This is an Accepted Manuscript published by Association for Information Systems:
Tuikka, Anne-Marie; Koskinen, Jani; and Kimppa, Kai K., "Habermasian discourse on digitalisation of governmental services – testing discourse ethical framework for communication" (2022). *ICIS 2022 Proceedings*. 10.
https://aisel.aisnet.org/icis2022/adv_methods/adv_methods/10

Habermasian Discourse on the Digitalisation of Governmental Services – Applying a Discourse Ethical Framework for Communication

Completed Research Paper

Anne-Marie Tuikka
University of Turku
20014 Turun yliopisto
anne-marie.tuikka@utu.fi

Jani Koskinen
University of Turku
20014 Turun yliopisto
jasiko@utu.fi

Kai K. Kimppa
University of Turku
20014 Turun yliopisto
kai.kimppa@utu.fi

Abstract

This study employs Habermas' discourse ethics in the context of governmental digitalisation. Habermas' key concepts including communicative action and rational discourse, as well as their interpretation in the field of information systems have inspired authors to adapt and modify Ulrich's philosophical staircase of ISD in order to develop their own framework that can be used to analyse the discourse on digitalisation of governmental services. The framework is applied to analysis of empirical data which have been collected in the form of focus groups in the context of social services in Finland. In addition to proposing a new framework, this article demonstrates how it can be used in practice. These experiences from using the framework enable evaluating it to reveal both its usability as well as the issues that need to be considered when it is applied as analytical tool.

Keywords: Habermas, Discourse, Discourse ethics, Social care, Digitalisation, Disability

Introduction

Digitalisation is changing society, including governmental services and public organisations. Public services in particular are transformed by information and communication technologies (ICTs). Consequently, the digitalisation of society is of interest to many different parties, such as politicians, practitioners, citizens and researchers.

One theoretical approach to the study of governmental service digitalisation lies in Habermasian discourse ethics (Habermas, 1996). In its own right, discourse ethics has helped shift the paradigm in the field of information systems towards more participatory design principles (Hirschheim & Klein, 1989; Lyytinen & Hirschheim, 1988; Ross & Chiasson, 2011). Habermasian discourse ethics is grounded in Jürgen Habermas's work on the subject of rational discourse. The idea is that the subjects of legislation have the possibility to participate in the creation of laws through rational discourse (Habermas 1996). This notion emerges from the existence of a social contract between the state and its citizens, which offers the state the

possibility to wield power over its citizens (see, e.g., Hobbes, 1651; Locke, 2005; Rawls, 1999). However, in certain situations, there is a need for deliberative participation to ensure that justified citizen demands are fulfilled. Since legislation plays an integral role in maintaining this social contract, its power should not be wielded arbitrarily. This emphasises the need for the creation of a deliberative approach that also concerns the use, development and implementation of ICTs in governmental systems. In some cases, ICTs have such a significant effect on society that they can be compared to law (Lessig, 1999) – consequently, they need to be governed to gain plausible justification. However, it is clear that the implementation and utilisation of ICTs in society should be governed through a participatory and deliberative approach, as technology advances so quickly that legislation processes are unable to keep up (see Moor, 1985). Habermas (1996) uses the term *deliberation* when discussing democracy, which is the instrument that can ensure the establishment of a free process and through which consensus can be achieved via mutual understanding. The important issue here is that in a deliberative democracy, communicative processes are necessary; representative structures are not enough. Thus, the democratisation of democracy can only be achieved if both participation and deliberation are regarded as the key elements of the collective decision-making process (Vitale, 2006).

Prior research on the development or implementation of governmental information systems urges citizens and users to be engaged in all phases of development. It also indicates that failures in governmental information systems could be related to neglecting the needs of various stakeholder groups when deciding the scope of the project and in other phases of the development. Hence, this article aims to contribute to the academic discourse on governmental information systems by expanding the idea of crafting laws through rational discourse to develop and evaluate the governmental information systems used and provided by either states themselves or their governmental bodies.

We begin by discussing discourse ethics concepts in light of relevant literature in the fields of information systems and public administration. We then continue by developing a framework to analyse the discourse on digitalisation. We applied the framework in an analysis of empirical data, which was collected as part of a research project focusing on the digitalisation of social services in Finland. The empirical data was gathered by organising focus groups for clients of and professionals offering social services. The conceptualisation and application of our framework aims to answer our research question: *how does discourse on digitalisation emerge, and what are its characteristics in the social care context?*

In the discussion section, we aim to answer this research question based on our conceptual reflections and experiences with using the framework to analyse empirical data. We conclude the article by discussing the limitations of our study and proposing the next steps to further develop our framework.

Background

Habermasian discourse ethics enables us to bring parties with differing views to a constructive debate. According to Stahl (2012), discourse ethics provides a mechanism that allows a consideration of different moral views and intuitions. It does not take the same rigid standpoint as the big three ethical theories (deontology, consequentialism and virtue ethics), which means that different views can be integrated more easily. At the same time, it accepts that certain norms guide life and action in communities, while also offering methodological underpinnings to modify them (Lovat & Gray, 2008). For example, rules can commonly be agreed upon using a consensus approach, which is not only in line with democratic decision making but is also applicable to the varied and diverse stakeholder groups that are common in the social services context (Lovat & Gray, 2008).

Discourse ethics also offers various tools for in-depth analyses of communication and discourse, making both past and current communication problems visible (Stahl, 2012). Although unattainable, the ideal speech situation can serve as a normative basis to evaluate communication between people and the process of public participation (Webler, 1995). Discourse ethics is based on the concepts of communicative action, public sphere and rational discourse, which are introduced in Habermas's earlier works. In communicative action, participants are not primarily motivated by their own individual successes. They need to be ready to negotiate on the basis of common situational definitions to formulate plans of action (Habermas, 1984, p. 286). This readiness is a pre-requisite of rational discourse, because it aims to reach an understanding between participants.

Although Habermas already mentions rational discourse in his *Communicative Action* (Habermas, 1984, 1987), he further develops this concept in *Between Facts and Norms* (Habermas, 1996). Not including strategic actions is central to the idea of rational discourse and emerges from the idea that an agent primarily aims for a certain end. Strategic action is successful when a predefined end is achieved, regardless of the means. Conversely, communicative actions are correct in relation to the normative context and can be found to be legitimate by a speaker and other participants in communication. Different types of communicative actions, such as promises, directions, avowals and predictions, are validated on the basis of different merits. For example, communicative actions can take the form of true statements, which can be accepted and shared by a hearer. Communicative actions can also express the truthful beliefs, intentions and feelings of a speaker, in which case a hearer aims to understand whether that subjective experience is expressed truthfully (Habermas, 1984, pp. 306–308). If only one of these principles can be used to validate a speech act, then this is one of the pure cases of speech acts, which include constructive speech act, expressive speech act and regulative speech act (Habermas, 1984, p. 309).

