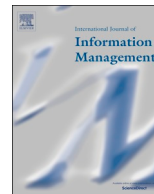




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Opinion Paper

The serendipitous impact of COVID-19 pandemic: A rare opportunity for research and practice

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ABSTRACT

In this opinion paper, I argue that the Covid-19 pandemic, as tragic and disastrous as it undoubtedly is, has also given us a rare opportunity to deeply examine the research and practice of information management in particular and information systems in general. To cope with the pandemic, we have retreated to the digital world and drastically changed the way we work. Yet these very practices can well shape the way we work in the post-pandemic world. Moreover, the pandemic is also a sharp lens through which we can study deep-rooted theoretical issues that otherwise would not have surfaced, or at least remained in the background. My call to the research community is to seize this rare opportunity.

1. Introduction

The Covid-19 pandemic has essentially forced us deep into the digital world. The use of the Internet has skyrocketed, mostly of social medium (Facebook, twitter, messenger) and various platforms for meetings (Zoom, Adobe connect, Skype). While the pandemic has shown us the “good side” of electronic interaction, it has also revealed the “darker” side. My focus in this article, however, is not on the use and abuse of the Internet, particularly of social media. Much has been written about this double-edged nature, as is the case with any technology especially Information and Communication Technologies. Much more will be written. I do not wish to engage in that discussion mainly because this is a never-ending topic and I have no new insights to offer. Instead I will limit myself to reflect on two aspects of the pandemic and the internet. First, it has provided us with an unexpected window of opportunity to see things in a way that we haven’t thought of before. For a thoughtful and insightful examination of this, I refer the reader to the excellent viewpoint piece by [Thapa \(2020\)](#)

Second, if we draw appropriate lessons from the pandemic experience, we can contribute to improve things, or to quote Thapa again “make the world a better place”. Before I delve into the topic, a caveat is in order. Many of the ideas in this piece are distilled from my own research (hence a preponderance of references to my own work) and experience with this lockdown which brought back memories of other lockdowns I have experienced in the past. Like any academic, or any human being, I am shaped by my experiences and thoughts.

The pandemic, or more accurately our experiences in dealing and coping with it through electronic technologies, has implications for

both the design and the use of these technologies. The impact is both on research and practice, especially for information management. In the rest of this short paper, I will elaborate on these impacts and I end with some reflections.

2. Impact for practice

There are at least three areas where the pandemic has impacted practice: information management, work practices and design of technologies.

2.1. For information management

In the Covid-19 world, we interact with others through the electronic media. How should we organize these electronic interactions? The media is a powerful means to share knowledge and people have kept up on the often bewildering barrage of updates, opinions, expert (and in-expert advice) on the pandemic through social media. The other side of the coin is that social media is notorious as a means to spread false news, propaganda and hatred. Facebook is a classic example and in a US Senate hearing, the founder Mark Zuckerberg had to defend the open policy while giving assurances on how the “dark side” can be mitigated. (For a transcript of the hearing, see [Washington Post, 2018](#)). The fundamental question then is this: How should – and to what extent – should and can we moderate the interaction to balance the good and the bad aspects of electronic interaction? Facebook does monitor the postings and has hired more “content moderators” whose job is to go through postings, and based on user complaints, examine postings.

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Their recommendations can lead to tag a post with warning flags or in the extreme case, delete it. This is a positive step, but much lies under the surface that undermines the “good intention” (for an expose of this see [Verge \(2019\)](#)).

2.2. For work practices

How many of the digital practices will carry over to a post-pandemic world and how should we integrate these practices into day-to-day work life as we know now? That the pandemic has forced us to change the way we work is beyond doubt. We work from home, meet virtually, teach online and our academic conferences are being held virtually. We may chafe at this enforcement and maybe champing at the bits to get back to face-to-face and physical way of doing things. At the same time though, we have discovered the upside of digital interaction. For some of us, especially academics, working from home is a perfectly viable option - online teaching, electronic meetings and virtual conferences basically cover all important aspects of academic life. These are likely to be part of post-pandemic work life at least blended with face-to-face parts (blended conferences may become the norm in the future).

2.3. For design

How can we design interaction technology and platforms that would enable us to implement information management approaches explored in this section? What are the limits to design? I will try to give some answers in the next section.

3. Impact for research

The impacts for practice discussed in the section above provide avenues for research. All three issues are tightly interlinked.

3.1. Designing interactions and technologies

A “How should” or “how can” question is answered by “This is how”. This knowledge is best created through a design approach which generates at the very least what [Van Aken \(2004\)](#) calls “Field-tested and grounded technological rules”. In the IS field, Design Research (DR)- or Design Science Research to use [Hevner, March, Park, and Ram's \(2004\)](#) term - generates design principles. The essence of DR is to generate knowledge through actually designing artifacts and evaluating their usefulness. A form of DR, termed Action Design Research – ADR – ([Sein, Henfridsson, Puroo, Rossi, & Lindgren, 2011](#)) calls for designing artifacts in an actual organization and intervening by implementing and evaluating it in situ. ADR is carried out in close collaboration between researchers and practitioners thus creating “Mode 2 knowledge” (knowledge created in the very context where it will be used). DR is not “atheoretical tinkering” – the design and intervention is firmly grounded in theory and concepts. That brings us to the basic question that we as researchers need to answer in providing guidelines for information management stated above. On what theoretical premise can we (dare I say, should we) organize electronic interactions. There are a plethora of theories that can provide us with the premise especially in institutional logics (see [Wahid & Sein, 2013](#)) and communication theory (inspired by Habermas) and so on. The second issue – finding a balance between moderating and freewheeling discussion on social media – can be viewed as a dialectic situation. In the Hegelian view, a dialectic situation arises when two viewpoints, termed thesis and anti-thesis are equally defensible but may be opposite thus leading to tension. In the context of moderating social media content, the thesis can be framed through the logic of control while the anti-thesis can be framed as the logic of free speech. Both can be viewed from the “good” side and the “bad” side of social media. Simply framing this as a

