The Misfits in Knowledge Work
Grasping the Essence with the Lens of the IT Knowledge Artefact

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Keywords: IT-knowledge Artefacts, UC&C, Situativity, Socio-Technical Fit, Individual Practices, Knowledge Creation.

Abstract: The workplace is changing rapidly and knowledge work is conducted increasingly in settings that are global, digital, flat and networked. The epicenter of value-creation are the individuals and their interactions. Unified Communication and Collaboration Technology (UC&C) supports individual interactions, collaboration and knowledge creation. The use of this technology is growing globally. In a previous study, we found that UC&C in collocated and distributed settings, produced misfits and fits between situated enacted practice-use of UC&C and the experienced productivity. We respond to the KITA 2015 call with this work-in-progress paper. We apply the IT Knowledge Artefact (ITKA)-interpretative lens from Cabitza and Locoro (2014) to a case of knowledge workers struggling with appropriation of UC&C for creating and sharing practice knowledge. We evaluate the framework - and discuss the usefulness of the lens in this specific setting. To further improve and enrich, we pose questions, aiming at contributing to the communication of valuable insights informing the design and use of future KITAs in knowledge work.

1 INTRODUCTION

Interactions between people over distance, time and location has given rise to a new type of Information and Communication Technology called UC&C\(^1\). UC&C supports interactions, connections, collaboration and communication, providing a unified interface to an ensemble of IT-artefacts like e-mails, chats, virtual meetings, presence and IP-calls (Silic and Back 2013). Applications well known and easy to use. When introduced though, the use is non-mandatory; the adoption is voluntary and the exploitation formed by individual preferences (McAfee 2006). UC&C amplifies the horizontal structure and creation of practice knowledge, that otherwise is difficult to support in virtual work-settings.

Our recent article “Co-configuration in Interaction work” (Harder Fischer and Pries-Heje 2015) communicates on several issues with productivity and autonomy in knowledge work, from the individual practice-use of technology. The paper involves a case of socio-technical misfit in an organization and reveals that practice-use of UC&C in situ is perceived as negatively influencing community culture and minimizing the opportunities for sharing practice knowledge. Hence, our previous case study reveals a misfit between technology-in-use, knowledge-practices and community culture.

Reading the call for papers for the KITA workshop we were inspired to experiment with the framework of IT-knowledge artefacts (ITKA) From Cabitza and Locoro (2014) and use it as an interpretative lens to gain new insights related to the issues found in our previous work. Working with the framework we experienced some challenges but also some interesting novel insights. In this paper we report on our experience using the framework and invite the KITA community to discuss some of the challenges we experienced. Hence, we evaluate the usefulness of the framework contributing to refine and enrich it.

Our overall aim is to minimize the negative consequences of technology in organizations (Harrison et al. 2007) and we believe that a useful interpretative lens can guide analyst and designers

\(^1\) Numbers are classified market data, but many and different sources report from 30 – 65 % adoption of UC&C in organizations on a global scale, and increasing.
when working with ITKA-based applications in organizational contexts.

We believe that an interpretative lens, providing a reification of knowledge, might be a way forward to minimize the misfits in knowledge work. Sarker, Chatterjee and Xiao (2013) makes an equal proposal when promoting a view, that renewed understanding of socio-technical fits, could be in terms of focusing on the “I” in IS, and begin to look at the fit between information and system (Sarker et al. 2013).

Progressing in our on-going studies of value creation in modern knowledge work, we seek to provide new understanding of misfits, tackling them from a socio-technical perspective, seeing them through the ITKA-framework as an interpretative lens.

We strive to answer these questions: What do we gain from evaluating UC&C as an ITKA in the peculiar setting? Can we use the framework to understand the design and use of this ITKA’s in other settings? Can our experiences with the framework reveal new insights that can enrich the interpretative lens?

