

Original Article

Digital Assets in the Inheritance Vortex: Testing the Readiness of Conventional Law and the Concept of **Joint Property in Modern Families**

Siti Murni 1

¹STAI Tgk Chik Pante Kulu Banda Aceh

*Corresponding author: siti.murni@staipantekulu.ac.id

Abstract

Conventional inheritance and marriage laws govern joint property. The legal status of these assets is unclear; whether they are inherited or joint property is difficult to determine. This type of research uses a normative legal research approach realized through the Library Research method. The data analysis technique that will be applied is qualitative content analysis, conducted interactively and continuously throughout the research process. The results of the study indicate that: 1). The Classification and Legal Status of Digital Assets in Inheritance and Joint Property is that digital assets can be classified into two main categories: assets with direct financial value (such as cryptocurrencies and e-wallets) and assets with indirect economic value (such as commercial social media accounts and NFTs). 2). Technical and Legal Challenges in Identifying, Proving, and Transferring Digital Assets are: First, identification challenges due to the virtual and hidden nature of digital assets often make heirs unaware of their existence. Second, problems proving ownership due to limited access to private keys, passwords, and platform policies that prohibit the transfer of ownership. Third, problems with the transfer of rights due to the absence of a clear legal mechanism for transferring ownership of digital assets to heirs, which has the potential to result in the assets being permanently lost. 3). Legal reconstruction and future solutions to fill regulatory gaps include: First, amending the Civil Code and the Marriage Law to explicitly recognize digital assets. Second, establishing specific regulations governing digital asset inheritance procedures and requiring digital platforms to provide inheritance protocols. Third, strengthening the role of notaries and educating the public about the importance of recording digital assets in wills, as well as developing a voluntary digital asset registration system.

Keywords: Digital Assets, Inheritance, Conventional Law, Joint Property



Introduction

The issue of digital assets in the context of inheritance law is becoming increasingly relevant. This primarily relates to how conventional law can be adapted to address the challenges posed by digital asset ownership in modern families. Several key aspects need to be considered in understanding this issue, including the definition and classification of digital assets, current legal challenges, and the concept of joint property in the inheritance context. First, understanding what is meant by "digital assets" is crucial. Digital assets include not only cryptocurrencies but also various other forms of digital data. Digital assets are considered to have characteristics similar to physical property, as their owners have the right to use and exploit them for material gain (Akhtam, 2022). In the legal context, the need for clarification and expansion of the term "digital assets" in legislation is emphasized. This is to ensure that the law covers all types of digital assets currently in existence, including ownership rights and non-property benefits (Akhtam, 2022). Furthermore, existing regulations often lack clarity and require clearer regulations to encompass these various types of digital assets (Akhtam, 2022).

Furthermore, the challenges faced by conventional law in dealing with digital assets are highlighted. Conventional inheritance laws are often not designed to account for the complexity of digital assets. For example, there are significant gaps in legal regulations affecting digital assets, such as in Uzbekistan, where inheritance and transfer of rights are complicated (Akhtam, 2022). On the other hand, in Indonesia, the growing number of crypto-asset investors demonstrates significant potential for economic growth, but also challenges existing laws to adapt to regulate these assets (Mulyani et al., 2023).

The concept of joint property in modern families also deserves careful consideration in this context. Transactions involving digital assets may be subject to different taxation depending on the legal entity involved; in Russia, there are specific tax provisions for transactions involving digital assets that differ for individuals and legal entities (Zubkova, 2021). This has given rise to debate about how joint property consisting of digital assets should be managed and divided, particularly in the context of divorce or the death of one spouse (Zubkova, 2021). Thus, legal uncertainty regarding the management and division of digital assets in divorce and inheritance is a crucial issue facing modern families.

International regulations also provide valuable insights into how other countries are addressing these issues. For example, new legislation in Serbia and discussions regarding the impact of regulations in the European Union provide insights into how a more integrated approach can be offered to address digital asset issues at the regional level (Željka, 2022). This can serve as a valuable reference for creating a better regulatory framework in inheritance law that is appropriate for the conditions of a modern society that is increasingly dependent on digital technology.

