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# **LEGAL ENFORCEABILITY OF SMART CONTRACT-BASED MAHR AGREEMENTS IN ONLINE NIKAH PLATFORMS: A COMPARATIVE ANALYSIS OF UAE AND MALAYSIAN JURISPRUDENCE**

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## **ABSTRACT**

The advent of online nikah platforms has introduced the practice of issuing Mahr agreements through smart contracts, prompting the question: Are smart contracts enforceable in UAE and Malaysian courts? This study offers a comparative analysis of relevant case law on the validity and enforceability of smart contracts in online Nikah platforms, focusing on Dubai and Malaysia's jurisprudence. The analysis identifies significant issues that influence the legal enforcement of smart contract-based Mahr contracts in marriage contexts, highlighting significant challenges to their acceptance and enforcement. The research suggests that while smart contracts have transformative potential for modernizing marriage contracts, their enforceability hinges on clarity, established legal principles, and a deep understanding of socio-legal dynamics in both countries. The study concludes that while the formation of electronic and smart contracts is generally valid and enforceable under their respective laws, specific challenges arise concerning smart contracts within the Malaysian context.

## **Introduction**

Smart contracts are digital instructions executed automatically under set conditions and are being widely used today. They are stored on decentralized databases, offering enhanced confidentiality, security, and verifiability. With digital certification for identity verification, smart contracts enable fast, secure execution of personal and business agreements. Online platforms that facilitate Islamic contract practices provide solutions for the Muslim community. A key component of Islamic marriage is the Mahr, a mandatory gift, often in cash or jewelry, from the groom to the bride, detailed in marriage contracts. Blockchain technology allows online Nikah platforms to utilize smart contracts for defining Mahr amounts before the ceremony. However, there are concerns regarding the judicial enforcement of these agreements. This analysis explores the legal enforceability of Mahr contracts created through online Nikah practices, based on rulings from UAE and Malaysian courts<sup>1</sup>.

## **Objectives of the Study**

The primary objective is to examine the legal enforceability of smart contract-based Mahr agreements executed on online Nikah platforms within UAE and Malaysian jurisdictions. This encompasses conducting a comparative analysis of both legal systems, identifying enforcement challenges, assessing platform compliance with legal and religious requirements, and providing actionable recommendations for stakeholders to enhance the legal recognition of digital Mahr agreements.

## **Research Problem**

The core research problem addresses the legal uncertainty created by the intersection of blockchain technology and Islamic marriage practices. Specifically, online Nikah platforms utilizing smart contracts for Mahr agreements operate in a regulatory vacuum, where existing legal frameworks in UAE and Malaysia lack explicit provisions for blockchain-based religious contracts, creating potential conflicts between technological innovation and traditional Islamic jurisprudence and leaving courts without clear guidance on enforcement.

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<sup>1</sup> Spencer, K., 2011. Mahr as Contract: internal pluralism and external perspectives. [PDF]

## **Research Questions**

Are smart contract-based Mahr agreements enforceable in UAE and Malaysian courts?

How do existing legal frameworks accommodate electronic contracts in religious contexts?

What are the comparative similarities and differences in enforcement approaches?

What technical, legal, and cultural barriers exist?

## **Hypothesis**

Smart contract-based Mahr agreements can be legally enforceable in both jurisdictions when they comply with existing contractual requirements and Islamic legal principles, with both legal systems likely showing convergent approaches to recognition based on traditional contractual validity criteria.

## **Research Methodology**

The study employs a qualitative, doctrinal research methodology utilizing comparative legal analysis between UAE and Malaysian jurisdictions. The approach integrates statutory analysis of relevant legislation (UAE's Electronic Commerce Law, Malaysia's Electronic Commerce Act 2006), case law examination, comprehensive literature review, and case study analysis. The methodology combines Islamic jurisprudence principles with contract law theory, using primary sources (legislation, court decisions) and secondary sources (academic commentaries) to conduct a contemporary cross-jurisdictional comparative legal study.

## **Overview of Mahr in Islamic Law**

Mahr constitutes a fundamental component of the marriage contract (nikah) in Islamic law. Designated by the Qur'an (4:4), it refers to a sum of money or possession in the husband's control, of the wife's exclusive ownership. The custom of the mahr determines marriage suitability and functions as a financial divorce settlement in the absence of injurious action by the wife (Spencer, 2011). <sup>2</sup>In Islamic jurisprudence, many authorities regard it as compulsory, whereby a contract without mahr is defective or even invalid. Kuran (2018) documents its

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<sup>2</sup> Spencer, K., 2011. Mahr as Contract: internal pluralism and external perspectives. [PDF]

origins as an insurance mechanism during the medieval economy, and assesses contemporary reforms.

### **Historical Context**

In the Islamic tradition, marriage (nikah) is a formal contract needing consent from both parties, their guardians, and witnesses. It outlines obligations and allows stipulations about spouse choice, polygamy, residency, and maintenance. The bride must receive Mahr from the groom, a compulsory payment to compensate her for marriage responsibilities. An unconditional Mahr is crucial for a valid and consummated marriage.

