Anticipation of organizational change

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Abstract

Purpose – Existing research on the organizational implications of the introduction of new information technology (IT) has neglected to focus on the anticipation of organizational change. In this paper, the author examines the extended pre-implementation phase prior to the introduction of the largest-ever health IT (HIT) implementation in Denmark. The purpose of this paper is to expand the conceptualization of organizational change to include the neglected pre-implementation phase preceding large-scale organizational change projects.
Design/methodology/approach – The research is based on qualitative data consisting of interviews, documents and observations gathered during a three-year research project in the Danish health sector. An important source of methodical inspiration has been grounded theory, which has allowed the pertinent interview themes to evolve and allowed for the gradual development of a theoretical framework.
Findings – The main finding of this paper is that the anticipatory pre-implementation phase is not simply passive waiting time for organizational members. Evidence from a three-year research project demonstrates how organizational members engage in recurring patterns of sensemaking, positioning and scripting of possible futures in preparation for the organizational changes that next generation HIT imposes. The study argues that resistance to organizational change may be better understood as resistance to having to give up institutionalized rights and responsibilities.
Originality/value – The paper offers a conceptual model—the anticipation cycle—that enables the systematic analysis of the relational mechanisms at work when organizational members are preparing for pending organizational change. Early analysis based on the anticipation cycle enables organizations and scholars to bring previously black-boxed anticipatory patterns into the equation of organizational change.

Keywords Positioning, Healthcare, Anticipation, Sensemaking, Organizational change

Paper type Research paper

Introduction

It is well established in organization studies that technology and information technology (IT) implementations affect relationships in organizations (e.g. Barley, 1986; Orlikowski, 1992; Perrow, 1967) and that for an IT implementation to be successful, the receiving organization needs to adapt (e.g. Burton-Jones and Grange, 2013; Orlikowski, 2000). The successful organizational implementation of new technologies is not merely a question of plugging in hardware, installing software and training users. From a health informatics perspective, focus has, e.g., been placed on the organizational consequences of the implementation of electronic health records (e.g. Berg, 2001; Greenhalgh *et al.*, 2013; Lorenzi and Riley, 2010).

A shared characteristic of the studies mentioned above and of the majority of the existing studies in organization studies, IT studies and health studies are, however, the focus on completed or ongoing implementations. I argue that by focusing exclusively on the experiences of past and present technology implementations, an important aspect of the implementations of new technology is missed. What about the months and years that precede the "go-live" of large-scale IT solutions, where organizational members know that changes are coming but know little or nothing specific about how they will be affected? What about the future? What can be learned from people's anticipations and the antenarratives (Boje, 1991, 2001) of those on the receiving end of health IT (HIT)? I propose that organizational change projects that neglect to take anticipation adequately into consideration are at risk of creating blind spots and thus sowing the seeds of future problems when progressing from ideas and plans to action and actual change.

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In this paper, I take a step back from the actual implementation and focus on the time preceding the introduction of new HIT, specifically examining what happens while the clinical staff is waiting for the new technology? Are they simply passive receivers, or do they prepare for it, and how does the waiting time affect them?

Existing literature—technology and organizations

Since Orlikowski (1992) observed that "the divergent definitions and opposing perspectives associated with technological research have limited our understanding of how technology interacts with organizations" (p. 398), it has become increasingly clear that technology and organizations are intrinsically connected. This view is elaborated in the joint article by Orlikowski and Barley (2001), in which they conclude that "information technology research can benefit from incorporating institutional analysis from organization studies, while organization studies can benefit even more by following the lead of information technology research in taking the material properties of technologies into account" (p. 145). The main reason for this is that new ways of working and organizing stemming from new technologies and changing institutional contexts can only be understood by including both perspectives.

Leonardi and Barley (2010) identified five distinct constructivist perspectives that authors have employed in researching the mutual influence of organizations and IT: perception, interpretation, appropriation, enactment and alignment. The perception perspective is focused on adoption, which, according to Leonardi and Barley, is the earliest phase of implementation. Authors have in other words not considered the time preceding actual adoption. Stated differently, research has focused on organizations after they have implemented IT and limited attention has been offered to the interpretation, sensemaking, and attitudes formed prior to "switching on the computer for the first time."

