

# ***Establishing the Foundations of Shariah Governance in Islamic Financial Institutions through FinTech 2.0 Technology***

***Mise en place des fondements de la gouvernance conforme à la charia dans les institutions financières islamiques à travers la technologie FinTech 2.0***

**KARI Abderrahmane\***

Akli Mohand Oulhadj University – Bouira (Algeria), Development Policy and Foresight Studies Laboratory, MCB, [a.kari@univ-bouira.dz](mailto:a.kari@univ-bouira.dz)

Received: 16/08/2025

Accepted: 24/10/2025

Published: 01/12/2025

## **Abstract:**

*FinTech 2.0 represent an advanced database mechanism that allows information to be shared transparently within the business network. and Economically, we find many orientations, each according to the doctrine followed. Here; we can talk about Islamic Financial institutions which based in FinTech 2.0 as a branch of the applied branches of Islamic Economy, where the principle of Sharia governance becomes clear.*

### **Keywords:**

*FinTech, Sharia governance, Islamic financial institutions, Governance Board, BlockChain*

**JEL Codes:** D02, D23, D91, O33, P49, Z12

## **Résumé :**

*La FinTech 2.0 constitue un mécanisme avancé de gestion de données, favorisant un échange transparent au sein du réseau commercial. Elle trouve également sa place dans les institutions financières islamiques, en tant que branche appliquée de l'économie islamique, où les principes de gouvernance conformes à la charia deviennent clairement apparents.*

### **Mots-clés :**

*FinTech, gouvernance charia, institutions financières islamiques, Conseil de gouvernance, blockchain*

**JEL Codes:** D02, D23, D91, O33, P49, Z12

---

\* Corresponding author.

## 1. Introduction:

The world is currently witnessing a technological revolution across all levels and various fields, making it increasingly difficult to keep pace with global developments without adopting the same technologies in the domains targeted for development. Therefore, it has become imperative for the economy to join the march of technological progress by integrating economic data and outputs with these technological advancements in order to achieve positive economic outcomes. Among the most significant technological contributions to economic advancement is the second generation of financial technology, known as *FinTech 2.0*, particularly through **Blockchain** technology.

Blockchain represents an advanced database mechanism that enables transparent information sharing within a business network, without allowing open access to delete or modify any given chain. This aligns with the requirements of a positive economy by achieving optimal results through the transparency ensured by this technology, as well as through the immutability and integrity of the database forming the blockchain. Here, the concept of governance can be introduced, and the positive correlation between it and blockchain technology can be identified.

From an economic perspective, there exist various schools of thought, each with its own doctrinal basis. In this context, we can refer to **Islamic financial institutions** as a practical branch of Islamic economics. A defining feature of such institutions is the presence of a **Shariah supervisory board**, which establishes regulations based on Islamic jurisprudential backgrounds during the decision-making process. This clearly reflects the principle of **Shariah Governance** in Islamic financial institutions. Accordingly, the following research question can be posed:

- How does the FinTech 2.0 contribute to the establishment of Shariah Governance foundations within Islamic financial institutions?

Based on this, we can put the following hypotheses in order to examination:

- The term *Shariah Governance* refers to the Shariah-based regulations derived from Islamic doctrinal foundations, adopted by institutions that implement this type of governance. *Blockchain technology*, in turn, is defined as an advanced database mechanism that allows for transparent information sharing within a business network, without open permitting to deletion or modification.
- Blockchain technology supports Shariah Governance within Islamic financial institutions through its unique features that align with the objectives of Shariah governance.

Within this context, this research paper seeks to answer the aforementioned question by dividing the discussion into two main sections:

- **The first section** defines both **blockchain technology** and **Shariah Governance in Islamic financial institutions**;
- **The second section** focuses on demonstrating the supportive role of blockchain **in the implementation of Shariah Governance within these institutions.**

## **2. The Essence of Shariah Governance and Blockchain Technology:**

Here we will talk in detail about Shariah Governance as first subsection, then as second subsection the Blockchain technology.