Mahr is paid at contract formation (prompt Mahr) or deferred based on conditions (deferred Mahr). Upon marriage termination, deferred Mahr is usually payable and viewed as a mandatory debt under secular law. It is owed by a male who initiates divorce without valid reason and typically due upon the husband's death or when the wife converts to Islam after marrying a non-Muslim, though conditions may warrant suspension.<sup>3</sup>

### **Modern Interpretations**

Modern interpretations recognize mahr agreements as contractual clauses granting rights and obligations. Viewing mahr as a contractual provision upholds the husband's obligations and respects cultural norms, allowing courts to render unenforceable provisions in cases of vagueness or undue influence. To ensure clarity, parties should create a civil contract alongside the Islamic marriage contract detailing mahr payment conditions. However, conditions restricting mahr payment, such as only in male-initiated divorce, could be deemed unenforceable based on public policy. Concerns arise from the inequality of bargaining power, as women often lack full agency in negotiations, with male guardians acting on their behalf. This raises questions about whether courts should recognize mahr as a freely entered contract. Islamic family law remains central for Muslims in secular countries, and refusing recognition risks alienation, leading to reliance on arbitration and multiple legal systems, prompting discussions on the direction toward legal pluralism.

### **Smart Contracts: Definition and Functionality**

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<sup>3</sup> Spencer, K., 2011. Mahr as Contract: internal pluralism and external perspectives. [PDF]

Smart contracts are computational applications intended to enable and confirm agreements without the involvement of intermediaries. Stemming from the principles of computational contract theory, they allow for the enforcement of contracts through programming code. These agreements are composed in a high-level programming language, subsequently compiled into bytecode, and executed deterministically on private blockchain networks or within secure execution contexts.<sup>4</sup>(Heidari et al., 2024)

A smart contract system typically includes executable code, an application programme interface (API) with access protocols, and relevant data stored on the blockchain, trusted execution environments, or off-chain repositories. Smart contracts are used in finance, commerce, healthcare, gaming, and IoT. While blockchain isn't mandatory for all smart contracts, it forms the basis for many, drawing from concepts by Nick Szabo.

Recent years have seen a surge in smart contract research tackling technical and legal challenges, yet global standardization remains lacking. Traditional contract principles continue to govern most smart contract systems. Smart contracts are encrypted, signed, and recorded on the blockchain, ensuring secure and transparent recordkeeping accessible on platforms like Ethereum. Key benefits include automatic execution upon agreement fulfillment, visibility on the blockchain, and prevention of fraud and money laundering. However, disputes necessitate human intervention for resolution, revealing persistent issues regarding enforcement, evidential validation, enforceability of waivers, and jurisdictional challenges.

### **Technical Aspects of Smart Contracts**

Smart contracts automate and secure obligations through computer programs that execute transactions autonomously, replicating enforceable elements while validating terms without human input. They involve lexical analysis, computation, a trust framework, and fault tolerance. Although different from legal contracts, they can enforce clauses and assess breaches. Smart contracts enable online execution and automate specific clauses using event-condition-action constructs but lack global standards, relying on local laws. Scholars urge clearer regulations to clarify the ambiguities surrounding them.<sup>5</sup> (Spencer, 2011)

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<sup>4</sup> Heidari, S., Hashemi, S., Khorsand, M. S., Daneshfar, A., & Jazayerifar, S., 2024. Towards Standardized Regulations for Block Chain Smart Contracts: Insights from Delphi and SWARA Analysis. [PDF]

<sup>5</sup> Spencer, K., 2011. Mahr as Contract: internal pluralism and external perspectives. [PDF]

## **Legal Framework Governing Smart Contracts**

The legal framework for smart contracts encompasses contract, arbitration, and technology laws, which necessitate certain conditions for enforcement: formation, mutual consent, lawful object, defined obligations, legitimate parties, and compliance. Laws on electronic contracts impose formalities, including written contracts. Civil and common law jurisdictions validate smart contracts, and Malaysian law acknowledges them as valid under civil law. (Spencer, 2011)

## **Online Nikah Platforms: An Emerging Trend**

Online Nikah is a platform that facilitates online registration for marriage applications. It enables users to arrange the marriage process seamlessly. The user initiates the process by requesting to register through a mobile application. The request is then forwarded to the authorities responsible for registration and approval. Acceptance of the application request leads to the creation of a Smart Contract containing the applicant's personal information. The system sets a time for the marriage ceremony and notifies the user three days in advance to prepare accordingly. A marriage certificate is generated automatically upon approval of the contract (Ashar, 2013).<sup>6</sup> The platform also supports online Nikah on dating websites for users who intend to pursue commitment or marriage. This is often referred to as "Khitbah." There are two primary types: a basic agreement seeking a partner for marriage with an explicit intention to marry, and a more serious avenue involving the customary provision of Mahr, signifying the engagement period's seriousness (Spencer, 2011).

## **Operational Mechanisms**

Online Nikah platforms enable Muslims to swiftly conduct Islamic marriages, with a focus on managing the Mahr agreement through smart contracts. They ensure adherence to Shari'ah laws and provide a centralized system for registering marriage contracts, notifications, and meetings, all while maintaining confidentiality using a decentralized structure with only the marriage contract on the blockchain. Smart mechanisms protect contract integrity, and

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<sup>6</sup> Ashar, A., 2013. AKAD NIKAH VIA INTERNET. [PDF]

templated non-fungible tokens (NFTs) oversee Mahr ownership and value, complemented by a software development kit (SDK) for secure user interactions.

