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Legal Governance of Fintech Risks in Malaysia

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ABSTRACT

This study examined the correlation between legal governance and fintech risks in Malaysia. The study examined the existing literature on the legal governance of fintech risks, as published in various journals between 2017 and 2022. Due to strict access control, fintech businesses face challenges implementing their solutions within the financial sector. They are required to obtain the necessary financial business authorisation to proceed. Nevertheless, the present status of fintech businesses within the financial legal system is unclear, resulting in uncertainty regarding their corporate standing, rights, and obligations. As a result, their participation in financial operations may face difficulties regarding legal scrutiny. If a fintech company experiences a technical malfunction during the application process could negatively affect consumers' financial interests. Defining the legal responsibilities between the technical body and the commercial entity can sometimes be challenging. Thus, it is possible to easily incite disruptions in assuming legal responsibilities. This study proposes the implementation of legal governance or a new regulatory framework to mitigate fintech risks for users. Fintech adoption in Malaysia is still in its early stages. Fintech poses a significant challenge to the financial sector. It is crucial to acknowledge the risks associated with Fintech.

1. Introduction

FinTech is a combination of the terms "financial" and "technology." Some writers use the term "BankTech" as a linguistic equivalent to "Fintech" [1]. Financial technology refers to novel technological advancements that improve and streamline financial services and distribution. FinTech is the combination of technology and financial services. FinTech is increasingly challenging traditional banks by offering new products and services, leading to a displacement of conventional banking services [2].

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Information technology innovation has greatly simplified routine business transactions. Salmony [3] stated that FinTech innovation was crucial for developing various business models and meeting customer demands. New information technology has significantly influenced the field of economics, specifically in payment services, the banking sector, and financial laws. Fintech is the term used to describe the emergence of new information technology within the financial service sector. Fintech is a term that combines "finance" and "technology" to represent the merging of these two areas. The National Digital Research Centre in Dublin, Ireland, defines "innovation in financial services." According to Alt and Puschmann [4], Fintech has created an incremental innovation framework for enhancing apps, processes, products, and business models in the financial service industry. In his speech at the Global Islamic Finance Forum 5.0 (GIFF 5.0), Dato Muhammad Bin Ibrahim, former Governor of Malaysia's central bank, highlighted the challenges brought about by the rise of financial technology (Fintech) in the financial industry. New business models will arise in response to existing norms, facing challenges from delivery channels and leading to lower transaction costs. Financial institutions should embrace the fintech revolution as a positive opportunity rather than viewing it as a threat [5]. Integrating financial technology (Fintech) into operations gives firms a competitive edge in attracting consumers and expanding business models.

The financial technology (Fintech) industry has experienced substantial growth in recent years thanks to its strong integration with information technology and the financial sector. The Fintech sector has experienced significant growth thanks to the rapid progress of key technologies like big data, artificial intelligence, and blockchain. Fintech has been widely adopted in various financial and commercial sectors, crucial in driving innovation and change in the financial industry.

Legal experts have shown significant interest in the issue of fintech risk, leading to extensive study within the legal community on the best framework and approach for governing these risks. The risks of Fintech have a unique structure and formation process. Regular updates and a comprehensive financial law system are crucial to establishing a robust legal governance framework. The legislative governance on fintech risks in China has faced challenges in coordinating regulatory aims, imprecise allocation of regulatory authority, inadequate risk identification, and deficient regulation instruments. The regulation approach has shifted between repressive, indulgent, and adaptive strategies [6]. This study examined the core principles and constitutional limitations that governed object intervention to establish a legal framework for addressing fintech risks. The study aimed to create a governance framework that promotes innovation, ensures regulatory effectiveness, and prioritises safety at all stages. Identifying and developing the legal framework for controlling fintech risk is crucial for effectively managing and mitigating the various risks associated with fintech innovation. This framework is essential for ensuring a harmonious and coordinated connection between technological innovation and risk mitigation, thereby ensuring the long-term success of the fintech industry. It is crucial to establish a localised legal-governance structure that addresses fintech risks and meets practical requirements for enhancing the financial and legal framework in a manner compatible with Fintech.

The emergence of Fintech is reshaping finance in its entirety, impacting investment management, capital formation, and even the concept of currency itself. Fintech will accelerate the creation of new financial transaction models and innovative frameworks for rights and obligations. Nevertheless, the current legal system may not be sufficiently prepared to handle these changes, resulting in potential legal risks due to the insufficient adaptation and coordination between fintech innovation and the legal system's operation. Fintech companies must obtain financial-business authorisation to implement fintech solutions directly due to the strict access control regulations imposed by the financial industry. Furthermore, the legal framework regarding fintech companies' status, rights, and responsibilities in the financial sector is still unclear. Therefore, their participation in financial activities may be uncertain when legally evaluated. In addition, adopting financial technology (Fintech) can potentially transform the traditional financial transaction framework. This involves the use of AI algorithms in AI-Advisors and the implementation of blockchain technology for token issuance.

Nevertheless, these advancements may diverge from the existing regulatory system to different degrees. Hence, it is imperative to promptly update the legal framework and regulatory rules to prevent any unintended consequences arising from integrating Fintech. In addition, if a fintech company with extensive technological integration experiences a technical failure during the application process, causing harm to consumers' financial interests, it can be challenging to determine the specific legal responsibilities of the technical and business entities involved. As a result, this situation may cause disruptions in determining legal liabilities.