In a comprehensive literature review, Lluch (2011) identified the barriers to HIT adoption from an organizational management perspective. The identified barriers/drivers are split into five main categories: the structure of health care organizations, tasks, people policies, incentives and information and decision processes (Lluch, 2011).

Lluch sums up the review by saying that "new implementations require healthcare organizational systems to build an understanding of their processes so that it is understood how a new system will fit in" (p. 857). Further research on this is required, and Lluch (2011) specifically points out that "more information is needed regarding organizational change, incentives, liability issues, end-users HIT competences and skills, structure and work process issues involved in realizing the benefits from HIT" (p. 859).

Several studies have followed the call for further research and have investigated, e.g., the use and adoption of clinical decision support systems (Khong *et al.*, 2015), and the implications of HIT implementations within specific health professions (Nilsson *et al.*, 2014) or with a specific geographical focus (Turan and Palvia, 2014). A common trait of these and other studies is, however, an exclusive focus on already completed implementations. No attention is offered to the effect of pending implementations, which corresponds to the observation that Greenhalgh *et al.* (2009) made in their comprehensive review—that very few studies have applied a prospective view on the implementation of HIT. "There appears to be surprisingly little peer-reviewed research on how interpretivist approaches might be used proactively and explicitly to shape the effective implementation and use of EPR systems, especially in large-scale programs" (p. 752), and it is concluded that "Prospective, theory-driven primary studies of large-scale EPR systems are urgently needed" (Greenhalgh *et al.*, 2009, p. 768).

In more general terms—broadening the view to include organizational change literature as such—it is clear that the anticipatory phase has been neglected. The focus of this paper can be seen as a complementary perspective, e.g., in relation to the notion of episodic vs continuous change as presented by Weick and Quinn (1999) or the typologies of change and innovation as proposed by Van de Ven and Poole (1995). Regardless of what philosophical

perspective (Smith and Graetz, 2011) one choose to apply on organizational change there is a gap in the existing literature with regards to anticipation as an essential element of organizational change.

Research site

In 2012, two Danish regions formally agreed to initiate a joint project to upgrade the HIT infrastructure in the two regions. The new HIT infrastructure was envisioned as a shared IT platform that would replace more than 30 outdated and scattered IT systems with a common IT solution, which support paperless workflows and structured clinical documentation, processes and quality control.

A common trait of much of the existing HIT is that it has been implemented to solve individual problems in hospital clinics. One system has, e.g., been implemented to store test results from labs, and another to store a doctor's notes about the condition of a patient. Yet, another system is in place to keep track of appointments with patients. Although such individual solutions may have solved specific problems in hospital units, they have over the years created an organizational landscape consisting of numerous isolated "technology islands," with IT systems scattered over various computers and servers. This has resulted in often problematical clinical workflows that have caused cooperation between hospitals, departments and medical specialties to be constrained. In 2015, the Danish Council of Nurses estimated that 3.6m h are wasted annually on unnecessary clinical documentation (Astrup and Fahnøe, 2015).

Research methodology and design

The data of this research project can be split into two overall categories. The formal data primarily consist of open interviews inspired by grounded theory (Charmaz, 2014; Glaser and Strauss, 1967; Silverman, 2011) conducted with clinical staff members and official documents, e.g., on the strategic direction and purpose of the new solution. The informal data are essentially everything else, including conversations at lunch, the atmosphere at events, remarks made at the coffee machine, or what Becker (1998) calls all the quick exchanges made while participating in and observing ordinary activities.

In total, 21 formal interviews were conducted prior to the implementation of the HIT infrastructure. To ensure sufficient variation, interviews were conducted at three different locations representing the involved regions. Interviews were conducted with staff from various clinical areas in a single location and one selected clinical area (oncology) across locations. Between main rounds of interviews, data were analyzed to identify pertinent themes for further investigation, and toward the end to determine if a satisfactory level of saturation had been achieved. The interviews varied in length between 20 mins and 90 mins and were all conducted as open interviews consisting of two elements. The first part of each interview focused on past experiences with HIT and technology implementations. The second part of the interview focused on expectations about the coming solution. During the interviews, interviewees were asked to elaborate on issues relating to past implementations of HIT and concerns about the pending implementation of the solution. A guiding principle in the interviews was to pursue the relational aspects of technology and technology implementations. During interviews, the interviewees were encouraged to elaborate on the relational aspects of technology use and implementations. This included questions about the involvement of other clinicians and the causes of identified issues.

