



# Cyberthanatology in Southeast Asia: a Phenomenological Study of Digital Memory, Digital Assets and Digital Legacy Before Death

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**Abstract.** Southeast Asia, particularly in emerging economies like Malaysia and Indonesia, digital assets and inheritance remain underexplored. Despite ties to religion and custom, the region sees rapid smartphone dependency and cloud use, which enable digital memory-making that leads to the accumulation of digital assets. These assets include digital data, memories and platforms which hold privacy, sentimental and monetary values. Without proper planning or legal transfer of digital rights, these digital assets cannot be inherited. As death is inevitable, raising awareness of digital legacy particularly among young adults is crucial, as they are among the active users who rely on communication technology. Therefore, anchored in the concept of ‘cyberthanatology’, which explores the intersection of death and communication technology, this study investigates how young adults view, perceive, and experience their digital memories, assets, and legacy in preparation for death. Using a phenomenological study, in-depth interviews were conducted with total of 10 young adults from Malaysia and Indonesia, selected through snowball sampling. The interviews were transcribed using Interpretative Phenomenological Analysis (IPA). Findings reveal that communication tools act as ‘memobilia’, technologies that store and digitalised memories which contribute to the formation of digital assets with the values of privacy, sentimental, and monetary. Despite awareness of online risks and privacy issues, planning and management for digital legacy is limited. The study highlights the need for structured and clearer digital assets and legacy management policies. It contributes to academic discourse and aligns with national digital initiatives such as Malaysia’s Digital Economy Blueprint and Indonesia’s Digital Transformation Roadmap, advocating for a digitally informed society prepared not only for life, but also for legacy beyond death.

**Keywords:** Cyberthanatology, Digital Memory, Digital Assets, Digital Legacy, Phenomenology

## 1 Introduction

The concept of cyberthanatology has transformed social perceptions of death in 21st century and life after death through digital memorialization. This phenomenon allows digital platforms to redefine user memorialization, influencing contemporary understanding of life and loss (Beaunoyer & Guitton, 2021). As dependency to digital technologies infuse everyday life, users are now inadvertently leave behind digital footprints that survive beyond physical death (Savin-Baden & Mason-Robbie, 2020). These developments mark a transition where smartphones not only serve as communication tools but act as external cognitive systems in managing human memories. Considering communication technologies and tools that are now integrated with cloud system, users especially the young adults can now store, retrieve, and symbolise personal experiences and memories. This situation reflect what Reading (2009) terms as memobilia, or digital memory tools. This cognitive role is especially pronounced among young adults, who are key drivers of Southeast Asia's digital economy and social media culture.

In Southeast Asia, the reliance on digital communication technologies has transformed the way people remember and manage memories, particularly in relation to digital assets, governance and the ethical challenges that accompany inheritance practices. According to Curtis et al. (2022), the increasing internet penetration in the region has led to the generation of ever-increasing amounts of data, underscoring the need to develop effective digital asset management strategies. This digital transformation is particularly evident in Malaysia and Indonesia which two rapidly developing countries with high levels of digital engagement but still lacking public discourse on digital heritage management. Digital assets such as personal content, social media accounts and digital currencies present their own challenges in terms of governance and inheritance (Jenweeranon, 2022).

As the region continues to evolve digitally, ongoing discourse on these issues is increasingly important to ensure that personal memory management is in line with contemporary technological advances. While consumers are increasingly emotionally attached to their digital lives, many are still unaware of the importance and methods of managing their digital legacy. Without systematic planning or legal transfer of digital rights, digital assets cannot be formally bequeathed. Since death is a certainty, raising awareness of digital legacy management especially among young adults is critical, given that they are the group most dependent on the use of communication technologies.

Accordingly, through a phenomenological approach, this study offers a new contribution by exploring young adults' level of awareness of digital heritage through the lens of digital memory, digital assets, and digital inheritance. This approach not only fills the knowledge gap that still exists in local and regional scholarship but also broadens our understanding of how younger generations navigate legacy issues in the digital age.