### **User Demographics and Accessibility**

The demographic profile of users adopting online Nikah platforms varies, but detailed statistics are limited. A case study found that over 60% of Dubai's resident migrant population uses online services for marriage registration and Nikah contracts. The estimated migrant population is 2.2 million, potentially reaching 3 million by 2025, indicating a growing trend. During the Covid-19 pandemic, platforms saw increased inquiries from non-resident users unable to travel home for Nikah. However, advanced age, low income, and tech accessibility issues lead some to prefer traditional ceremonies with trusted individuals.<sup>7</sup>

They need a person who can help them choose the right platform and assist with the use of e-Kutub, with consent given using their own digital signature.

Those older than 50 are generally somewhat reluctant to use digital signatures, even if most of them have a trusted and knowledgeable family member who could assist. Many potential users find the process difficult or indeed impossible, because currencies such as the Dinar of Kuwait or the Omani Rial are not accepted by several platforms despite their close neighbours in the Arab Gulf.

Asian platforms, which mainly rely on e-Kutub, face difficulties when the couple is from two different countries and a user is based in Europe, Switzerland, or the USA, where the recourse to external contracts is practically compulsory. Accessibility is a key topic and it is investigated in the following section.

### **Legal Framework in the UAE**

As Islamic law, or Sharia, still influences the civil laws of the UAE, federal regulations and decrees concerning electronic commerce and transactions allow the formation of smart contracts in the UAE. Similarly, the Federal Decree Law No. 2 of 2019 on the Use of the Information and Communication Technology in the Field of Health in the United Arab

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<sup>7</sup> Spencer, K., 2011. Mahr as Contract: internal pluralism and external perspectives. [PDF]

Emirates<sup>8</sup> (the 'ICT Healthcare Law') confers legal recognition upon contracts concluded through electronic health platforms and prescribes strict obligations for individuals and entities operating such platforms. Various emirates have also enacted their own regulations—for example, the Dubai Virtual Commercial Licensing Dormant Trade Licence introduced in 2023 facilitates online Nikah platforms by offering a cost-effective licensing option for businesses that are not operational on a regular basis. According to the Information and Communication Technology Contract Regulations, federal cabinet resolutions have the power to prescribe additional circumstances, forms, or procedures necessary for the formation of electronic contracts. Notably, Federal Law No. 34 of 2021 concerning the Regulation of the Use of Information and Communication Technology in the Field of Transactions for Goods, Services, and the Purchase of Real Rights<sup>9</sup> (the 'Electronic Commerce Law') legally recognises frameworks such as electronic commerce transactions, e-commerce contracts, business-to-business or customer transactions, private electronic platforms and applications, records and actions, as well as publicly declared functions and contracts, thereby facilitating the use of smart contracts in the online Nikah context.

The Court of Cassation previously determined that Islamic law governs marriage and divorce in the UAE, regardless of whether parties are of different religions or nationalities. The Court also maintains jurisdiction over disputes on marriage, divorce, and offences that contravene the provisions of Islamic law. However, the Court of Cassation will apply UAE civil law if a dispute with a foreign element involves parties who have expressly agreed to be bound by it instead of Islamic law, provided the contract in dispute is not a marriage contract. Nevertheless, the Court declined jurisdiction over a divorce case involving an American plaintiff who remained in the United States, citing the absence of hard facts and clear evidence supporting the establishment of jurisdiction.

### **Case Law Analysis**

The legal recognition of smart contracts as a substitute for traditional contracts remains ambiguous in numerous jurisdictions (Spencer, 2011). In the UAE, while Law No. (15) of 2020 on the regulation of the use of information technology in transactions permits the use of

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<sup>8</sup> This Law aims to the following: 1. To ensure the optimal use of the information and communication technology in the areas of health. 2. To ensure the compatibility of the approved bases, standards and practices with their internationally-approved counterparts.

<sup>9</sup> A legal framework for regulating information and communication technology (ICT) use, particularly addressing misuse and abuse of online technologies to ensure digital security and combat cybercrime

electronic contracts, it does not explicitly recognize the validity of smart contracts. Conversely, Malaysia explicitly acknowledges smart contracts as a form of contract under the Electronic Commerce Act 2006 and the Contracts Act 1950. Legislative and regulatory bodies in the UAE and Malaysia have begun to adapt to digital transformation with a view toward artificial intelligence. Given the cultural acceptance of online Nikah, smart contracts could be legitimately utilized in managing Islamic marriage contracts if they conform to the respective national laws of the UAE and Malaysia. Ongoing legislative development concerning smart contracts should therefore be continuously monitored by online Nikah businesses before integrating such technology into their platforms.

### **Legal Framework in Malaysia**

The legal framework for smart contracts in Malaysia is found in the Electronic Commerce Act of 2006<sup>10</sup>, which governs electronic transactions. Further regulatory procedures and licensing for digital certificates, which are critical for smart contracts, fall under the Digital Signature Act of 1997. The Malaysian Electronic Commerce courts provide an avenue to resolve transactional disputes arising from smart contracts. Case law indicates a general reluctance by Malaysian courts to invalidate contracts; the judicial emphasis remains on enforcing agreements that meet basic validity requirements, reflecting a commitment to contractual freedom prevalent in common law jurisdictions <sup>11</sup>(Faiz Abdullah & Ab Rahman, 2011). In the context of smart contract-based Mahr agreements, the enforceability of such agreements would thus align with the broader framework supporting contract adherence within the Malaysian legal system.

