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Sale and Deferred Payment Sale Via  
Artificial Intelligence (AI)**

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## Programming the Future Commodity Sale and Deferred Payment Sale Via Artificial Intelligence (AI)

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## Abstract

**Main idea of research** is to introduce a practical AI application for Islamic financial transactions. **Its importance** lies in emerging AI and seize the opportunity of integrating it in the Islamic financial transactions as an alternative for various transactions that cause the global financial crises. **This research is also to confirm** the value of the Islamic jurisprudence to address the situations imposed by the AI as a natural development in the civil progress. The problem is the lack of jurisprudential adaptation and application of AI in its various aspects. **This research aims to** introduce a flexible methodology to enable the Islamic jurisprudence to adapt to the AI systems in connection with the Islamic financial transactions. It will introduce AI-driven models for deferred payment sales and future commodity sales, setting a precedent for other Islamic financial transactions. **The nature of the research** depends on an analytical approach, analyzing the definition of AI and its fields. It also analyzes the jurisprudence provisions related to AI, the targeted types of sale, and introduces solutions for the issues raised from a jurisprudential point of view. **Among the most prominent results** that both researchers reached are the following: the Islamic transactions can be adapted using AI as shown in deferred payment sales and future commodity sales, while preserving the precise jurisprudential regulation. Also the research has found that deferred payment sales and future commodity sales are permissible and significant Ijtihad that can introduce solution for many financial crises, especially that hinder financing the short and long term projects. **Therefore, both researchers believe that** the development of the jurisprudential codification integrated with legislative regulations to be the base of Ijtihad in leveraging AI.

**Key Words:** AI, deferred payment sale, future commodity sale.

## برمجة البيع الآجل وبيع السلم عبر تقنية الذكاء الاصطناعي

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### ملخص البحث

**فكرة البحث:** الرئيسة محاولة لتقديم تطبيق عملي لإمكانية برمجة المعاملات المالية الإسلامية عن طريق تقنية الذكاء الاصطناعي، وتكمن أهمية البحث من ظهور تقنية الذكاء الاصطناعي ومحاولة اغتنام فرصة بروزها في عرض المعاملات المالية الإسلامية كبديل للعديد من المعاملات التي تسببت في الأزمات المالية العالمية، وكذلك التأكيد على القيمة الذاتية للأحكام الفقهية وقدرتها على تنظيم الأوضاع والأحوال التي يفرضها الذكاء الاصطناعي كتطور طبيعي في مجال التقدم المدني. وتتمثل إشكالية البحث في افتقار تقنية الذكاء الاصطناعي إلى التكيف والتطبيق الفقهي في جوانبها المتنوعة. ويهدف البحث إلى تقديم منهجية مرنة في التكيف الفقهي لأنظمة الذكاء الاصطناعي فيما يختص بالمعاملات المالية الإسلامية، وتقديم البيع الآجل وبيع السلم على نمط تقنية الذكاء الاصطناعي؛ ليكون أنموذجاً لبقية المعاملات. وقد اقتضت طبيعة البحث أن سلك البحث المنهج التحليلي حيث يعنى بتحليل حقيقة الذكاء الاصطناعي ومجالاته، وتحليل الأحكام والقواعد الفقهية ذات الصلة بموضوع الذكاء الاصطناعي وأنواع البيع المستهدفة، وصولاً إلى تقديم حلول عملية للإشكالات المثارة من الناحية الفقهية. ومن أبرز النتائج التي توصل إليها الباحثان

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قابلية المعاملات المالية الإسلامية كما ظهر في البيع الآجل وبيع السلم؛ لأن تبرمجان عن طريق تنقية الذكاء الاصطناعي، وتشمل بالتنظيم الفقهي الدقيق كمعاملات مالية نموذجية، كما توصل البحث إلى أنّ البيع الآجل وبيع السلم مشروعان واجتهادان كبيران يمكن لهما أن يحلّ العديد من الأزمات المالية خاصة التي تعترض تمويل المشاريع قصيرة وطويلة الأمد. لذلك يرى الباحثان ضرورة تطوير التقنين الفقهي وربطه بالتنظيم التشريعي ليكون الأساس الاجتهادي في الاستفادة من تقنية الذكاء الاصطناعي.