## 2 Literature Review

### 2.1 Cyberthanatology and Communication Users in Southeast Asia

The emergence of cyberthanatology has significantly influenced the preservation and inheritance practices of digital memory, where cultural norms around death are deeply rooted. In Southeast Asian cultures, the transition from traditional practices to the digital memorial reflects an adaptation to technological advances, facilitating the retention of memories in virtual spaces (Beaunoyer & Guitton, 2021). The implications of digital legacies and ethical considerations surrounding virtual people after death are increasingly significant in our interconnected digital panorama. George and Mamedova (2024) discuss how emerging technologies shape the preservation of online identities, highlighting the need for ethical frameworks that navigate the complexities of the digital management of life after management. This phenomenon highlights the importance of exploring and understanding the cultural implications as users in this 21st century are now adapted their practices in the face of the challenges of digital inheritance. In Southeast Asia specifically, religious, cultural, and legal frameworks deeply influence how this digital legacy is perceived and managed. In Malaysia and Indonesia, inheritance practices are influenced by Islamic perspective, which does not yet comprehensively account for digital possessions. Despite technological innovation, digital end-of-life planning remains underexplored (Sudan et al., 2020). Unlike Western countries which offer the framework of digital legacy features, Southeast Asian users face minimal policies and structure (Curtis et al., 2022).

### 2.2 Digital Memory, Memobilia and Technology Dependency

Digital memory form in the process of digitalising human memory through digital tools. McLuhan's early media theory predicted this shift, and this phenomenon now embodied in how smartphones and clouds platform store personal memories (McLuhan, 1975). Goggin (2025) argues that these devices act as portable memory vaults, holding photos, messages, and videos. Reading (2009) defines this as memobilia, which integrates personal identity, device mobility, and editability. The emergence of 5G, Artificial Intelligence, and augmented reality technologies enhance the dependency of smartphone as cognitive role, enabling it to capture and manage memory beyond human capacity. Among young users, smartphones dependency have become emotional containers for self-narrative and memory preservation, raising ethical concerns around data management and memory continuity after death (Holt et al., 2021). This dependency is closely linked to the functional expansion of smartphones, which are now essential not only for communication but also for entertainment, education, and emotional expression (Klimenko et al., 2024). However, Kim (2020) argues, dependency in communication technology arises from users' active engagement with the device to fulfil daily needs aligns with Media System Dependency (MSD) theory, where individuals rely on media for 'self-understand', 'orientation', and 'play' in society (Ball-Rokeach, 2008).

### 2.3 Types of Digital Assets

Digital assets have become an increasingly significant by communication users, categories in personal and financial contexts, which is witnessing a rapid digital transformation. These assets can be more than monetary values and classified into several categories, including non - fungible tokens, cryptocurrencies, digital tokens. Gurinovich et al. (2022) emphasize the importance of defining digital assets and addressing related legal challenges, which are critical of promoting confidence and market stability. Digital assets refer to online or device-based content with emotional, financial, social, or intellectual value (Farooqui et al., 2022). For the personal data and media which include videos, photos, memos, notes, digital daily journals, hold sentimental value and document lived experiences. Apart from that, the financial or monetary assets include online platforms, e-wallets accounts, online banking accounts, cryptocurrencies, and online business activities which may require lawful distribution under Shariah and Faraid in Muslim contexts especially in Malaysia and Indonesia (Abd Wahab et al., 2023).

Social media profiles that represent digital identity and require clear instructions for memorialisation or deletion. Access credentials, including passwords and PINs, which are often not shared, making posthumous access difficult. The management of these various categories of digital assets presents challenges in terms of regulation, safety and consumer protection, which requires collaboration efforts between government, communication technology providers and policy.