2 METHOD

This paper is a reply to the invitation in the call for paper: “we invite other authors to apply this framework to their cases to both validate it and improve and enrich it, as a convenient interpretative lens”. Thus, our purpose and contribution with this paper is to evaluate and discuss the framework. Ultimately, to pose questions for a future debate in the KITA community based on our experience. Consequently, this is not a classic paper and this is not a classic method section. This section describes how we have approached this endeavor. First, we must explain our conceptual starting point.

In the out-set, we decided to experiment with how to use the ITKA framework as an interpretative lens - to understand our case in a new perspective. As a starting point, we decided to follow the logic suggested by the paper it-self and produced five consecutive questions that could help us to categorize and classify UC&C. The questions are out-lined in table 1.

Table 1: Questions for categorizing and classifying ITKAs.

<table>
<thead>
<tr>
<th>Question</th>
<th>Five consecutive questions as the interpretative lens</th>
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</thead>
<tbody>
<tr>
<td>Q 1</td>
<td>Is UC&amp;C an IT-artefact?</td>
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<tr>
<td>Q 2</td>
<td>Is the IT-artefact an IT Knowledge Artefact (ITKA)?</td>
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<tr>
<td>Q 3</td>
<td>Is the ITKA socially situated or representational?</td>
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<tr>
<td>Q 4</td>
<td>Is UC&amp;C an ITKA-based application?</td>
</tr>
<tr>
<td>Q 5</td>
<td>Can we classify the ITKA according to the degree of objectivity and situativity, implied from the design input and requirement for the IT artifact as the final out-put.</td>
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In section 3, we present our understanding of the case, as it was prior to experimentation with the ITKA-framework.

In section 4, we apply the framework and provide the answers to the five questions defined in order to experiment with the ITKA-framework.

In section 5, we discuss the experience we gain from applying the framework as an interpretative lens; does it make sense and does it provide new insights to the misfit we found in our previous work. We present challenges and insights as questions for future debate.

In section 6, we conclude and answer our overall questions. We conclude suggesting how our experience with the framework may contribute to the evolution and refinement of the interpretative lens and hopefully inspirer to an interesting future conversation in the area of ITKA’s.

3 CASE PRESENTATION & UNDERSTANDING

The company has approximately 15,000 employees of whom 1300 works at the head quarter in Denmark. A consequence of the distributed workforce is that people collaborate less collocated and often distributed with project-teams all around the world. They are very dependent on UC&C technology for coordinating work, assisting each other, share knowledge and information in a here-and-now manner.

Our presented understanding comes from the interpretation from a facilitated discussion on improving knowledge sharing practices with eight participants from the organization that took place in February 2015. We saw issues of people feeling socially disconnected because of a situated practice of “never putting on video in virtual meetings and conference calls”...“I now feel a distance to my
The interrelatedness in these quotes are better understood from the lens of social presence theory. Social presence is the acoustic, visual, and physical contact that can be achieved between two [or more] communication partners (Kaplan and Haenlein 2010). Social presence involves intimacy and immediacy in the communication. Following this logic, social presence are lower for mediated (calls) and higher when interpersonal (face-to-face); low for asynchronous (e-mail) and higher for synchronous (live chat) (Kaplan and Haenlein 2010). When feeling caught in e-mails and calls without face expressed in “never putting on video” the feeling of intimacy and immediacy should be low. It seems that it affects knowledge sharing on a somehow more profound level: “From previously sharing a lot of day-to-day knowledge to now an obsessive focus on text and documents” ... “is changing our knowledge sharing focus”.

The interrelatedness in these quotes are better understood from the lens of Brown and Duguid (2000) promoting how we generate knowledge in practice, but implement it through process in organizational contexts. Practice emphasizes the lateral connections within an organization, the implicit coordination and exploration that, for its part, produces things to do. Process emphasizes the hierarchical, explicit command-and-control side of organization - the structure that gets things done. Practice without process tends to become unmanageable; process without practice becomes increasingly static (Brown and Duguid 2000). UC&C, as mentioned in the introduction, is an ensemble of IT-artefacts, supporting interactions between people coordinating and communicating virtually. When emphasizing lateral connections and the implicit coordination between team-members, it becomes clearer that UC&C is a medium for practice knowledge in an organization and as such supports, the horizontal structure in the organization.