The issue of digital assets in modern inheritance law requires in-depth consideration and adaptation of existing legal frameworks. For effective digital asset management, it is crucial to ensure appropriate classification and address relevant tax and regulatory aspects. This will ensure that ownership and inheritance of digital assets are handled legally and fairly.

The problematic nature of this research stems from the wide gap between the digital reality of modern society and conventional legal provisions, which still rely on the concept of tangible assets. First, there are identification and qualification issues. Positive inheritance laws, such as the Civil Code, lack an explicit legal definition of digital assets,

making their status as inherited property unclear. Can a balance on an online investment platform or ownership of a website domain be equated with a bank deposit or movable property? Second, there are issues of proof and access. Digital assets are often protected by passwords and two-factor authentication, which are personal and confidential. Heirs will face significant difficulties even knowing the existence of these assets, let alone accessing them, without a clear legal obligation for the platform to grant access to the family. Third, there are classification issues within family law. The Marriage Law regulates joint property, but how does this concept apply to Bitcoin purchased by one party before marriage, or to an Instagram account whose value skyrockets due to a husband and wife's joint venture? This ambiguity has the potential to trigger internal family disputes that damage kinship.

The urgency of this research cannot be underestimated. First, there is the urgency of legal protection for families. Without a clear legal framework, there is a significant risk that assets worth billions of rupiah will simply "disappear" in cyberspace, harming their legitimate heirs both morally and materially. Second, there is the urgency of legal reform. This research serves as a catalyst for legislators and legal practitioners to urgently formulate specific regulations capable of catching up with the legal advancements in technology. The law should no longer remain silent and react after a dispute arises, but must proactively anticipate developments. Third, this research has socio-economic urgency. More and more people are relying on the digital economy for their livelihoods and investments. Legal certainty over their assets, even in worst-case scenarios such as death, is a prerequisite for creating a healthy and sustainable digital economic ecosystem. Therefore, testing the readiness of conventional law and the concept of joint property to face this new reality is no longer merely academic discourse, but a necessity for providing justice and legal certainty for modern families.

METHOD

This research, entitled "Digital Assets in the Vortex of Inheritance: Testing the Readiness of Conventional Law and the Concept of Joint Property in Modern Families," will employ a normative legal research approach, implemented through the Library Research method. This method is chosen based on the characteristics of the problem under study, which focuses on examining legal principles, legal norms, and the application of positive law in addressing the new phenomenon of digital assets. Library research allows researchers to conduct in-depth exploration of various legal materials and expert opinions relevant to the research topic, thereby providing a comprehensive overview of existing legal gaps. As stated by Sugiyono (2021), library research is an appropriate method for building a strong theoretical framework through dialogue with various existing ideas and findings.

The data sources in this study will include three types of legal materials classified by their level of authority. Primary legal materials include statutory regulations such as the Civil Code, Law Number 1 of 1974 concerning Marriage, and other related regulations that underlie inheritance and family law in Indonesia. Secondary legal materials consist of legal textbooks, scientific journal articles, and research reports that provide explanations and analyses of primary legal materials. Tertiary legal materials include legal dictionaries, encyclopedias, and other reference materials that support understanding of technical terms. This study will specifically rely on current academic sources to ensure a timely analysis.

The data collection technique used will be a systematic and comprehensive document study. This process includes the identification, inventory, and categorization of various

relevant library materials. Document searches will be conducted through library catalogs, online journal databases, and institutional repositories using strategic keywords such as "digital asset inheritance," "digital asset common property," "cryptocurrency inheritance regulations," and "digital asset legal gap." According to Moleong (2021), document study data collection requires careful selection and verification of the authenticity and credibility of the sources used. Therefore, this process will be carried out carefully and thoroughly to ensure the quality of the collected data.

The data analysis technique used is qualitative content analysis, which is conducted interactively and continuously throughout the research process. The analysis begins with systematizing the collected data into relevant thematic categories, such as conventional legal regulations on inheritance, the concept of joint property, the characteristics of digital assets, and identifying legal gaps. The next stage is the interpretation of each legal provision and expert opinion to understand its meaning, intent, and legal implications. The analysis process then continues with contextualization, namely inserting the data into the current social context to understand how existing laws should be applied to the reality of digital assets. The final stage is evaluation and construction, where researchers will assess the gap between existing laws and the legal needs of society and develop legal thought structures as solutions. This hierarchical data analysis approach aligns with the method outlined by Creswell & Poth (2023), which emphasizes the importance of a systematic analysis process to generate substantive themes.