**الكلمات المفتاحية:** الذكاء الاصطناعي، البيع الآجل، بيع السلم.

## **Introduction:**

This research seeks to underscore the inherent flexibility of Islamic financial transactions, characterized by the self-renewing nature. It examines the effectiveness of renewable methods on the renewal process. The research emphasizes the importance of flexibility in financial transactions, especially when innovative methods are employed to assist the Ijtihad scholars in extrapolating the Islamic provisions and their objectives in the emerging situations. It stresses the need to produce methods and means, and acquire specialized technology to elevate the level of the financial transactions while adhering to the Islamic ethics.

This research deals with the application of AI to various types of Islamic sales. Now, AI is considered one of necessities of provisions in our modern era and a requirement to upgrade them. It is important to note that the necessities of provisions are too broad to be confined to AI. It is a renewal approach to Islamic jurisprudence. The researchers discuss the AI from the aspects of its concept, usage, applications, and impact on modernizing Islamic financial transactions especially financing sales. They have focused on deferred payment sale and future commodity sale because they are the most popular among consumers and producers.

Given the importance of AI and its results in changing the patterns in the transactions, it's crucial for Islamic scholars to stay updated. Earlier, those interested successfully introduced the components of Islamic jurisprudence regarding financial transactions.

They persuaded people of the high value of Islamic provisions and their ability to address challenges with innovative solutions. Now, the opportunity arises once more. Issues such as AI, among others, emerge. Therefore, we are going to discuss “the impact of AI on programming<sup>(1)</sup> future commodity sale and deferred payment sale”.

### **Importance of the research:**

Importance of the research comes from the following:

1. It is about a novel scientific development that necessitates a Sharia perspective on its consequences.
2. The topic’s significance lies in the value of the Islamic jurisprudence to address the situations imposed by the AI as a natural development in the civil progress.
3. Islamic researchers and scholars are confronted with the challenge of developing the best jurisprudence models to regulate the social and economic implications of AI integration in a broad sense.
4. Some advocate for treating AI as humans,<sup>(2)</sup> granting it full rights and legal personhood.

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(1) The Definition of Programming: It is a set of commands given to the computer to carry out a specific task. A program is a sequence of instructions, written in a programming language, that directs a computer to perform specific tasks, such as calculating numerical values. Ibrāhīm, ‘Abd al-Raḥmān ‘Abbās. The Fundamentals of Programming, (Khartoum: Blue Nile University, School of Further Studies), P. 1-4.

(2) Gunkel, David. J., The machine’s Question: Critical Perspectives on AI, Robots, and Ethics (Cambridge: MIT Press, 2012), 1st issue, P.104.

5. The rise of intelligent agents in smart contracts underscores the importance of researching AI and its applications.

**Objectives of the Research:**

The most important objectives of this research are the following:

1. Introduce a flexible methodology to enable the Islamic jurisprudence to adapt to the AI systems in connection with the Islamic financial transactions.
2. Demonstrate how Islamic provisions can establish superior systems that adapt to AI innovations.
3. Model the future commodity sale and deferred payment sale via AI.

**Problem of the Research:**

AI raises many practical issues that require to be addressed with a successful and effective way. A major issue is adapting AI to Islamic jurisprudence accurately and suitably, especially since AI is used in all aspects of public and private life. In the contemporary era of globalization, rapid communication, and information abundance, Islamic jurisprudence must demonstrate its capacity to address novel challenges arising from complex social and economic interactions. The complexity has reached a point where we can no longer distinguish between valid and invalid financial transactions. We are at risk of abandoning our jurisprudential constants, like the distinction between usury and trade, and

recognizing that ignorance, uncertainty, and injustice are factors affecting the validity of our transactions.