Discourse ethics is part of this continuum, as the theory was developed to adapt rational discourse and, hence, communicative action as a more ethical and straightforward approach to solving ethical controversies. Scholars argue that discourse ethics could constitute a suitable ethical approach for the field of information systems (Mingers & Walsham, 2010) and help it develop further (Ross & Chiasson, 2011). Ross and Chiasson (2011) even argue that it is essential to the field.

Hansen et al. (2009) analysed Wikipedia from the rational discourse perspective. According to them, Wikipedia's design is consistent with the principles of Habermasian communicative action theory, although the discourse on Wikipedia does not meet all the requirements of discursive action. Furthermore, they suggest that Wikipedia serves as an example for those who are interested in designing emancipatory information systems, because its technical solutions and social norms within the project capture "the interplay of anonymity and accountability for participants, the role of transparency in fostering participation and creating trust, the importance of the broader social and institutional context, and the rule of minimalism in a priori design efforts" (Hansen et al., 2009). Knox (2016) focuses on examining social media platforms and their potential to increase authentic communication between public administrators and citizens. Social media platforms, if implemented in public organisations, could serve as one step towards achieving Habermas's ideal of using the public sphere to bridge the lifeworld and the system.

However, discourse ethics has also received criticism from different fronts (Roberts, 2012; Salam, 2003). For instance, to have a rational discourse about legislation, citizens are required to join the discussion on public affairs, which they might not be motivated to engage in. However, even if they do participate in the discourse, their interests would conflict. Different parties also typically have their own agendas in any discourse. This problematises the use of Habermasian *rational* discourse, as the participants may not be rational and thus unable to stay within the bounds of rational discourse. Despite these criticisms of discourse ethics, discourse itself is at the heart of democracy. Thus, even though it has its problems and weaknesses, it should not be rejected. We believe discourse ethics has much to offer our society, because its main aim is to bring differing views into critical and rational discourse.

Conceptualising the framework

Discourse ethics offers a promising approach to gain insight into the social aspects of information systems. Discourse ethics has been part of the paradigm change that the field of information systems has undergone (Hirschheim & Klein, 1989; Lyytinen & Hirschheim, 1988; Ross & Chiasson, 2011) and, as a result, participatory methods have emerged to develop information systems and emancipate workers during the requirement process. Examples of these methods include ETHICS, designed by Mumford (1995), and critically systemic discourse, created by Ulrich (2001a).

Lyytinen and Hirschheim (1988) argue that information systems can be used to establish new communication channels, redistribute access to existing information and provide new information in a discourse. Hence, the use of information systems can, sometimes, contribute to discoursive action; in some situations, these systems can also permit democratic consensus formation and decision making. However, it should also be noted here that the use of information systems is often a combination of communicative, strategic and instrumental action.

Referring to Habermas's communicative action theory, Lyytinen and Hirschheim (1988) distinguish four different classes of validity claims: comprehensibility (clarity), truthfulness (veracity), sincerity (correctness vis-à-vis a speaker's intention) and rightness in relation to norms (appropriateness). Depending on the class of a validity claim, different means of redemption are required to validate it. Ulrich's (2001b) conceptual study on information systems' definition, design and development (ISD) specifies and extends validity claims further, creating a philosophical ISD staircase that includes the following steps: syntactic clarity, semantic clarity, pragmatic clarity, expressive validity, empirical validity, normative validity, instrumental validity, strategic rationality and communicative rationality. According to Yetim's (2006) interpretation of Habermas's work, discourse can be defined as communication that is focused on validating communicative action. Thus, in accordance with this definition, participants in a discourse can criticise one another's validity claims through arguments.

Even if Habermas's work provides a way to understand discourse, it does not propose a methodology for discourse analysis. Hence, the endeavour to do so has inspired other researchers, such as Cukier et al. (2004) and Yetim (2005, 2006), in the field of information systems. Cukier et al. (2004) developed a method to assess Habermas's validity claims in textual discourse and to identify the elements of ideal speech situations, as well as communication distortions. Yetim's (2005, 2006) work separates the communication action layer form of discourse and presents a framework to analyse the meta-level of communication in the design principles of digital tools. As neither of these studies specifically focus on analysing discourse itself, we have further developed Ulrich's (2001b) philosophical ISD staircase framework to meet the needs of analysing discourse in the form of spoken communication. Our framework (see Figure 1) is based on the principles of discourse ethics, as well as on Lyytinen and Hirschheim (1988), Ulrich (2001b), Yetim (2005, 2006) and Cukier et al.'s (2004) interpretations of them. This framework can be used to analyse conversations related to digitalisation, and to identify when discourse emerges and what its characteristics are. The framework has two types of elements. Ones related to preconditions of the public sphere and named as the cornerstones of the public sphere. Others represent the requirements of communicative action and they are named as the steps towards communicative rationality.

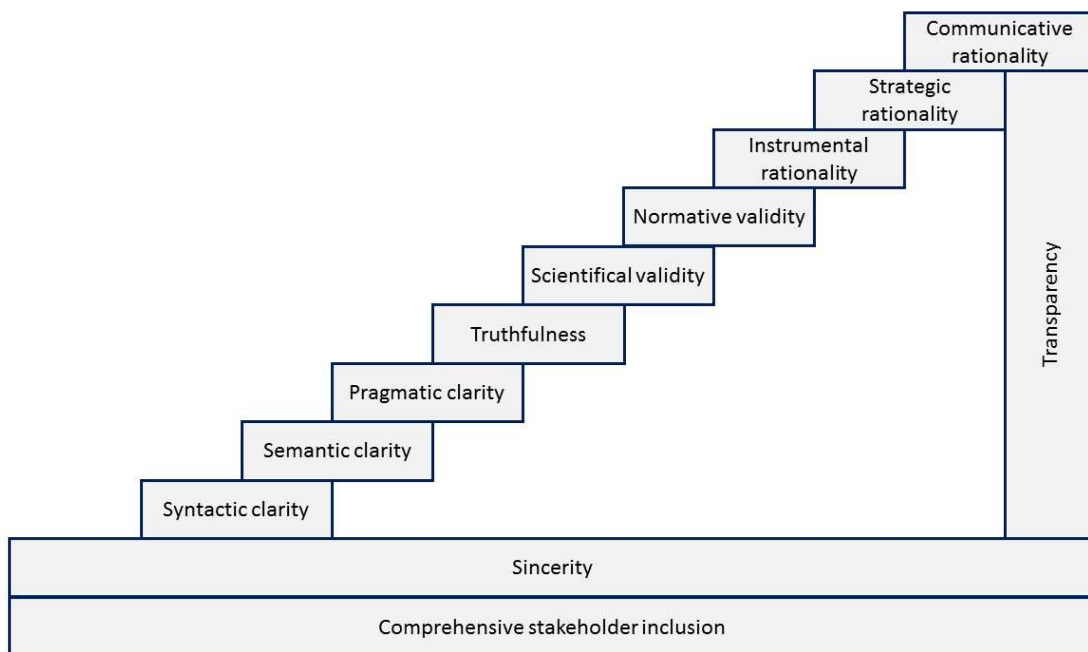

Figure 1. Discourse Staircase Adapted and Modified from Ulrich (2001b)

