make change difficult (Akingbola et al., 2019; Rumelt, 1995). The origin of readiness-for change lies in Lewin's (1948) concept of 'unfreezing', moving and freezing behaviour' as three successive factors for positive change. In Lewin's model, unfreezing is the early stages in the change process. To change, an organisation involves accepting the present situation and influencing an individual's 'readiness towards the desired behavioural change (Samara and Raven, 2014; Armenakis and Harris, 2002). However, while the construct of readiness-for change is a recurring theme in the change management literature, it is seldom studied in the knowledge sharing literature with some notable exceptions (Holt et al., 2007; Taylor and Wright, 2004; Patel et al., 2010a, 2010b). In this study, readiness-for change is defined as an emotional and cognitive state which encompasses various beliefs and assumptions that people hold about a change (Gigliotti et al., 2019). These assumptions and beliefs are prerequisites for any organisation that requires an understanding of human aspects of change, prior to implementing a knowledge sharing initiative.

As discussed thus far, the use of the construct of individual readiness is a critical precursor to address individuals' reactions to change (Armenakis and Bedeian, 1999) since it is more a micro-level perspective, than other more traditional perspectives, such as theories at the aggregate, or macro-level (Felin and Foss, 2019). Armenakis and Harris (2002) introduced the five change messages that combine elements of both Lewin's (1948) work and Bandura's (1997) social cognitive learning theory. Their theory suggests that human readiness-for change is motivated by five factors; discrepancy, principal support; change efficacy; appropriateness; and valence and each will be discussed in turn.

3.1 Discrepancy

Discrepancy serves as an explanation for why change is required. To understand that change is essential consist of presenting individuals with how current knowledge sharing practice differs from the desired completion (Samara and Raven, 2014). In complex organisational change, there may be opposing and varying viewpoints that people can have concerning a change. In these circumstances, the justifications manager's offer about a change may not be understood, heard, or recalled (Samara and Raven, 2014). Armenakis and Harris (2002) propose that in order for individuals to be motivated to change, they "need to see that something is wrong and something needs to change".

3.2 Principal support

The construct principal support refers to the belief that leaders must support the change effort. The concept of change efficacy represents the confidence of one's own ability to positively implement the desired change (Bandura, 1997). However, the macro-level bias

tends to overshadow the perceived needs of individuals (Gigliotti et al., 2019). Change, therefore requires the appropriate leadership support, and leaders must guide the change by developing confidence and enthusiasm, so that a positive perspective of the change is made known to individuals (Kotter, 1995).

3.3 Change efficacy

Change efficacy has been found to regularly impact an individual's thought patterns, perceptions and actions concerning a change initiative. That is, individuals with greater levels of self-efficacy are generally more inclined to make behavioural changes in comparison to people with lower self-efficacy. The notion of efficacy is fundamental to most motivational theories and can demonstrate itself in various forms, such as performance and choice of actions affected by an individual's motivations (Bandura, 1997). According to Bandura, (1997) self-efficacy is defined as a "personal belief concerning ones capabilities to organise and execute courses of action required to produce given attainments." The increased self-efficacy of managers can lead to the enhancement of their employees' engagement and effectiveness.

3.4 Appropriateness

Appropriateness is when an organisation affirms that a new change initiative is necessary. During this phase, individuals may question whether a change being presented is an appropriate one. Accordingly, employees may recognise a need for change (discrepancy), however they may also question the appropriateness of the proposed change (Samara and Raven, 2014). If a change is a suitable one, there should be some confirmation as to why it is the correct one. Individuals must be convinced that the change recommended is applicable to the context of the organisation and not just another management fad (Samara and Raven, 2014).

3.5 Valence

Valence is the aspect of the message that describes the personal benefits (or personal loss) one may assume as a result of a change in an organisation. As a result, individuals may question: 'What is in it for me?' or 'What are the positive and negative outcomes?' (Armenakis et al., 1993; Samara and Raven, 2014) A number of key authors Kotter (1995) Armenakis et al. (1993) have argued, "that individuals' need to be communicated about the benefits of change and presented with the opportunities to experience the benefits themselves, if not this can hinder the implementation of a change initiative". Cabrera and Cabrera, (2002) suggest that individual members may fail to understand the benefit from a knowledge sharing initiative or they may perceive lack of support from management to apply new ideas to their work.