### **Questions of the Research:**

The research answers the following questions:

1. To what extent can AI be utilized in programming financial transactions?
2. Do Islamic provisions have enough flexibility to address AI novelties?
3. Can we develop a methodology to adapt novel transactions using AI?

### **Methodology of the Research:**

The research depends on the analytical approach, analyzing the definition of AI and its fields. It also analyzes the jurisprudence provisions related to AI, the targeted types of sale, and introduces solutions for the issues raised from a jurisprudential point of view.

### **Content of the Research:**

The research consists of an introduction, two topics, conclusion, and references.

The introduction contains importance, problematic, methodology, and content of the research. The First Topic: The definition and Fields of AI. It has two themes. The First Theme: The definition of AI. The Second Theme: The Fields of AI. The Second Topic: Programming the Types of Sales. It has two themes. The First

Theme: The concept of programming the financial transactions.  
The Second Theme: Programming the future commodity sale and deferred payment sale. The conclusion: The most important results and recommendations.

### **The First Topic: The definition and Fields of AI.**

#### **The First Theme: The definition of AI.**

Intelligence means; “the cognitive abilities of human beings that enable them to understand, make connections, clarify the ideas and information, reason, figure out, interpret, analyze, remember, set goals, draw plans, solve problems, and recognize relationships”.<sup>(1)</sup> Artificial intelligence means; “The ability to act autonomously as a human being. The science of AI aims to study the means to enable systems to act autonomously.”<sup>(2)</sup>

In the context of computers, AI is defined as “the ability to create computer models of various life domains, identify fundamental relationships between their elements, and generate appropriate responses to events and situations within those domains”.<sup>(3)</sup> It also involves “the reproduction of intelligent behaviors on the

(1) Artificial Intelligence: Is it symbolic technology? (In Arabic), ‘Izz al-Dīn Ghāzī, *Majallat fikr, ‘ulūm al-Insānīyah wa-al-Ijtīmā‘īyah*, 6th Issue, 2005, P. 45.

(2) ‘Īsá, Haytham Al-Sayyid, *The Obligation to Explain before Contracting through AI Systems (Dār al-Nahḍah al-‘Arabīyah*, 2018), P. 18.

(3) Artificial Intelligence Applications: a Gateway to Developing Education in light of the Challenges of the COVID 19. ‘Abd al-Razzāq Mukhtār Maḥmūd. *International Journal of research in Educational Sciences*, Vol. 3, 4th Issue, 2020, P. 182.

computer, distinguishing between two broad categories: sensory activities (sight, hearing, talking) and higher cognitive activities (such as visual computation, proving properties, software, expertise, and playing)".<sup>(1)</sup> Therefore, AI, in connection with computers, information networks, or other technologies, is employed by the human mind to replicate perception, analysis, deduction and reasoning. It aids humans in performing complex cognitive operations quickly and accurately to achieve the best possible results in various fields.

Ongoing studies and research on AI have shown that it aims to understand human intelligence by creating computer programs capable of simulating intelligent behavior. These programs can solve problems or make decisions by drawing on a variety of inferential processes coded into them<sup>(2)</sup>.

There is a difference between human intelligence and artificial intelligence. Human intelligence is a unique characteristic of the human mind, distinct from mental discrimination, and it varies among individuals due to various factors. The human mind has a remarkable ability to innovate, create, and diversify. In contrast,

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- (1) Ḥamdī Aḥmad Sa‘d, (2021, August 11-12). The Legal Nature of Artificial Intelligence. (In Arabic). The fourth international scientific conference on the legal and Sharia adaptation of contemporary developments and its impact on achieving social security, Tanta, Egypt. P. 237.
  - (2) Artificial Intelligence Applications: a Gateway to Developing Education in light of the Challenges of the COVID-19. ‘Abd al-Rāziq Mukhtār Maḥmūd. International Journal of Research in Educational Sciences, vol.3, 4th issue, 2020, P. 188.

