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An Introduction to Islamic Perspective in Fintech Security

Sarajaldeen Akram Bahjat Arif [1, a], Maha Waleed Elfadel[2,b]
[1,2] Kulliyyah (Faculty) of Information & Communication Technology (ICT), International Islamic University Malaysia (IIUM), Malaysia
[a]*opallord@gmail.com*, [b]*maha3_2007@yahoo.com*

Abstract
This paper aims to study FinTech integrity in terms of the security of information regardless of technological advancement from an Islamic perspective. Information security issues are still questionable, especially on financial finance issues in the financial sector. The issue of information security in financial finance cases is a challenge for financial institutions. This study adopted a systematic literature review to analyze 28 studies in the field of financial technology (FinTech). Content analysis was employed to analyze the data, conduct a detailed analysis of the texts, and identify patterns and relationships between different categories. The result shows that the reliability and integrity of ICT in Fintech can be assessed through an Islamic perspective, emphasizing the importance of information security for all financial sector participants. It identifies six key elements: surveillance, confidentiality, trustworthiness, truthfulness, transparency, and accountability. The literature review indicates a gap in integrity analysis in Fintech regarding information security from an Islamic viewpoint. Modern practices are aligning with these Islamic principles, which advocate comprehensive information security measures. Islam inherently recognizes and mandates the principles of confidentiality, integrity, and availability of information and resources, underscoring their practical significance.

***Keywords*:** FinTech, Financial Technologies, Information Security, Islamic Perspective.

1. Introduction

As a life guide, Islam places a high value on information and technology, as well as the importance of information security. It encourages Muslim fellows to utilize whatever technologies or methods are available to them to acquire, analyze, and share information more easily. It encourages children to place a high value on information to gain knowledge.

ICT closely links to security concerns to reduce the risky use of technological applications (Noordin, 2013). Mohd and Aziz (2019) assert that technological innovations in the industry have significantly impacted financial sector players. This causes participants to receive incorrect data or experience information leakage. Although information security is a critical component of financial service delivery, Giuseppe et al. (2019) assert that this information remains vulnerable to exposure and misrepresentation to parties not authorized to access it. Unfortunately, this is a likely scenario.

Internet use is widespread and prominent in financial applications. However, without the security of these programs, people would lose faith in them. Islam prioritizes security. Allah s.w.t. has instructed us to protect ourselves from our fears through the stories found in the Holy Quran, like the "Zulqarnayn" narrative. Allah s.w.t. has sent us this narrative to demonstrate

that "Zulqarnayn" built a wall and set fire to it. IT security, especially firewalls, provides users with robust protection from both internal and external attacks (Merkow & Breithaupt, 2014).
Islamic specialists with a focus on Information and Communication Technology (ICT) are required to innovate and venture into the computerization of Islamic products. These items include services, such as e-Islamic banking or mobile Islamic banking. According to Noordin (2013), Muslim ICT specialists must follow in the footsteps of al-Kindi by addressing encryption, security, and associated equipment. In Islam, breaching security systems, whether in the form of information security or computer security, is considered Haram (Ibrahim et al., 2014). The Quran has clearly defined the penalty for anybody who disturbs any property, including information security:

قال تعالى: ﴿لَيْسَ بِأَمَانِيِّكُمْ وَلَا أَمَانِيِّ أَهْلِ الْكِتَابِ ۗ مَنْ يَعْمَلْ سُوءًا يُجْزَ بِهِ وَلَا يَجِدْ لَهُ مِنْ دُونِ اللَّهِ وَلِيًّا وَلَا نَصِيرًا﴾ (النساء: 123).
"It will not be in accordance with your desires, nor the desires of the People of the Scripture. He who doeth wrong will have the recompense thereof, and will not find against Allah any protecting friend or helper (Quran 4:123)".

وعن أبي هريرة رضي الله عنه عن رسول الله صلى الله عليه وسلم قال: «المسلم من سلم الناس من لسانه ويده، والمؤمن من أمنه الناس على دمائهم وأموالهم.«
"As for Abu Hurairah, may Allah be pleased with him about the Messenger of Allah (may Allah bless him and grant him salvation), he said: The Muslim is the one from whose tongue and hand the people are safe, and the believer is the one from whom the people's blood (lives) and their money (wealth are safe)". (Al- Tirmidhi (2775)).