### **2.1. Shariah Governance:**

It is important to begin by defining **Shariah Governance** as a compound term composed of two parts; The first relates to *governance*, and The second relates to the *Shariah-based nature* of that governance. Accordingly:

#### **2.1.1. Definition of Shariah Governance:**

Governance refers to a set of **processes, rules, and policies** used to manage and regulate institutions and entities, aiming to ensure that decisions are made in a **transparent, accountable, and effective** manner that serves the public interest or that of the concerned stakeholders.

At the corporate level, governance describes how a company is managed and how major decisions are made, such as the distribution of profits, appointment of executive managers, and performance monitoring. Governance practices also include ensuring compliance with laws and regulations, combating corruption, and promoting transparency in operations.

As for the Shariah aspect of governance it refers to the **Islamic legal controls** applied to the decision-making process within the framework of governance for the managing entity. **according to The Islamic Financial Services Board (IFSB, 2009, p. 03)** Shariah Governance is *“that system which refers to the set of institutional and organizational arrangements through which Islamic financial institutions ensure effective and independent Shariah supervision”*. This system is governed by Islamic legal sources, namely: the **Qur’an and Sunnah**, and the **jurisprudential tools** such as **Ijma’ (consensus), Qiyas (analogy), and Maslahah Mursalah (public interest)**, in line with the hierarchy of needs (**Daruriyyat, Hajiyyat, and Tahsiniyyat**) that aim to protect the **five essential objectives (Maqasid al-Shariah): Religion, Life, Intellect, Progeny, and Wealth**.

As a compound term; **Shariah Governance** naturally aligns with Islamic values and ethics—promoting integrity, honesty, and good conduct. Therefore, corporate governance from an Islamic perspective emphasizes integrating Islamic ethical dimensions and moral values into the operations and business activities of Islamic financial institutions. This implies that decision-making ranging -from strategic decisions to daily operations- must reflect **moral and ethical principles**, which should form an integral part of the **institutional culture** of Islamic financial institutions...Islamic financial institutions, as part of the broader Islamic economic system, must contribute to achieving **Maqasid al-Shariah** a comprehensive concept that encompasses the protection of religion, life, intellect, progeny, and wealth. Accordingly, Islamic financial institutions are bound by the principles and

rules of Shariah to **rigorously fulfill their responsibilities towards all stakeholders** (IFSB, 2023, p. 17).

In the same context, The Islamic financial institutions are defined as: “*all institutions that provide Islamic financial services, and operate – exclusively- under the guidelines issued by the Islamic Financial Services Board (IFSB). These may include: Islamic windows, Takaful institutions (Islamic insurance), and Islamic investment funds*” (IFSB, 2009, p. 22).

The term *Shariah Governance* may also be defined more specifically, according to (الكيلاني, 2017, p. 512) as: “*The organization of the operations of the Shariah board within the institution, determining its authorities, duties, rights, and its position within the institutional organizational structure, along with all arrangements that ensure the achievement of its goals in accordance with defined standards*”.

This proposed definition implies that:

- Shariah Governance is a **system or set of clear, documented policies** governing the relationship between the Shariah Supervisory Board and the institution in an organized manner. It ensures a fair and transparent distribution of rights and responsibilities, without bias toward one party over another.
- It clearly defines **accountability and responsibility**, enabling the board to carry out its supervisory and evaluative role **effectively, transparently, and independently**.
- It ensures the **Shariah compliance** of institutional performance and boosts **trust and credibility** in the board and its decisions.

A well-structured governance system should detail the following:

- **Membership criteria** for the Shariah board, including civil conditions, academic qualifications, and professional competencies.
- **Appointment, dismissal, compensation, and the term of membership**.

- **Board meetings**, mechanisms for presenting matters to the board, and **decision-making procedures**.
- **Reports issued by the Shariah Supervisory Board** regarding the institution's compliance with approved Shariah rulings and decisions.
- **Delineation of responsibilities** and rights between the board and executive management, based on an organizational structure that ensures the **independence of the Shariah board**, allowing it to fulfill its legislative and supervisory roles.