Cornerstones of the public sphere

Comprehensive stakeholder inclusion is a precondition that makes meaningful rational discourse possible (Habermas, 1996). Hence, stakeholder inclusion is set as the basis for our framework (see Figure 1). It is necessary to ensure that each group of justified stakeholders is represented during discourse. The starting point for planning and analysing discourse is to consider stakeholder inclusion – before entering into discourse. Involving important stakeholders is also one of the main steps to identify user needs in product development (Kujala, 2008). In the social care context, both social workers and the citizens receiving their services are important stakeholders who need to be included in the development process (Gillingham, 2014). Knaapi-Junnila et al. (2022) show that there is great need to place laypeople in the centre of the discourse, as they are easily seen as objects (passive) instead of actors (can act and influence outcomes). This, however, demands that these individuals are invited into the discourse and seen as core members, not as a burden to be taken care of.

Sincerity. Lyytinen and Hirschheim (1988) note that the need for correctness vis-à-vis speakers' intentions is crucial for rational discourse. It could also be considered the most important principle, as it creates the basis for the possibility of having discourse participants develop their understanding of their views (Patelli & Pedrini, 2014). Therefore, this principle forms the second part of the foundation of our discourse staircase framework (see Figure 1).

If participants have certain hidden agendas or suspicious argumentation methods, all rationality is endangered because these participants do not share their real intentions to reach consensus. Sincerity is separated from truthfulness, as these two terms are not the same – in fact, they are not even closely related (Heath, 2014).

The concept of sincerity not only refers to being truthful, but to preventing the strategic games that are not accepted in rational discourse (Habermas, 1996). People can be truthful but still try to steer the discourse in a manner that serves their own purposes, without intending to reach consensus or even aiming for it. It is logical that these types of agendas are hidden, which is particularly harmful for the kind of discourse presented here, and should thus receive extra attention. Consequently, sincerity is the foundation of the whole framework. Discourse would greatly benefit from having facilitators who are neutral – that is, those who do not favour any main stakeholder group and focus on observation and intervening upon noticing hidden agendas (see Knaapi-Junnila et al., 2022, p. 305). Facilitators enforce sincerity and mitigate negative and unconstructive communication – even though they may, of course, not be able to prevent it entirely.

Transparency is considered an important factor for communication and discourse in different contexts (see Blomgren, 2007; Knaapi-Junnila et al., 2022; Koskinen et al., 2019). It constitutes the other central part of our framework and is therefore a pillar which upholds the staircase towards consensus or, at least, meaningful discourse. By transparency, we refer to the openness of information, knowledge, and motivation, all of which are needed to evaluate the rationality of discourse validity. Without transparency, the following scenario is highly likely: the discourse participants have access to different kinds of information and background knowledge, but by limiting the visibility of this knowledge and information, they mask their true intentions and make the discussion quasi-rational, all while acting on self-interest and selective arguments. Transparency is thus related to sincerity, as both are needed to analyse other parts of a discourse by following the steps outlined in our framework.

Steps towards communicative rationality

Syntactic clarity refers to the idea that discourse should have a clear, common language and that the medium of discourse should suit it (Ulrich, 2001b). This is a low-level demand that focuses on participants having the possibility to receive and give arguments in a meaningful and understandable manner, especially if technology is used as a medium, because it may act as either a clear barrier to or enabler of discourse.

Semantic clarity looks at the kinds of meanings that participants bring into communication. The focus here is on analysing the level of terminology and the type of language in relation to a discourse's context

and participants (Ulrich, 2001b). Alongside syntactic clarity, semantic clarity is required for participants to follow and understand the discourse.

Pragmatic clarity refers to an attitude and way of communicating in a manner that makes sense in a given discourse, thus contributing to the discourse in a meaningful way (Ulrich 2001b). Similarly, pragmatic clarity indicates a way of communicating that helps a discourse and its goals, and which should aim at common understanding that can lead to a consensus or solution. This is a crucial aspect that discourse members should internalise, because they should always consider how their communication helps them find a common "language".

Truthfulness. Discourse should be based on truthfulness, to which all members are bound. The importance of this cannot be emphasised enough. Violating truthfulness sets all communication under suspicion and equivocates all violators' discussions and claims. Consequently, if claims are not based on truth, actors who intentionally use false claims should be removed from the discourse. However, participants may give arguments that are not true but which they believe to be true; such a situation does not violate truthfulness, but represents a mistake that stems from a theoretical or empirical error, which is addressed in the next steps of the staircase.

Scientific validity. In this step, both theoretical and empirical validity are examined, because they are bound together. Science is commonly based on the development of theories and subsequent empirical validation of these theories or empirical findings, which are sources for the theoretical development of science and knowledge. Hence, claims provided in discourse should be valid on a scientific basis. This means that claims should be at least theoretically possible and not based purely on opinions or biased assumptions. Situations may arise in which neither theoretical nor empirical validity has yet been revealed in a discourse. In such cases, the right solution is to seek justification for the issues presented rather than rely on mere opinions or individual beliefs without self-criticism. One common false position is to present claims in which there is only one or limited options for some occasions. This type of necessity claim usually lacks both theoretical and empirical validity, because there are usually several possibilities. Examples can be found in the spheres of economy and politics in particular (see Herrigel, 2020; Séville, 2017). Such necessity claims seem to be used to end discussion and promote one's own position or idea by downplaying the arguments of others – which endangers the entire discourse and should clearly be called out. Using artificial intelligence (AI) as a basis for arguments can also pose challenges. The problem is that AI is not an actor in the same sense as a human is; however, when it is used to provide arguments, it could gain status, through which it affects discourse like a participator, even if it does not have the ability to adjust itself to real discourse. Consequently, participants should carefully reflect on any information received through AI and avoid presenting arguments that are solely based on AI as truth.

Normative validity refers to commonly acceptable behaviours and norms that are plausible in both society and the context of the discourse (Ulrich, 2001b). Ideally, normative validity is based on an ethically justified basis. However, therein lies the theoretical pitfall of this framework and of discourse ethics itself. Discourse ethics is based on discourse – and discourse creates normative validity. Nevertheless, from a practical point of view, we can evaluate whether arguments are acceptable from the value positions of the discourse participants, which should be communicated clearly if conflicts arise. This can create new discourse within the main discourse.

Instrumental rationality is a way in which discourse can be analysed by examining whether or not it aims for a specific goal that can be achieved, which helps shift focus from discussion speech acts towards the aims that lie behind communication (Ulrich, 2001b). If the goal or aim of a discourse is not visible, then the question of why we are engaged in it should be raised. Thus, the focus is placed on the purpose of discourse, which should be communicated clearly; otherwise, the discourse does not serve as an instrument of communication.