The appropriation of UC&C and the situated work practices in this case, is “changing our knowledge sharing focus” ... “From previously sharing a lot of day-to-day knowledge to now an obsessive focus on text and documents”. They communicate work–output and coordinate tasks in a more formal way, using documents and e-mails. It seems that they use UC&C for transfer of information and not for promoting practice knowledge. In communities of practice, ideas move with little explicit attention to transfer and practice is coordinated without much formal direction; they seem to acknowledge the lack of practice knowledge as a problem and recognize it as an important element of knowledge creation in an organization.

The lack of social presence and lack of practice knowledge seems to illuminate the cultural change expressed “previously being socially oriented”. The distribution of colleagues – co-located and distributed - are tipping in the direction of distributed work. In these setting UC&C should/could support the informal connections and social interactions, promoting the horizontal structure in the organization but it seems that it falls short in providing this, due to an emerged situated enacted practice on the individual level, skewing the focus on practice knowledge to a transfer of information. The perceived related change of culture “changing our knowledge sharing focus and company culture” seems essential in understanding the situation.

Goffee and Jones (1996) promotes a view on how people relate to a community, based on either sociability or solidarity. Sociability is present when we can see friendliness and non-instrumental relations among members of a community. When we see people share ideas, interests, values and attitudes through face-to-face relations, sociability is build and sustained. Solidarity is when people see each other as instruments for achieving results, pursuing - nevertheless - shared strategy goals quickly and effectively. Building relations with colleagues comes from common tasks, mutual interests and shared goals (Goffee and Jones 1996). Organizations should seek an equilibrium between the two (Goffee and Jones 1996)

When colleagues primarily interacts with colleagues located in other countries and regions, and when the relation is not build or sustained with face-work as in “never putting on video” the more instrumental the relationships gets. In this case, it affects all relationships “I now feel a distance to my colleagues”. The social side of work decreases and in-personal relationships arises and the possibilities for creating knowledge trough the sharing of practices declines.

Our understanding of the case comes from illuminating certain aspects, abstracting it with theory supporting our interpretations. In this case, we see the situated enacted practice use of UC&C influences the very type of knowledge shared and again influence the community culture, which again influences how much importance is put on social presence from the daily appropriation of UC&C. The case reveals a situation of socio-technical misfit. We see the entanglement of people, technology and organizational use (Orlikowski and Iacono 2001) not amounting to joint optimization (Sarker et al. 2013).
4 APPLYING THE ITKA FRAMEWORK

Tackling the situation from a socio-technical perspective, we try to understand why the underlying intention of fit and optimization between the technical system and social system (Sarker et al. 2013) is not achieved. In our former article (Harder Fischer & Pries-Heje 2015), we conclude that users are in fact appropriating this technology, by improvising (Sarker et al. 2013) balancing individual autonomy with experienced productivity in work. On the individual level, they – in socio-technical terms - produce a fit, but on the organizational level these appropriations does not seem to amount to joint optimization.

It seems as if the situated appropriation of UC&C creates a social void inhibiting the general ability to share practice knowledge in the whole organization and in the end – changing the community culture. We seek a deeper understanding of the underlying nature of UC&C grasping the essence of socio-technical fits/misfits in interaction knowledge work.

In this section, we experiment with the interpretive lens of ITKA’s from Cabitza and Locoro (2014) applying it in the manner described in section 2, we answer the questions from table 1 consecutively.

Q1: Is UC&C an IT-artefact? Orlikowski and Iacono (2001) provides five premises for IT-artefacts. In their view IT-artefacts are not natural, neutral, universal, or given; they are embedded in some time, place, discourse, and community; they are made up of a multiplicity of often fragile and fragmentary components; they are neither fixed nor independent, but emerge from ongoing social and economic practices. They are not static or unchanging, but dynamic. UC&C is clearly dynamic, the appropriation emerges from ongoing social and economic practices and is clearly embedded in a community culture.