AI is an embodiment or simulation of the outcomes produced by the human mind. AI is limited by what it is programmed to do. Ultimately, AI is a creation of the human mind. It is anticipated that the human mind, endowed with talents by Allah Almighty, will continue to make more significant discoveries.

### **The Second Theme: The Fields of AI.**

AI has emerged as one of the most efficient and advanced fields today. It is utilized in critical areas such as education, medicine, business, law, and administration. AI has led to the development of neural networks, smart client systems, and expert systems, making it essential in facilitating information management as a smart system.<sup>(1)</sup> One of the most significant outcomes of AI is the creation of robots programmed to perform various tasks across different industries. These include conducting surgical procedures and detecting fraud and forgery in documents and metals. Most research centers tend to incorporate robots into their educational and research processes within their curricula, if they haven't already.

Education is one of the areas of our daily lives that will benefit the most from AI. Among its benefits, machine learning stands out as one of the most significant. It allows information to be stored, retrieved, and quickly delivered to the recipient with little or no human intervention. There is no doubt that a lot of time and effort

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(1) The Role of Artificial Intelligence in Managing the Online Client Relationship of the Credit Populaire D'Algerie (in Arabic), Shaykh Hjjrh, The Academia Journal of Social and Human Studies, 20th Issue, 2018, P. 82.

has been saved. The many stages involved in preparing scientific material have been shortened. This has had a positive impact on the quality of achievement and performance levels, and has facilitated measurement, evaluation and assessment processes.

An intelligent agent is one of the applications derived from AI, designed to help people perform daily tasks. It ensures privacy and has the capability to continuously improve and learn. It plays a significant role in smart contracts due to its ability to interact with other contractors and intelligent agents, and to act legally. An intelligent agent is “a program designed to perform tasks on behalf of people without their direct intervention or control. It is autonomous, flexible, and capable of communicating and interacting with users and other agents”<sup>(1)</sup>.

### **The Second Topic: Programming the Types of Sales.**

#### **The First Theme: The concept of programming the financial transactions.**

Communication and information technology have become an indispensable part of contemporary life. Following the successful adaptation of Islamic jurisprudence to electronic transactions, it is imperative to address their potential negative consequences through rigorous and informed Ijtihad.<sup>(2)</sup> The Islamic science is

- (1) The Legal Issues in Concluding Smart Agents for Smart Contracts in the Blockchain Era; Kuwait and the UAE as an Example. Elsayed, Aḥmad Al-Dabūsi. Kuwait International Law School Journal. Vol.8, 2020, P. 402.
- (2) . Negatives of Using the Means: inability to adequately preview the item, lack of verification of the parties, hackability of applications, and lack of

actively engaged in the development and regulation of AI, contributing an Islamical and ethical perspectives to the global debate<sup>(1)</sup>. AI consists of means and methods. The permissibility of these means is determined by the nature of the materials used, which are generally permissible. Meanwhile, the methods are designed to perform specific tasks and actions that are intended to aid and benefit humans in various aspects of their lives. The process of programming itself is generally permissible, unless it involves any elements that contravene specific Sharia provisions. In such cases, the ruling applies only to the specific offending parts of the programming, and not to the entire process. Therefore, the planning, design, manufacturing, use, and disposal of the robot are permissible, provided they adhere to Sharia principles.

The claim that the invention was intended to emulate the creative power of Allah is not supported by evidence and is therefore unfounded. Additionally, while the specific design of the robot may be problematic, the acquisition of such a robot from a non-Muslim source for essential purposes is permissible. This is because the Islamic provision in this case is based on the act of

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awareness of how to conduct transactions. These issues can be mitigated through controlling and mentoring the Ijtihad, codification, and programming. As the transactions are a matter of Sharia and religion, not abstract interests.