Strategic rationality refers to the wider rationality that creates the discourse sphere (Ulrich, 2001b). When instrumental rationality has a specific goal, by which we mean the phenomenon that is the primary aim of discourse, the strategy is more "political". For example, a strategic aim can be the lowering of income differences, in which case income support is the instrument by which this strategic aim can be achieved. Once again, such strategic rationality can demand its own separate discourse.

Communicative rationality. Discourse itself is a tool for the ongoing development of communities as well as societies. It can help individuals find common ground or possible solutions together. As noted, on a

few occasions the need for parallel discourses may arise during a discourse. Even when we have the staircase, it does not mean that we must stick to all its steps. Instead, the staircase is meant to serve as a tool to discover problems and solutions through real-life communication, thus supporting our problemsolving activities. Consequently, the final step of our staircase is communicative rationality, as defined by Habermas (1984), which may ultimately lead to the creation of a solution among different actors.

Empirical data collection

We applied our framework in practice to analyse the empirical data collected as part of a research project focused on studying the digitalisation of social services in Finland. Digital solutions in the social care field represent one type of governmental information system. However, compared with the health care sector, the digitalisation of social services has advanced at a slower pace. In Finland, the aim is to enable the digital transformation of social services through national digital services, or Kanta services, that transfer client data between social care and health care organisations and offer clients access to this personal data.

Kanta services are currently used by all health care providers, and their expansion to social care organisations is advancing in multiple stages. Currently in the social care sector, Kanta services are used on a voluntary basis by over 100 public and private organisations. According to a new law on client and patient data, all public organisations offering social services have to start using Kanta services before 2024. For private service providers, the transition period continues through 2026. Although the use of Kanta services is still ongoing among social service providers, most of them use some type of client information system (Jormanainen et al., 2019).

Prior international studies show that digitalisation has significant implications for work practices in the social care context, because it has the potential to change the relationships between social care workers and citizens who need their services (Albuquerque, 2013). The potential for ICT use in the social care context is strong (Parrott & Madoc-Jones, 2008), as digital platforms can improve access to the information that social care workers require to make decisions. Social workers are more likely to use available information systems if they have sufficient ICT skills, meaning the systems in question should be easy to use and the perceived data utility should be high (Carrilio, 2007).

In a social care context, work includes both social and relational aspects. On the one hand, this includes coordinating with other welfare services and making the state more responsive to the needs of its citizens (Parton, 2008). On the other hand, it also refers to the interaction between a client and a social worker that is influenced by complex internal and external forces (Tosone, 2004). Hence, it is especially important to seek the viewpoints of citizens, because their needs in this context may differ drastically from one case to another, given that situations are firmly individual- or family-rooted. Citizens who are in need of social services can face specific life situations that demand the existence of structures that support deliberation but in which active participation may be challenging. This underlines the demand for deliberative constructive communication between different stakeholders – which is central to Habermasian rational discourse and discourse ethics – and for the support of structures and incentives in social care organisations. Thus, we assumed that analysing the empirical data from this particular research project would be especially fruitful when evaluating the framework in practice and understanding its value.

In the research project in question, the participatory research approach was employed to empirically study the digitalisation of social services. This approach emphasises the importance of the public sphere in which people can engage in rational discourse. When people are brought together, they can reflect on their actions together. Through reflection, people may begin to better understand their practices and the conditions under which they practice (Kemmis et al., 2013). This may lead to the legitimacy of the current practices being questioned and, thus, to the innovation of new practices.

Likewise, the participatory research approach emphasises the agency of research participants. Stahl et al. (2011) propose focus groups as one of the appropriate research methods to promote the emancipation of research participants and researchers. Focus groups are especially suitable for studies in which design and execution are derived from the critical approach, because group context offers an opportunity to study how social and cultural knowledge, opinions and meanings are produced.

In the field of information systems, focus groups have been used to, for example, design services and information systems (Kankainen et al., 2012), and to study the digital inclusion of people with disabilities

(Tsatsou, 2020). We perceived that focus groups have the potential to create the public sphere in practice and consequently chose to apply our framework through focus groups.

As part of the research project, three focus groups were organised, with each having their own set of participants. The participants included either parents of children who are on the autism spectrum or professionals offering social services to children with disabilities and their families. Each of the focus groups lasted 60–117 minutes and were organised in 2016 and 2017.

The aim of each focus group was to create a public sphere; a space in which discourse on social services and their digitalisation could emerge. Although each focus group had its own discussion themes, they also had certain similarities. The focus groups were facilitated by the first author, who introduced the participants to the principles of rational discourse, such as sincerity (Lyytinen & Hirschheim, 1988), during the discussion. Throughout the discussion, the facilitator occasionally interrupted the participants to present new themes and remind them about the timetable. The purpose was to enable a natural flow of conversation, even if the setting was planned and guided by the facilitator. Discourse arose when the participants disagreed with or disputed certain claims, as well as when they aimed to reach consensus on a topic introduced by the facilitator. Thus, the facilitator's role made her responsible for guiding the conversation forward while following the guidelines given in the beginning of the focus group session. Hence, it is also probable that her status as a representative of the scientific community had an impact on the dynamics of the focus group sessions. For example, the participants might have wanted to give her a positive impression of themselves, their work or their organisation. Data gathered through focus groups also cannot be classified as naturally occurring; instead, focus groups are perceived as a form of interview.

The first focus group was organised for the parents of children on the autism spectrum. Organising the focus group sessions was preceded by visiting peer groups for parents whose children are on the autism spectrum. The first author also interviewed parents of children on the autism spectrum to increase her understanding of the parents' experiences in general and the role of governmental information systems in them. The invitation to join the focus group session was spread through these connections, the communication routes of a local non-governmental organization representing people on the autism spectrum and their families, as well as through the email list of a local school offering education for children on the autism spectrum. Discussion themes included parents' experiences of public services and governmental information systems, and their ideas for new digital services. To encourage the parents to join the focus group, a simultaneous event was organised for the children of the participants in collaboration with special education students. The purpose was to offer parents the opportunity to join the focus group without having to worry about the care of their children while they participated. Overall, five parents (four women, one man), representing four families from the same city, participated in this focus group. Coincidentally, four of them participated in the activities of the aforementioned local non-governmental organization, while one did not.

The second focus group was organised for professionals who work in a hospital that offers rehabilitation for disabled children and their families. The participants of the focus group were social care and not health care professionals. Some of them participated in the rehabilitation of the children directly, while others had responsibilities related to developing services for children and families by collaborating with stakeholders and advancing information systems to collect customer data. One of the participants was the manager of the other four participants. The participants were selected by the organisation after they had given official research permission for the study.