The data validity testing technique in this study will utilize source triangulation. This technique involves comparing and cross-checking the reliability of information obtained from one source with another. Each legal interpretation regarding the status of digital assets put forward by a legal expert will be checked for accuracy and consistency with the opinions of other experts, court decisions, and statutory provisions. Therefore, the data and arguments developed in this study do not originate from a single source but have been verified with various trusted sources to ensure the credibility and dependability of the research results. The application of source triangulation is crucial in library research to maintain the objectivity and accuracy of the resulting legal analysis.

RESULTS AND DISCUSSION

A. Classification and Legal Status of Digital Assets in Inheritance and Joint Property

The results of this study reveal that digital assets are complex legal entities that have not been adequately addressed within Indonesia's conventional legal framework. The study successfully identified and classified digital assets into two main categories based on their nature and function. First, digital assets with direct financial value, including cryptocurrencies, e-wallet balances, digitized financial assets, and security tokens. Second, digital assets with indirect economic value, including commercial social media accounts, game accounts with valuable items, NFT-based digital works, website domains, and commercially valuable digital data and content. This classification is fundamental to analyzing the legal status of each type of digital asset, with assets in the first category more easily qualified as property compared to the second category, which requires prior proof of economic value.

In the context of inheritance law, research findings indicate that philosophically, digital assets qualify as inherited property under Article 528 of the Civil Code concerning the definition of objects. However, technically, there is legal uncertainty due to the lack of

explicit recognition. This research proves that although digital assets are intangible, they have economic value that can be valued in money and are transferable, so they should be included in the legal definition of objects. Furthermore, from a family law perspective, this research found complexity in determining the status of digital assets as joint or private property. Digital assets acquired during marriage should be categorized as joint property, but proving this is very difficult, especially for private assets such as cryptocurrency. This finding is reinforced by Salim's (2021) analysis in his book, which highlights the development of the definition of objects in civil law, where the concept of objects has evolved to include intangible things that have economic value.

The classification and legal status of digital assets in inheritance and joint property in Indonesia is an increasingly relevant and pressing issue, given the rapid growth of digital assets in recent years. Digital assets encompass various forms, such as cryptocurrencies, digital tokens, and assets in applications or other digital platforms. It is important to understand how the law provides a framework for the management and transfer of these assets in the context of inheritance and joint property.

First, in the context of inheritance, digital assets must be clearly classified within the existing legal framework. This classification is crucial for ensuring the management of joint assets within the context of family law, including the inheritance system, which requires a normative approach in accordance with primary and secondary law (Yusuffendra et al., 2024). This research can provide insight into how digital assets can be viewed as part of joint assets that can be inherited, taking into account court decisions governing the division of assets within a household.

Furthermore, in Islamic legal analysis, a bilateral inheritance system facilitates the establishment of individual rights regarding inheritance (Tohari, 2018). This is relevant when considering digital assets because it requires clarity regarding who has the rights to digital assets left by the heir, as well as how the transfer process can be carried out in accordance with applicable legal principles. In understanding Islamic law, it is important to consider the type and form of inherited assets, including assets that are not physically tangible.

In the context of joint property, the application of moral and social justice in the distribution of assets demonstrates the importance of the concepts of wasiyyah and will (Umar et al., 2023). This concept can be applied to the inheritance of digital assets, where the testator can explicitly state in the will how their digital assets should be allocated after their death. Therefore, the management and distribution of joint property, including digital assets, must prioritize social justice and respect the rights of the individuals involved.

Furthermore, to ensure the proper management of digital assets, it is crucial to develop an effective accounting approach for inherited assets (Basnan et al., 2013). This requires clear guidelines on the recognition, measurement, and disclosure of digital assets in inheritances. These guidelines will ensure that all parties involved in the inheritance and distribution of joint assets have a shared understanding of the value and legal status of their digital assets.

