

Understanding Disaster Related Information Seeking Behaviour Using Oral Documents

Introduction

Earthquakes and related natural disasters are always a possibility for anyone who lives or works in areas along the Pacific Rim, so called, “Ring of Fire” (Weisenfeld, 2012). Taking the case from the 2011 Great East Japan Earthquake and Tsunami, it triggered powerful tsunami waves that reached heights of up to 40.5 meters (133 ft.) in Miyako in Tohoku’s Iwate Prefecture, on March 11, 2011, at 14:46:24 JST (UTC +09:00). It reached a magnitude of 9.0 on the Richter scale and lasted for 6 minutes; it is considered the fourth most powerful earthquake in the world since modern recordkeeping began in 1900. Nearly 16,000 people were reported dead and 2,500 people missing after the disaster, and more than 6,200 million people were affected in some way.

The Great East Japan Earthquake of 2011 was one of the largest disasters ever recorded in Japan’s history and destroys many critical infrastructures. Immediately after the catastrophe happened, people experience information disruption within their community, as well as from the outside world. This inability to access information caused by physical or virtual barriers instigates instant isolation (Quarantelli, 1954; Arai, 2013). The lives of many people are altered forever when they are caught up in an unexpected disaster in their physical environment. Formally, we can define such disaster event as a temporally acute, unanticipated natural or man-made disaster (Imran et. al., 2013).

Disaster situations, throughout history, have demonstrated that people rise to severe challenges to help others, often through remarkable innovations and adaptations of their abilities and resources to meet needs (Tierney, Lindell and Perry, 2001; Kendra, Wachtendorf, and Quarantelli, 2003). In some settings, citizens and governments can seek to prepare for the occurrence of crisis events, for example, people are trying to find out the duration of the disaster, if family members are okay, maybe even finding a loved one who got lost in the catastrophe, and planning for earthquake response in geologically active areas. Such planning can involve response preparation for individual citizens and emergency services upon characteristics of information sources, messages, transmission channels, and receivers (Drabek, 1986; Lindell & Perry, 2004; Sellnow & Seeger, 2013; Tierney, Lindell, and Perry 2001). Unfortunately, however, detailed such plans are, the exact response required, will be unknown, and each event involves unique circumstances. Two things that are certain though are the response and timely collection of relevant information. The response needs to be prompt, often very prompt. Thus, appropriate collection, collation and distribution of relevant information to all those caught up in a disaster event is also important. Those are essential to limiting immediate distress, suffering and loss of life, and potentially the long-term effects on individuals and their environment. Accordingly, this research can provide detail accounts on information needs, sources, and channels of information seeking behaviour during disaster based on oral documents.

Oral Documents as Data Sources

Apart from the concept of information seeking behaviour, we need to know what data sources that we will use. With increasingly pervasive information and communications technology (ICT), the people’s attention to disaster situation is high. People need the disaster information to overcome the problem that might happen.

Therefore, people often get this information from online activities. The amount of research has investigated information-seeking behaviour across a social networking service or on-line activities (Tapia, A., et. al., 2011). Furthermore, researcher tends to analyse disaster information propagated through the Twitter network with the purpose of assessing the reliability of Twitter as an information source. Their analysis shows that the propagation of tweets that correspond to rumours from tweets tend to be questioned (Mendoza et. al., 2010). It leads us to say that social media data can also be problematic. For example, a United Nations study of the potential of social media, “While they (social media and microblogging) make available information that would not have emerged otherwise, they pose a serious challenge regarding authentication. Validation is a fundamental issue in the further use of social media in situations of conflict and disaster” (Coyle, et. al., 2009).

In this study, we use different data sources. There is another resource than online or social networking sites data that we are known as oral documents. Turner (2010) defined oral documents as evidence or information about both specific content and characteristics embedded in action(s) essential to furnishing that content via word of mouth spoken in the presence of another. The documents provide a major form of data. Most qualitative research entails analysing texts. Documents comprise one type of text whose form, content, purpose, accessibility, visibility, utility, legitimacy, and consequences, can raise intriguing questions. These documents enter research in multiple ways that reflect everyday life (Charmaz, 2014; Plummer, 2001).

On the other hand, a small number of studies have investigated information-seeking across all available sources of information such as oral documents during a disaster or on the channels that people use to secure information (Fu et. al. 2010; Priest et. al., 2006; Quarantelli, E L., 1990). Given that, we specifically consider the ways in which oral documents mediate our vision and understanding of disaster rather than using online arenas. This new sources offered fascinating echoes of the earlier earthquake and insight of the earlier earthquake.

Future Work

In our preliminary findings, we prospect oral documents from local governments, power companies, news media, and local people published after the 2011 Great East Japan Earthquake and Tsunami strikes. After the open coding process, we analyse 143 people’s testimonies. We aim to collect more than 1,000 people’s testimonies. We want to discuss more on ISIC’s doctoral workshop:

1. For more challenge on information seeking behaviour study in disaster area, what method that suits best to analyse this special phenomenon?
2. Could we add more oral documents that represent different people behaviour such as more information about location, timing, and disaster type?
3. Due to the complex nature of oral documents written in Japanese, we had to examine the documents for many times. Inconsistent coding about information seeking behaviour in disaster, might have affected the actor descriptions of their event descriptions.
4. Since data collection took place in the collecting documents and input to the system in the lab, there were some limitations. What is the best way for defining the real situation naturally?