Categorization of data

Early analysis of data revealed distinct patterns in the ways in which clinicians prepared for the pending organizational changes. Further data collection and ongoing analysis using

Nvivo strengthened the proposition and confirmed the focus on the three distinct theories/concepts around which the analysis is structured: sensemaking (Weick, 1995, 2001), positioning theory (Davies and Harré, 1990; Harré and Langenhove, 1999; Harré and Moghaddam, 2003; Harré *et al.*, 2009) and scripting (Barley, 1986). The interviews have all been transcribed verbatim and coded in Nvivo. The codes have subsequently been clustered in the anticipatory themes mentioned above, and the analysis has been broken into parts corresponding to the three analytical components of anticipation.

Sensemaking

The first group of responses can be seen as attempts to make sense of what is happening. The interviewees are making sense of the pending changes based on their experiences and on their knowledge of the current organizational practice. They are acting as "mapmakers" (Weick, 1995, p. 29) looking out on the organizational landscape and making sense related to: past experiences, normalization, standardization and uncertainty.

Past experiences. When asked to describe their experiences with implementation and use of HIT, the interviewees generally find it bad, inadequate or simply ridiculous. For example, "So, if you transfer a patient within 5 kilometers between hospitals, they cannot see each other's notes. It is completely insane!" (Secretary 1). "It would be so great not having to register in two different systems. It is completely mad!" (Secretary 2). Even though these remarks are not directly relating to the new solution, as it has not yet been implemented, the observations constitute important features of the organizational landscape they observe and of which they try to make sense.

It is interesting to observe the bursts of emotion that occurred while explaining HIT amongst this group of otherwise rational and composed clinicians. Weick (1995) explains that "negative emotions likely occur when an organized behavioral sequence is interrupted unexpectedly and the interruption is interpreted as harmful or detrimental" (p. 47). The emotional reactions of the clinicians when describing the bad technology can be explained as reactions to the interruption of their clinical practice. It is, however, equally typical that they are merely outbursts—nothing extended, which indicates that ways of removing or circumventing the interruption exist. Weick (1995) explains that the negative emotion should become more intense the longer the interruption lasts, and this is not the case in this study. The clinical staff seems always be able to find a solution. There seems to be something—an institutionalized attitude of simply sorting out things or of removing or circumventing the problems encountered.

Normalization. Normalization is closely related to "bad technology," but not exclusively. It is the code applied when interviewees "iron out" identified problems. The clinicians describe situations as completely crazy; there is, however, an equally clear pattern in that after having "let out steam" and complained about the technology, the interviewees tend to downgrade and normalize the problems. Normalization is in other words used in the anticipatory phase to defuse actual or anticipated potential issues related to HIT.

Weick (2012) argues that the concept of normalization is closely related to the dominant stories in organization that serve to "[fix] the associative connotations of some of the central concepts' that are needed to label and make sense of 'organizational events such as good leadership, employee, consultant or project. It is the mobilization and deployment of these very same associative connotations that occurs in the organizational practice of normalization'" (p. 144). Although the resilience of the dominant stories may have a positive effect, e.g., in the form of stability, the consequences can also be catastrophic, as was the case in the run up to the explosion of the space shuttle challenger (Vaughan in Weick, 2012, p. 144).

The abovementioned experiences that clinicians have with bad technology are examples of the "organizational events" that clinical members make sense of through normalization. Essentially, they are saying that the technology is not really that bad and that they

deal with it. What in one sentence is described as crazy in the next it is downplayed as not really a problem at all:

> What goes wrong […] Well, nothing really goes wrong, because all that happens is that things are not connected. For instance, if we are not told when patients stop treatment early. That is an example. Then we catch it. Nothing really happens, which has catastrophic conse […], but things can happen that we do not know about (Secretary 2).

This is an example of more or less un-reflected/emotional reactions ("It is crazy!") that escape rational and reflected sensemaking. This, in turn, is followed by a more rational and solution-oriented sensemaking focused on how to cope with the situation, which bares noticeable similarity to the normalization of the extreme situations of death and trauma in hospitals as described by Chambliss (1996).