UC&C is not neutral or given. UC&C is promoted in organizational settings as enabling easier communication, faster and more efficient collaboration from virtually anywhere, anytime (Silic and Back 2013). Moreover, the intent is to deliver flexibility, interoperability and efficiency (Silic and Back 2013). Hence, UC&C is an IT-artefact.

Q2: Is it an IT Knowledge Artefact (ITKA)? We adopt the view from Cabitza and Locoro (2014) defining ITKA as “a material IT artefact which is [...] purposely used to enable and support knowledge related processes with in a community” (Cabitza and Locoro 2014). In our case, UC&C is used for transferring knowledge. This makes UC&C an ITKA. Underneath the value propositions of UC&C lies an intent of establishing more appropriate knowledge flows in dispersed organizational contexts. The intention of UC&C is clearly to provide a digital manifestation of the horizontal informal structure supporting the flow of practices i.e. practice knowledge in an organization. Either way, seen from the perspective of Knowledge Artefacts (KA) - it could be described as an “item that captures explicit or [and] tacit knowledge” (Smith 2000, in Cabitza and Locoro 2014). Applying a socio-technical perspective on UC&C, it becomes clear that this IT artifact enable and support knowledge-intensive activities and tasks, hence being a IT-Knowledge artefact.

Q3: Is it socially situated or representational ITKA? First, we must interpret the nature of knowledge provided as either tacit, cultural, practical and actionable or explicit and representational. Representational ITKA’s provides structured sources of static knowledge while socially situated ITKA’s acts as a support or scaffold to the expression of knowledgeable behaviors (Cabitza and Locoro 2014) and practices. UC&C has the ability and intentionality to be a scaffold for unfolding practical wisdom (Nonaka and Takuechi 2011) throughout a dispersed organization and as such is the opposite of static knowledge. The ontology is clearly cultural, practical and actionable. Second, we must interpret the epistemology as being either constructivist, interactionist and emergentist or positivist. UC&C is clearly interactionist, providing interactions with an underlying notion of interactions as sense-making. We thus categorize UC&C as a socially situated IT knowledge artefact.

Q4: Is UC&C an ITKA-based application? An IT knowledge artifact is a class of software applications that encompass material artifacts either designed or purposely used to enable and support knowledge related processes within a community (Cabitza and Locoro 2014). UC&C is designed specifically to enable and support the lateral connections and implicit coordination in work, the backbone of sharing practice knowledge. As such, it is an ITKA based application. Adopting the view from Livari (2007) on typologies and archetypes of IT-applications, we can refine the answer by interpreting UC&C primarily as a medium with the specific role and function to mediate. Livari (2007) mentions e-mails, instant messaging, chat rooms and blogs as examples of mediators. In UC&C, a combination of these applications are unified through an interface with possibilities for talk, calls and video and
presence indicators, extending the mediation of text to also sound, picture and presence. The knowledge mode is typically unstructured as in audio/calls and free text. With the use of video, a tacit dimension comes along. In the case, we see that this ensemble of IT-artefacts also gives way for more structured knowledge modes of transfer of explicit knowledge. The focal point either way is enabling or support of knowledge related processes we will categorize it as an ITKA-based application.

**Question 5:** Can we classify the ITKA according to the degree of objectivity and situativity, implied from the design input and requirement for the IT artifact as the final out-put.

In figure 1, we see each group of ITKA-based applications associated with a research stream, design principles, values and assumptions of the disciplines that lays at the intersection points in the figure (Cabitza and Locoro 2014).