وعن أبي هريرة رضي الله عنه أن رسول الله صلى الله عليه وسلم وقف على أناس جلوس فقال: «خيركم من يُرجَى خيره ويؤمَن شره. وشركم من لا يُرجَى خيره ولا يؤمَن شره.«
"As for Abu Hurairah, may Allah be pleased with him, the Messenger of Allah, peace be upon him, stood on people to sit and said: The best of you is the one whose goodness is hoped for, and people are safe from his evil. And the worst of you is he whose goodness is not hoped for, and people are not safe from his evil (Al- Tirmidhi(2263))"

Fintech has now emerged as a prominent solution to financial inclusion and exclusion issues. Fintech provides new services such as managing data electronically rather than digitalizing institutions, having robot advisors instead of depositing checks via mobile devices, and cryptocurrencies as the underlying technology of blockchain. We can apply certain Islamic principles to enhance the security of fintech. The first element is "surveillance," which refers to the integrity of Fintech in securing information (Ullah & Anwarii, 2014). "Confidentiality" is a crucial element that fosters a relationship of trust between the parties involved in the ICT sector (Mohd & Aziz, 2019; Zulhuda, 2010). "Accountability" pertains to the capacity to understand the outcomes of actions (Sahri, 2018; Mohd and Aziz, 2019). The last factor is "transparency," which indicates that information sharing provides individuals the right to access the information (Taufiq, 2015; Stewart and Jürjens, 2018). This research examines numerous difficulties regarding Fintech applications, including security from an Islamic viewpoint, which is the key focus of this study.

1.2 Problem statement

Incidents involving information security have grown increasingly common in enterprises as the world has become much more linked than it was years ago. Insiders may be responsible for such incidents, which are not always deliberate. Although businesses have begun to recognize

the influence of inadvertent security behaviour on ICT applications, this topic has received little attention in academic studies and empirical research (Barzak et al., 2016).

With the rapid development of new communication technologies, new information security challenges emerge, such as privacy, security, honesty, integrity, and computer and financial crimes, which may be explained from an Islamic viewpoint (Ibrahim et al., 2014). Fintech's capacity to provide reliable information security remains uncertain. According to the Islamic viewpoint, Fintech's trustworthiness poses a challenge for financial institutions, as it primarily secures information about participants in the financial sector (Mohd and Aziz, 2019). We should address this situation as an information security concern (Hilmi et al., 2013).

Despite the extensive research on FinTech and information security, it primarily focuses on current Western practices, rather than considering an Islamic perspective.

1.3 Research Question

Based on the problem statement and what has been summarized above, this study intends to close the gaps by answering the following question: what are the security elements of Fintech information security for the financial participants from an Islamic perspective?

1.4 Objective of Study

Generally, the overall objective of the current study is to handle these issues while focusing on a couple of objectives. Objective one is to provide an identification of the Fintech security element from the perspective of Islam. Objective two is to address the Fintech element's reliability from the perspective of Islam. The current study has employed a literature review to reach a conclusion on this topic and achieve these two objectives.

1.5 Significant of Study

The significance of this study has to do with dealing with a vital and modern subject of ICT, namely FinTech Security. Many financial organizations attach great importance to this subject and dedicate great resources to developing it to contribute to achieving its information security, the current research provides pragmatic additions from an Islamic perspective. In this context, the significance of the study is presented in both practical and theoretical aspects as follows:

- In this way, the researchers hope that the current study's findings and recommendations will contribute to scientific knowledge to provide libraries with a source of information that will help academics and researchers in the fields of finance, technology and those interested in this field while conducting further research on the subject. Moreover, the importance of this theoretical study is that it contributes to filling part of the gap in the lack of studies applied in this field specifically in the bank sector – as far as the researchers are aware.
- This study provides a deep insight for future studies on fintech security. It includes studies and articles on the impact of technology in fintech on secure financial activities in the financial sector. In addition, it identifies gaps to be filled by other financial organizations such as banks, commercial, etc.
- This study can be extended in the future by focusing on FinTech technology. The recommendation for future research is to Search the details of FinTech technology and use the elements of security based on Islamic principles.