Standardization. In addition to "past experiences with bad technology" and the tendency to "normalize," a prominent theme in initial sensemaking has to do with the consequences of standardization. It comes in two variations. As part of sensemaking, standardization is either seen as having negative or positive consequences and it can be related to the level of the individual, department or profession. Even though the new solution and the actual standardization has not yet been implemented during the study, this is a good example of how the anticipation of the future makes it real in the now. Anderson (2010) calls it the presence of the future in the now. The pending standardization is as such part of the organizational landscape of which the clinicians are making sense, even if it is still only lurking on the horizon.

Uncertainty. The final element of sensemaking is uncertainty, which is expressed in several ways. As is the case with standardization, it can be related both to the individual level and to the level of the department, immediate work group or profession. Referring to Weick, Jensen *et al.* (2009) observes that "although sensemaking is an ongoing process, the need to make sense is intensified in circumstances where organizational members face new or unexpected situations, where there is no predetermined way to act, and where a high degree of ambiguity or uncertainty is experienced" (p. 345). It is particularly interesting how this sensemaking is taking place almost two years before the go-live phase at the hospital. This does not matter. The rumors and "thinking" makes it real, as seen in the following excerpt from interview with medical secretary; "So of course one starts thinking. Then you start hearing from different hospitals that e.g. if a leading medical secretary resigns the position is not filled by a new secretary. A department-nurse is put in charge of the secretaries. And then you start hearing about [another hospital], that lots of savings are being made, where they are saying 'well, medical secretaries will be made redundant in time, so you can start with them […].' " The sensemaking contains clear elements of uncertainty that needs to be coped with in one way or another. This brings us to the next aspect of anticipation and how to cope with uncertainty through positioning.

Positioning

The second category of themes/responses is related to the ways in which the interviewees are positioning themselves and others (Davies and Harré, 1990; Harré and Langenhove, 1999) in anticipation of the HIT infrastructure. It is the logical next step of anticipation but not necessarily the actual next sequential step in a specific case. Positioning is used as a way of explicating actual or desired positions in the organizational landscape. It can be seen as efforts to bolster existing positions or to identify new positions with desirable rights, duties and responsibilities. Positioning efforts are related to age and uniqueness.

Age. On the surface, age is used to position self or others as either old or young. Equally important, it is used as a way of pointing to one's experience or inexperience, and it is used to hint at the ability to adapt to a new technology and "new times." Age is placed under

positioning because it is a strong and illustrative example of a stereotype that "ha[s] to be treated as rhetorical devices that people use in order to position themselves and others" (Harré and Langenhove, 1999, p. 137).

In the case of age, this stereotype has to do with the ability to adapt depending on age. The stereotypical perception of the older generation is that it will have a hard time adapting to change, whereas someone younger will find it easier to do so, as exemplified in the following statement by a doctor; "I think it depends on your age. I think that those who did not grow up in the IT age are likely to have significant resistance. I would imagine that. To them it is unfamiliar. For us who has grown up in the iPhone age, we will probably think 'Well, that's fine' and we do that as long as it tells us […] Well, it should obviously not guide us in our profession – that makes us upset, but as long as it is process matters, I only see it as a help. So it all depends" Whether this is true or not is irrelevant from a positioning perspective. No single true or correct representation exists. The stereotypical view of the age of self and others is real to the user, and it corresponds with the generational rift identified by Lluch (2011) and with the potential clash between older generations of clinicians and Generation Y clinicians who may be organizational change agents.

The use of age to position self and others shows how a speech act establishes a storyline that inevitably positions oneself and others as having certain competencies, rights, duties and responsibilities. This is a good example of the dynamic nature of "positioning" compared with the more static "role" (Goffman, 1990), which would not to the same extent be able to accommodate and explain short-term alterations to situational behavior. Positioning theory does this by explicating the workings of storyline, speech acts and positions in relation to age.

Uniqueness. The other recurring theme and the most significant way in which clinical staff are dealing with the scenarios of their own sensemaking is through positioning as unique. Uniqueness covers a range of different ways of positioning self and others and draws attention to the associated rights and responsibilities of particular positions.

Martin *et al.* (1983) found that individuals prefer to think of themselves as unique beings, and in a similar vein, "occupational subcultures, such as doctors make claims to unique competence in order to justify autonomy and freedom from oversight" (Martin *et al.*, 1983, p. 438). In the case of the three professions, however, the claim to uniqueness is stated in very different ways: on the individual level, the department level and the profession level.