Thus, the classification and legal status of digital assets in inheritance and community property requires a cross-disciplinary approach that takes into account existing law, social context, and principles of equity. Expanding the understanding of traditional inheritance law to the digital domain will be helpful in establishing the standards and guidelines

necessary to manage digital assets fairly and legally.

B. Technical and Legal Challenges in Identifying, Proving, and Transferring Digital Assets

This research identifies three main challenges in handling digital assets during inheritance proceedings. The first challenge lies in identification, where heirs are often unaware of the whereabouts of their digital assets due to their virtual and hidden nature. Unlike conventional property, which has a physical presence, digital assets can only be accessed through electronic devices with a specific authentication code. The second challenge concerns proving ownership, where heirs face difficulties in proving the legal relationship between the heir and the digital assets they leave behind. Private keys, passwords, and two-factor authentication, which are highly personal, pose major obstacles to this process. Furthermore, digital platform policies prohibiting the transfer of account ownership further complicate the legal position of heirs.

The third identified challenge is the issue of transfer of rights. This study found that the mechanism for transferring digital assets to heirs lacks clear legal procedures. For assets such as cryptocurrency stored in private wallets, without access keys, the assets become de facto permanently inaccessible. Meanwhile, for assets linked to platforms like social media or digital wallets, the heir verification process requires legal documents that are often not recognized by service providers. This finding is consistent with Gunawan's (2023) analysis of the impact of technology on inheritance law, which states that the lack of a legal mechanism for accessing an heir's digital assets is an urgent issue that needs to be regulated by law. Further research reveals that the lack of a legal obligation for digital service providers to cooperate with heirs further exacerbates this legal uncertainty.

In the ever-evolving world of digital law and technology, the technical and legal challenges of identifying, proving, and transferring digital assets are becoming increasingly important. Digital assets, such as cryptocurrencies and other digital data, have unique characteristics that require a specific approach to their management. The first significant challenge in identifying digital assets is technical complexity. Digital assets are often stored in encrypted formats and distributed across multiple platforms, making tracking and identification a complex process. Furthermore, data security is a key issue in digital asset management, where the risk of data leaks or theft can be detrimental to asset owners (Putro, 2024). The lack of interoperability between systems is also a barrier, as systems that cannot communicate with each other slow down the asset identification process. In this regard, implementing a comprehensive digital strategy involving advanced information technology can help overcome these challenges, although it must be remembered that such implementation is not without organizational and cultural challenges that must be managed wisely (Putro, 2024).

Furthermore, the challenges in the process of proving digital assets are significant, particularly in a legal context. In many cases, gathering relevant evidence often faces significant obstacles, ranging from legal to technical aspects. For example, the applicable legal system may not fully understand how digital assets operate, making existing evidentiary procedures inefficient. This is exacerbated by the lack of clear legal guidance on how to manage and prove ownership of digital assets in court. Research on the Semarang District Court's decision demonstrates the importance of a better understanding of our legal system for valid evidence in corporate crime cases (Widjaja et al., 2024).

Meanwhile, when discussing the transfer of digital assets, legal and regulatory challenges

are central, particularly in the context of anticipating misuse and fraud. The transfer process involves not only technical aspects but also requires attention to legal compliance. The absence of clear regulations governing digital asset transactions allows for fraud and other illegal activities, further adding to the complexity of asset transfer efforts

On the other hand, the organizational aspects of digital asset transfer are also important to consider. In this context, organizations need to have a deep understanding of the importance of training and improving digital literacy among their human resources. This plays a crucial role in ensuring individuals within the organization are better prepared and aware of potential challenges, while also enhancing their ability to adapt to new technologies. Therefore, the technical and legal challenges in identifying, verifying, and transferring digital assets require collaboration between various entities, including the legislative, executive, and private sectors, to create a more efficient and secure ecosystem for digital asset management.