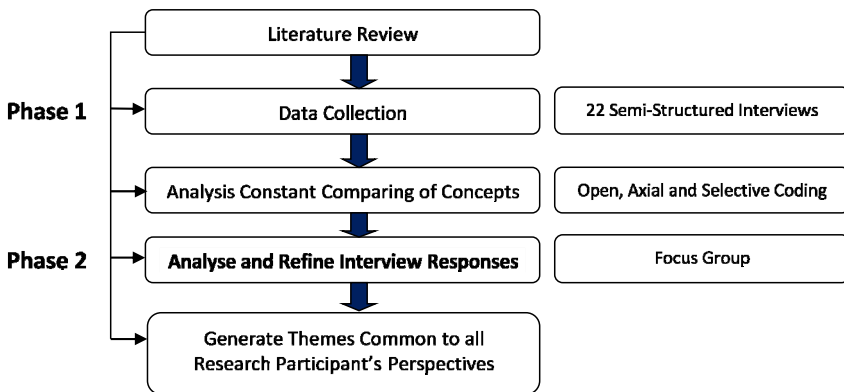
In this research the five change messages proposed by Armenakis and Harris (2002) was adapted during the data collection as criteria for determining readiness-for change, as it is the most comprehensive and takes cognition into account. Much of the literature on knowledge sharing rarely describes or probes the concept of change, as an individual level phenomenon in any depth because little research builds upon existing theories and models of organisational change. Indeed, both the process of organisational change and the ability of individuals to deal with change are only mentioned implicitly in the

knowledge literature and often take the individual’s understanding of the change for granted (Patel et al., 2010a). Part of the problem may have been the lack of a generalised theory of readiness and its lack of grounding within an established stream of research in knowledge sharing initiatives. To help build a stronger evidence base, in the next section, this study attempts to build such a theory, while also grounding it in the knowledge sharing and readiness-for change literatures.

4 Research methods

Because of the lack of a comprehensive framework this study embarked on an exploratory study to gauge the various explanations and meanings of the different factors supporting or inhibiting an individual readiness-for change. To compensate for this gap, a grounded theory and case study (Yin, 1984) methods were used to investigate the research question. A single case study approach was conducted in a large UK higher educational institution (for anonymity purposes, the university name and names of respondents are not disclosed). The concurrent data collection involved in this grounded theory study entailed two phases. In phase one, data arose from 22 semi-structured interviews and in phase two a focus group was conducted supplemented with a group of employees to achieve refinement of the research findings arising from phase one. Data was guided by theoretical sampling or sampling on the basis of theoretically relevant concepts to ensure that the data collection is controlled by the emerging theory. A comprehensive review of the literature was conducted during both phases of the research. Figure 1 outlines the phases of the research that reflects the inductive approach of the research development

Figure 1 Phases of the research (see online version for colours)



In phase one, a sample of 22 participants were recruited to permit the formulation of a substantive theory of the role of individual’s readiness-for change on knowledge sharing initiatives in organisations. During this phase, interviews were conducted using an open-ended approach, in order to gather in-depth information and explore readiness-for change from the individual’s own perspectives. The respondents were assured anonymity and all interviews were recorded and transcribed. The transcripts were coded both by hand in verbatim and using NVivo qualitative software. The questions were designed to draw out

perceptions and opinions on readiness-for change in an effort to gather data on the inhibitors and supporting factors that affect individual's readiness-for change. The sample included respondents from various job categories, five faculties, and seven technical, six administrative, four senior managements were interviewed. The aim of this mix was to obtain as many different perspectives and concepts related to individual readiness-for change. Moreover, in phase one of the interviews, the five readiness-for change components proposed by Armenakis and Harris (2002) were adopted to form the interview questions. These five components integrate to affect an individual's motivations (readiness) or negative (resistance) toward the change. The five change message components has been developed to primarily address the need for change, starting at the individual or personal level, hence developing a micro level view of change and as a basis for categorising the inhibitors and supporting factors of readiness for change. Hence, Table 1 presents a sample of the interview questions posed to respondents based on the five components of readiness-for change.