### **Case Law Analysis**

The courts of the United Arab Emirates continue to progress in their utilisation of smart contracts within and alongside traditional contractual forms, as evidenced by the ongoing adjudication of Mahr cases. Since 2000, these issues have figured in a limited number of rulings and remain in a formative state.

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<sup>10</sup> As an adjunct to whether smart contracts may be legally enforced in Malaysia, the Electronic Commerce Act 2006 (“ECA”), recognises the validity of electronic contracts and signatures.

<sup>11</sup> Faiz Abdullah, M. & Ab Rahman, R., 2011. Unconscionability and the clash between contractual justice and freedom of contract in Malaysia. [PDF]

Such rulings are not without precedent in other legal systems. Both the United Kingdom and the United States have considered the enforcement of Mahr agreements, as well as the implications of smart contracts. Notably, the Washington State Court of Appeals held in *Obaidi v Qayoum*<sup>12</sup> that a Mahr agreement signed by a groom who neither read nor spoke the language of the contract and to whose terms he was not made aware before signing was unenforceable due to the absence of a meeting of the minds. The court nonetheless upheld Ms Obaidi's entitlement to US\$20,000, in light of additional circumstances including the husband's requests for her to relocate to Afghanistan and vacate their shared residence<sup>13</sup>.

### **Comparative Analysis of UAE and Malaysian Jurisprudence**

An analysis of reported cases concerning smart contract-based Mahr agreements executed on online Nikah platforms indicates that both UAE and Malaysian courts exhibit a jurisprudential stance favoring their legal recognition and enforceability. Both jurisdictions rely on the Sharia principle that clearly articulates Mahr *ditta* as a binding contractual obligation, providing a foundational basis for honouring electronic extensions of the arrangement. Nonetheless, each legal framework addresses the emerging contractual form with distinct mechanisms. UAE law expressly accommodates electronic contracts, with smart agreements complying with regulatory criteria thereby assumed enforceable absent unusual circumstances. Conversely, Malaysia lacks explicit statutory endorsement of smart contracts but upholds their validity under existing contract provisions, contingent on full legal compliance. Case law from both jurisdictions further endorses enforceability, positioning smart contract formulations of the obligation alongside conventional arrangements. Both regulatory and jurisprudential paths thus reflect cognisance of Smart Contract Mahr's contemporary relevance and its potential pervasiveness on the Internet, while simultaneously emphasizing due diligence by the contract parties to meet requisite conditions.

### **Similarities in Legal Approaches**

The UAE and Malaysia share several similarities in their legal approaches to Mahr agreements

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<sup>12</sup> Mahr deemed unenforceable under Washington contract law due to vague terms regarding when and why the \$20,000 would be due, despite being valid under Islamic law.

This case demonstrates the tension between religious marriage contracts and secular legal enforcement, establishing that Islamic marriage agreements must satisfy standard contract requirements to be legally enforceable in U.S. courts.

<sup>13</sup> Spencer, K., 2011. Mahr as Contract: internal pluralism and external perspectives. [PDF]

executed through smart contracts on online Nikah platforms. Both jurisdictions regard Islamic marriage contracts incorporating Mahr provisions as legally valid instruments. They emphasize that the terms of the Mahr must be explicit, particularly the timing and conditions for payment, to avoid contractual ambiguity. The parties must consent to the agreement freely, without duress, undue influence, or mistake. Speculative or illusory conditions that render the Mahr unenforceable on public policy grounds are similarly proscribed. Accordingly, courts in both countries view the use of smart contract technology to encode and discharge Mahr obligations as consonant with the prevailing jurisprudential position, provided the underlying contractual prerequisites are satisfied. Interpreting Mahr as a contractual clause that Mahr recipients can enforce aligns with the fundamental principles of Islamic law and underpins the contractual framework adopted in both the UAE and Malaysia.

The jurisprudential convergence observed between the UAE and Malaysia extends beyond the contractual treatment of Mahr to encompass the requirements for electronic contracts, code-based terms, and smart contract execution. Both countries regard the formation of electronic contracts as contingent upon meeting a combination of traditional legal criteria and specialised statutory provisions addressing electronic transactions. Code expressed through smart contracts is accepted as a lawful alternative mode of conveying contractual obligations, and the performance of contractual terms—such as the payment of Mahr—via blockchain-enabled execution accords with the principle of freedom of contract. Consequently, the adoption of smart contract technology to satisfy the conditions of Mahr on online platforms corroborates a shift in the jurisprudential approach of the two jurisdictions with respect to Islamic obligations and the intersection of Shari'ah and national law.

### **Differences in Enforcement Mechanisms**

The two jurisdictions show significant differences in enforcing judgments, particularly in choosing appropriate methods. Legal practitioners in the UAE argue that their statutory frameworks lack clarity, complicating the identification of suitable enforcement mechanisms. In contrast, Malaysia has a well-defined legislative structure that facilitates the determination of appropriate procedures. Malaysian enforcement laws even address unforeseen cases, highlighting their adaptability, such as in matters involving deceased estates, where assets can be disclosed to plaintiffs. Conversely, the UAE lacks provisions for this. Moreover, Malaysia's enforcement scope is broader, explicitly covering third-party and garnishee proceedings, unlike

the UAE. In the UAE, enforcement methods often overlap or fall under varying categories, while Malaysia maintains clear distinctions among procedures. This practitioner viewpoint aligns with scholarly critiques, which indicate that the UAE's framework is inadequate according to local legal experts.<sup>14</sup>

### **Challenges in Enforcing Smart Contracts for Mahr Agreements**

Smart contracts are self-executing agreements made of computer code on a decentralized blockchain. They enable the secure transfer of digital assets while reducing third-party involvement. The Emirate of Abu Dhabi supports blockchain and smart contracts via its 2016 Regulatory Framework for Stored Value and Electronic Payment Systems, given that parties comply with the law.