1.6 Research Methodology

The research methodology provides the scientific foundation upon which data analysis and conclusions are based. This study conducted a systematic literature review of 28 studies in the

field of financial technology (FinTech). Data was collected through systematic searches in reputable academic databases such as Google Scholar, PubMed, and IEEE Xplore, using specific search terms related to FinTech to ensure comprehensive coverage. The inclusion criteria were studies published between 2015 and 2023, addressing various aspects of FinTech, published in peer-reviewed academic journals, and available in full text. Content analysis was employed to analyze the data, involving initial reading, coding, classification into main themes, and in-depth analysis using both traditional methods like pen and paper to conduct a detailed analysis of the texts and identify patterns and relationships between different categories. The results were organized and presented clearly, highlighting the main patterns and common themes identified across the 28 studies.

2. Literature Review

2.1. Defining and Benefits FinTech

Fintech is an acronym for financial technology. It is a tool for improving the financial services delivery process. Fintech is most often associated with the use of technology in finance. Fintech encompasses a broad variety of financial activities, including client interface, operations and risk management, monetization, finance, data security, payments, and infrastructure. Fintech represents a cutting-edge technological innovation of today. It is comparable to, if not superior to, conventional techniques of financial transactions, particularly in the financial services sector (Giuseppe et al., 2019).

Fintech innovation began in the 1900s and has continued to evolve and change ever since. One of the most significant characteristics of Fintech is the transition from physical to virtual meetings. The beginning of the twenty-first century saw the digitization of financial services via technology to provide market participants with these services. Traditional institutions need to adopt Fintech as a viable solution to catch up with modern institutions. As a result, several financial institutions are incorporating Fintech into their business strategies, according to Mohd and Aziz (2019).

Today's most well-known trends in fintech development include peer-to-peer lending, e-wallets, bitcoins, t-commerce, m-wallets, and so on. When it comes to blockchain technology, financial services primarily focus on a few sectors, including "Bitcoin, Ethereum, and Dash; Android Pay, Google Wallet, and Apple Pay for mobile payment; and decentralized storage systems for cloud technology."

Though the fintech industry is rapidly expanding, it is defined in a variety of ways in business journals and academics. Stakeholders may agree on the core Fintech aspects, but they have yet to establish a precise definition of the scope. Not everyone thinks that fintech, or technology-based financial enterprises, are new. Divergent opinions exist regarding the classification of incumbents as Fintechs and their role in inventing new technology-based goods or services. It is unclear whether there is a market capitalization barrier that can differentiate fintech from conventional financial intermediaries. However, these variations did not prevent consensus in definitions that Fintech refers to organizations that provide financial services and products that rely heavily on the use of information technology (Varga, 2017). Recent improvements in information technology have resulted in innovative new financial services. These are referred to as financial technology (Fintech). Fintech is an abbreviation that stands for 'financial' and 'technology'. It has to do with integrating finance and developing technology. Examples include big data, cloud computing, and artificial intelligence (Gomber et al. 2018). Fintech combines finance and technology to give people more creative financial services. These services include

peer-to-peer (P2P) lending, wealth management, mobile payments, insurance, and crowdfunding (Barberis 2014).

FinTech encompasses a wide array of applications that leverage technology to improve financial services. Among the most prominent applications are blockchain, mobile payments, and online banking.

Blockchain technology, a decentralized ledger system, is fundamentally changing the way transactions are recorded and verified. It provides a secure, transparent, and immutable way to record data, which has significant implications for sectors such as finance, healthcare, and supply chain management. The adoption of blockchain in financial services has led to improvements in transparency and security, reducing the risk of fraud and enabling faster and cheaper cross-border transactions (Nakamoto, 2020). Moreover, blockchain's smart contract functionality allows for the automated execution of contracts when predefined conditions are met, further enhancing efficiency in financial operations (Tapscott & Tapscott, 2020). The main challenges of blockchain technology include scalability issues, regulatory concerns, and the need for standardization. Scalability remains a major obstacle as blockchain networks struggle to handle large volumes of transactions simultaneously. Regulatory uncertainty also poses a challenge, as governments grapple with how to regulate this new technology. Additionally, the lack of standardized protocols and interoperability between different blockchain platforms hinders widespread adoption and integration across industries. Despite these challenges, the potential benefits of blockchain technology continue to drive innovation and investment in its development.