This independence can only be realized if the board occupies a **prominent position** within the institution's organizational hierarchy that enables **effective performance, transparent oversight, and impartial evaluation**, ultimately ensuring the sound implementation of Shariah principles

### **2.1.2. Characteristics of Shariah Governance:**

The most prominent features of Shariah Governance can be summarized as outlined by (الكيلاني, 2017, p. 519) in the following table, which differentiates between positive and negative governance:

**Table 01:** The difference between **positive** and **negative** governance.

<b>Negative Governance Characteristics</b>	<b>Positive Governance Characteristics</b>
Exclusive decision-making by the institution's management	Joint decision-making in collaboration with the Shariah board
Shariah board decisions are advisory only	Shariah board decisions are binding
Absence of accountability (no reward or penalty mechanism)	Effective accountability mechanisms
Lack of organizational stability and presence of disorder	Organizational stability and sound structure of the Shariah board
Tense relationship between management, shareholders, and Shariah board; lack of responsiveness to its decisions	Noticeable satisfaction and prompt responsiveness to Shariah board decisions
Inadequate transparency and disclosures	Adequate and substantive transparency and disclosures
Presence of personal interests by board members (lack of objectivity)	Objectivity and impartiality of the Shariah board due to absence of conflicting interests
Insufficient expertise in the financial domain	Adequate financial expertise

## **2.2. Blockchain Technology:**

In order to defined the Blockchaine Technology as will be, we must talk about its important priceples variables; its Definition as first subsection, and its important features as second subsection:

### **2.2.1. Definition of Blockchain:**

**Blockchain technology** has been defined by many researchers, we choose the following definitions considering its clearensy:

It defined by (*Amazon, 2025*) as: "*An advanced database mechanism that enables transparent information sharing within a business network. A blockchain database stores data in blocks that are linked together in a*

*chain. The data is time-consistent because you cannot delete or alter the chain without network consensus. As a result, blockchain can be used to create an immutable ledger for tracking orders, payments, accounts, and other transactions. The system contains built-in mechanisms that prevent unauthorized transaction entries and establish consistency in the shared view of these transactions."*

According to (Joseph Abadi, 2018, p. 07), Blockchain is: *"A digital database containing information (such as records of financial transactions). It is an open ledger that can record transactions between two parties efficiently and in a verifiable and permanent way."*

Furthermore, (Merriam-webster, 2025) defines it as: *"A digital database containing information such as financial transaction records, which can be used and shared simultaneously within a large, decentralized, and publicly accessible network."*

According to the (Oxford, 2025), Blockchain is: *"A system in which a record of cryptocurrency payments is maintained across several computers that are linked in a peer-to-peer network."*

Hence, blockchain can be described as a **decentralized ledger** of all transactions across a **peer-to-peer (P2P)** network, where participants can conduct transactions transparently without the need for a centralized certifying authority. Potential applications include **fund transfers, trade settlement, voting**, and many other uses.

### **2.2.2. Key Features of Blockchain Technology:**

Based on the foregoing, the most important functional features of **Blockchain technology** can be summarized as follows:

#### **A) Transparency**

Several elements illustrate the transparency feature in blockchain technology, most notably:

- **Open-source technology:** All data recorded on the blockchain is accessible to every participant in the network, allowing them to verify transactions and registered information without the need for an intermediary.
- **Decentralization:** Transactions and information on the blockchain are verified by nodes that are not subject to any central authority, which significantly reduces the potential for manipulation by centralized power.
- **Auditability of historical data:** The public and immutable ledger of transactions ensures that no prior transaction can be hidden or altered, making all entries auditable at any time by any member of the network.

## **B) Credibility**

In addition to transparency, which is a vital component of blockchain credibility, the following elements further reinforce its trustworthiness:

- **Consensus-based verification:** Blockchain relies on consensus mechanisms such as *Proof of Work (PoW)* or *Proof of Stake (PoS)* to validate transactions. This requires approval from the majority of participants, thereby enhancing the integrity and accuracy of the data.
- **Decentralization:** As with transparency, decentralization is also central to credibility. The absence of reliance on a single entity or centralized authority eliminates the risk of unilateral control, corruption, or data manipulation.
- **Encryption and data protection:** Blockchain uses highly secure encryption systems, including **hashing algorithms**, making attempts to breach or tamper with data extremely difficult and costly, often to the point of being unfeasible.
- **Strict penalties:** Some blockchain systems impose severe penalties on participants attempting to manipulate the network or its data - such as forfeiting their balance or stake- as is the case in *Proof of Stake* protocols.