Table 1 Criteria's for readiness-for change

<i>Readiness message</i>	<i>Definitions</i>	<i>Interview questions</i>
Discrepancy:	A gap between the current state and an ideal state	Describe the actions taken to explain why change was necessary?
Appropriateness:	Whether or not the change that is proposed was the right one	When you feel the change proposed is not an appropriate one describe how your opinion is taken on board?
Efficacy:	A person's ability to complete a task or accomplish a specific goal	Describe how you perform during a change situation? As a senior member of staff how do you deal with staff that are less ready to change?
Principal support:	The extent to which change leaders demonstrate that they support the change	Can you describe how important or difficult it is for you to ensure that change is accomplished?
Valence:	To describe the benefits (or personal loss) one may expect as a result of a change	How are you benefiting as a result of the change process? How has change improved your knowledge sharing and work performance?

All participants interviewed had access to the same technology and therefore experienced the same change problems. In this study, IT staff was deemed the most knowledgeable because they were considered to have varying degree of experience in implementing change associated with knowledge sharing initiatives. The different topics raised by IT staff in regards to individual level readiness ranged from communication barriers, users adapting to change and computer-literacy which resulted in a much richer understanding of individual readiness for change.

In this research, the available systems that were used for knowledge sharing were identified from the participants' point of view. The intention was to identify the individual's readiness at a greater depth, as well as at a more personal level. The participants reported that the organisation had undergone significant changes to certain systems that were being newly developed or implemented to support knowledge sharing. A system for knowledge sharing which was recognised frequently by faculty and staff was a newly developed Student Record Management System (SRMS). The SRMS was used across the university that enables administrators and faculty to share and monitor

students recorded data and to manage courses as the primary database affecting the entire institution's information systems. The question of changing the SRMS toward a new system has been discussed at great length within academic services and at the faculty level. The IT team was formed to introduce and to help guide the implementation of the new SRMS.

During the second phase of the research, the concepts and categories that emerged from the 22 interviews in phase one was further analysed and refined as additional data were obtained from a focus group consisting of 6 participants during a single 2 hour session. Three senior management staff participated in the study, including one admin and two technical staff. The focus group was conducted to gather a range of questions, grounded in the words of the users as a way of conceptualising people's own readiness-for change assumptions and perceptions on knowledge sharing initiatives. This process allowed the researcher to include only those themes or concepts that were mentioned consistently throughout the focus group.

The research conducted the constant comparing of concepts and categories in line with grounded theory using the open, axial and selective coding methods for data analysis (Corbin and Strauss, 2008). The analysis process began with transcribing, coding, and categorising the data into different sets and then comparing incidents to enhance the internal validity, generalisation and theoretical level of building theory (Eisenhardt, 1989).

5 Findings

This section presents the findings drawn from phase one and two of the research including the central themes and sub-themes that emerged during the data analysis. The first phase of data collection and analysis, the formation of the open coding, together with memos formed a more cohesive approach to the analysis of readiness for change reaching a near point of saturation. The second phase of the research, the concepts and categories that emerged from the 22 interviews in phase one were analysed and refined as additional data were obtained from a focus group. In doing so, each member of the group were presented with a sample of 25 themes (Table 2) that emerged in phase one. Each participant was asked to reflect on their readiness-for change and put forward their own ideas on the factors that affect each of the themes and to define each of the themes in their own words (on the right hand side of Table 2). Based on the answers given for each of the themes, new themes were brought to light. The discovery of new themes provided deeper understanding about which concepts the individual deemed as key focus ideas that they linked to other concepts.

The author found a total of 94 codes (from phase one and two of the research) describing aspects of individuals' readiness-for change. These codes were then minimised by comparing and contrasting them to find commonalities among them. The findings generated themes that were common to all of the research participant's perspectives on readiness-for change experiences in knowledge sharing initiatives. The next sections discusses two core categories that emerged, namely "Awareness of change" and "Communicators for readiness-for change" and their subcategories, as influential factors for inhibiting or supporting readiness-for change.

Table 2 Themes elicited in interviews and focus group

<i>Interview themes Open codes</i>	<i>Focus group Participant responses</i>
Willingness to change	Inclusion
Motivation to change	Purpose of change not communicated effectively
Resisting change	Lack of information, lack of transparency, scared of the unknown
Adoption of change	Change procedures not communicated to those that are supposed to enforce it
Work relationships	Understanding the context of your job and how it relates to others
Politics	Us and them mentality, between faculties and between support staff and academics
Culture change	People stuck in processes and complacent cultures
Desired behaviours	Enthusiasm, engagement, commitment, dedication, willingness to take part
Preconceived interpretations of change	Rumours, grapevine and lack of transparency
Communicating change	Not getting the right/enough information to the right people
Lack of awareness of change	Bad communication
Knowledge sharing behaviours	Generally there is information given through all staff emails but not always very informative
Perceived need of the change	Overuse of scare-tactics if need not established, lack of commitment
Ownership	Link between responsibility (being given) and the authority (not given)
Failed knowledge initiatives	The right people not included at the beginning
Trust in management	Lack of transparency
Ease of change	Communication and engaging the right people at the beginning
Needs of users	The foot soldiers not consulted enough
Taking action	Motivation – what's in it for me