![Classification of ITKA-based applications. (Cabitza and Locoro 2014)](image)

Having categorized UC&C as a socially situated knowledge IT artefact and as a KITA-based application, we must be able to express the degree of objectivity and situativity implied by the design input and requirement for the IT artifact as the final output. Situativity, is the extent to which the KA is capable to adapt itself to the context and situation at hand, as well as the extent it can be appropriated by its users and exploited in a given situation (Cabitza and Locoro 2014). The situativity side of figure 1 is clearly the appropriate hemisphere. The design principles behind the UC&C is end-user malleability and the values and beliefs of out-put is a socio-technical fit. The objectivity hemisphere implies to what extent the KITA can handle quantifiably information in a centralized way and to which extent it supports standard processes (objective knowledge) with computational autonomy as design principle and quality as the values and beliefs in out-put. The degree of objectivity in the design of UC&C seems nonexistent. UC&C as a design belongs to lowest right side in figure 1. The specific appropriation in our case shows an interesting dynamic. Caused by the high degree of situativity, users change the purpose of the design hence moving it towards more objectivity decreasing the perceived socio-technical fit between technology and system.

Seen from the design view it is possible to map UC&C in the right lower corner in figure 1. When appropriated in the specific context of the case, it becomes uncertain to where it moves. From the case, we witness a move towards more objectivity interpreted as the need for documenting which implies a preference for quality in out-put. We also witness a deselection of video, implicating a move away from practical knowledge created through interactions. What is apparent from our case is that this move negatively influences the creation of knowledge through sharing practice and influences community culture. We find that this move challenges a meaningful classification.

<table>
<thead>
<tr>
<th>Questions</th>
<th>Answers</th>
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<tbody>
<tr>
<td>Q1 UC&amp;C is an IT-artefact; dynamic, embedded in context.</td>
<td></td>
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<tr>
<td>Q2 The intention is to support practice knowledge creation and thus is an ITKA.</td>
<td></td>
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<tr>
<td>Q3 The ITKA is socially situated; an underlying interactionist view on building culture from practices.</td>
<td></td>
</tr>
<tr>
<td>Q4 UC&amp;C is an ensemble of ITKA-based applications supporting many practices of knowledge sharing and creation</td>
<td></td>
</tr>
<tr>
<td>Q5 Seen from a design input view a high degree of situativity and user-driven malleability is evident. It should produce socio-technical fits as output. The users appropriate UC&amp;C with intentions of transfer and produces misfits. This dynamic makes difficult to classify meaningful in figure 1.</td>
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</table>

To make sense of classification, the categorization tool should provide knowledge for designers and analysts to understand better the design and the use from the ontology and epistemology implied. With the possibility of negative impacts from sociotechnical misfits or decrease in quality output, it is essential. It seems that the dynamics in use from user appropriation is difficult to grasp in the present framework.

The examples and the research streams of IS, CSCL and CSCW should guide us then. We see some
important differences. Reflecting upon the research streams and the associated applications, we sense an underlying notion of planned change (Sarker et al. 2013). UC&C is rarely introduced as a planned change (McAfee, 2006). UC&C is an ensemble of IT- artefacts, which implies that certain practices with artifacts could come into the foreground, we do not detect the same degree of malleability in IS, CSCL and CSCW. The software applications in the IS-box does not seem to support the important horizontal informal structures supporting the sharing and creation of practice knowledge, created by people and their interpersonal relations through daily situations where social presence is important. We acknowledge that software applications in the CSCW-box supports informal interactions between people, but often in specific project-work with a fixed and planned purpose. In comparison, UC&C is supporting companywide knowledge creation through the ability to share practice knowledge. The software applications in the CSCL-box has specific intentions of organizational learning purposes. In other words, we cannot assign UC&C to any of the research streams.

Experimenting with the framework has been valuable and has given us some new insights and knowledge of the essence of misfits. We find it difficult though to fit UC&C in the contemporary research streams boxing in the software application. We also find it difficult to fixate it in the figure 1.

In the following section, we will discuss what we have gained from using the interpretative lens. We end with some questions for the KITA community, to progress in the enrichment and improvement of the framework.