Mobile payments have revolutionized the way consumers and businesses conduct transactions. The proliferation of smartphones and mobile internet has facilitated the rise of mobile payment platforms such as Apple Pay, Google Wallet, and PayPal. These platforms provide a convenient and secure method for making payments, offering features such as biometric authentication and tokenization to protect users' financial information (Khan et al., 2021). The convenience of mobile payments has led to their widespread adoption, particularly in regions where traditional banking infrastructure is underdeveloped. For instance, in China, mobile payment platforms like Alipay and WeChat Pay have become ubiquitous, significantly reducing the reliance on cash (PWC, 2021). The main challenges of mobile payments include security concerns such as fraud and data breaches, as well as issues related to interoperability between different platforms. Additionally, some consumers may still be hesitant to fully embrace mobile payments due to privacy concerns and a lack of understanding of how these technologies work. However, as these platforms continue to evolve and improve their security measures, mobile payments are likely to become an even more integral part of daily financial transactions worldwide.

Online banking has also seen significant growth, particularly in the wake of the COVID-19 pandemic. With traditional bank branches closing or reducing hours, more consumers have turned to online banking services. Online banking offers numerous advantages, including 24/7 access to accounts, the ability to perform transactions from anywhere, and enhanced features such as budgeting tools and financial planning services (Capgemini, 2020). Additionally, online banks often have lower overhead costs than brick-and-mortar banks, allowing them to offer higher interest rates on savings accounts and lower fees (Deloitte, 2021). The main challenges of online banking include concerns about cybersecurity and data privacy. Customers may worry about the security of their personal information when conducting transactions online, leading to a lack of trust in online banking services. Another challenge is the potential

for technical glitches or system outages, which can disrupt the ability to access accounts or complete transactions. Additionally, some customers may struggle with the learning curve of using online banking platforms, especially those who are not as comfortable with technology. Despite these challenges, the convenience and cost-saving benefits of online banking continue to attract a growing number of consumers.

In brief, FinTech applications such as blockchain, mobile payments, and online banking are transforming the financial services landscape by enhancing security, convenience, and accessibility. As technology continues to evolve, these applications are likely to become even more integral to the financial ecosystem, driving further innovation and improvements in service delivery. For instance, blockchain technology is revolutionizing the way transactions are conducted by providing a secure and transparent platform for financial exchanges. Mobile payment solutions are making it easier for consumers to make purchases and transfer funds with just a few taps on their smartphones. Online banking services are enabling customers to manage their finances from anywhere at any time, eliminating the need for physical bank visits. As these FinTech applications continue to advance, they will undoubtedly shape the future of the financial industry, creating a more efficient and user-friendly experience for all stakeholders involved.

2.2. Aspects of Use FinTech:

Fintech's growth has changed all aspects of financial services and banking services in the following aspects (Ryu, 2018):

- Loans: This has transformed the way banks function and created a massive new market for market credit. With the emergence of Fintech, users may now readily get loans and other services. Alternative models are created to provide capital to consumers, whether it is a company or an individual. These businesses aim for better customer service, financial goods, and quick credit approval.
- Payment services: Fintech services have affected the payment process. Payments are now done online or via cell phones, removing the necessity for trade accounts. Money may be sent immediately into a bank account, lowering the risk of fraud and transaction costs.
- Asset management. People use Fintech to save money, manage assets, and invest their cash. These firms are using new financial technology to provide tailored solutions for managing their wealth and assets. Fintech software may also assist in comparing possibilities to establish the finest investment strategies for personal finances.
- Money transfer. For many years, banks and consumers have struggled with conventional money transfer services, which can be costly and difficult. For many years, Fintech businesses have attempted to make these incoming and outbound transactions simple and economical.
- Insurance Services: Obtaining insurance has become less complex. With personalized plans, anything may be done over the internet. From the application process to the regular payment of insurance premiums, this comprehensive paper service has evolved with the help of innovative technologies.