In the case of the HIT infrastructure, doctors are well aware of the pending changes in technology and the resulting consequences for work processes. Standardization will require them to enter notes directly into EHRs, which has previously been done by secretaries. Although this may give rise to some concerns on a practical level, it does not pose a threat to their self-perception. As a doctor explains; "The essence of my job will not change, because there are still patients that needs to be healed or done less sick, but I think it will become a bit more fun" (Doctor 1). This is an example of a Logic as an anticipatory action "that aims to prevent, mitigate, adapt to, prepare for or preempt specific futures" (Anderson, 2010).

The example above confirms the institutionalized view of the doctor as the "healer," who due to the importance of physician work and to the uniqueness of the profession perceives himself or herself to be less impacted by the pending change. The position that the discourse provides has a strong and distinct storyline that makes it unique *vis-à-vis* the other professions, which is completely in accordance with the five-step process for the development of self as proposed by Davies and Harré (1990).

Equally, to what was, e.g., observed in the interview with Doctor 1, Secretary 1 uses the interview situation as a gradual move from initial sensemaking through positioning to describing a possible future. Establishing herself as different from the "ordinary" secretaries seems to be important to her. "We (flying secretaries) have become a kind of consultant, who are able to go out into departments and 'clean things up" (Secretary 1). The uniqueness

of the secretary is a personal matter. She is talking about her own personal qualities and uniqueness and not about the profession or department.

Similarly, to Doctor 1 and Secretary 1 above, Nurse 1 is positioning herself as unique. This, is, however, in yet another way, being an example of positioning that takes place on a departmental/group level. According to Nurse 1, one of the potential problems of the future system is that it to a wide extent assigns responsibility for individual patients to individual nurses:

> […] the system is designed so that you have your own patients – you are given your own tasks. And this is not necessarily how we work. […] We don't think like that. We know too well that when an experienced nurse does rounds with a new nurse, then it is the experienced one that has the overview. She cannot just leave the responsibility to the new nurse. It does not work like that! (Nurse 1).

Nurse 1 is not saying that they will not use the new system, only that it will be used in their own way. They will go beyond the system—turn in another direction. By going their own way, they cope with the change and get on with the job, and autonomy is maintained despite the inevitable standardization of the new solution.

Through positioning, the individuals essentially appear to be saying: "I am special, I am flexible, and I am rational," which confirms the finding by Van Maanen and Barley (1984). "Common skills, common risks, and common adventures form the basis for a communal identity by promoting interaction with those others who 'know the score' and thereby increase the probability that members of such occupations will consider themselves to be unique" (Van Maanen and Barley, 1984, p. 25).

Scripting the future

The final category of themes/responses involves looking forward and articulating and scripting possible futures. Based on the sensemaking and positioning, the interviewees articulate "solutions" to a post-implementation scenario and making bets about what the future with the new HIT infrastructure will be like, focusing on: new possibilities, rebellion and victimization.

Throughout interviews and across hospitals and professions, the notion of possible futures is a theme. Once the interviewees have "mapped the terrain" through initial sensemaking, and after having assessed the actual and desirable positions of self and others, the next logical or sequential step is to look ahead through scripts of possible futures. Barley (1986) defines scripts as the mechanism that links the institutional realm to the realm of action. Explained differently, Martin *et al.* (1983) write that scripts specify "a set of characters or roles and a causally connected sequence of events, sometimes with optional branches for alternative story components and events" (p. 441). Martin further suggests that a script is to be understood as "the skeleton of a story, what remains when the nonessential details have been stripped away," which corresponds well with the anticipatory scripts observed in this study. When looking ahead to the future, the interviewees cannot script more than the skeleton of a story because very little is known in the anticipatory phase. The anticipatory scripts of the future are simple elaborations on the sensemaking and positioning already performed.

New possibilities. The bright look at the future is characterized by attention to the new possibilities that the new HIT offers. New possibilities are closely related to standardizations and to the possibility of getting rid of the bad technology identified in the sensemaking. When looking ahead to the future with the new solution, the interviewees in general are positive. The interview with Doctor 1 is a good example of this, but it is also another example of the non-linear and non-sequential order of the anticipation process.