5 DISCUSSION

We have answered the questions out-lined in section 2, with our understanding from the case description in section 3. In section 4 we used the interpretative lens as a categorization tool, just as intended from the authors "A tool for analysts and designers to interpret the peculiarities of the setting hosting ITKAs, as well as to understand the ways and goals according to which ITKAs are built and used" (Cabitza and Locoro 2014). We will discuss what we gained by answering the questions, interpreting the specific use of UC&C in a case of socio-technical misfit.

In general, by applying the ITKA-interpretative lens, the embeddedness of technology in a complex and dynamic social context becomes clear. ITKAs are neither dependent nor an independent variable but instead enmeshed with the conditions of its use (Orlikowski and Iacono, 2001) and within its culture.

Framing UC&C as an IT-artefact makes sense seeing more clearly the changeable and dynamic nature of the UC&C.

It makes sense to view UC&C as an IT-knowledge artefact, since it brings the important element of knowledge creation through sharing of practice knowledge to the foreground.

Categorizing UC&C in the light of ontology and epistemology makes sense, understanding the intentions underlying this ITKA. Defining it as a socially situated ITKA is valuable too, since it brings forward the tension between design-intent and user-appropriation. From our case, we see a clear dependency between the specific appropriation of using UC&C and the transfer of information happening. UC&C in this case, is no mediator of human-to-human interactions increasing social presence. Thus stated as an important foundation for sociability and producing practical knowledge. The use then is different from the design-intention.

Framing UC&C as a specific ITKA-based application – a medium - draws attention to the intention of design and use of the applications. Being an ensemble of IT- artefacts, the knowledge forms vary from formal to informal. It highlights the issues and tensions present in the case. The expressed frustration of a socio-technical misfit from an organizational point of view, while at the same time, choosing preferred knowledge modes. These dynamics creates an unintended move.

We find it important to understand the nature of implementation with UC&C. Introducing UC&C in organizations is not a planned change. Instead, the adoption is voluntary and random. Andrew McAfee (2009) promotes the view that adoption - as in joint optimization - within this archetype of IT-applications is the sum of a large number of individual choices about which technologies to use for communication, collaboration and interaction (McAfee, 2009).

In our prior article (Harder Fischer & Pries-Heje 2015) we saw the paradox of individual knowledge workers producing autonomy in knowledge work settings with UC&C by adopting practices for becoming more productive on the individual level yet becoming less productive on a collective level.

The ITKA-interpretative lens provides insights and reveals a more fundamental tension between the individual knowledge worker and the organizational setting in which the technologies are appropriated.

Focus on knowledge, the center of knowledge work is a valuable contribution to the evaluating
UC&C. We have become more aware of the actual meaning that people - appropriating these artefacts - assign to them.

With underlying assumptions about socio-technical fits, it also makes the misfits clearer. Reflecting on situativity and objectivity highlights the relatedness between knowledge, practices with technology and intentions with the software applications, in a specific culture and context.

So why do we have difficulties when classifying the KITA-based application and draw a box in figure 1? While we certainly belong to the situativity domain, with aspects of extreme end-user malleability and fit (possibility for misfits) as dominant dynamics, it is still difficult to position it meaningfully. Popular speaking it is a moving target.

We are missing a dynamic dimension of use truly seeing the impacts from individual or collective appropriations and practice-uses in the situated context. The associated applications within the research streams are designed according to intentions of objectivity and situativity. There seem to be an underlying notion of a logic relationship between design in-put and use out-put. From our case, we report on a change of purpose, from people’s practice-use, with the ITKA-based application. These dynamics are the core of situativity. Reflecting on the ITKA-based applications (gathered under research streams), we see a common denominator though; that all of these systems and applications are designed and formally implemented in an organizational context, hence grounded on believe that a fit between intended design purpose and end-user malleability can be planned and managed.

As such, the framework seems to emerge from established research domains, build from a common mindset of planned change, steered design and mandated IS-implementations. We seem to lack the ability to categorize and classify an end-user malleable KITA, introduced at random, adopted on the individual level, so moldable and powerful, in a specific time, context and culture that it can change the design intention of the software.