Because of the fast growth of information technology and the 2008 subprime crisis, the global economy has seen a prolonged downturn. To address this, governments throughout the globe supported the adoption of a new financial paradigm (Lee & Shin, 2018), which resulted in the establishment of various Fintech businesses (for example, Kabbage, LendingClub, OnDeck,

Apple Pay, Ant Financial, and JD Finance). These firms are mostly non-financial, yet they do provide innovative financial services.

Many parts of finance have changed dramatically as a result of the partnership between finance and technology. These features include cryptocurrencies, banking, trading, and investing. Fintech is more than just a financial technology reference. It is more of an innovative technology that enhances conventional financial processes and creates better solutions for the services necessary while keeping up with the newest technologies. Figure 1 depicts financial technology progress, which includes Banking software and mobile banking apps.

Fig. 1. Fintech methods and applications
Source: North, R. (2018). Evolution of Financial Technology (Fintech) Ecosystem in India, [Online], https://www.enterpriseedges.com/fintech-ecosystem-in-india

2.3. Information Security in FinTech:

Information security is a dynamic process that establishes a full system aimed at forming closer inter-technology coordination, as well as administration and management technologies, systems, and information morals related to law and society, to make security better, more useful, efficient, and compatible, and to protect privacy and reduce levels of monitoring or surveillance over people (Hilmi et al., 2013). When we assess information security, we value the data itself. The more a person or organization values their assets, the greater their anxiety. There are several security definitions and meanings. Information security is seen as a precondition for realizing the full potential of information and information technology (Zulhuda, 2010).

The Fintech revolutionary component aims to shift the financial sector from a conventional system to a modern one. This may be accomplished by striking an innovation-security balance. According to Mohd and Aziz (2019), maintaining a robust regulatory framework for information systems is difficult. The primary Fintech practice aspect is a focus on security, which extends beyond innovation. The fintech revolution is now growing to the point where it is no longer only a regulatory issue. It is now being used to secure financial data. The lack of personnel and financial resources has contributed to the fintech divide. To utilize Fintech, no unauthorized access is permitted. In general, Ambhire and Teltumde (2011) define information security as "the protection of information from unauthorized access, modification, inspection, destruction, recording, use, disclosure, disruption, perusal, or destruction."

In modern terminology of information security, 'repudiation' is primarily one of the information hazards that must be judged; when information is devalued or rejected, it cannot be relied on. Islamic law, as a comprehensive legal system, attempts to cure ills and impose order on society in all areas, especially those dealing with commodities and security. Information security is defined by Whitman and Mattord (2013, "The protection of information and its critical characteristics (confidentiality, integrity and availability), including the systems and hardware that use, store and transmit that information, through the application of policy, training and awareness programs, and technology". All financial sector players may benefit from one of Fintech's core features: information security. It (i.e., information security) is crucial and serves as one of the financial sector's assets. As a result, it is critical to secure information against unwanted access, usage, or disturbance. The goal is to reduce the possibility of an information leak or breach. Furthermore, the most serious challenge to fintech is information security or privacy.

2.4. Islamic Perspective of FinTech Security:

In Islam, information is a vital asset for learning knowledge, on which the success of Islamic civilization is dependent. This objective is made possible by the use of information and communication technologies. The ultimate purpose of Islam is attained via the correct and safe delivery of knowledge, which is carefully managed throughout Islam. The most popular definition is protection against a variety of dangers, with information considered an asset to ensure company continuity (Ibrahim et al., 2014).

In the Qur'an, Allah s.w.t. mentions shariah or norms for all people. This is to give humanity the peaceful existence they need to live in harmony without causing damage to others (security, privacy, authority, ethics), as well as to worship (ibadah) Allah and behave as his Khalifah. We can fulfil both Abdillah and Khalifah's tasks thanks to the support of ICT. Noordin (2013) contends that ICT must follow Islamic principles. People may refer to the Qur'an because it is the most comprehensive religious book for Muslims, covering all elements of human existence, including astronomy, biology, social sciences, ICT, economics, law, commerce, and politics.
Figure 2 depicts the Qur'an's several fields of knowledge. Allah s.w.t, not humanity, wrote the Qur'an. Allah created all things, and He knows all people need to know to exist in the world and serve as Allah's vicegerent. Security, in whatever form it takes, is very vital in Islam to safeguard humanity and all other inhabitants of the planet. We lack the security technologies required to defend our properties, leaving us vulnerable.