Keywords:

The great east Japan earthquake, information seeking behaviour, oral documents, crisis informatics

Short CV

Contact Details

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I. Education

UNIVERSITY OF TSUKUBA Tsukuba, Ibaraki / Japan
Ph.D. Candidate, September 2015 – Present
Graduate School of Library, Information and Media Studies

UNIVERSITY OF TSUKUBA Tsukuba, Ibaraki / Japan
Master Degree, August 2015
3.94 of 4.00
Graduate School of Library, Information and Media Studies
“Understanding Disaster Related Information-Seeking Behavior Using Oral Documents.”

UNIVERSITAS INDONESIA Depok, West Java / Indonesia
Bachelor Degree, February 2013
3.52 of 4.00
Department of Library and Information Science
“Supporting Activities Preservation Program to Fulfil Public Libraries Needs
on the Great East Japan Earthquake and Tsunami in Japan.”

II. Work Experience (notes: start with the most recent—please highlight the experience that strongly relevant to the positions that you are applied for)

MITSUBISHI RESEARCH INSTITUTE

Chiyoda, Tokyo / Japan

Oct 2015-Present

Graduate Research Assistant

- Research about how whole wide a national archive helps local governments' archives activity.
- Research about how national archives and other organizations gathering oral histories.

PT TECHBATOR INDONESIA

South Jakarta, Jakarta / Indonesia

Feb-May 2013

Digital Librarian and Content Knowledge Management

- Managed and developed the procurement, supply and distribution of information for clients to support their needs and objectives.
- Worked with electronic information, especially online digital publishing databases content management systems and Internet resources, as well as traditional library materials.
- Concerned with managing book publishing to make it easily accessible.

United Nations Population Fund (UNFPA)

South Jakarta, Jakarta / Indonesia

Dec 2012-Jan 2013

Staff of set-up library project

- Managed, organized, evaluated and disseminated information, provided support to members of a UNFPA community.
- Developed specialist knowledge and other functions, such as resource ordering, specialist collections, ICT systems and library projects.

III. Organizational Experience (notes: examples of organizational and/or committee experience. List leadership roles if applicable)

Overseas Indonesian Students Association Alliance Radio

Tsukuba, Ibaraki / Japan

Feb 2014-Feb 2015

Announcer and Human Resources Manager

- Created, produced, and announced topics over the radio, especially about "Books" and "Indonesia's Spotlight Travel" and other matters of interest.
- Recorded, edited, publicized and managed radio jingle, adlibs and "Breaking News" program.
- Arranged, assigned and regulated all/new programs, etc.
- Maintained and enhanced all human resources by planning, implementing, and evaluating employee relations and human resources policies, programs, and practices.
- Maintained organization staff by establishing a recruiting, testing, and interviewing program; counseling board of managers on candidate selection; conducting and analyzing exit interviews; recommending changes.
- Programmed the activities and gathered the stakeholders, etc.

Kuliah Kerja Nyata, Universitas Indonesia

West Kalimantan, Kalimantan / Indonesia

Jun 2012-July 2012

Coordinator of set-up library project

- Managed, organized, evaluated and disseminated information, provided support to members of "Kuliah Kerja Nyata, Universitas Indonesia" (K2N UI)

- Developed knowledge and other functions, such as resource ordering, specialist collections, ICT systems and library projects.
- Facilitated and supported learning by teaching information retrieval skills to students and staff within border areas in Indonesia.
- Spent considerable time working on community engagement to introduce electronic resources, etc.

IV. Achievements / Scholarships / Honors / Awards

2013 PK-1, Awardee of Indonesia Endowment Fund for Education (LPDP), Ministry of Finance, Republic of Indonesia

2013 Awardee of Student Travel Support from Catalyst and Microsoft Japan to attend Asia Summer School of Information Retrieval at University of Tsukuba, Japan

2012 Semi-finalist of Outstanding Student at Universitas Indonesia

V. Seminars / Conference Experience

2016 World Information Architecture Day – Depok, Indonesia
Guest Speaker <http://2016.worldiaday.org/location/depok-indonesia>

2015 The 2nd Asian Summer School in Information Access (ASSIA) at National Taiwan Normal University, Taiwan
Presented Poster “Understanding Disaster Related Information-Seeking Behavior Using Oral Documents.” <http://assia2015.lib.ntnu.edu.tw/>

2014 LibrAsia: The Asian Conference on Literature & Librarianship
Presented “Youth Empowerment Through the Use of Prison Libraries: Case Studies of the Tangerang Juvenile Detention Center Library and the Salemba Detention Center Library in Indonesia.” <http://iafor.org/iafor/conferences/librasia2014/>

Published paper

Rahmi, R., & Lo, P. (2015). Youth Empowerment Through the Use of Prison Libraries: Case Studies of the Tangerang Juvenile Detention Center Library and the Salemba Detention Center Library in Indonesia. *JLIS.It*, 6(1), 183-206. doi:10.4403/jlis.it-10082