The third focus group was organised for professionals working in the same municipality in which the participants of the first focus group lived. These professionals worked in a unit that focuses on disability services. In Finland, disability services are considered a subset of social services that are meant for people with disabilities. According to Finnish law, disability services are additional – hence, a person who is entitled to them is also entitled to other social services. Consequently, a family with a child who has a disability can receive services from both a unit that specialises in disability services and a unit that specialises in other types of social services (e.g. child welfare services) if the municipality in question has divided the responsibilities related to different types of services to different units. This was the case in the municipality participating in this study. The focus group session was preceded by receiving official research permission from it.

The participants of the third focus group represented a sub-unit within disability services. They focused on providing social services for children with disabilities and their families. Overall, this focus group had four participants, all women. All participants were social care professionals, and one held a managerial position. As was the case for the second focus group, the participants were selected by the organisation.

Applying the framework to data analysis

Prior sections have introduced the conceptualisation of our framework and the empirical data collection needed to apply it. In this section, we use the framework in practice to analyse collected empirical data.

Analysing the cornerstones of the public sphere

While each focus group targeted a certain stakeholder group, together they included all key stakeholders by representing both parents and professionals. However, some stakeholder groups were not included. For example, no focus group was organised for the children on the autism spectrum, even though they could be considered a key stakeholder group in relation to the digitalisation of social services. This was an intentional decision that was made during the planning phase of the research, because the children themselves are not the ones applying for the social services; hence, they do not use digital mediums to do so. In a different research scenario, it would be essential to engage the children in the discourse.

In the first focus group, the participants appeared to be sincere during the discussion. This was most evident when they disagreed with each other. As they showed their emotions to each other in the midst of heated discussion, they seemed to sincerely be involved in the discussion. This is apparent in the excerpt below:

Parent 1: *“I feel that I cannot say I do not want this service.”*

Parent 2: *“Yes you can.”*

Parent 1: *“I have the impression that if I refuse a service, it will be a question for child welfare services.”*

(The discussion continues on a slightly different topic)

Parent 1: *“It is not true. Maybe you think it is true, but it is not.*”

Parent 3: *“We have done it.”*

Sincerity was less apparent in the second and third focus groups, possibly due to their composition. In the second group, the head of the unit was also a participant, possibly creating a hierarchical relationship within the group. This might explain why the participants often appeared to agree with each other in most parts of the discussion and were careful when voicing the problems they saw within the organisation. The third group also included participants who had different roles in the organisation, even if they all worked on the same team to provide services for children with disabilities.

In the first focus group, transparency was a difficult dimension to analyse because there was no specific information that the participants could either reveal or hide from other participants. This is primarily due to their role of representing citizens who can apply and benefit from social services or use governmental information, but who are not in charge of developing either the policies that guide the social care sector or the information systems that facilitate service delivery. The participants of this focus group were encouraged to discuss their experiences with acquiring social services for themselves and their children, communicating with professionals in the social care sector and using governmental information systems. Hence, throughout the conversation the participants referred to their prior experiences. If other participants did not intuitively agree with or believe them, they shared more details of their experience and background to offer the possibility to understand them better. We interpret this as an example of transparency in action when it comes to discussion that focuses on personal experiences, which no official source can confirm or deny.

Transparency was a relevant issue to analyse in the context of the second and third focus groups, because those participants represented different work roles and, possibly, different types of knowledge about the work, organisation and policies. They might also potentially have had different information sources, depending on their work tasks and education. No evident situations arose in which the participants were not ready to share their knowledge with each other. During the discussions, if one participant only brought

up one aspect of the services, information or organisational policies, the others often spoke about some of the other aspects if they had knowledge on the topic. However, it is difficult to say with certainty whether some participants decided not to share their viewpoints on the topic, which thus prevented the facilitator from capturing a full picture of it.

Analysing the steps towards communicative rationality

In general, the discussion in each focus group was easy to follow and most terms used were either comprehensible in common language or explained with common terms. Hence, there were no problems related to syntactic clarity. Regarding semantic clarity, it needs to be acknowledged that the facilitator did not have first-hand experience with the discussion topics, unlike the participants, all of whom had either personal or professional experience with it. This influenced her facilitation style, in which she asked the participants to clarify some of their statements or to explain the terminology they used during the discussion.

For our analysis of pragmatic clarity, it is important to know that none of the focus groups were instructed to reach one common goal. Instead, they were asked to speak about their experiences and ideas. This might partly explain why the pragmatic clarity of the discourse was sometimes lacking in the first focus group. However, when the topic of digitalisation was brought up, the participants engaged in the discussion in such a manner that made it possible to reach a common understanding. This occurred when many participants agreed on an idea presented by one participant. In the other focus groups, pragmatic clarity appeared to be present most of the time, although some participants strove to redirect the discussion to a new topic.

Truthfulness was one of the most important aspects to consider when analysing these focus groups. Since discussions largely focused on the experiences of the participants, it was important that these were shared truthfully. During the discussions, there were moments in which the facilitator doubted whether or not some statements were true. However, she did not make any claims in this regard. Instead, she asked follow-up questions, which sometimes provoked further discussion among the participants, who were either convinced that the statement was true or questioned it. In some cases, the participants questioned each other's claims before the facilitator could comment on them. In the following excerpt, one of the participants in the second focus group truthfully explained her actions in a given situation. Other participants questioned her response and suggested other solutions:

Faclitator: *"Do clients sometimes send you a regular [non-encrypted] email?"*

Professional A: *"Yes, but I usually call them back."*

Facilitator: *"Is there any way to answer them through email without encryption?"*

Professional B: *"I get a lot of those questions. I have replied to them through email if the question was not too personal. I don't think I do anything wrong if I reply directly."*

Professional C: *"If we consider the data protection act very precisely, one should not answer the email from a client if it is not encrypted."*

Professional B: *"Usually, the questions are at a very general level."*

Professional C: *"If it is somehow possible to understand that the person sending the message is our client, then one should not answer without encryption. Usually, I send back a text message that I will answer them through an encrypted email service...."*

Professional B: *"If I do not answer it, it doesn't feel good for the parent. Their message usually only has a first name, last name and email address."*

Both of the prior excerpts indicate that normative validity was addressed within the focus groups. The one between professionals provided a good example of the creation of new discourse within the main discourse with the aim to define a commonly acceptable behaviour and what the norms should be. The one between parents demonstrates their differing views on societal norms and how this leads to new discourse aiming to find consensus on those norms, despite failing to achieve one.