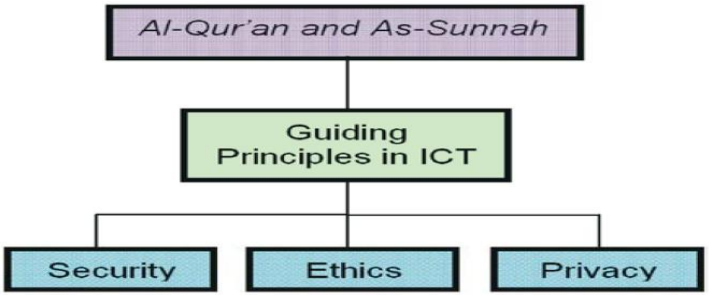

Fig. 2. Model for Ethics, Security and Privacy from the Islamic Perspective
Source: Noordin, M. F. (2013). Application of privacy, security and ethics in Islamic concerned ICT. Middle-East Journal of Scientific Research,14(11), 1550.

Security from an Islamic Perspective: Allah s.w.t demonstrates how to defend ourselves from our adversaries via the narrative of Zulqarnayn. Allah s.w.t tells Zulqarnayn to build a wall and set fire to it. Firewalls have emerged as a critical tool in IT security, protecting users from both

external and internal threats. Zulhuda (2010) investigates the degree to which Islamic principles and practices (particularly those contained in the Prophet Muhammad's traditions) strengthen the concept of information security as a means of protecting information assets. He discovered that Islam encourages, embraces, and applies complete concepts of information security. According to Mohd and Aziz (2019), Fintech is credible as a security information tool from an Islamic viewpoint since it is built on six principles: secrecy, trustworthiness, surveillance, honesty, accountability, and transparency. Figure 3 depicts a summary of graphical results on Fintech's integrity in information security from an Islamic viewpoint.

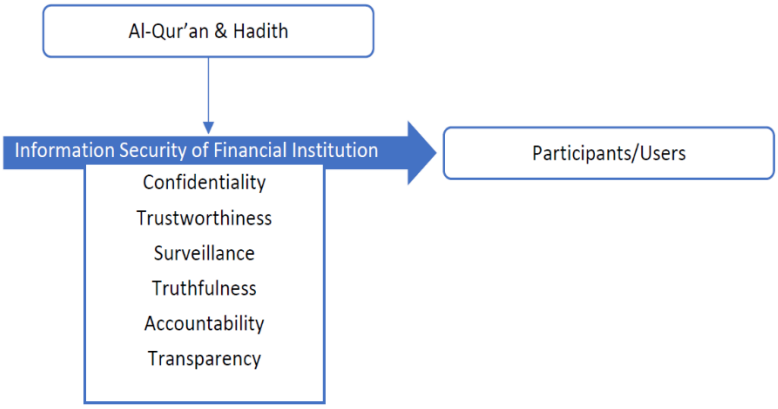

Fig. 3. The elements of the integrity of FinTech in information security from an Islamic perspective
Source: Mohd, K., & Aziz, A. H. A. (2019). A Framework on the Integrity of Fintech in Information Security from Islamic Perspective. International Journal of Islamic Economics and Finance Research, 2(2), 72.

Allah s.w.t has prohibited humans from violating other people's rights such as distrust, fraud and stealing. This matter is proved in the verses of the al-Quran which prohibit humans from behaving with bad moralities. Some of it is the Holy Quran:

قال تعالى: ﴿وَلَا تَأْكُلُوا أَمْوَالَكُمْ بَيْنَكُمْ بِالْبَاطِلِ وَتُدْلُوا بِهَا إِلَى الْحُكَّامِ لِتَأْكُلُوا فَرِيقًا مِنْ أَمْوَالِ النَّاسِ بِالْإِثْمِ وَأَنْتُمْ تَعْلَمُونَ﴾ (البقرة: 188).
"And do not consume one another's wealth by unjust means, nor offer it as bribes to the officials to consume part of other people's wealth illicitly, while you know". (Quran 2:188).