- (1) Navigating the Intersection of AI and Islamic Ethics: Opportunities, Challenges, and Collaborative Pathways, Safi Kaskas, Iqra, <https://iqra.study/navigating-the-intersection-of-ai-and-islamic-ethics-opportunities-challenges-and-collaborative-pathways/>, (Wednesday, 14/11/2024), 01:45.

acquisition, not on the original act of creation or manufacturing.

The primary challenge is not the utilization of AI, but rather the formulation of precise jurisprudential regulations, their codification into robust and clear frameworks, and the implementation of rigorous oversight mechanisms.

A top priority should be the development of robust, secure Islamic transaction templates and smart applications, governed by appropriate regulations, to meet the diverse needs of beneficiaries, ranging from large-scale commercial institutions to individual consumers, on a global, regional, and national scale.

Therefore, the necessities of programming the transactions are as follows:

- 1- Jurisprudential Ijtihad to determine the final shape of the transaction.
- 2- Solid jurisprudential codification of comprehensive and controlled models.
- 3- Relying on easy-to-use and reliable programming technology that is designed to accommodate the specific requirements of jurisprudential Ijtihad and legal formulas.
- 4- Establish a supervisory body with the authority to provide comprehensive oversight

Undoubtedly, every experiment encounters challenges post-launch, and the practical application of Islamic finance through AI

is expected to face various challenges from political, economic, and legal perspectives. “Among the most serious challenges are the digital divide, information asymmetry<sup>(1)</sup>, bankruptcy disclosure, and Shariah non-compliance<sup>(2)</sup>. However, early preparation to develop effective solutions to these challenges can significantly reduce their impact on the future of Islamic finance through innovative technology. «This includes rigorous monitoring by specialized Shariah bodies, provided they receive advanced training in handling electronic devices and staying up-to-date with rapid technological developments.

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- (1) Islamic finance when facing the Digital Challenges. Mubārakī Sāmī & mḡ'āsh Sāmiyah. *Acil journal for economic and administrative research*, 5th Issue, 2021, P. 155-173.
  - (2) Opportunities and challenges of Islamic finance in Egypt (In Arabic). Ḥāzim Ḥasānayn Muḥammad & Jbryl Al-Shallāḥī. *Journal of Business Studies*. 4th Issue. 2021, P. 289-325.

## The Second Theme: Programming the future commodity sale and deferred payment sale.

### The First Section: The Classifications of Sales.

The sale<sup>(1)</sup> is the most important and widely used transaction in Islamic finance. It plays a significant role in establishing vital facilities across various fields. Its impact is evident in meeting the needs of both producers and consumers. It contributes to wealth development by generating profits and its various types help achieve the goals and desires of the parties involved. There are classifications as follows:

#### 1. The classification of sales based on the type of exchange involved:

There are four types<sup>(2)</sup>:

**Absolute Sale:** To exchange an item for cash, like trading a computer for Egyptian pounds. It's the simplest and most commonly used type of sale, with no conditions attached. It allows the buyer to exchange cash for items, making it the primary type of sale.

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(1) In language, sale means to transfer ownership of an item to another person or to acquire ownership of an item. And it is said that the meaning of sale is universally understood, thus requiring no definition. It is defined in jargon as: transfer the ownership of an item in exchange for something else. Al-Ḥaṭṭāb. M. M., The Talents of Galilee in Khalil's Brief Explanation (In Arabic) (Dār al-Mi'rāj lil-Nashr wa-al-Tawzī', n.d.), Section 6, p.4.

(2) Ibn 'Ābidīn, M. A., Ḥāshiyat Ibn 'Ābidīn (radd al-muḥtār 'alā al-Durr al-Mukhtār) (Cairo: Sharikat Muṣṭafā al-Bābī wa-Awlāduh, 1966), section.7, P.9.

**Future Commodity Sale:** To exchange a debt for an item or sell deferred item for an immediate price. It is called as the sale of those in need. The parties involved need to the exchanged items.