5.1 *Awareness of change*

After several iterations using the analytical tools available in grounded theory the core category awareness of change was identified by participants as a central theme. Table 3 is an extract of the core category awareness of change category, representing the integrated concepts, and subcategories with similar meanings. The significance of the core category awareness of change was based on the interpretations of issues that occurred over time from various perspectives during the implementation process of the new SRMS. The awareness of change category consists of the assumption that readiness-for change occurs when the individual is aware of the change. Most important, the concept of awareness emerged as an important influential factor for inhibiting or supporting readiness-for change. Accordingly, an individual's lack of awareness of change can delay actions of

individuals to embark on a change initiative. In turn, the clarity and understanding of the overall change mission involve the individual’s awareness of organisations goals helping to create a shared sense of readiness among individuals. In addition, the data in phase one indicated that the lack of conscious awareness of change had several negative (inhibitors) and positive (supporting) factors for individual readiness-for change that is akin to other insights of awareness namely, ‘adoption’, ‘motivation’ and ‘uncertainty’.

Table 3 Awareness for change category

<i>Core category</i>	<i>Sub-categories</i>	<i>Open codes</i>
Awareness of change	Adopting change	<ul style="list-style-type: none"> • Ease of change • Lack of willingness to adopt • Fear of coping with change • Non-adopters • Strain on the rate of adopting change • Acceptance of change • Communicate change goals
	Motivation	<ul style="list-style-type: none"> • Personal benefits • Seeking reassurance from senior managers • Personal benefits of change • Absence of clear goals • Communicating change • Lack of experience of change • Past experience about change • Sense of purpose • Barriers to influence readiness for change • Pre-conceived interpretations of change • Lack of rewards • Willingness to take part
	Uncertainty about change	<ul style="list-style-type: none"> • Managing uncertainty • Knowledge gap • More dialogue with senior members • Social inclusion • Communicating change equally • Poor communication • Enthusiasm • Engagement • Commitment • Dedication • Only small and certain groups aware

5.2 Adopting change

Data analysis in phase one identified significant (none) adoption and recalcitrance behaviours across the organisation. The sub-category of adopting change describes the adoption behaviour of individuals during knowledge sharing initiatives. The understanding of why individuals decide to, or not to take part in a knowledge sharing initiative, emerged as a central challenge among several participants. The faculty and administrative staff and other stakeholders who were supposed to adopt the new SRMS, were reluctant to adopt. For example, it was said that the communication was not transparent enough, and that the occurrence of these informative meetings was not sufficient. The learning curve also differed among these groups. Furthermore, individuals that tended to adopt a new initiative were more open and willing to change. For instance, staff who were already familiar with this system were logically found to be more accepting to the change. In contrast, non-adopters tended to resist change, which subsequently influenced their readiness-for change.

5.3 Motivation to change

Through further analysis, a further sub-category that matched the concept of motivation also emerged in these data. The concept of motivation emerged as a category around which change can manifest under different conditions of low readiness because of individuals motivations to change. Previous research has demonstrated that because knowledge is not easily observed or transferred, leaders must rely more on intrinsically motivated mechanisms particularly in complex change initiatives. Some participants, particularly admin staff, felt that when a training workshop or briefing was initiated to inform staff about the new SRMS, it was assumed by senior management that individuals already possessed prior knowledge about the system. Indeed, communication processes are inherently a part of these new initiatives, including creating awareness of change programs, team building exercises, and users cooperation and feedback regarding change programs, to name only a few'. However, some administrative staff expressed that although the organisation maybe driven by a commitment to improve knowledge sharing, their incentive was usually far more self-driven. Unsurprisingly, a wide range of dominant issues was forwarded about individuals' motivation to change including "seeking reassurance from senior managers, sense of purpose, personal benefits for change".