### 2.4 Digital Legacy Among Young Adults

Digital legacy encompasses the online remains of a person's life which include digital memories, identities, and assets. For young adults, who are among the most prolific digital users, planning for digital legacy is rarely a priority. Many of users perceive death as distant, making legacy features or digital wills seem irrelevant (Agarwal & Nath, 2021). Cultural norms in Malaysia and Indonesia further discourage discussions about death, resulting in a lack of preparation. As Reading (2009) suggests, digital technology like smartphone now act as personal diaries, which users form deep emotional ties with the digital content. The process of others which include friends and family members to access these data after death can be uncomfortable as these considered personal and private to some users. Without the rights transfer and explicit user invitation, the next of kin or family members may consider with decisions to manage or not to manage these digital assets after death which include social media accounts, personal archives, or encrypted financial apps (Bassett, 2022). This has verified that the limitation on the awareness of digital inheritance policies or literacy among young adults remain vulnerable to digital loss. This underscores the need for culturally sensitive education and policy to ensure digital legacies are preserved.

### 2.5 Theory and Research Conceptual Framework

This study adopts a phenomenological approach, elements of memobilia, digital assets, digital legacy, and technology dependency based on the MSD Theory. The phenomenological approach was selected for its ability to explore individual opinion, understanding and experiences of events in their daily lives. MSD Theory as explained by Ball-Rokeach (2008) , clarifies how society depends on media. It is particularly relevant here, as the study explore on media dependency at the individual level, focusing on the Individual Media Dependency (IMD) elements, which individuals rely on media to understand, connect, and function in society. Guided by this theoretical foundation, a conceptual framework (Illustration 1) was developed to explore memobilia, digital assets and its influence on digital inheritance awareness.

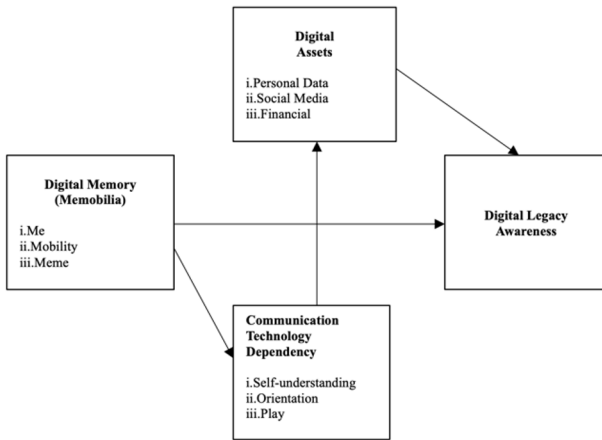


Fig. 1. Illustration 1: Conceptual Framework

### 3 Research Method

This study adopts a qualitative research design guided by a phenomenological approach to explore the deeply personal and contextual experiences of communication technology users in relation to digital memory, digital assets, and digital legacy awareness. In-depth interviews were employed as the primary method for data collection and this study used non-probability sampling, specifically snowball sampling. Initial informants were identified based on predefined criteria and were then asked to refer other eligible individuals. The sample included total of 10 young adults in Malaysia and Indonesia, aged between 18 and 30, with active smartphone use and engagement in digital activities such as content creation, social media interaction, and online business.

Looking at the sample size, it is sufficient for phenomenology oriented research as the views were based on participants’ experience. The findings demonstrated that Indonesians participants demonstrated stronger belief on ritualistic and familial expectations surrounding death issues which contributed on how they perceived digital after

death as part of digital memories. Contradict to Malaysian participants where they grounded this issue more personal and significant to personal privacy, personal data and reputation concerns.

The interview data were transcribed and analysed through a method of Interpretative Phenomenological Analysis (IPA). IPA was selected for its participant-oriented approach and its capacity to examine how individuals make sense of their personal and social worlds. The analysis involved a double hermeneutic process where the researcher interprets how the participant is interpreting their own experiences by using Atlas.ti software.