**Currency Exchange:** To exchange a price for a price in the same or different currency, such as the gold for gold and silver for silver. It is subject to special conditions, unlike other types of sales. Exchange must be completed in the same place, regardless of whether the exchanged items are identical or different.

**Bartering:** To exchange an item with an item, except for gold and silver. The two items must be equal in terms of exchange if they are the same in the sort and quantity.

## 2. The classification of sales based on pricing methods<sup>(1)</sup>:

There are three types:

**Bargain:** The seller don't disclose the production cost of the product.

**Auction:** The seller offers goods for sale, and buyers bid competitively. The goods are sold to the highest bidder.

**Trust Sale:** The seller is under obligation to disclose to the purchaser the cost price.

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(1) Pricing method: In Islamic jurisprudence, the price is the amount exchanged for the sold item and relates to liability. Ḥaydar, A., *Durar al-ḥukkām sharḥ Majallat al-aḥkām*. (Berūt: Dār Al-Jīl, 1999). Section.1. p.250. In the classification of sales based on pricing methods mentioned above, the price should be specific and clear, whether through bargain, auction, or cost-plus-profit sale.

**Cost-plus-Profit sale:** Goods are sold for their cost price plus a specified mark-up or profit agreed upon by the parties.

**Sale with no Profit:** The seller is delegating ownership of the goods to the purchaser without any profit.

**Sale with Loss:** The seller discloses the original cost of the goods but sells them with a loss which is a certain percentage of the purchase price.

### 3. The classification of sales based on price delivery<sup>(1)</sup>:

There are three types:

**Immediate Payment Sale:** The price is paid immediately, and there is no requirement to defer the price, and it is called a cash sale or a sale with an immediate payment. **Deferred Payment Sale:** The price must be deferred.

**Deferred Item Sale:** The delivery of the sold item is deferred for an agreed period, which applies on the future commodity sale and manufacturing sale.

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(1) Price delivery method: The full price must be delivered at the contract place as in the currency exchange and bartering, regardless whether the exchanged items are identical or different. Al-Lubnānī, S. R., Explanation of the Magazine (In Arabic) (Beirut: Dār al-Turāth Al-‘Arabī, n.d.), 3rd ed., 3rd issue, P.69, article 122. Another way is to deliver a portion of the price after entering into the contract and before the handover of the sold item as in the future commodity sale. Also, the price may be deferred to a certain date as in the deferred payment sale.

Al-Shirbīnī, M. Al., Mughnī Al-muḥtāj ilá Ma‘rifat Alfāz Al-Minhāj, (Dar Al-Kotob Al-Ilmiyah, 1994), 1st ed., 1st issue, section.2, P.43.

#### **4. The classification of sales based on binding of sale<sup>(1)</sup>:**

There are two types:

**Binding Sale:** It is the final sale without any permissible option clauses.

**Non-Binding Sale:** It is a sale that includes one of the permissible option clauses.

Therefore, there are many types of sale. According to researchers, some of these types are suited for national and regional levels due to their simplicity and ease, such as absolute sales and auctions. Other types are more applicable at the international and global levels.

The researchers tent to program each type of sales, no matter how electronically simple, to be available to all those authorized to sell, whether they are individuals or commercial institutions. This is because electronic means and the Internet represent the modern form of transaction. These means can be used to enter into a permissible contract, encouraging adherence to the provisions of the sale and fulfilling the satisfaction and desires of consumers.

Upon investigating the types of sales permissible in Sharia, researchers concluded that all such sales can be programmed and

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(1) The binding of sale: If the sale is validly concluded, free from option clause, it has become binding. Therefore, the sale becomes binding if it is free from any options or stipulations that might affect it. However, it becomes non-binding if it includes any option clause. Mujāḥī, M., *The Provisions of the Contract of Sale in the Maliki Islamic Jurisprudence*. (In Arabic) (Beirut: Dar Ibn Hazm Publications, 1422 AH), 1st ed. P. 234.

converted into smart applications using AI or any future innovations. An advanced application can cover these sales, but it is crucial to focus on two important matters besides other sale aspects: empowering the parties with option clauses and the right to cancel the sale according to applied Sharia controls<sup>(1)</sup>.