### ***C) Trust in Transactions***

The features of **Transparency and Credibility** help establish a strong sense of **trust** between the client and the blockchain network. Additionally, the following aspects reinforce trust in blockchain-based transactions:

- **Autonomy:** The independent nature of blockchain, free from reliance on third parties such as banks or insurance companies - whose trustworthiness may be questioned-, makes the technology itself a reliable guarantor of security, thus attracting client trust.
- **Data verification:** Before adding any data to the blockchain, every node in the network validates the transaction. This rigorous process reduces the likelihood of fraud or tampering, enhancing participants' confidence in the accuracy and integrity of transactions.
- **Immutability and permanence:** Once a transaction is added to the blockchain, it becomes permanent and unchangeable. Even if someone attempts to manipulate the data or transaction, such actions would be visible to all participants, leading to a loss of credibility in the person himself, without affecting the integrity of the major blockchain

### **3. Supporting Shariah Governance through Blockchain Technology:**

Islamic faith-based institutions cannot remain isolated from technological integration and the global advancement imposed across all fields. In fact, adopting modern technology in economic domains with Islamic orientations has become a necessity, in accordance with the concept of **Fiqh al-Waqi'** (understanding the context and reality). However, the **Shariah-based criteria** remain the decisive factor in determining whether a given technology is acceptable for use in Islam or not.

This section aims to highlight the **supportive role of blockchain** in the implementation of governance; first in a general context, and then specifically within **Islamic financial institutions**.

### 3.1. At the General Level:

Governance relies heavily on **rigor and consistency** in the execution of operations, the establishment of rules, and the formulation of policies used to manage and regulate institutions, in our case which pertains to the **financial sector**. Effective governance requires real-time and precise monitoring of all operational details, here is where technology occupies a pivotal role. Which defined as (*David Preece, 2023, p. 22*) said; technology refers to: “*Techniques and technical knowledge used as tools to improve working and living conditions.*” This definition extends beyond **industrial and productive technology** to include **organizational technologies**, such as administrative systems. Therefore, **Blockchain technology** is considered one of the most effective technologies applicable in the implementation of Shariah governance.

In order to illustrate the concept, the following table by (*Ye Guo, 2016, p. 06*) highlights the **key differences** between: Traditional financial institutions, Financial Institution based on Internet Technology, and those based on **Blockchain systems**:

**Table 02:** The differences between institutions based on: Traditional Finance, FinTech 1.0, and FinTech 2.0

	<b>Traditional Financial Institution</b>	<b>1<sup>st</sup> Generation of Financial Institution, based on Internet Technology (FinTech 1.0)</b>	<b>2<sup>nd</sup> Generation of Financial, Institution, based on Blockchain Technology (FinTech 2.0)</b>
<b>Customer experience</b>	Uniform scenarios	Rich scenarios	Rich scenarios
	Homogenous service	Personalized service	Personalized service
	Poor customer experience	Good customer experience	Good customer experience
<b>Efficiency</b>	Many intermediate links	Many intermediate links	Point-to-point transmission, disintermediation
	Complex clearing process	Complex clearing process	Distributed ledger, transaction = clearing

	Low efficiency	Low efficiency	High efficiency
<b>Cost</b>	Large amount of manual inspection	Small amount of manual inspection	Completely automated
	Many intermediate links	Many intermediate links	Disintermediation
	High costs	High costs	Low costs
<b>Safety</b>	Centralized data storage Can be tampered	Centralized data storage Can be tampered	Distributed data storage Cannot be tampered
	Easy to leak users' personal information	Easy to leak users' personal information	Use of asymmetric encryption, Users' personal information is more secure
	Poor safety	Poor safety	Good safety

**Source:** (Ye Guo and Chen Liang, 2016, Blockchain application and outlook in the banking industry, p6).

As a result, the use of Blockchain technology within financial institutions supports the governance of these institutions through the following:

- **Innovative activities:** Technological innovation directly and positively impacts financial innovation, which is a key responsibility of the governance body overseeing the institution. This enhancement strengthens: credibility, transparency, and mutual trust between clients and the managing financial institution. Consequently, clients gain confidence in dealing with the blockchain technology adopted by their respective financial institution.
- **Improved customer service:** When blockchain technology is implemented in the governance of an institution, it implicitly entails the enhancement of customer service from good to better. This improvement encourages stakeholders to support the adoption of this technology in management. Economic clients, regardless of their level of affiliation, primarily seek to maximize outputs while minimizing inputs, and improved service is among the greatest benefits a client can derive from the institution.

- **Elimination of intermediaries:** The absence of intermediaries in financial transactions increases mutual trust and available transparency, which is a fundamental expectation of any economic actor. Thus, the governance body within the institution is inherently obligated to implement blockchain technology, which positively impacts the institution's outcomes.
- **High efficiency:** In the era of technology and digitization, efficiency is a primary demand from both economic actors and recipient entities -the financial institutions. Increased efficiency translates to enhanced economic prudence, reducing risks to the institution's and the economic actors' main objective- profitability. Therefore, blockchain technology supports the governance systems that adopt it.
- **Automated processes:** Automation targets the element of time, which is one of the most critical economic factors for financial institutions, so! "The greater the time investment, the higher the institution's economic efficiency". Prudent governance seeks to capitalize on this element to ensure the best possible outcomes, which blockchain technology guarantees.
- **Low operational costs:** Economic prudence requires maximizing profits with minimal costs, a principle equally valid for governance. The lower the operational costs, the greater the ease and comfort in applying governance within financial institutions. That's because operators reduce the number of parties requiring a direct communication, making this an important way blockchain technology supports governance in financial institutions.
- **Decentralized and accessible data storage:** The decentralization and accessibility of data within blockchain increase the transparency of the institution, which is necessary at all levels. Centralization implies that individuals control data and influence decisions, which neither serves the client nor the financial institution's governance body. Therefore, the decentralization inherent in blockchain technology significantly and directly supports financial institution governance.

- **Fully encrypted and secured client information:** Trust and reassurance are among the most crucial elements in transactions, especially financial ones. The strong encryption and security of client data provided by blockchain technology constitute a key pillar of this element. This naturally benefits both the client and the governance body of the institution, as blockchain reduces the time and effort needed to establish internal policies and rules related to “convincing, reassuring, and gaining” the client’s trust.
- **Very high protection:** Related to trust and reassurance, very high protection is one of the strongest contributors to these elements. Furthermore, high protection benefits the institution and the governance body more than the client. In a highly protected environment, the rate of stability regarding risk exposure is very high, thereby reducing or eliminating the governance body’s burden of establishing internal policies and rules aimed at “ensuring protection that promotes stability”.

### **3.2. At the Level of Islamic Financial Institution:**

Islamic financial institutions represent one of the most important practical embodiments of Islamic Economy. Within the framework of *Fiqh al-Waqi'* (jurisprudence of reality) and Islam’s guidance in addressing new and emerging issues in a manner suitable for all times and places, institutions with an Islamic doctrinal background must keep pace with the global technological developments imposed across all sectors. This is because they constitute the practical interface of the Islamic economy. Otherwise, they would fail to reflect the instruction of Islamic economic, given that the economic domain depends heavily on instant and permanent updates, including interactions with information and communication technologies.

Considering that the Sharia supervisory boards within these institutions bear the responsibility for governance, we turn to examine them in the context of linking Sharia governance with blockchain technology.

#### **3.2.1. The Sharia Supervisory Board of Financial Institutions:**

The Sharia Supervisory Board maintains its qualification and eligibility for its role through rigorous assessments of competence and suitability, both; on an individual and collective level. It is essential for the board to stay abreast of ongoing developments within the Islamic financial services industry, including advancements in the technologies employed by Islamic financial institutions (*IFSB, 2023, p. 37*).