## **4 Results and Discussions**

### **4.1 Digital Memory Contributes to the Formation of Digital Assets**

The findings suggested that communication technology like smartphones and clouds platform contribute to digital memory where users capture, store and edit everyday life activities. This process contribute to the formation of digital content include images, videos, social media content and financial activities. Many informants strongly agreed that their smartphones work as digital tools to record daily life and preserve personal narratives. Communication technology like smartphones have fundamentally altered the way they capture and select everyday memories, transforming them into valuable digital assets that have significant implications for personal identity and legacy. As digital memories formed, the content can be categorized as digital legacy that can be accessed and reviewed by future generations. The dependency on smartphones contributes to the process of user generated assets. These digital assets can be grouped into three types, personal data assets, social media digital assets, and financial digital assets. Thus, this digital legacy can be considered as digital assets which encompasses with privacy, sentimental, and monetary value.

These findings also significant to the MSD, particularly in Mico level on the dependency elements of understanding and orientation. The young adults depends on the usage of smartphones to get access to digital platforms not merely for storage purposes but also as memory tool to share their life stories, frame their life activities, connect to their network society, and orient themselves within social environments. This dependency reinforces the formation of content creation include, photos, videos, data, messages, financial transactions, online business activities which eventually accumulate into the types of digital assets.

### **4.2 Digital Memory Contributes to the Formation of Digital Assets**

Despite being highly dependent to smartphones and social media usage, many informants agreed that they had never thought about digital after death, in the context of managing their digital assets. In the contexts of Malaysia and Indonesia, the awareness of digital inheritance is very limited as conversations about death are often taboo. Clear policies and advocacy on digital legacy is also limited, which contribute to many young adults unprepared to manage their digital assets. Limited awareness on digital legacy

has also influenced the online behaviors of young adults, often leading to a compromised privacy and poorly managed digital identities. This lack of awareness and understanding can lead to consequences in personal data management system, in particular reputation damage and confidentiality violations. As these young adults growing, the need for digital literacy becomes fundamental in this 21st century, pressuring users to critically evaluate their online commitments and the lasting impact of their digital inheritance. Therefore, by addressing a clear framework will help to better acceptance in the importance of digital inheritance. Improvement strategies include education, digital literacy and proactive identity and data management practices.

In another perspective, by considering religion perspective, digital legacy management guidelines or digital assests management system should include practical mechanisms such as built-in legacy contact features on major regional platforms, templates for digital wills that comply with Shariah and local inheritance principles, and awareness campaigns on digital estate planning. These measures would support both users and policymakers in navigating issues of privacy, consent, and post-mortem data governance.

## 5 Conclusion

In conclusion, the need for awareness and planning to digital inheritance among young adults in Southeast Asia cannot be overvalued. As this demography is increasingly leading as users in a digital landscape with smartphone usage and digital communication tools dependency, understanding the significant between digital memory, digital data management and digital after death is crucial. This dependency has verified to the contribution of digital assets which can be categorized in three types include personal data digital assets, social media digital assets, and monetary digital assets. These assets hold privacy, sentimental and monetary values. However, despite concerns about online privacy, awareness of managing digital legacy remains low among young adults. Given the widespread lack of transparency among communications and technology companies concerning data sharing risks and rewards, establishing a clear digital legacy management guidelines should be a prioritize in Southeast Asia.

For future recommendation, a critical analysis is suggested as part of comparative cultural study across major Southeast Asian ethnicities to investigates the specific death rituals, digital afterlife belief, and cultural expectations influence the concept of digital memory, assets, and legacy behaviours. These comparative studies would help to reveal deeper understanding on cultural patterns.

Indeed, upholding an understanding of digital legacy through digital inheritance awareness is important in the empowerment of young adults to help them manage their digital asset. This exploration supports the objectives outlined in the Malaysia Digital Economy Blueprint and Indonesia's Digital Transformation Roadmap particularly focusing on data management, reinforce digital trust, and ensuring inclusive digital development in Southeast Asia.

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