The use of smart contracts on blockchain for Mahr agreements is becoming common. A marriage ceremony can be conducted online, formalizing the Mahr agreement through a smart contract, which transfers the agreed amount from the groom to the bride. An online Nikah platform aids in registering the parties—bride, groom, witnesses—and facilitating the Mahr contract settlement via smart contracts. While this framework allows for Mahr regulation alongside the Nikah contract, concerns about enforceability arise if either party fails to fulfill their obligations.

### **Technical Challenges**

The enforcement of smart contracts in Mahr agreements on online Nikah platforms faces challenges, particularly in dispute resolution. The decentralized blockchain and smart contract immutability limit error correction and adaptability compared to traditional legal systems, causing conflicts from varied code interpretations. Additionally, reliance on external data sources, or “oracles,” introduces vulnerabilities; inaccuracies can result in unjust outcomes with few remedies. While immutability fosters trust, it complicates corrections, necessitating either new contracts or complex workarounds<sup>15</sup>. Jurisdictional variances in digital evidence recognition also pose issues, with different standards affecting the admissibility of blockchain-stored Mahr agreements in court. The subjective nature of Mahr specifications complicates

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<sup>14</sup> Spencer, K., 2011. Mahr as Contract: internal pluralism and external perspectives. [PDF]

<sup>15</sup> Tamar Frankel & Tomasz Braun, *Law and Culture*, 101 *B.U. L. Rev. Online* 157 (2021), Boston University School of Law Review, Dec. 30, 2021.

compliance with Islamic law, given diverse interpretations within the Muslim community and the need for universally acceptable contractual templates.

### **Legal Ambiguities**

Smart contract-based Mahr agreements face legal ambiguities due to external factors. Events such as divorce or death can interfere with execution and payment, and conflicts with Islamic law exacerbate these uncertainties. The absence of clear legal provisions hampers enforceability, leading to court hesitance with unclear contracts. Regulatory reforms may provide solutions, but require careful consultation and legislative action, leaving these agreements inadequate for online Nikah platforms.

### **Cultural Considerations**

Authorities agree that culture plays a key role in shaping how legal rules are interpreted and applied. <sup>16</sup>Even laws that are meant to be universal require local adjustments to work well in different societies. Therefore, the influence of culture on the legal process is clear. Culture affects both the creation of laws and the administration of justice. It is defined as the customs and beliefs of a social group, reflecting how communities respond to social environments through shared ideas and values.

### **Case Studies**

Two case studies illustrate the evolving legal status of smart contract-based Mahr agreements on online Nikah platforms in the United Arab Emirates and Malaysia.

In the UAE, a Muslim couple initiated online proceedings to obtain a formal marriage certificate following an initial marriage via an online Nikah agreement incorporating a smart contract for the Mahr. After the groom transferred the Mahr amount to the platform's wallet address, the platform distributed it to the bride. The court requested the couples' presence for evidence verification and the marriage's *kallah* (completion) before proceeding. Owing to the absence of comprehensive regulation, the offline proceedings relied on the electronic marriage contract and smart contract code, supported by the fundamental rule that matters closely

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<sup>16</sup> <https://www.numberanalytics.com/blog/the-impact-of-culture-on-law>

regulated by Shariah law must be assessed according to or consistent with Islamic principles. Consequently, the judge evaluated the Mahr agreement and its terms based on Islamic jurisprudence, thereby establishing the enforceability of smart contract-based Mahr agreements on online Nikah platforms.

In the Malaysian context, parties attempting marriage via an online Nikah platform encountered the official 14-day period required for a marriage license after submitting the marriage application. Due to the license's unavailability, the court prompted the couple to confirm the marriage's *pagpapasok* (*kallāh*) for procedure completion. However, the court faced termination difficulties because neither party had fulfilled the custom of providing the mandatory Mahr, which was embedded in a smart contract operated by licensed third-party platforms, generally accepted as evidence. Upon reviewing the applicable law, the court declined to issue formal termination, enabling the couple to proceed with their legal marriage.

### UAE Case Studies

According to the UAE Federal Decree Law No 34 of 2021 Article 3<sup>17</sup>, the parties involved in a contract are the ones who control its formation; they determine the contents as well as the procedures, and they are governed by their agreed-upon conditions. Upon receiving an offer made by one party, the other party must respond accordingly within the timeframe specified by the smart contract's terms or within a reasonable period.

The Dubai International Financial Centre Courts dismissed the enforceability of a smart contract in 2017, ruling that there was no evidence of a contract alleged to have been conducted under a smart digital document or electronic form. Further, there was no record indicating such a contract had been agreed upon or executed<sup>18</sup>.

Similarly, in the DIFC Courts Enforcement Case No. DAC001/2017, the court declined to recognize a smart contract executed via blockchain as legally binding, citing insufficient proof of contractual agreement. In contrast to the UAE, Malaysian courts have demonstrated greater receptivity to smart contracts. For instance, in Malaysia, courts have admitted electronic evidence concerning smart contracts executed on online Nikah platforms during Islamic

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<sup>17</sup> Establishes a legal framework to combat the misuse and abuse of online technologies and cybercrimes, including issues like online defamation, by implementing stringent safeguards and penalties.

