Information Practices Meet Lifelogging Technologies: Towards A Successful Multimethod Research Framework

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ABSTRACT
Information Practice research emphasises on contextual factors such as the situation, social roles, collaborators, or communications of information behaviour. This wider scope allows us to gain enriched, deeper, and complex factors such as the situation, social roles, collaborators, or Information Practice research and surveys for a long time. The typical research method for getting holistic view of information practices in various contexts has been interviews. Meanwhile, a range of wearable devices have become commodity and collecting a large amount of personal lifelog data has become much easier than before. On the other hand, the researchers who are familiar with qualitative methods and computational methods do not often communicate, although they are likely to have common research agenda.

This proposed panel provides a unique opportunity to invite panellists from the two research communities, and discusses how lifelogging technologies may (or may not!) contribute and transform information practice research. The panel will also involve the audience in sharing their personal or scientific experience with lifelogging technologies, or their expectations or concerns regarding the use of lifelogging technologies in their research. Outcomes from the panel discussion should yield some clear pointers that can facilitate multimethod research in Information Practices.

Keywords
Information Practices, Multimethod Research, Lifelogging, Wearable Devices

INTRODUCTION
The typical research method for getting holistic view of information practices in various contexts has been interviews and surveys for a long time. These qualitative methods, however, are often criticized that the data gathered in the study are not exactly what the participants did in real life, regardless there are many difficulties to gather data, such as taking a long time, and asking researchers and participants to act “very well” in the research. Diary method (Bartlett & Milligan, 2015) or PhotoVoice (Wang & Burris, 1997) have also been used in the researches of various kind of human behaviour. These methods are tough work for the participants, though they are better ways to gather data of people’s real life.

Recent years, the number of research using logs of social media, such as Facebook and Instagram, are growing up rapidly. These studies, however, seems to use media studies rather than information practices research. Therefore, the researches using log of social media focus on not everyday life information practices but revealing the feature of social media itself. In addition, it is commonly said that social media does not describe what people exactly think, because people select something that they think OK to show to others among their activities when they upload to social media.

More recently, a workshop on lifelogging devices was successfully held by the current proposers at iConference (Joho, et al., 2016a). In this workshop, participants had an opportunity to learn and play with various wearable devices. The workshop also had two case studies of lifelogging technologies: one group was undergraduate students (Nagaoka, et al., 2016), and another group was elderly people (Joho, et al., 2016b).

Both case studies demonstrated the usefulness and possibility of using wearable devices to capture long-term everyday life behaviour in digitised form. The studies also presented a light-weight approach to lifelogging with a single device as well as intensive approach with multiple devices. Both approaches allowed researchers to observe individual differences in their behaviour. Also, undergraduate students were able to analyse their own data to gain insight into their daily activities, formulated a new goal to improve their life quality, and assess whether such a new plan worked or not. These findings motivated the current proposers to suggest a follow up panel discussion at the ASIST Annual Meeting so that further discussions can be made for the research methods in Information Practices.

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OVERVIEW OF ISSUES TO BE DISCUSSED
This panel mainly discusses the following key issues towards the construction of successful multimethod research framework in Information practices.

- Strength and weakness of current information practice research paradigm
- Opportunities and limitations of lifelogging technologies in data collection and analysis
- Contributions of qualitative and quantitative data in information practice research

THE PANELISTS AND THEIR CONTRIBUTIONS

Hideo Joho, University of Tsukuba
Hideo Joho is an associate professor in Research Center for Knowledge Communities, Faculty of Library, Information and Media Science, University of Tsukuba, Japan. Dr. Joho is also a visiting scholar at National Institute of Informatics (Japan) and RMIT (Australia).

Dr. Joho is interested in cognitive and affective interaction between users and search systems, involving behavioural analyses, user modelling, and user studies.

Dr. Joho will be the moderator of the proposed panel discussions, while presenting views from computational approaches based on his experiences in both laboratory-based user studies and recently performed long-term fieldwork of lifelogging exercise with undergraduate students.

Cathal Gurrin, Dublin City University
Cathal Gurrin is a senior lecturer at the School of Computing, at Dublin City University, a visiting researcher at the University of Tromso and a principal investigator at the Insight Centre for Data Analytics.

Dr. Gurrin is a renowned lifelogger and leading lifelog researcher (Gurrin, et al., 2014). He and his colleagues have developed a number of lifelog data collection and analysis systems over the last decade.

Dr. Gurrin will show some of the systems developed by his team to demonstrate the real examples of lifelog data collected by various wearable devices. Dr. Gurrin also shows the research dataset for lifelogging research, which was recently constructed in the context of NTCIR Lifelog task. Finally, Dr. Gurrin will discuss both opportunities and limitations of lifelogging technologies, as well as their future directions.

Jannica Heinström
Jannica Heinström is a senior lecturer in Information Studies at Åbo Akademi University, Finland, and a docent at the University of Borås, Sweden. Presently Dr. Heinström is employed as a senior researcher in the ARONI project at the University of Tampere (2016-2018). ARONI (Argumentative online inquiry in building students’ knowledge work competences) is an interdisciplinary project funded by the Academy of Finland.

Her research interests lie in psychological aspects of information interaction, such as personality, motivation and emotion.

Dr. Heinström will discuss challenges in using conventional methods such as interviews and surveys for studying information practices. A recent study investigating young people everyday life information practices by interviews revealed various ways that respondents interpreted survey statements. This poses a severe challenge to validity. Surveys and interviews also cannot capture what respondents actually do, only what they say they do. Surveys and interviews additionally rely on memory, which may not be accurate. Life-logging devices provide many opportunities that may address these challenges.

Mamiko Matsubayashi
Mamiko Matsubayashi is Assistant Professor in Faculty of Library, Information and Media Science, University of Tsukuba.

Her research interests lie in social constructivism for understanding information practices of researchers. She is trying to understand such as the relationship between information use/sharing and research activities.

Mamiko Matsubayashi mentions two points as follows: 1) the comparison of diary method and to gather using life-logging devices in the researches of information practices of researchers, 2) are there any way of discussing social-constructive aspects of information practices, using a massive amount of lifelog data.

STRUCTURE OF THE PANEL SESSION
We’re currently planning to structure the proposed panel session in the following manner.

Introduction (5 min)
The moderator briefly introduces the aim and structure of the panel, followed by the introduction of panellists

Strength and weakness of Information Practice research methods (20 min)
Dr. Heinstrom and Matsubayashi discusses the strength and weakness of current information practice research methods by reflecting their own studies and others

Opportunities and limitations of lifelogging technologies (20 min)
Dr Gurrin and Joho discusses the opportunities and limitations of lifelogging technologies by demonstrating real lifelogging data collected and analysed by them

Contributions of qualitative and quantitative data (30 min)
All panellists express their perspectives of how conventional qualitative methods and emerging lifelogging technology-supported quantitative methods can contribute to the multimethod research of information practice.

**Discussions with audience (10 min)**

Free discussions with audience members who can share their personal or scientific experience with lifelogging technologies, or their expectations or concerns regarding the use of lifelogging technologies in their research.

**Wrap-up (5 min)**

The moderator summarises the outcomes of the panel discussions.

**EXPECTED OUTCOMES**

By the end of the panel discussions, the following outcomes are expected.

- Panellists and audience members will share the basic understanding of information practice research and lifelogging technologies.
- Panellists and audience members will learn the tools and devices available for the collection and analyses of lifelogging data.
- Panellists and audience members will have a better idea about how and when to apply lifelogging technologies in their information practice research.

**REFERENCES AND CITATIONS**


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