Given that the board is responsible for ensuring Sharia governance within financial institutions, certain key attributes must be present. The most important among these, as detailed by (الكيلاني, 2017, pp. 523-530), include: justice, competence, diligence, capability, sound judgment, diversity of jurisprudential schools, and the board's independence:

- **Justice:** Members must be characterized by honesty, integrity, and a good reputation. The institution should implement transparent procedures to appoint the most suitable candidates to the Sharia board.
- **Competence, Diligence, Capability, and Sound Judgment:** Board members must possess the ability to engage in *ijtihad* (independent reasoning) and derive appropriate rulings for complex or conflicting issues raised during board meetings. This requires a solid foundation in Islamic jurisprudence to correctly interpret and apply Sharia texts in a manner consistent with the objectives of Islamic law and balancing conflicting interests.
- **Diversity and Multiplicity of Jurisprudential Schools:** The board should comprise members from various Islamic jurisprudential schools, with diverse backgrounds, extensive experience, and different nationalities. This diversity fosters the development and enrichment of local expertise and skills.
- **Independence:** The role of the Sharia board extends beyond advising and issuing rulings on emerging issues. It includes the oversight, review, and auditing of all systems, contracts, agreements, and financial dealings within the institution, ensuring compliance with Sharia principles by identifying errors proactively and

correcting them promptly. To effectively fulfill this role, the Sharia board must operate independently from the institution's management, positioned at the highest level of the organizational hierarchy. In the same context several key conditions must be met:

- The authority to appoint board members must reside with the General Assembly rather than the Board of Directors, to prevent conflicts of interest given that the board supervises the management.
- Board members must maintain full independence in executing their duties.
- Financial compensation for board members should be a fixed, predetermined amount, not linked to the institution's profits, to avoid any undue influence.
- The decisions of the Sharia board must be binding on the institution's management.

### **3.2.2. Blockchain Technology and Sharia Governance:**

Blockchain technology relies on the peer-to-peer (P2P) protocol, which helps establish principles of transparency, credibility, and mutual trust between the financial institution adopting blockchain and its clients. Considering that the Sharia supervisory board in Islamic financial institutions reflects the doctrinal foundation of the Islamic economy -one that emphasizes ethics of piety and avoidance of immoral behavior in financial and economic dealings- the main features of blockchain technology (credibility, transparency, and mutual trust) are fully aligned with what the Sharia board must ensure while exercising governance. Therefore, adopting blockchain technology occupies an effective and supportive role in applying Sharia governance in Islamic financial institutions.

Since Sharia governance in Islamic financial institutions is a type of governance within financial institutions in general, the elements that blockchain supports in general governance (as mentioned earlier) apply

here as well, alongside some elements specific to Islamic financial institutions, summarized as follows:

- **Khilafah (Stewardship):** Blockchain technology supports the Islamic principle of Khilafah, which Islamic financial institutions wholeheartedly embrace, as reflected in the Quranic verse: « وَجَعَلْنَاكُمْ خُلَفَاءَ عَلَى الْأَرْضِ »; “*And He will make you successors upon the earth*” (Al-Naml, 27:61). When Sharia governance is implemented using a specific blockchain, the chain effectively delegates stewardship of managing transactions and data -whether accessed by clients or exchanged among them- to the blockchain itself, thus becoming a mirror reflecting the users, including the Sharia supervisory board practicing governance.
- **Involvement of the Institution’s Management and Sharia Board in Decision-Making:** When blockchain is adopted, the institution’s management is compelled even if it wishes to manipulate decisions to involve the Sharia board in decision making processes due to the chain’s inherent transparency and credibility.
- **Binding Decisions of the Sharia Board:** Supporting its independence, the blockchain implemented by the financial institution ensures the binding of the Sharia board’s decisions during governance by leveraging the chain’s transparency and decentralization. This is especially evident in the “P2P” protocol, which guarantees no third party interferes between the client seeking data and the data itself, including the decisions issued by the Sharia board.
- **Stability and Integrity of the Sharia Board’s Organizational Status:** Blockchain ensures the stability of the Sharia board’s organizational status by making it part of the immutable blockchain database, which cannot be altered or deleted. High protection levels, encryption, and precise security features provide the Sharia board with complete confidence in the safety of its organizational standing, facilitating comfortable governance practice.
- **Tangible Comfort and Swift Responsiveness to Sharia Board Decisions:** When the board of directors of an Islamic financial

institution observes the Sharia board's confidence and ease in exercising governance -thanks to blockchain technology- this positively influences the board's responsiveness to the Sharia board's decisions, as members recognize the transparency and credibility the blockchain provides to all parties.