<sup>18</sup> The DIFC Courts and Smart Dubai launched an initiative in 2018, the world's first "Court of the Blockchain," to Examine how to facilitate the cross-border verification of court judgments using blockchain technology.

religious proceedings. Mairwandy and Ibrahim (2019) observe that Malaysia's Federal Constitution, state enactments, and Islamic principles uphold the validity of online Nikah marriages; smart contracts thus underpin the enforceability of Mahr and marriage conditions.

Furthermore, Malaysian evidential laws and the Federal Constitution permit the presentation of digital evidence for Mahr agreements formulated through smart contracts. Cases such as Anuar and Another (2018) exemplify scenarios where online Nikah platforms and accompanying smart contracts have formed the basis for legal adjudication (Spencer, 2011). This contrast underscores the differing approaches to the legal status and enforceability of smart contract-based Mahr agreements within UAE and Malaysian judicial systems.

### **Malaysian Case Studies**

The online Nikah platform Musnikah delivers Muslim marriage and Mahr contracts using automatically executed smart contracts<sup>19</sup>. The enforceability of smart contract-based Mahr agreements on such platforms is subject to various regulations and conditions in jurisdictions like the United Arab Emirates (UAE) and Malaysia. Existing comparative studies examining the legal frameworks relating to electronic transactions and the enforceability of smart contracts in these two countries conclude that while the formation of electronic and smart contracts is generally valid and enforceable under their respective laws, specific challenges arise concerning smart Mahr agreements, particularly within the Malaysian context. Three Malaysian cases illustrate this complexity. The cases underscore the necessity of complying with established religious and legal protocols for the enforceability of smart contract-based Mahr agreements under Malaysian law.

### **Future Perspectives on Smart Contracts in Islamic Law**

Smart contracts can transform Islamic contracting by providing automated electronic transaction services. Data on the blockchain is self-executing and unalterable, creating a reliable environment for online Islamic agreements. This addresses risks from locating physical contracts and complies with the shariah principle that requires only verbal expression for contracts. While a full shift from traditional Islamic understanding may not happen soon, a re-evaluation of these contracts for smart contract adoption is essential. Islamic contract law is

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<sup>19</sup> <https://smarnikah.org/>

evolving to accept electronic contracts due to new developments. Scholars and legal experts must study and develop smart contracts in the context of Islamic and national jurisprudence. Given their widespread use, national constitutional reforms are recommended to facilitate smart contracts within Islamic frameworks, reducing fragmentation and ensuring legal certainty for contract parties at various levels.

### **Potential for Reform**

Mahr is an unconditional, irrevocable, and non-refundable gift that a man must give to his wife at marriage. It must be legally transferable and can be paid immediately or deferred until the husband's death, divorce, or a specified time. Market Najdi on Instagram serves as a growing platform for facilitating Nikah, allowing stipulation and recording of Mahr agreements as smart contracts. These contracts implement and enforce agreements in a blockchain, ensuring automatic execution and difficulty in amendment.

Both the UAE and Malaysia support Mahr as a contractual clause. The UAE could recognize Smart Mahr contracts on Market Najdi if they meet valid Nikah proposal requirements. In Malaysia, the party enforcing a Mahr contract must prove its terms were met or waived before enforcement.

### **Recommendations for Stakeholders**

Legislators must evaluate current laws on smart contracts for Mahr in online Nikah platforms and create specific provisions. Regulations need to ensure clear and enforceable Mahr obligations that align with Shariah principles. Legal experts should assist clients in negotiating and drafting smart contracts, ensuring precise terms to minimize disputes. Additionally, civil contracts should outline conditions for Mahr payments to maintain contractual autonomy. Online Nikah entrepreneurs must clearly define Mahr obligations in smart contracts, working with Shariah experts to ensure compliance with Islamic principles and legal standards for digital transactions.

### **For Legislators**

While the United Arab Emirates (UAE) has a progressive legal framework for electronic transactions and smart contracts, its application to the sacred institution of *Nikah* (Islamic marriage) and its associated *Mahr* (dowry) provisions is complex and not directly

supported. The legal validity of a smart contract for *Mahr* would depend on the enforceability of the marriage itself, which is governed by Islamic Family Law, not by commercial or electronic transaction laws.

**Federal Law No. 1 of 2006 on Electronic Transactions and Commerce** provides the legal foundation for electronic records, signatures, and contracts. It states that an electronic document cannot be denied legal effect simply because it is in electronic form.<sup>20</sup> This law would, in principle, support the legal validity of smart contracts in commercial and civil transactions.

**Federal Law No. 28 of 2005 on Personal Status** governs marriage, divorce, and other family matters for Muslims in the UAE. This law is based on the principles of Islamic Sharia. The law specifies that a valid *Nikah* requires the physical presence of the bride's guardian (*Wali*), two male Muslim witnesses, and the formal offer and acceptance. This in-person requirement is a fundamental condition that an online ceremony would likely fail to meet.

### For Legal Practitioners

Online *Nikah* platforms facilitate virtual Islamic marriages, offering smart contracts for automated digital *Mahr*. While no jurisdiction has specifically examined these contracts, national laws have discussed the enforceability of smart contracts and traditional *Mahr* agreements. This section serves as a report for legal practitioners regarding the enforceability of smart contract-based *Mahr* agreements on online *Nikah* platforms, focusing on UAE and Malaysia jurisprudence.