## **The Second Section: Programming the Deferred Payment Sale and the Future Commodity Sale.**

### **Programming the Deferred Payment Sale:**

The deferred payment sale<sup>(2)</sup> aims to meet the needs of those lacking sufficient resources, whether individuals or traders, on a

- (1) Option Clauses and Cancellation: Although the sale contract cannot be canceled unilaterally, it is crucial to consider the permissible option clauses for the purchaser, such as the option to withdraw before parting and the commodity's sighting choice. The e-contract should include the jurisprudential cancellation reasons such as the impossibility of execution and option clauses. In our opinion, all option clauses have conditions, so the program should incorporate these conditions.
- (2) The Deferred Payment Sale: It is permissible according to the religious texts such as this Hadith; "there are three things which contain blessings: a business transaction in which payment is agreed on a fixed later time, al-Muqaradah (speculative partnership), and mixing wheat and barley for one's household use but not for sale." Al-Shawkānī, M. ibn 'A, Attainment of objectives (Dār Ibn al-Jawzī, n.d). Section: 5, P.267. This is an important type of sale. Its core principle is that the deferment must be compensated in terms of price. This is a major distinction between sale and usury. Sharia does not consider time compensation in loans or debts, as money's function is to serve as a means of exchange, not to generate profit on its own. On the other hand, Sharia considers the value of time in the sale, because the time is added to the commodity that has the function of being increased. 'Abd Allāh, A. 'A., Types and Practices of Usury (In Arabic) (Khartoum: Dār Al-Sadād, 2001), 2nd ed. P.118.

robust ethical foundation. It is based on the confidence between the parties, who are assured that the transaction is valid in terms of Sharia and legislative aspects. Cost-plus-Profit sale<sup>(1)</sup> may be the most significant form of deferred payment sale. It can compete with other forms of purchase and financing because it is genuinely based on the seller's disclosure of the true price of the item. If the seller hides the true price of the item, the purchaser has the option to cancel or accept. Therefore, any electronic model should include various options. This transaction is based on the seller's right to set a certain profit for their item, and it is permissible to increase the price as the term extends.

Although the seller has the right to require legislative guarantees to ensure payment, we shouldn't forget that this transaction aims to fulfill needs, considering the conditions of the parties and the general market situation (influences on production and consumption).

One important mechanism to ensure the rights of the parties is the effective monitoring through supervisory bodies<sup>(2)</sup> which

- (1) Cost-plus-Profit sale: It depends on whether the price is disclosed upfront. Has the transaction been completed, and has the price been paid? Additionally, it depends on agreeing on a specific profit. It is free from purchase promises found in some modern formulations. It can be used to meet the urgent needs requiring a swift process, such as the sale of clothes, food, and equipment.
- (2) Supervisory body: In general, the supervisory body is a state entity that represents the state's ability to regulate commercial activities. Therefore, it should be independent and assigned specific competences and tasks. The movement of goods and services should be monitored by the supervi-

should be independent from the financial institutions. These bodies should be responsible for the creation, codification, and approval of transactions, particularly those of a capital nature. They should also monitor contracts throughout their lifecycle, adhering to the Islamic legal principle of state supervision without direct commercial participation.

Programming the deferred payment sale can be realized through a practical model incorporating electronic documentation, photos, and videos. Therefore, the jurisprudential provisions are translated into reality. It's essential to feature a design that expresses the aesthetic art of Islam. This model would function as a 'robot' for deferred payment sales, integrated into a broader financial transactions system, and made available to both individuals and commercial institutions.