- **Sufficient Transparency and Material Disclosures:** Given transparency is a core characteristic of blockchain, it enables the Sharia board to govern with full transparency and with sufficient, substantive disclosures.
- **Objectivity and Impartiality of the Sharia Board Due to Absence of Personal Interests:** With blockchain technology, personal interests influencing decisions are eliminated, as the decentralized nature of the blockchain prevents control of decisions by any specific party or individuals, thereby removing the possibility of manipulation through authority.
- **Sufficient Financial Expertise:** Board members familiar with blockchain technology and its financial aspects naturally possess broad knowledge of financial transaction fundamentals, equipping them with sufficient financial expertise.

#### **4. Conclusion:**

"FinTech 2.0" represents one of the most significant technological advancements contributing to the development of the financial sector, including financial institutions. Since no financial institution operates without internal governance, Islamic financial institutions implement governance with the same doctrinal framework that characterizes the institution itself. Thus, Sharia governance becomes one of the most distinctive features of Islamic Financial institutions. This research paper has demonstrated how blockchain technology supports the governance of financial institutions in general, and how it specifically enhances Sharia governance within Islamic financial institutions.

The study yielded several key findings, notably:

#### **4.1. Search Result:**

The study yielded several key findings, notably:

- The term "Sharia governance" in Islamic financial institutions is intrinsically linked to the Sharia supervisory board, which must maintain independence while exercising its governance role.
- Blockchain technology is among the most important technological enablers for financial institutions, and notably for Islamic financial institutions.
- The distancing of specialists in Islamic Sciences, particularly in Islamic Economics, from technological advancements deprives Islam of crucial resources it urgently needs in an era where such technology is indispensable.

#### **4.2. Key Recommendations by the Researcher:**

After due reverence to ALLAH, the researcher recommend the following:

- Specialists in Islamic economics should avoid complacency and actively engage in research to uncover hidden treasures within manuscripts and books, especially at a time when the global community is increasingly looking toward Islamic economics for innovative economic solutions.
- Regulatory bodies responsible for Islamic finance legislation in Algeria should expedite the adoption and development of technology that supports Islamic finance.

#### **5. References:**

1<sup>st</sup> ; **The Holy Quran.**

##### **Books:**

- David Preece, J. L. (2023). *Technological Organizational Action* (1st Edition ed.). UK: Routledge prss.

##### **Reports:**

- IFSB. (2009). *Guid 09 "GUIDING PRINCIPLES ON SHARĪAH GOVERNANCE SYSTEMS FOR INSTITUTIONS OFFERING ISLAMIC FINANCIAL SERVICES"*. Malaysia: IFSB publications.

**Journal articles:**

- Ye Guo, C. L. (2016). Blockchain application and outlook in the banking industry. *Financial Innovation Journal*, Vol.4.

**Seminar article:**

- Joseph Abadi, M. B. (2018). Blockchain Economics. *NYU Intermediation conference* (pp. 03-17). Princeton University.

**Internet Websites:**

- Amazon. (2025, 03 26). *amazon*. Retrieved 03 26, 2025, from Amazon Dictionary: <https://aws.amazon.com/ar/what-is/blockchain/?aws-products-all.sortby=item.additionalFields.productNameLowercase&aws-products-all.sort-order=asc>
- *Merriam-webster*. (2025, 03 26). Retrieved 03 26, 2025, from Merriam Dictionary: <https://www.merriamwebster.com/dictionary/blockchain>.
- Oxford. (2025, 03 26). *Oxford Dictionary*. Retrieved 03 26, 2025, from Oxford: <https://www.oxfordlearnersdictionaries.com/definition/english/blockchain?q=blockchain>.