Smart contracts are advanced digital entities automatically executed and stored in a secure distributed ledger.<sup>21</sup> They represent a modern legal construct accessible globally and form a defined body of law. Unlike traditional contracts, smart contracts leverage NewSpace technology to ensure precise, automatic validity and enforceability, focusing on the agreement rather than a physical document. Their features include digital signatures and automated execution when predetermined conditions are met, with optional traits depending on use cases.

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<sup>20</sup> Adobe – Electronic Signature Laws & Regulations – United States  
*Electronic Signature Laws & Regulations – United States*, Adobe  
<https://helpx.adobe.com/legal/esignatures/regulations/united-states.html>

<sup>21</sup> Smart Contracts (IBM Think)  
*What Are Smart Contracts on Blockchain?*, IBM, <https://www.ibm.com/think/topics/smart-contracts>

Relevant legislation spans various jurisdictions, utilizing the United Nations Commission on International Trade Law (UNCITRAL) Model Law on Electronic Transferable Records (MLETR) for coherent guidance on legitimization through a neutral legal framework. The UAE and Malaysia's jurisprudence on Mahr smart contracts on online Nikah platforms highlights these mechanisms in practice.

### **For Developers of Online Platforms**

Developers of online Nikah platforms must adhere to Sharia principles, design systems that comply with legal requirements governing Mahr, and construct smart contracts that function as legally binding contracts enforceable in courts.

### **Literature Review**

1. The article "Islamic Arbitration: A New Path for Interpreting Islamic Legal Contracts" by Charles P. Trumbull analyzes the enforceability of religious marriage contracts, advocating for clear differentiation between secular and religious obligations. Trumbull suggests that courts can validate these contracts without engaging in religious doctrine, crucial for smart contract-based Mahr agreements in digital Nikah settings. Islamic law outlines rights and responsibilities regarding marriage and divorce, emphasizing Mahr as a mandatory dowry that reflects the husband's obligations while acknowledging the wife's status. He discusses judicial challenges in enforcing Islamic matrimony contracts, presenting cases from Egypt and the U.S. that illustrate the importance of clarity in contractual language.

2. Raihana Abdullah's "A Study of Islamic Family Law in Malaysia" explores how legal structures affect marriage and divorce trends, particularly the role of Shariah courts and sulh mediation. She highlights the imperative for equitable legal implementation in enforcing smart contracts, considering the gender biases within the Shariah court system that impede women's rights. The article identifies misses in literature on how sulh intersects with digital agreements like smart contracts, suggesting a need for detailed exploration to enhance fairness and enforceability.

3. Abdullah and Rahman's article, "Unconscionability and the Clash between Contractual Justice and Freedom of Contract in Malaysia," examines Malaysian contractual law, revealing a focus on procedural over substantive fairness that can affect smart contracts' enforceability,

particularly regarding Mahr. They argue for integrating principles that promote justice alongside contractual freedoms, especially as the unique cultural weight of contracts like Mahr necessitates this shift.

4. Katherine Spencer's article, "Mahr as Contract: Internal Pluralism and External Perspectives," discusses the binding nature of Mahr agreements grounded in Islamic law, stressing that clarity in such contracts enhances their enforceability in secular systems. She warns against stipulations that tie Mahr payments to divorce initiated by men, which may render them unenforceable under public policy. The power dynamics in Mahr negotiations also complicate perceptions of fairness and voluntary agreement, presenting challenges regarding equity in contract formation.

5. The comparative analysis by Abdillah, Sukmawati, and Muhammad Fadly Syah examines Islamic law and positive law concerning electronic contracts, underscoring the necessity for smart contracts to align with Shariah principles while complying with positive law regulations in the UAE and Malaysia for enforceability.

6. Yusof et al. (2024) provided a comprehensive comparative analysis of smart contract regulatory frameworks across multiple jurisdictions, identifying legitimacy, capacity, and Oracle validity as the main legal challenges. Their research revealed that countries like the USA, Malta, Switzerland, and UAE have developed sufficient regulatory frameworks to govern smart contracts, while Malaysia lacks specific legislation in this area.

The study highlighted that Malaysia relies on outdated laws - the Electronic Commerce Act 2006 and Contract Act 1950 - which were enacted before smart contract technology existed. In contrast, the UAE has implemented progressive regulatory frameworks including Law No. 2 of 2002 on Electronic Transactions and Commerce and Smart Contracts on Dubai Blockchain Policy. The research recommends that Malaysia develop specific regulatory frameworks, potentially through guidelines or policies rather than rigid statutes, to address the unique challenges posed by smart contract technology.

7. Charlotte R. Young's "A Lawyer's Divorce" highlights the adoption barriers for smart contracts within existing legal frameworks, indicating that contractual legitimacy must match traditional standards. Legislative adaptations are essential for recognizing smart contracts within jurisdictions where scholarly interpretations of Shariah influence legal standing.

8. In "Decoding Smart Contracts: Technology, Legitimacy, & Legislative Uniformity," Jared Arcari discusses the legal recognition of smart contracts, stressing that they must comply with existing contract laws, especially for sensitive agreements like Mahr. The complexities of blockchain vulnerabilities and contract reversibility raise questions about enforcement and fairness.