وقال تعالى: ﴿يَا أَيُّهَا الَّذِينَ آمَنُوا لَا تَأْكُلُوا أَمْوَالَكُمْ بَيْنَكُمْ بِالْبَاطِلِ إِلَّا أَنْ تَكُونَ تِجَارَةً عَنْ تَرَاضٍ مِنْكُمْ وَلَا تَقْتُلُوا أَنْفُسَكُمْ إِنَّ اللَّهَ كَانَ بِكُمْ رَحِيمًا ﴿29﴾ وَمَنْ يَفْعَلْ ذَلِكَ عُدْوَانًا وَظُلْمًا فَسَوْفَ نُصْلِيهِ نَارًا وَكَانَ ذَلِكَ عَلَى اللَّهِ يَسِيرًا﴾ (النساء: 29-30).
"O you who believe! Do not consume each other's wealth illicitly, but trade by mutual consent. And do not kill yourselves, for God is Merciful towards you (29) whoever does that, out of hostility and wrongdoing, we will cast him into a Fire. And that would be easy for God (30)" (Quran 4:29-30).

It also contradicts the main purpose of prophet Rasulullah s.a.w. as the Messenger of Allah, which is to provide a living example of good moralities for humans to follow. prophet, Muhammad[ﷺ] said: "I have been sent to compliment the good moralities"(Al-Baihaqi, 20571). In the Sunnah, this confirms the importance of security: The Messenger of Allah (s.a.w) said: Whoever among you wakes up in the morning secured in his dwelling, healthy in his body, having his food for the day, then it is as if the world has been gathered for him (al-Tirmidhi: 2346)".

"Narrated AbdurRahman ibn AbuLayla: The Companions of the Prophet [ﷺ] told us that they were travelling with the Prophet [ﷺ]. A man of them slept, and one of them went to the rope which he had with him. He took it, by which he was frightened. The Prophet [ﷺ] said: It is not lawful for a Muslim to frighten a Muslim (Sahih Al-Albani)".

"Narrated Abdullah ibn as-Sa'ib ibn Yazid: The Messenger of Allah [ﷺ] said: None of you should take the property of his brother in amusement (i.e. jest), nor in earnest. The narrator Sulayman said: Out of amusement and out of earnest. If anyone takes the staff of his brother, he should return it. The transmitter Ibn Bashshar did not say"Ibn Yazid, and he said: The Messenger of Allah [ﷺ] said"(Sunan Abi Da'ud:5003).

Practicing Fintech is mostly about trust. No study has yet been conducted to examine fintech integrity in terms of a specific integrity component. Trust, in today's world, serves to justify honesty. According to Islam, trust is a component of integrity, but trust alone does not indicate the presence of integrity. As a consequence, integrity is one of the most important aspects of Fintech since it is an Islamic instrument for information security. The present study's literature assessment showed the integrity of six aspects that distinguish Fintech as an information security technique from an Islamic standpoint. As a result, data and information are intended to be very secure. The six components are confidentiality, trustworthiness, surveillance, honesty, accountability, and transparency. The table below summarizes these six components.

Table 1: FinTech elements from an Islamic perspective

Element	Fintech Perspective	Islamic Perspective	Reference
Confidentiality	It ensures information access is limited to those authorized to access it, whether they are individuals or institutions. Protecting the personal information is the essence of confidentiality.	"Yaqub advised his son Yusuf" O my son do not share your dream in front of your brothers or they will give an interpretation of your dream against you"*(Yusuf: 4-5)*	Ullah and Anwarii (2014); Mohd & Aziz, (2019); Zulhuda (2010)
Trustworthiness	The information should be kept and protected from any negligence. It is a process of promoting integrity in an ethical manner that entails honesty as an inherent notion.	*"Narrated Abu Hurairah that the Messenger of Allah (S.W.T) said" "The sign of a hypocrite is that whenever he speaks he lies, and whenever he makes a promise he does not fulfil it, and if he is entrusted he betrays."*Imam Bukhari, 2631, hadith 26:	Mohd & Aziz, (2019).
Surveillance	Surveillance is the action of precaution that guarantees taking good care of the information to protect it from any cyber-attacks. Though	*"Do you not realize that Allah knows everything in the heavens and everything on earth? There is no secret counsel between three, but He is their fourth; nor between five, but He is their sixth; nor*	Whitburn(2019); Tyler(2018).