We see some issues that we find important to discuss further in the process of refining the framework in the shared pursuit of providing a valuable tool for designers and analysts to understand design requirements but especially the use of ITKAs in peculiar settings in the future.

We ask the following questions. The questions are our primary contribution in this paper. The questions comes from our experiences from experimenting with the lens from the framework:

### Table 3: Questions for the KITA-community.

<table>
<thead>
<tr>
<th>Questions</th>
<th>How do we tackle:</th>
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<tbody>
<tr>
<td>1</td>
<td>Dynamic ITKAs from a sociotechnical perspective underlying the interpretative lens?</td>
</tr>
<tr>
<td>2</td>
<td>ITKAs influenced by user appropriation, changing the setting of knowledge focus and community culture?</td>
</tr>
<tr>
<td>3</td>
<td>The distinction between intentions in design and intentions in use?</td>
</tr>
<tr>
<td>4</td>
<td>The difference between planned change and individual driven appropriation of ITKA’s?</td>
</tr>
<tr>
<td>5</td>
<td>The distinction between ensembles of ITKAs as opposed to single ITKA’s?</td>
</tr>
<tr>
<td>6</td>
<td>How do we classify and understand moving ITKA-ensembles.</td>
</tr>
<tr>
<td>7</td>
<td>The issue of our difficulties of not being able to assign UC&amp;C to a research stream?</td>
</tr>
<tr>
<td>8</td>
<td>ITKAs that support both tacit/explicit- and process/practice knowledge?</td>
</tr>
<tr>
<td>9</td>
<td>A lens viewing the organizational and the individual level at the same time?</td>
</tr>
</tbody>
</table>

The changes in the workplace, happening right now, seems to be running a little ahead of IS-research. In future knowledge work, individuals and their interactions - and not the hierarchy - becomes the locus of value-creation. Connecting, interacting and producing knowledge of high quality productively/efficiently becomes increasingly important. Knowledge professionals, freelancers and contractors will increasingly configure and co-configure the many ITKAs in order to create value and at the same time be productive. They might even bring with them individualized ITKA software applications and preferences for productive practices.

Supporting and sustaining the equilibrium of process & practice and sociability & solidarity will be the foundation for successful and productive value-creation in networks and communities.

### 6 CONCLUSIONS

In this section, we conclude by answering our overall questions: What do we gain from evaluating UC&C as an ITKA in the peculiar setting? Can we use the framework to understand the design and use of this ITKA in other settings? Can our experiences with the framework reveal new insights that can enrich the interpretative lens?

The very aim is to take the socio-technical nature of UC&C more serious, to be able to minimize the negative consequences of technology in organizations (Harrison, 2007). Seeing UC&C in the light of the ITKA framework was valuable. It gives
us a better understanding of the difficulties of joint optimization with the individually driven appropriation of dynamic knowledge IT-artefacts in different contexts, with different purposes for supporting knowledge creation.

We support the purpose of the work (Cabitza & Locoro 2014) seeking an interpretative lens that illuminates the dynamic relatedness between people, knowledge and IT-artefacts and the community culture (evident in this case). It seems that the framework becomes a little backward looking more than forward-looking. We discuss how we meaningfully can classify the individual-driven appropriation of dynamic knowledge IT-artefacts in different settings with situated preferences for knowledge sharing and creation. These dynamic forces are important to conceptualize in the framework. We believe that the nature of KITAs with powers to change knowledge sharing focus and community culture is important to understand in the future value-creation process.

We believe that our experimentation with the ITKA interpretative lens and the resulting questions for the KITA-community, will contribute to the work and improvement of the ITKA-framework. We find it important and valuable to supporting the development of a lens, used by for designers and analysts, so that design and appropriation of KITAs in the future workplace can contribute to positive impacts. Grasping the essence of misfits in contemporary knowledge work, would be a valuable starting point.

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