The anticipation of new possibilities as described in the scripts of the future has a significant overlap with the prospective sensemaking of the initial sensemaking, which underlines the non-sequential nature of the anticipation phase. The overlap is an indicator of a cyclical structure where it can be hard to clearly distinguish where sensemaking starts and scripting stops and to determine where positioning gradually turns into scripting.

Bévort and Suddaby (2016) explains the connection between sensemaking and scripting by saying that "sensemaking is the process which individuals use to infuse scripted action with meaning" (Bévort and Suddaby, 2016, p. 5). In connection with anticipation, I suggest a different mechanism. Sensemaking and positioning are the processes that individuals use as foundation for scripting possible futures. The difference is found in the distinction between scripts as preexisting or evolving schemas in the conceptualization of Barley and Tolbert (1997) and Bévort and Suddaby (2016), and scripts anticipating and relating to a possible future in the present conceptualization.

Rebellion. Another view of the future identifies the need to rebel against the changes. Potential implications of the pending change are seen as unsatisfactorily and cause interviewees to see some kind of rebellion as a solution.

A nurse, e.g., described how changes would cause people's "hackles to rise." The procedures introduced by the system are perceived as a threat to the independence and individuality of the nurses. This is not acceptable and countered by a discrete rebellion. "I actually think that what will happen is that we will use the system as we can, and then we will go beyond it. We will not use the function that are offered – not initially anyway" (Nurse 1).

Nurse 1 is not saying that they will not use the new system, only that it will be used in their way. They will go beyond the system. This is an example of how the uniqueness of the nurses is presented and how their special circumstances require them to find a way to deal with the change. By going their own ways, they cope with the change and get on with the job.

In the interview with Secretary 1, the conversation also quickly turns to the future. She is aware that things are changing and as noted above that the everyday work tasks are changing, particularly for the secretaries. However, rather than accepting her fate, Secretary 1 is looking for new opportunities. The interview gradually moves from initial sensemaking through coping strategies and onward to describing a possible future.

Secretary 1 explains how secretaries will have to go out and steal (jobs) and reinvent their own tasks and perhaps change the education of the medical secretary. "Our profession drowns if we do not find something else to do" (Secretary 1).

Victim. The victim code is applied where the interviewee sees nothing but a bleak future. The new possibilities of HIT are not seen as positive, and there is no way to work around the problem. The interviewee is a victim in a future with the new HIT infrastructure.

The victim code is only used on very few occasions in the interviews. One secretary, one nurse and one doctor are coded with "victim," and on closer inspection, it is in fact, only the nurse to whom it truly applies. In the case of Doctor 1, the position as victim is used jokingly, and in the case of secretary, the victim position is combined with "rebellion," which in effect offers a way out of the issues, which is not there for "true" victims. Despite the scarce use of the code, it is interesting as an extreme case of a reaction to new HIT.

Findings—the anticipation cycle

Taking a step back, the anticipation of organizational members may appear to be sequential from a strictly logical perspective. Logically, individuals initially engage in sensemaking to determine the features of the organizational landscape, which is logically followed by an effort to position self and others in the landscape. This sequence is logically concluded by the scripting of possible futures based on sensemaking and scripting.

In reality, however, the anticipatory actions are not a linear sequence but a cycle that can be entered anywhere. The interviewees do not make sense of, position, or script their future in an orderly and structured way, and regardless of sex, age and profession, the beginning, middle and end appears in fragments. In practice, individuals skip around in the cycle and make sense, position and script depending on what is required in the situation to create or maintain a coherent organizational presence of self.

The anticipatory actions of organizational members facing pending changes follow a cyclical pattern described in the anticipation cycle (Figure 1).

The anticipation cycle can be thought of as an arena of resources available to individuals in their efforts to maneuver a changing organization that rearrange what only moments before seemed like robust points to navigate by. What previously was tasks reserved for skilled professionals is increasingly being performed by others because the technology makes it possible and because efficiency makes it desirable.

Sensemaking occurs when individuals look outward to what is transforming the organizational landscape. Individuals make sense of the pending changes by adjusting their inner organizational map by taking into account the new features of the organizational landscape. Positioning occurs when individuals look inward in an effort to asses and renegotiate the ability of self and others to cope with and navigate the new organizational landscape. If the initial sensemaking, however, does not managed to protect the institutionalized rights and responsibilities of the group or individual adequately, the positioning of self or others can help with securing the rights and responsibilities or alternatively identifying a new position that offers equally attractive rights and responsibilities.