	Fintech is booming, still cyber-attacks can be it.	*less than that, nor more, but He is with them wherever they may be. Then, on the Day of Resurrection, He will inform them of what they did. Allah knows everything."(Al-Mujadilah: 7)*	
Truthfulness	Truthfulness that has to do with information has to be presented just like the initial agreement states.	*"And mix not truth with falsehood, nor conceal the truth while you know (the truth)".* *(Al-Baqarah: 42), "O ye who believe! Fear Allah and be with those who are true (in word and deed)". (At-Taubah: 119)*	Giuseppe et al., (2019); Mohd & Aziz(2019).
Accountability	Responsibility towards any accomplishment. The person who processes the technology is still responsible for this process though technology does the majority of the transaction.	*"Whoever has done an atom's weight of good will see it. And whoever has done an atom's weight of evil will see it"(Az-Zalzalah: 7-8).*	Sahri(2018); Giuseppe et al., (2019); Mohd & Aziz(2019).
Transparency	Being able to access information related to implementation, process, governess and the related achieved results freely.	"*O ye who believe! When ye deal with each other, in transactions involving future obligations in a fixed period, reduce them to writing Let a scribe write down faithfully as between the parties: let not the scribe refuse to write".(Al-Baqarah: 282)*	Taufiq (2015); Stewart & Jürjens (2018).

Each one of us needs to hold in with the Islamic philosophy in our daily lives. Allah has given clear guidance to us through the main references which are al-Quran and al-Hadith. Thus these resources become the main reference for humans in each activity of life, including new issues that have risen nowadays, for instance, computer crime. Allah said in his novel al-Quran:

وقال تعالى: ﴿وَلَقَدْ أَنْزَلْنَا إِلَيْكُمْ آيَاتٍ مُبَيِّنَاتٍ وَمَثَلًا مِنَ الَّذِينَ خَلَوْا مِنْ قَبْلِكُمْ وَمَوْعِظَةً لِلْمُتَّقِينَ﴾ (النور: 34).

"We have sent down to you clarifying revelations, and examples of those who passed on before you, and advice for the righteous". (al-Nur:34)

Human intention is essential in determining whether an action or conduct is lawful or invalid in Islam since it differentiates between purposeful and inadvertent acts or behaviours. As a consequence, the Qur'an and Hadith make plain the standards and rules that govern such activities and behaviours, whether intended or not. For example, if a person intended to do good but did not do it, he or she will be rewarded, as prophet Mohammed peace be upon him

stated in a Hadith narrated by "Umar bin Al-Khattab": "The rewards of deeds depend on the intentions, and every person will get the reward according to what he has intended" (Sahih AL-Bukhari, Book 1, Hadith Number 1). As a result, Muslims need to have good and right intentions for every activity (Barzak et al., 2016).

"Therefore, Shariah-compliant software applications will be created. With the availability of Shariah-compliant software tools, humanity will follow Allah's path as He has decreed." That is, by obeying all of His commands while disregarding the prohibitions. As a result, Allah's approval will become the primary priority for humans in all their endeavours. As a consequence, the human position as Allah's caliph will be carried out properly.

3. Conclusion and Discussion

The reliability and integrity of ICT from an Islamic perspective can be measured through Fintech applications. Information security is essential for all participants in the financial sector and it must create a unified and robust security environment. Islamic perspective in ICT and Fintech is measured through six elements which are surveillance, confidentiality, trustworthiness, truthfulness, transparency, and accountability. The review of the literature reveals that integrity analysis is absent in Fintech in providing the security of information to users of Fintech applications from an Islamic perspective. The modern practice is positioning it on these elements in information security. Islam encourages, adopts and practices comprehensive principles of information security. Islam has therefore emphasised that the principles of information security as embodied in the confidentiality, integrity and availability of information and information resources are inherently recognised and required on many practical issues.

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