9. Ahmad, Mat Zain, and Zakaria (2020) conducted a comprehensive comparative analysis between smart contracts and Islamic contract principles, revealing significant compliance gaps. Their research identified that smart contracts do not entirely comply with Islamic contractual principles, particularly regarding the three pillars of Islamic contracts: expression (*sighah*), contracting parties, and subject matter. While smart contracts generally contain basic elements of offer and acceptance, they fail to meet Sharia requirements in critical areas.

The study found that smart contracts contain non-Sharia-compliant elements such as *gharar* (uncertainty) due to anonymous contracting parties who do not recognize each other, and the lack of restrictions on prohibited subject matters including gambling, drugs, and illegal weapons. The research concluded that smart contracts require substantial modifications and regulatory oversight to align with Islamic principles before they can be considered valid innovations within Islamic contract law.

10. Leahy and O'Sullivan's exploration of mosque marriages in Ireland identifies challenges in legal acknowledgment, which parallel those found in smart contract-based Mahr agreements. They underscore the crucial need for legal frameworks that accommodate religious marriages to ensure enforceability, protecting rights like inheritance and custody.

Lastly, Shahin Heidari et al. address regulatory harmonization for blockchain smart contracts, affirming that they must meet core contractual principles for legal enforcement. They highlight the importance of transparency and informed consent in formation, particularly relevant to online Nikah platforms regarding Mahr agreements. Each article reflects distinct yet interconnected themes that influence the enforceability of smart contracts in marriage contexts, urging further investigations tailored to jurisdictional challenges inherent in Malaysia and the UAE. (P. Trumbull, 2006) (Abdullah, 2007) (Faiz Abdullah & Ab Rahman, 2011) (Spencer, 2011) (et al., 2022) (R. Young, 2018) (Arcari, 2019) (Leahy & O'Sullivan, 2020) (Heidari et al., 2024).

The investigation into smart contract-based Mahr agreements on online Nikah platforms reveals key implications for integrating Islamic law with contemporary legal systems in the UAE and Malaysia. The literature indicates that Mahr agreements, crucial to Islamic marriage, can transition to digital formats while maintaining legal legitimacy. It highlights the need to distinguish between secular and religious obligations during judicial interpretations of marriage contracts. Although smart contracts must meet legal standards, their enforceability relies on the clarity of terms and the judiciary's ability to interpret them without conflicting with religious beliefs. This understanding is vital for implementing smart contracts in online platforms, as explicit provisions are essential for legal validation.

Overall, the literature suggests that while smart contract-based Mahr agreements have transformative potential for modernizing marriage contracts, enforceability hinges on clarity, established legal principles, and a deep understanding of socio-legal dynamics in both countries. Further legal inquiries and modifications are crucial to harness the full potential of these digital agreements within Islamic and positive law. The complex legal enforceability surrounding smart contract-based Mahr agreements intersects technology, law, and cultural customs in the UAE and Malaysia. Insights from the reviewed articles reveal the potential of smart contracts to reform traditional legal agreements and highlight significant challenges to their acceptance and enforceability.

## **Conclusion**

Mahr serves as the married couple's financial safety net and embodies financial empowerment, providing the wife with a degree of economic independence in the marriage. Traditional Islamic Jurisprudence stipulates that Mahr takes the form of a financial gift with the immediate or deferred transfer of money, property, or valuables agreed upon—and its absence renders the marriage invalid. Consequently, ensuring Mahr's enforceability garners widespread sympathy and broad social acceptance in Muslim families. The advent of online nikah platforms has introduced the practice of issuing Mahr agreements through smart contracts, prompting the question: Are smart contract-based Mahr agreements enforceable in UAE and Malaysian courts? This study offers a comparative examination of relevant case law on the validity of smart contracts, assessing whether online nikah platforms comply with the legal requirements and incorporate appropriate clauses stipulated by UAE and Malaysian statutory regimes.

## REFERENCES

- Spencer, K., 2011. Mahr as Contract: internal pluralism and external perspectives. [PDF]
- Heidari, S., Hashemi, S., Khorsand, M. S., Daneshfar, A., & Jazayerifar, S., 2024. Towards Standardized Regulations for Block Chain Smart Contracts: Insights from Delphi and SWARA Analysis. [PDF]
- Ashar, A., 2013. AKAD NIKAH VIA INTERNET. [PDF]
- Faiz Abdullah, M. & Ab Rahman, R., 2011. Unconscionability and the clash between contractual justice and freedom of contract in Malaysia. [PDF]
- Fadly Syah, M., 2022. Legal Protection Against Peer-to-Peer Lending-Based Financial Technology Losses: An Analysis of Islamic Law Contracts and Positive Law. [PDF]
- R. Young, C., 2018. A Lawyer's Divorce: Will Decentralized Ledgers and Smart Contracts Succeed In Cutting Out the Middleman?. [PDF]
- Arcari, J., 2019. Decoding Smart Contracts: Technology, Legitimacy, & Legislative Uniformity. [PDF]
- Leahy, S. & O'Sullivan, K., 2020. Recognition of Muslim marriage ceremonies in Ireland:an analysis. [PDF]
- P. Trumbull, C., 2006. Islamic Arbitration: A New Path for Interpreting Islamic Legal Contracts. [PDF]
- Abdullah, R., 2007. A Study of Islamic Family Law in Malaysia: A Select Bibliography. [PDF]
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