As the discourse was settled in the focus group format, its instrumental rationality was largely guided by the facilitator, who introduced the topic of discussion and facilitated participants communication with her

questions. The goal of the session was made clear in the introduction she gave at the beginning of each focus group. Overall, the participants appeared to understand the purpose of the focus groups and were willing to share their opinions, experiences and viewpoints on all topics. The following quote demonstrates how the participants of the third focus group were able to shed light on their work practices through conversation with each other:

Professional 1: *"The recommendation is that you should not send applications via email."*

Facilitator: *"Has someone tried to send them by email?"*

Professional 2: *"I have been here such a short time that I cannot say."*

Professional 3: *"They have to be signed."*

Professional 1: *"Someone may scan it. Sometimes, we get applications which are scanned."*

Facilitator: *"This is exactly what I was thinking about. Do you accept the application?"*

Professionals: *"Yes, yes."*

The facilitator played a central role in ensuring strategic rationality in the focus groups, as she had set the focus group aims. In the first focus group, one objective was to discuss the current state of social services and to consider the opportunities that digitalisation can offer in relation to applying for social services or enhancing the work of professionals. The participants were asked to share their ideas regarding improvements and new innovations:

Parent 4: *"I know parents who cannot fill in the forms to apply for services from Kela. There is a question about challenges in daily lives and they cannot write an answer to it."*

Parent 1: *"There's, of course, situations when digital services cannot help. Non-digital services are needed in addition to them."*

Parent 4: *"Or the service needs to be in the cloud and a client could fill it in with a professional."*

Parent 1: *"Sort of...."*

Parent 4: *"In real time."*

Parent 5: *"If it would be a video chat. With another person."*

Parent 4: *"Or both of you could see the same form on your computers. Both could fill it in at the same time."*

Parent 1: *"So, if this service, in which everything is gathered in one place, is not enough, there could be a help button to reserve a time with a professional."*

The final step in our framework is communicative rationality. The question of whether this step was achieved is hard to answer. Communicative rationality did not appear to be present at all times in any of the focus groups. Each group had moments in which the participants did not want to understand each other. In some situations, the participants shared their personal views, which could be interpreted as an attempt to direct the conversation towards their strategic aims. If this was their goal, they were not successful: The other participants were not interested in the topic and did not comment on it. In contrast, each focus group was able to create solutions, or at least identify options between different actors. The example below demonstrates this in the case of the second focus group:

Professional B: *"In another city, home care workers use smartphones to write notes whenever they visit a family. They record the time and, if they have time, probably write extensively. But at least they write roughly about the visit, maybe a bullet list. That type of system might be good. I should check if it is possible. It would reduce the need for paper notes."*

Professional A: *"We have this work process to speak with the family after each activity to hear the opinions about it from parents and children. If we wrote down notes at that time, it would feel like a natural part of the work process. It would be a good thing. It would release the stress of the worker from writing down the notes afterwards, when there wouldn't be time for it."*

Professional D: *"It could be done with a tablet. Children could also fill it in."*

Discussion

Remarks on applying the framework to data analysis

Our discourse ethical framework for communication gave structure to our data analysis and offered the possibility to discover additional discourses within the conversations taking place in the three focus groups. Although our framework is adapted and modified from Ulrich's (2001b) philosophical ISD staircase, it proposes new elements to it: the three cornerstones of the public sphere. These cornerstones are stakeholder inclusion, sincerity and transparency, and they focus on preconditions of the public sphere that are essential to enabling communicative rationality and rational discourse. Using both, cornerstones of the public sphere and steps towards communicative rationality, it was possible to identify issues that the stakeholder groups found problematic and which provoked discourse among participants. When the discourse was characterised by communicative rationality, it led to designing solutions either digital or social in nature – for existing problems. In some instances, solutions were remarkably similar, even though the focus groups acted independently and had no input from one another.

In terms of information systems' evaluation, development or research, comprehensive stakeholder inclusion should ideally be ensured while designing the discourse setting. This will invite representatives of all key stakeholder groups to engage in discourse. Unfortunately, this was not the case in our sample of empirical data, as the focus group participants were either selected by the organisations they worked for or they decided to join the focus group themselves. However, we were able to analyse stakeholder inclusion in relation to our framework. Our findings revealed that even in the first focus group in which participants are assumed to represent the same stakeholder group and have no authority over one another, rational discourse might be hard to achieve. One the other hand, the second focus group, which had participants representing different organization roles, was able to achieve consensus on topics that initially provoked differing opinions. Based on analysis of these focus group session, it seems that rational discourse is more easily attained when participants are in their professional setting where as participating as a representative of one's personal circumstances. Expressing personal experiences might provoke more intense feelings which may influence other participants in such a way that can be detrimental for having rational discourse. According to our analysis, the facilitator or one of the participants needs to take action to calm the atmosphere in situations like this. If this can be done successfully, communicative action as well as rational discourse can emerge again.

Sincerity is essential for creating a public sphere where communicative action and rational discourse can emerge. Hence, facilitator had encouraged participants of each focus group to be sincere to each other. Although sincerity was difficult to identify in the expressions of participants, when analysed after the focus group had been organised, the analyses of discourse revealed statements and reactions that can be understood to reflect sincerity. This cornerstone of public sphere seemed to be most apparent in the first focus group where all participants represented parents of children with disabilities. Because sincerity was less apparent in the focus groups for professionals, it provokes a question if the rational discoursed only seemed to be achieved in their groups more easily than in the first focus group whereas in reality participants retained from expressing some of their conflicting arguments in favour of achieving consensus during the focus group session.

Alongside sincerity, transparency is essential for creating public sphere. According to our analysis transparency might be more important element when public sphere is created to provoke discourse on topics that require professional understanding or knowledge on particular topic. In the first focus group, the topics related to individual experiences of the participants and their ideas related to digitalisation of social services. Hence, they did not seem to have apparent reason to upheld information or knowledge from each other. In the second and third focus group situation was different because participants might not want to share work related information or knowledge with others. However, the analysis did not reveal a situation in which participants would have been retaining information or knowledge.

Analysing the data gathered from the focus group session through steps towards communicative rationality enabled identifying discourses that emerged during the sessions. When the discourses were characterised by communicative rationality, they led to designing solutions either digital or social in nature – for existing problems. In some instances, solutions were remarkably similar, even though the focus groups acted independently and had no input from one another.

In the parental focus group, discourses emerged that were related to applying for services, refusing services and desires for new digital services. Communicative rationality was most apparent in this focus group when the discussion was directed towards the possibilities offered by digitalisation. Parents assumed that digitalisation would solve certain challenges they faced in finding information about social services and interacting with social care professionals. This was largely due to their expectation that digital solutions related to applying for social services would make it transparent what types of services exist and who is eligible to receive them. Among the professionals in disability services who are responsible for reviewing these applications, no objection was raised about the idea of digitalising the application process, even if they were not particularly interested in new information systems. It is likely that they assumed that a digital application process would not alter their work practices, because paper applications are already processed digitally. Hence, the parents and professionals seemed to agree that the digitalisation of application processes for disability services is desirable.

In both sessions with professionals, we were able to identify similar types of discourse in which communicative rationality was apparent. During these discourses, the participants shared their work practices and debated their acceptability in relation to the values that they perceived as important in their work, as well as the legal requirements that they are expected to follow.