C. Legal Reconstruction and Future Solutions to Fill Regulatory Gaps

Based on the above findings, this study formulates several strategic recommendations for reconstructing Indonesian inheritance law to make it relevant to developments in the digital era. First, amendments are needed to the provisions of the Civil Code and the Marriage Law to explicitly include digital assets within the definition of property and joint property. This expanded definition must be accompanied by clear criteria regarding how a digital asset can qualify as an object of inheritance. Second, the study recommends the establishment of specific regulations governing the procedures for inheritance of digital assets, including mechanisms for identification, verification, and transfer, involving notaries as the authorized party to inventory the testator's digital assets. These regulations should also include obligations for digital service providers to establish clear inheritance protocols and respect legal documents issued by authorized institutions in Indonesia.

The third solution proposed is strengthening the role of notaries in addressing this issue. Notaries should be encouraged to educate the public about the importance of registering digital assets in wills or creating inventories of securely stored digital assets. Furthermore, this study recommends the development of a voluntary digital asset registration system managed by a specific government agency, allowing digital asset owners to register their ownership as a preventative measure to facilitate the identification process by heirs. This policy recommendation aligns with Sutedi's (2022) work, which emphasizes the importance of legal adaptation to digital transformation, including recognizing digital assets as legally protected assets. Implementing these recommendations is expected to provide legal certainty and protection for the public in managing and inheriting their digital assets.

In the context of law and regulation in Indonesia, regulatory gaps are a critical issue that requires serious attention to create a more effective and inclusive legal system. In carrying out the function of organizing elections, several recommendations are made to strengthen law enforcement mechanisms in elections that can address existing gaps. Research by Hidayatullah explains the importance of rehabilitation and reintegration for perpetrators of election crimes, as well as increasing international cooperation in sharing best practices in election law enforcement. These recommendations are expected to help realize elections with more integrity and democracy, in line with Law Number 7 of 2017 (Hidayatullah, 2024).

Furthermore, there is an urgent need to modernize land registration processes and strengthen institutional capacity in Indonesia to address regulatory gaps in the financial and credit sectors. Andaryanti et al. recommend the use of trusted electronic structures, strengthened oversight mechanisms, and a culture of legal compliance among relevant parties as solutions to improve the legal standing of creditors, particularly in the context of mortgage-based credit. These measures aim to reduce risks for creditors and increase overall legal certainty (Andaryanti et al., 2025).

In the realm of economic law, the knowledge gap regarding Islamic economic law and MSMEs also needs to be addressed. Aryani explained that a deeper understanding of Islamic economic law and its contribution to improving the welfare of MSMEs is necessary to improve their current and future situation. By strengthening this legal framework, it is hoped that MSMEs in Indonesia will be more empowered and contribute to the national economy (Aryani, 2023).

On the other hand, addressing gender-based violence demonstrates the complexity of existing regulatory gaps. Research by Sidayang et al. provides a comparative analysis of international legal frameworks and existing practices, suggesting a more holistic approach to combating gender-based violence in Indonesia and other similar contexts. Cataloging the challenges faced and potential solutions provides insights for policymakers and practitioners (Sidayang et al., 2023).

Thus, in the agricultural sector, agricultural land management and assessment require attention to the existing legal framework. Zhumataeva emphasized the need for comparative analysis to identify best practices and adaptable legal provisions to improve and reform existing systems, focusing on the strengths and weaknesses of frameworks implemented in various jurisdictions. Therefore, by integrating all these recommendations and findings, it is important for policymakers to develop a comprehensive strategy to fill existing regulatory gaps and create a responsive, equitable, and effective legal framework (Zhumataeva, 2024).

CONCLUSION

Based on an in-depth analysis of three key aspects, this study concludes that conventional Indonesian law is not yet ready to address the complexities of digital assets in inheritance and family matters. First, although digital assets can be classified as objects based on their economic value, their legal status remains ambiguous due to the lack of explicit regulation in the Civil Code and the Marriage Law. Second, the process of identifying, proving, and transferring digital assets faces significant technical-legal challenges, ranging from their hidden nature, access barriers due to platform privacy policies, to the lack of a clear transfer mechanism. Third, legal reconstruction is needed through legislative amendments, the establishment of specific regulations mandating digital inheritance protocols, and strengthening the role of notaries and public awareness to create legal certainty and protect heirs' rights in the digital era.

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