By making sense and positioning self and others in desirable ways, the foundation is laid for scripting a future with a suitable position for one self. If on the other hand the individual has not managed to make sense of the changes in a way that leads to resolution or positioning self with desirable rights and responsibilities, scripting a desirable future may end up being virtually impossible. The lack of a future turns individuals into victims. In contrast, a future based on "successful" sensemaking and on the identification of a suitable position (either the same as now or a new one) leads to a brighter future with new possibilities.

Applying the concepts of the anticipation cycle to the interviews makes it possible to identify and perform a more granular analysis of pertinent themes than would be possible with the individual theoretical approaches. In combination, the three concepts constitute what I call the anticipation cycle, which is a framework for the analysis of the anticipatory phase preceding the implementation of the new HIT infrastructure.

Conclusion and reflections

When these lines are written, the development and deployment of the first wave of the new solution has already been completed. This is typically the point in time when research on the post-implementation phase and on the actual organizational changes caused by the new technology could commence. From a research point of view, it is almost as if nothing important happened before the system was switched on. The three years leading up to the go-live have shown that this is a fundamental misunderstanding.

The irony is that anybody who has worked in an organization with a significant organizational change pending will know that talks during lunch or at the coffee machine

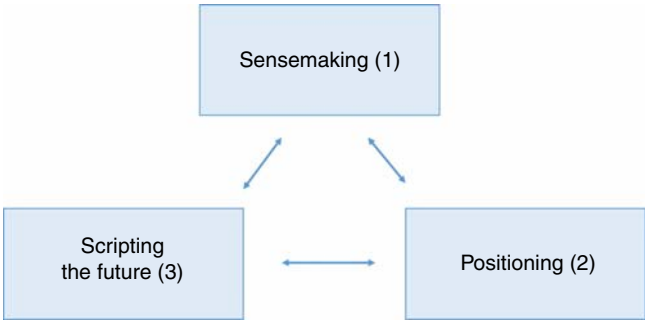

Figure 1.
The anticipation cycle

start well before any actual changes occur. Whether a pending change stems from new technology, financial cutbacks, or ritualistic, recurring organizational reshuffling is less important. Once the genie is out of the bottle, the pending change becomes part of organizational reality, even if it is still in the future.

This paper has presented a theoretical/conceptual framework for the analysis of this pre-implementation phase. The main finding of the paper is that organizational members' reaction to an extended anticipatory phase is an engaging in the recurring patterns of sensemaking, positioning and scripting in an effort to cope with the inherent uncertainty of the navigation of an uncharted organizational landscape. The recurring pattern is described as the anticipation cycle. The anticipation cycle offers a view of the mechanisms inside the previously black-boxed pre-implementation phase of a pending organizational change.

The effect of the anticipation cycle on organizational members appears to be an obscuring of the inevitable effects of organizational change on institutional practices, including the reshuffling of institutionalized rights and responsibilities. Stated differently, the anticipation cycle acts to postpone the realization of the potential "unpleasant" effects of pending changes through a variety of anticipatory actions, including the normalization of events and the identification of suitable positions. The lack of specific details and concrete knowledge in the anticipatory phase causes organizational members to articulate their own versions of the possible future, but ones that to a wide extent are disconnected from the harsh realities to come. As a consequence, practitioners may find that the rational communication efforts, e.g., aimed at convincing organizational members to "come onboard" with pending organizational changes are futile. Rather than simply seeing organizational change communication as forward looking information it should been perceived as retrospective sensemaking building blocks enabling organizational members to build anticipatory foundations in times of change and uncertainty. Further research into this is required.

To sum up the findings, I suggest that the post-implementation resistance often observed in connection with organizational change is a result of the disconnect between the position and the associated rights and responsibilities that individuals have prepared for themselves in the anticipation phase and the actual consequences experienced post-implementation.

The resistance to change that may be observed in connection with the introduction of new technology is, in other words, not simply resistance to change. Resistance to change is better understood as resistance to threats to institutionalized rights and responsibilities.

Further research

Further research should investigate the patterns of rights and responsibilities in health organizations specifically and organizations generally. Better insights into how organizational members protect and renegotiate rights and responsibilities through inter- and intra-personal positioning can aid in IT implementations that take into account the individuals who are affected.

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