### **Programming the Future Commodity Sale:**

One of the most significant permissions in Islamic financial transactions is the future commodity sale<sup>(1)</sup>. It is an exception to

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sory body through a flexible mechanism and competent staff. This system is similar to governance, which also serves as a form of oversight.

- (1) Future Commodity Sale: It is permissible to reduce the production cost and fulfil the needs of producers. Ibn Rushd said; "According to the Maliki school, it is permissible similar to the easement, because the purchaser wants to pay the price to license the item, i.e., the purchaser pays a little to receive more upon delivery. On the other hand, the seller needs this transaction for the feature of deferment. If they do not set a specific time condition, this intent is void." Ibn Rushd, M. A., The beginning of the hardworking and the end of the frugal (in Arabic) (Cairo: Maktabat Ibn Taymīyah, 1415 AH), Section.2, P.153.

the rule prohibiting the sale of non-existent items. This unique transaction addresses the financial needs of producers. It serves as a typical financing formula, offering simplicity, ease, and security, while also acting as an ideal compensation formula, with diverse exchanged items such as assets (production inputs) or various types of money. Future commodity sale can serve as an alternative to loans or other forms of financing that come with the disadvantages, such as usury.

The future commodity sale is a contractual formula that can be programmed using AI in an audio format accompanied by an application model. It can branch into new, important, influential, and flexible formulas, allowing AI to model them effectively. The future commodity sale is a significant Ijtihad that supports the commercial and financial sector with many solutions to the financial crisis. In terms of modeling and programming, the principles applied to deferred payment sales can also be applied here. However, the future commodity sale is unique in its financing capacity, making it a preferred option for banks and finance companies. Therefore, it requires programming that considers financing aspects and standard banking procedures in lending. Thus, we can blend technological innovation with the timeless wisdom of Islam to promote the common good of humanity<sup>(1)</sup>.

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(1) Navigating the Intersection of AI and Islamic Ethics: Opportunities, Challenges, and Collaborative Pathways, Safi Kaskas, Iqra.

## **The conclusion:**

### **Firstly: The Results:**

1. AI enhances the value of Sharia financial transactions, maximizes the benefits of each transaction, ensures their perfection and improvement, broadens user options, and reduces errors in applying Sharia provisions through the proper use.
2. A key priority of scientific research is to develop programs or applications for Islamic transactions using AI with robust cybersecurity, ensuring they are available for use in accordance with regulatory laws.
3. Every type of sale, no matter how electronically simple, requires a program and application, and should be accessible on the Internet.
4. The future commodity sale is a significant Ijtihad project that supports the commercial and financial sector with many solutions to the financial crisis if properly adapted through AI.
5. Translating Islamic financial transactions into reality and showcasing their ethics requires integrating them into the AI world.
6. To acquire an independent and advanced industrial technology driven from AI or any future innovation, it is essential to master scientific principles. This can be

achieved by building a productive educational system that fosters and encourages creativity and innovation.

**Secondly: Recommendations:**

1. Formulate a renewal approach based on Ijtihad and research, and driven by openness, knowledge, and life-impacting activities through the formation of research teams and groups.
2. Create a governance system for Islamic transactions (contracts and deals), guided by Sharia provisions such as validity, monitoring, and review.
3. Pay attention to studying electronic means and technical methods, such as AI, and observe their impact on Ijtihad.
4. Establish a dedicated role for jurisprudential codifiers, requiring academic qualifications and practicing license, to develop the jurisprudential codification of Islamic sales and integrate it into the legislative process.
5. Establish a large supervisory body, independent of financial institutions, for all types of transactions. This body would handle the creation, legalization, and approval of transactions, serve as the final department for completing transactions, and then assume monitoring after the transaction is completed.
6. Embark on the acquisition of electronic means by securing prerequisites, establishing an appropriate environment, and incentivizing innovators to create them.

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# مَجَلَّةُ الشَّرْعِيَّةِ وَالذِّكَايَا الْأَصْطَنَاعِيَّةِ

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