dialectic situation is but half the story. How such situations get resolved is perhaps the more interesting half. Whether either the thesis or anti-thesis “wins” or there is a synthesis it is a compromise, is one way of looking at it. Framing the dialectics not as opposites (the Hegelian perspective), but as complimentary (the Dao-ist perspective) is an alternative way (See [Moe, Newman, & Sein, 2017](#)). Another dialectic situation arises in the tension between privacy and the need for surveillance. An effective way of preventing, or at least containing, the spread of the virus has been contact tracing. This requires surveillance of the citizenry. How much privacy are we willing to give up for our own good – or for common good?

In short, the IS discipline has a plethora of theoretical premises to build our work upon in trying to make sense of the pandemic world.

3.2. Explaining use of technology

A more fundamental issue is this: What mechanisms can explain the huge uptake of electronic communication? One good lens is “affordances” ([Thapa & Sein, 2017](#)). Affordances are the action possibilities of a technology for a user. These affordances that arise in a socio-cultural-political context need to be perceived and then actualized to give the desired outcome. Facilitating conditions and conversion factors are needed to actualize the affordances. Users, including those groups who were reluctant to use the Internet are discovering what it can do for them (or to state it differently, what action possibilities does the Internet offer to them?) There is a sizable group of the population who simply won't use the internet because they see no need for it and see how people use them for what they term “frivolous” activities (such as chatting and posting useless stuff on Facebook). Clearly the pandemic has shown them that, if not anything else, the Internet technologies (meeting platforms for instance) enabled them to keep in touch with near and dear ones. For want of a better word, let's label this affordance “connectability”. Can this insight help us to (a) move the group of “non-users by choice” to users? (b) What facilitating conditions and conversion factors need to be provided to help the users perceive and actualize this affordance of “connectability”?

3.3. Understanding new and old concepts

The notion of “connectability” itself needs to be examined further. We need to delve deeper into what does this affordance itself afford? (Affordances are interconnected – as a Trajectory, or web, or as cascades – where the perceiving and actualizing of one affordance leads to the discovery, perception and actualization of another affordance. At some stage, this interconnectedness leads to the fulfillment of a core need – or a higher order need. This can be framed as allowing one to live a life that one chooses to live and one that values (the concept of [Sen's \(2001\)](#) “freedom of choice”).

A term that the pandemic has made universal is “social distancing” another effective measure to contain the spread of the virus. On the surface, the term is a misnomer. The “one meter distance” is a physical measure, not a social one. Are the two the same? Perhaps not. Physical distancing does affect the social, or can. The saying “out of sight, out of mind” indicates that. There is another saying though “absence makes the heart grow fonder”. What we have observed is both at the same time. The huge increase in the use of meeting platforms, especially for personal reasons, such as meeting family and friends regularly over Zoom, is ample evidence that we are in fact communicating more than before the pandemic. The question though is this meeting over the electronic medium the same as a face-to-face meeting? I am not referring to media richness. I am referring to a more fundamental issue – the role of the body in communications inspired by the work of the French philosopher Maurice Merleau-Ponty and particularly the concept of corporeity (For a tour through his work, see [Steinbock et al., 2007](#)).

This is a rich vein for research.

Finally, what values or choices have this use of the electronic medium during the pandemic actually fulfilling? Is it a new form of connection or a “digitization” of something that has always been there – perhaps even primordial? Is the increase in use simply a time-and-place-and-medium shifting of practices and habits that are “normal”?

4. Reflections

The answer to the last question may provide us with a pointer to whether we will enter a vastly different post-pandemic world than the one we would have left behind? The poem “The Great Realization” by Tom Roberts on YouTube (Roberts, 2020) that went viral (an unfortunate connection these days) is optimistic – that we will enter a new world and we will prefer it to the one we left behind. The Indian writer and activist Arundhati Roy poses this as a question framing the pandemic as a “portal” where it is our choice to decide on which side we emerge after the pandemic – the world we left behind, or a new world (Roy, 2020) What is likely is that it won’t be either or. As I posited above, many of the practices we are used to in pandemic days, such as virtual meetings and work from home will get integrated into “normal work” as we know now.

These are issues that will be settled by discourses that are far broader than information management or technology per se. Our field though can be an important voice in these discussions. After all, the materiality of information technology (specifically the internet and even more specifically, the social media) made the Covid-enforced digital world possible. It was the base on which the broader questions are discussed. The challenge facing us is succinctly captured in an editorial for a special issue in Information Systems Frontier: being (more) human in a digitized world (Seetharaman et al. forthcoming).

It is undeniable that many, if not all, of the issues I raised in this note already existed. But the pandemic has magnified them and thus provided us with a magnifying glass to peer into the depths of these issues. I concur with Thapa that is an opportunity given to us by this devastating tragedy. Let us seize it.

Author statement

As the sole author of the paper, I contributed to all aspects of the paper.

Appendix A. Supplementary data

Supplementary material related to this article can be found, in the online version, at doi:<https://doi.org/10.1016/j.ijinfomgt.2020.102164>.

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