5.4 Uncertainty about change

What emerges from these insights also includes the absence of shared sense of readiness among individuals, because of the need for clarity toward understanding the overall change mission. It was found that 'individual's uncertainty' about the change was strongly associated with concepts of 'communicating change' and 'awareness of change'. Faculty respondents identified that this was one of the fundamental problems with which managers need to deal with, as they direct the change initiative. For example, perceptions of the new SRMS were widely depended on the information available and the way this

information is processed and thus, the person is likely to act in accord to these attitudes and perceptions. However, one factor which was highlighted by a faculty member that was invoked to explain the perceived awareness of the new SRMS is lack of transparency and openness about the change. In particular, because of the lack of awareness of this change, very few people in the organisation were able to leverage and share their contributions in this way.

6 Communicators for readiness-for change

In phase two of the study ‘communicators for readiness-for change’ was selected as the core category name which best captures all the other concepts because this was the actual term uncovered by the participants in the focus group. Hence, the feedback from the respondents suggested that the organisation would only achieve better change awareness through pursuing more effective forms and structures of communication. The process of communication lies at the centre of a change initiative and mainly crucial at the persuasion stage of a change. It was notably the most common reason for failure of any change initiative and associated with individual level readiness. In this research, communicating change refers to individuals (management) responsible for communicating a change initiative. Table 4 illustrates, that the core category is related to subcategory ‘management involvement’ change related information and communication. Thus, the data that emerged from both phases suggested that communicators (management) mainly discover issues not from individual workers but come through the management structure.

6.1 Communication

Some of the respondents believed that when you had a change that is management led there is an increase likelihood if it’s not communicated on time there might be a chance for people to ‘speculate or resist the change’. Similarly, the issue related to management and dialogue with senior members reflects is one of the key factors of supporting or inhibiting the individual’s readiness-for change. For example, it was suggested that general information via meetings and small informal discussions concerning SRMS could be the most effective channels for disseminating information about a change.

A significant factor that was prompted was that the organisation had a highly silo culture, where a knowledge sharing initiative was quite counter to the viewpoint of many people in the organisation. The consequences of such ‘silo culture’ can relate to problems, such as ‘loss of trust, ‘motivation’ and resistance to change’. For example, despite efforts to adopt the new SRMS, participants felt that the problematic nature and asymmetries in communication created a challenge with consequences in the form of employees abandoning the change initiative. Indeed, several participants noted that previous IT initiatives were abandoned “because of lack of commitment to investing the time necessary to push the change forward”.

Table 4 Communicator for readiness-for change category

<i>Core category</i>	<i>Sub-categories</i>	<i>Open codes</i>
Communicators for readiness for change	Management involvement	<ul style="list-style-type: none"> • Identify change agents • Failed initiatives • Limited support • Pressure to communicate change • Negotiation to overcome resistance • Identify change agents • Failed initiatives • Ability to deliver change • Participative decision making • No priority on top management • Use of power to manipulate change • Influence change • Efficacy of managers • Commitment to implementation • Aligning knowledge sharing initiatives • Trust • Leadership style • Empowering change
	Change related information	<ul style="list-style-type: none"> • Misinformation • Absence of clear goals • Communicating change results • Open communication • Technology • Right information to the right people • Not always informative • Fear to confront and relay the news • Lack of significance given to the message
	Communication	<ul style="list-style-type: none"> • Formal/informal communication • Management role in change negotiation • Persuasive communication • Absence of clear goals • Communication barriers • Pressure to communicate change • Rumours, grapevine • Lack of transparency

6.2 Change related information

A common theme during the interviews was that participants wanted to have more information about the new SRMS and how it will impact them. The lack of awareness or uncertainty of change can also arise from a lack of related information about change. In general, change related information is commonly used to help individuals to feel more ready and able to deal with change. What was notable from the interviewees is the need for information about the new SRMS to be made more transparent. The lack of visible and relevant information given about the change was one of the main readiness for change inhibitors among individuals. Moreover, one of the key communication failings as perceived by several interviewees was that the organisation did not provide a “justification or rationale” to determine the appropriateness of the change.

6.3 Management involvement

Several participants perceived the managers role as being instrumental to the success (or failure) of new SRMS. One of the IT staff commented that the receipt of management support is critical to the development of individual’s contribution during the change initiative. The respondent further expressed that the opportunities for more one-on-one interactions by establishing contact between senior management and employees have not been fully effective during the implementation of the new SRMS. Additional concepts and themes emerged, including ‘assumptions of change’, ‘misinterpretations’, ‘pressure to meet desired behaviours’, ‘dealing with inertia’ and ‘quality of knowledge sharing initiatives’.