These discourses focused on a particular problem – how can professionals protect the personal data of their clients while communicating with them through email? The participants aimed to find a solution that would match their conception of doing their work well and their ability to perform it in practice. As a result, most of the participants favoured workarounds with other tools. None of them proposed any changes to the technical solution that was currently in use to communicate with clients. This might be due to the fact that the discourse was not seen as a forum to influence the development of such tools. Nevertheless, the discourse revealed its value by identifying a situation in which the existing information systems conflict with the social and relational aspects of work in social services. We would argue that these discourses demonstrate that information systems encapsulate legal structures, cultural norms and designer preconceptions in their design and users have only limited possibilities to adapt them to their particular needs or specific situations.

Key takeaways for using the framework in future

While this study focused on applying our ethical framework for communication to analyse data gathered through focus group sessions after these sessions were held, it has also revealed the potential of our framework for designing such sessions or another type of situations where communicative actions and rational discourses can emerge. For this purpose, the cornerstones of public sphere, comprehensive stakeholder inclusion, sincerity and transparency, are most important to consider.

Comprehensive stakeholder inclusion has integral part in planning and organising a public sphere. One needs to consider the goals for organising a public sphere – is it to increase understanding and collecting information about experiences and needs of certain stakeholder groups as was the case in this study. If that is the case, it might be best to follow similar approach to us and organise separate sessions for different stakeholder groups to reduce anxiety that participants might feel toward one another. However, as was noted through our analysis, creating public sphere for representatives of same stakeholder group can be challenging and might require facilitation. This being said, achieving certain goals would require organising public sphere between representative of different stakeholder groups. We suspect that during inter-group communication, rational discourse could be even more difficult to achieve. When planning such situation, the dynamics of inter-group communication should be considered, and the facilitator should be prepared to take active role in guiding the participants toward communicative action and rational discourse.

Sincerity is also an issue that should be outlined and agreed upon before entering the discourse. Sincerity can be promoted by, for example, rules that the discourse participants agree upon. Koskinen et al. (2022) tested this approach in discourse ethical workshops to decide consent management systems for public sector information use. Commonly agreed-upon rules did create an atmosphere where people seemed to be more open and aimed for consensus, and thus offered pre-discourse support for the workshops.

Transparency plays a relevant role in choosing people to represent key stakeholders. Depending on the situation, different people can be offered transparent information that is essential for meaningful discourse. Sometimes, transparency requires specific understanding or skills, such as technical knowledge. Hence,

this might set a demand to organise focus groups in which participants have a specific background. In other instances, a sufficient level of transparency can be achieved by giving extra attention to ensuring that participants are adequately informed.

Another challenge to achieving transparency relates to preserving information confidentiality, which may prevent the sharing of a particular piece of information with other participants in the conversation. Transparency can also take on different forms in different situations, as noted in our analysis of the focus group for the parents of children on the autism spectrum.

Finally, our data analysis demonstrated that not all elements of the framework are appropriate in each situation. The focus groups' topic as well as the guidelines given by the facilitator directed the session towards issues that are based on participant experiences instead of arguments that could be scientifically justified. Hence, we omitted one of the elements – scientific validity – when analysing this data set. However, scientific validity can be an important part of the analysis of another data set which includes arguments based on objective measures or scientific research.

Conclusions

In this study, we focused on developing a framework that can be used as a tool to design and analyse the discourse on digitalisation in the context of governmental information systems. This framework was developed by conceptualising prior research on Habermas's theories in the information systems field. We applied the framework by analysing the empirical data gathered from focus groups representing different stakeholder groups in governmental information systems.

Our analyses have shown that creating a public sphere space in which to discuss digitalisation can generate ideas to advance digitalisation when the discourse is facilitated towards this aim. This requires the three cornerstones of the public sphere – stakeholder inclusion, sincerity and transparency – to be proactively considered while planning the facilitated conversations (e.g. focus group sessions).

In terms of information systems' evaluation, development or research, comprehensive stakeholder inclusion should ideally be ensured while designing the discourse setting. This will invite representatives of all key stakeholder groups to engage in discourse. Unfortunately, this was not the case in our sample of empirical data, as the focus group participants were either selected by the organisations they worked for or they decided to join the focus group themselves. However, we were able to analyse stakeholder inclusion in relation to our framework. Our findings revealed that even a focus group in which participants are assumed to represent the same stakeholder group and have no authority over one another, rational discourse might be hard to achieve. Therefore, during inter-group communication, rational discourse could be even more difficult to achieve. Future research can study the dynamics of inter-group communication and the challenges related to organising the public sphere setting for it.

Limitations of this study relates to specific research context governmental services in Finland, relatively small sample size of three focus groups and the inability to choose individual participants for the focus group session. Further research is needed to evaluate how the framework can help prepare focus groups to enable creation of public sphere. The framework itself might be suitable for preparing public sphere and analysing discourses on digitalisation in other contexts than governmental services. Hence, future research can expand the scope of this framework to other spheres of society, adjusting it if necessary.

It would also be of interest to study the possible benefits of using this framework in a governmental information systems development project. Applying the framework in practice by analysing existing data emphasised the different nature of cornerstones and steps in our framework. Cornerstones have the potential to proactively support creating public sphere and thus enable communicative action and rational discourse. However, the steps are more suitable for analysing the discourse and its possible emergence. Depending on the situation, such analyses might be desirable throughout the development or implementation of ICTs in the governmental services context. It could help project participants and managers identify issues that need to be consider throughout the project, or even reveal risks to the project's success. Hence, it would also be of interest to study the possible benefits of using this framework in a governmental information systems development project.

Acknowledgements

We wish to acknowledge the anonymous reviewers for their thoughtful and knowledgeable comments which were most valuable for improving this article. We also wish to thank The Foundation for Economic Education for supporting this study.

References

Albuquerque, C. (2013). The study of social needs as a strategic tool for the innovation of the social care sector: The contribution of new technologies. In Cruz-Cunha, M., Miranda, I. & Gonçalves, P. *Handbook of research on ICTs for human-centered healthcare and social care services* (pp. 347–365). IGI Global.

Blomgren, M. (2007). The drive for transparency: Organizational field transformations in Swedish healthcare. *Public Administration*, *85*(1), 67–82.

Carrilio, T. E. (2007). Using client information systems in practice settings: Factors affecting social workers' use of information systems. *Journal of Technology in Human Service*s, *25*(4), 41–62.

Cukier, W., Bauer, R., & Middleton, C. (2004). Applying Habermas' validity claims as a standard for critical discourse analysis. In Kaplan, B., Truex, D., Wastell, D., Wood-Harper, T. & DeGross, J. *Information systems research* (pp. 233–258). Springer.

Gillingham, P. (2014). Electronic information systems and social work: Who are we designing for? *Practice*, *26*(5), 313–326.

Habermas, J. (1984). *The theory of communicative action, volume 1*. Polity Press.

