


# Chapter 8

## A Wake-Up Call After a Disaster: Initiating Archiving Household Documents Through a Digital Repository

**Muhammad Rosyihan Hendrawan**

 <https://orcid.org/0000-0003-0438-2571>

*University of Brawijaya, Malang, Indonesia*

**Aniesa Samira Bafadhhal**

 <https://orcid.org/0000-0002-5666-0660>

*University of Brawijaya, Malang, Indonesia*

### ABSTRACT

*This chapter examines the development of a digital repository prototype by the Universitas Brawijaya to help effectively manage household records in Batu City, the Republic of Indonesia, which is prone to recurrent natural disasters. The 2021 flash flood that ravaged the area highlights the need for electronic records management to guarantee the accessibility and preservation of essential information during disasters. The digital repository enables people to securely save, access, and disseminate vital records, thereby improving disaster resilience and administrative efficacy. Notwithstanding its advantages, obstacles such as inadequate digital literacy and Internet accessibility endure, requiring extensive governmental programs to bolster infrastructure, augment digital literacy, and safeguard data security. The study promotes the extensive use of digital repositories to enhance community resilience to natural disasters, perhaps acting as a prototype for analogous projects in disaster-prone regions. A future study is advocated to enhance these initiatives and broaden their use.*

DOI: 10.4018/979-8-3373-0204-1.ch008

## INTRODUCTION

In disaster-prone regions, records are more than administrative tools—they are instruments of continuity, resilience, and legal identity. Household records such as birth certificates, family cards, property titles, and health documents are essential for families to access public services, prove ownership, and secure post-disaster assistance. The role of records management, therefore, extends beyond organizational efficiency to encompass disaster preparedness and social recovery. Effective records management regulates the lifecycle of records—creation, storage, access, and destruction—ensuring that information remains accessible, reliable, and legally compliant (Franks, 2013; Saffady, 2021). In this regard, robust systems mitigate the risk of data loss and ensure that information continuity can be maintained even under crisis conditions (Smallwood, 2019).

A well-functioning records management system also contributes to risk reduction by enabling quick retrieval and verification of vital information. It supports informed decision-making, enhances transparency, and fosters public trust, particularly during emergencies. Haddad et al. (2022) argue that strong recordkeeping infrastructures can expedite recovery operations by ensuring data integrity, reducing administrative friction, and securing legal identities. Furthermore, effective systems reduce storage costs, extend the lifespan of information, and provide audit trails for accountability (Dikopoulou & Mihiotis, 2012). From a disaster recovery perspective, the availability of secure, retrievable records is not merely operationally advantageous, it is essential for individual and community resilience.

Indonesia, a nation situated within the Pacific Ring of Fire, is frequently affected by natural disasters including floods, earthquakes, and volcanic eruptions. These recurrent events regularly result in the loss or degradation of physical records, impeding both individual recovery and state response. One significant example is the flash flood that struck Batu City in East Java Province on November 4, 2021. The disaster affected six villages, caused seven fatalities, displaced 89 households, damaged 35 homes, and submerged 33 others under thick mud. Notably, it compromised numerous family archives and administrative records, delaying the reissuance of essential documentation.

34 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: [www.igi-global.com/chapter/a-wake-up-call-after-a-disaster/389094](http://www.igi-global.com/chapter/a-wake-up-call-after-a-disaster/389094)

## Related Content

---

### Efficient Clustering Algorithms in Educational Data Mining

Anupama Chadha (2018). *Handbook of Research on Knowledge Management for Contemporary Business Environments* (pp. 279-312).

[www.irma-international.org/chapter/efficient-clustering-algorithms-in-educational-data-mining/205080](http://www.irma-international.org/chapter/efficient-clustering-algorithms-in-educational-data-mining/205080)

### Knowledge in Police Work

Petter Gottschalk (2007). *Knowledge Management Systems in Law Enforcement: Technologies and Techniques* (pp. 1-24).

[www.irma-international.org/chapter/knowledge-police-work/25030](http://www.irma-international.org/chapter/knowledge-police-work/25030)

### Multi-Modal Visual Teaching Combined With Artificial Intelligence Empowerment Mechanism to Innovate the Image Teaching of Ancient Literary Knowledge

Osman Jumaand Maysigul Husiyin (2026). *International Journal of Knowledge Management* (pp. 1-18).

[www.irma-international.org/article/multi-modal-visual-teaching-combined-with-artificial-intelligence-empowerment-mechanism-to-innovate-the-image-teaching-of-ancient-literary-knowledge/411841](http://www.irma-international.org/article/multi-modal-visual-teaching-combined-with-artificial-intelligence-empowerment-mechanism-to-innovate-the-image-teaching-of-ancient-literary-knowledge/411841)

### Knowledge Retention Challenges in Information Systems Development Teams: A Revelatory Story From Developers in New Zealand

Yi-Te Chiu, Kristijan Mirkovski, Jocelyn Cranefieldand Shruthi Shankar (2022). *International Journal of Knowledge Management* (pp. 1-25).

[www.irma-international.org/article/knowledge-retention-challenges-in-information-systems-development-teams/291096](http://www.irma-international.org/article/knowledge-retention-challenges-in-information-systems-development-teams/291096)

### Assessing Knowledge Management System User Acceptance with the Technology Acceptance Model

William Moneyand Arch Turner (2005). *International Journal of Knowledge Management* (pp. 8-26).

[www.irma-international.org/article/assessing-knowledge-management-system-user/2655](http://www.irma-international.org/article/assessing-knowledge-management-system-user/2655)