What was apparent from the interviewees is the need for information about the change to be made more transparent. Indeed, information about change often minimises the opportunities for staff to fill in the blanks of missing information and makes it harder for them to assume that most changes are failures. The lack of visible and relevant information given about the actual change was one of the main inhibitors among individuals. Furthermore, some participants seemed to agree that lack of information also exerted pressure in dealing with older habits (and past interpretations or misinterpretations about a change), as well as a decline in the necessary knowledge and skills that are required to adopt a change initiative.

7 Implication and conclusions

According to the results presented in this paper there is little doubt that the insights of individual readiness-for change can act as an essential facilitator to encourage and support knowledge sharing initiatives by making knowledge sharing easier and more effective for the organisation. The list of inhibitors (supporting) factors presented herein offers a more inclusive and structured starting point to senior managers when assessing the individual’s readiness-for change, and communicating recommended behaviours toward implementation to knowledge sharing initiatives. Evidence suggest, however that the key issue, is to select and implement a suitable change to knowledge sharing initiatives that provides a close fit between individuals (at the micro-level) and organisations (macro-level). In doing so, the various inhibitors and supporting factors

must be understood first and foremost, at the micro-foundation in order to achieve effective change at the macro organisational-level.

The goal of this research was to better understand how organisations manage and respond to individual's readiness-for change while confronted with pressures of implementing new knowledge-sharing initiatives. The study offers a first qualitative grounded theory approach to this question. The study data suggests that individual's readiness-for change is primarily motivated by communication of top management and is conclusively attributable to the individual's readiness-for change. Thus, the absence of communication can minimise an individual's awareness of change. More specifically, organisations wishing to make their knowledge sharing initiatives a success need to pay attention to a large number of potential readiness-for change barriers. Indeed, the lack of a socially supportive environment from management, was found to be the strongest predictor of negative attitudes towards change. Moreover, both the interview respondents' answers and all other evidence suggest, that people are not always clear about a change if they are not properly alerted, and thus change related information is necessary as it can help to present the benefits and realities to knowledge sharing initiatives. The most apparent explanation is that change related information reduces fear and uncertainty, and consequently can help to overcome potential obstacles and possible resistance for change. The uncertainties associated with change can manifest negative behavioural assumptions, and attitudes which may lead to a negative impact on the success to knowledge sharing initiatives. Decline in communication is not only easily attributable to the change, but it also makes change unattractive and problematic leading to unsupportive attitudes to knowledge sharing initiatives.

This paper demonstrates the importance of individual level change behaviours during knowledge sharing initiatives. Prior research into knowledge sharing has focused heavily on examining informal knowledge sharing relationships or aspects of homophily within organisations. Most importantly, there have been calls for the micro-foundations approach to increase the understanding of the role of individual actions and interactions to organisational knowledge sharing initiatives.

As to the managerial implications, it was shown that effective work relationships are very important during knowledge sharing initiatives. The study contends that readiness-for change at the individual level, should be made more overt in the organisation during knowledge sharing initiatives. Managers should assess the role that individual readiness for change plays in determining newly adopted behaviours and especially a constant point of focus during (the pre and post change implementation) knowledge sharing initiatives. Managers should use effective dialogue, and communication which might create greater awareness of the benefits of change to knowledge sharing initiatives. In particular, they should be much more vigilant of micro level behaviours of change and be conscious of the various individual readiness problems that may hinder the success to knowledge sharing initiatives.

With regard to future research, we urge that studies on readiness for change to knowledge sharing initiatives should incorporate micro-foundations, as this can result in new perspectives on the causes of readiness for change. Moreover, further studies are needed to analyse change implementation of knowledge related initiatives within organisations by examining some of the psychological and human barriers of change. Hence, more research is needed to understand the consequences that can arise at the micro-level during organisational knowledge sharing change initiatives. Also, there are further opportunities for researcher to apply different methods for building a

micro-foundational perspective to develop better understanding of individual level behaviours that are prerequisites for successful knowledge sharing in an organisation. This paper explored only knowledge sharing initiatives, future research may consider other types of knowledge management related behaviours and practices in order to further explore the complex nature of change and its impact on the individual's readiness-for change.

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