Habermas, J. (1987). *The theory of communicative action: Lifeworld and systems, a critique of functionalist reason* (Vol. 2). Polity Press.

Habermas, J. (1996). *Between facts and norms: Contributions to a discourse theory of law and democracy*. Polity Press.

Hansen, S., Berente, N., & Lyytinen, K. (2009). Wikipedia, critical social theory, and the possibility of rational discourse. *The Information Society*, *25*(1), 38–59.

Heath, J. (2014). Rebooting discourse ethics. *Philosophy & Social Criticism*, *40*(9), 829–866.

Herrigel, G. (2020). Industrial possibilities and false necessity: Rethinking pro-duction, employment and labor dynamics in the global economy. *Socio-Economic Review*, *18*(2), 599–624.

Hirschheim, R., & Klein, H. K. (1989). Four paradigms of information systems development. *Communications of the ACM*, *32*(10), 1199–1216.

Hobbes, T. (1651). *Leviathan or the matter, forme and power of a common-wealth ecclesiasticall and civil*. Andrew Crooke.

Jormanainen, V., Rötsä, M., & Parhiala, K. (2019). Kuntien sosiaalitoimien sähköiset asiakastietojärjestelmät vuonna 2017. *Finnish Journal of eHealth and eWelfare, 11*(1-2), 125–138.

Kankainen, A., Vaajakallio, K., Kantola, V., & Mattelmäki, T. (2012). Story-telling group–A co-design method for service design. *Behaviour & Information Technology*, *31*(3), 221–230.

Kemmis, S., McTaggart, R., & Nixon, R. (2013). *The action research planner: Doing critical participatory action research*. Springer Science & Business Media.

Knaapi-Junnila, S., Rantanen, M. M., & Koskinen, J. (2022). Are you talking to me? – Calling laypersons in the sphere of data economy ecosystems. *Information Technology & People*, *35*(8), 292–310.

Knox, C. C. (2016). Public administrators' use of social media platforms: Over-coming the legitimacy dilemma? *Administration & Society*, *48*(4), 477–496.

Koskinen, J., Knaapi-Junnila, S., & Rantanen, M. M. (2019). What if we had fair, people-centred data economy ecosystems? In *2019 IEEE Smart World, Ubiquitous Intelligence & Computing, Advanced & Trusted Computing, Scalable Computing & Communications, Cloud & Big Data Computing, Internet of People and Smart City Innovation (Smart-World/SCALCOM/UIC/ATC/CBDCom/IOP/SCI)* (pp. 329–334). IEEE.

Koskinen, J., Knaapi-Junnila, S., & Selkälä, T. (2022). *Kuntalaisten OmaDatan käytön suostumuksenhallinta palveluiden tuottamisessa* [Consent management when providing services based on the use of mydata of the citizens]. Turun kaupunki, tutkimusraportteja 1/2022. https://www.turku.fi/sites/default/files/atoms/files/tutkimusraportteja_1-2022.pdf

Kujala, S. (2008). Effective user involvement in product development by improving the analysis of user needs. *Behaviour & Information Technology*, *27*(6), 457–473.

Lessig L. (1999). *Code and other laws of cyberspace*. Basic Books.
Locke, J. (2005). *Second treatise of government* (D. Gowan, Ed.). (Original work published 1690). http://www.gutenberg.org/files/7370/7370-h/7370-h.htm
Lovat, T., & Gray, M. (2008). Towards a proportionist social work ethics: A Habermasian perspective. *British Journal of Social Work*, *38*(6), 1100–1114.
Lyytinen, K., & Hirschheim, R. (1988). Information systems as rational dis-course: An application of Habermas's theory of communicative action. *Scandinavian Journal of Management*, *4*(1–2), 19–30.
Mingers, J., & Walsham, G. (2010). Toward ethical information systems: The contribution of discourse ethics. *MIS Quarterly*, *34*(4), 833–854.
Moor, J. H. (1985). What is computer ethics? *Metaphilosophy*, *16*(4), 266–275.
Mumford, E. (1995). *Effective requirements analysis and systems design: The ethics method.* MIT Press.
Parrott, L., & Madoc-Jones, I. (2008). Reclaiming information and communication technologies for empowering social work practice. *Journal of Social Work*, *8*(2), 181–197.
Parton, N. (2008). Changes in the form of knowledge in social work: From the "social" to the "informational"? *British Journal of Social Work*, *38*(2), 253–269.
Patelli, L., & Pedrini, M. (2014). Is the optimism in CEO's letters to shareholders sincere? Impression management versus communicative action during the economic crisis. *Journal of Business Ethics*, *124*(1), 19–34.
Rawls, J. (1999). *A theory of justice*. Belknap Press of Harvard University Press.
Roberts, J. M. (2012). Discourse or dialogue? Habermas, the Bakhtin Circle, and the question of concrete utterances. *Theory and Society*, *41*(4), 395–419.
Ross, A., & Chiasson, M. (2011). Habermas and information systems research: New directions. *Information and Organization*, *21*(3), 123–141.
Salam, R. (2003). Habermas vs. weber on democracy. *Critical Review*, *15*(1-2), 59–85.
Stahl, B. C. (2012). Morality, ethics, and reflection: A categorization of normative is research. *Journal of the Association for Information Systems*, *13*(8), 636–656.
Stahl, B. C., Tremblay, M. C., & LeRouge, C. M. (2011). Focus groups and critical social is research: How the choice of method can promote emancipation of respondents and researchers. *European Journal of Information Systems*, *20*(4), 378–394.
Tosone, C. (2004). Relational social work: Honoring the tradition. *Smith College Studies in Social Work*, *74*(3), 475–487.
Tsatsou, P. (2020). Digital inclusion of people with disabilities: A qualitative study of intra-disability diversity in the digital realm. *Behaviour & Information Technology*, *39*(9), 995–1010.
Ulrich, W. (2001a). Critical systemic discourse. *Journal of Information Technology Theory and Application*, *3*(3), 10.
Ulrich, W. (2001b). A philosophical staircase for information systems definition, design, and development: A discursive approach to reflective practice in ISD (part 1). *Journal of Information Technology Theory and Application*, *3*(3), 55.
Vitale, D. (2006). Between deliberative and participatory democracy: A contribution on Habermas. *Philosophy & Social Criticism*, *32*(6), 739–766.
Webler, T. (1995). "Right" discourse in citizen participation: An evaluative yardstick. In Renn, O., Webler, T. & Wiedemann P. *Fairness and competence in citizen participation* (pp. 35–86). Springer.
Yetim, F. (2005). A discourse-based meta-communication model for collective sensemaking. In *Proceedings of the Language-Action Perspective on Communication Modeling* (pp. 19–20).
Yetim, F. (2006). Acting with genres: Discursive-ethical concepts for reflecting on and legitimating genres. *European Journal of Information Systems*, *15*(1), 54–69.