Surprisingly, international political economy (IPE) research has not given much consideration to this new regulatory innovation despite its significance and innovative nature [7]. IPE seems slow in analysing the impact of changes in authority, governance, and power dynamics between finance and regulators [8]. Sandboxes enable the integration of Fintech into society and finance, acting as a part of the fintech-financialization apparatus that enhances Fintech's reach into non-financial social relations, potentially causing significant social disruptions.

2. Literature Review

2.1 Trend of Fintech Risks in Malaysia

Fintech refers to the utilisation of technology within the financial system. The global financial crisis of 2008 brought attention to its emergence as credit and interbank markets in advanced economies collapsed and became unusable. In Malaysia, introducing credit cards in the 1950s was a significant Fintech advancement. It aimed to alleviate the inconvenience of constantly carrying cash for Malaysians. In the 1990s, the objective of financial technology was to promote the adoption of online banking among bank customers in addition to the automated teller machine [8].

In addition, several banking institutions, including Maybank, CIMB, and HSBC, have formed joint ventures with Fintech companies. Fintech's integration into the banking system has significantly improved customer service and internal operations [9]. In the twenty-first century, significant digitisation has occurred, including the emergence of payment applications, mobile wallets, crowdfunding platforms, and robo-advisors for wealth management [10].

The Malaysia Fintech Report 2021 [11] reveals a significant increase in mobile banking transactions, with a surge of over double from MYR200 billion in 2019 to MYR460 billion in 2020, as depicted in Figure 1. In 2020, mobile banking service subscribers increased by 3 million, reaching 20.2 million, compared to the previous year's 17.2 million. This growth contributed to the surge in transactions. The data indicates a rise in consumer adoption of Fintech.

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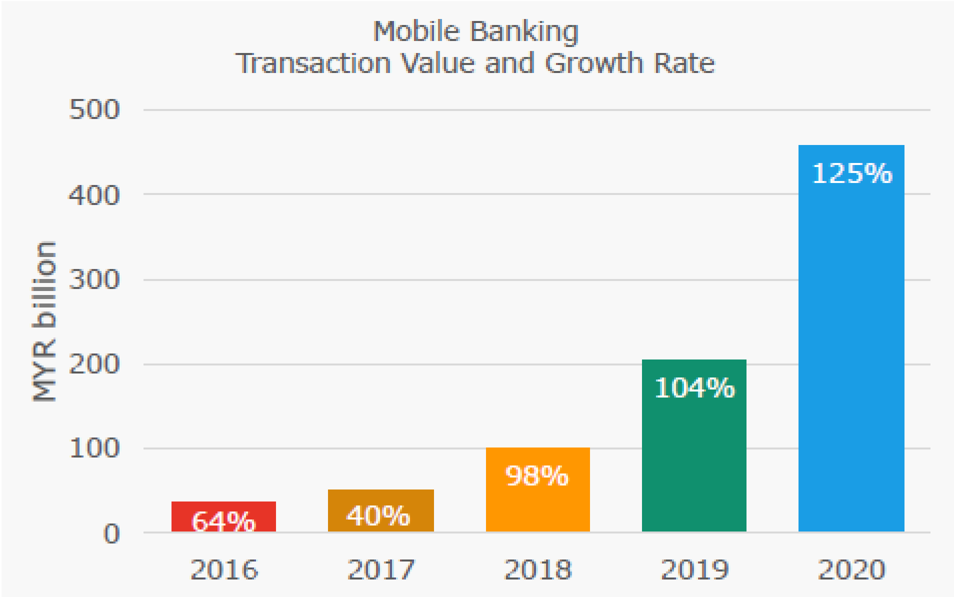

Fig. 1. Mobile Banking Transaction Value and Growth Rate

Despite the optimistic outlook of experts and practitioners, the level of acceptance for Fintech in the financial industry remains uncertain [12,13]. Due to the considerable risks involved, there are still individuals who remain hesitant to embrace Fintech. It is commendable that the Bank Negara Malaysia (BNM) strives to create a conducive environment for the development of Fintech while also addressing the potential risks it may pose. Fintech's growth as a disruptive technology will pose ongoing regulatory challenges for Malaysian financial institutions. In order to meet the evolving needs of emerging industries, the authorities must be adequately prepared. Business operations constantly change, requiring legal frameworks that can adapt to emerging standards. Regulatory bodies must carefully select the right strategy to ensure that current and outdated restrictions do not hinder innovation. In Malaysia, no single regulatory authority is responsible for fintech regulation [14]. The regulations imposed on fintech companies will differ based on their classification. The Securities Commission Malaysia (SC) and the Central Bank of Malaysia (BNM) are Malaysia's leading regulatory bodies responsible for overseeing and governing fintech legislation [15].

The primary obstacles to adoption include concerns related to risk, such as financial implications (such as potential loss of financial gains and additional fees), regulatory uncertainties (such as legal ambiguities surrounding adoption), security and privacy vulnerabilities (such as weaknesses in security technologies), and operational challenges (such as insufficient processes or systems within Fintech companies). Customers seek to assess the anticipated value of Fintech adoption, considering its advantages and disadvantages. They aim to make an informed decision regarding adoption when the benefits outweigh the risks. Therefore, Fintech companies face the challenge of maximising the advantages and minimising the risks associated with providing Fintech services to customers [16].

Fintech risks are particularly concerning for users who may not have a background in information technology, especially those in the B40 group. According to the data presented in Figure 2, Malaysia has had a significant number of cybersecurity cases [17]. The field of technology Effective risk management is essential for organisations to adapt to dynamic shifts in the environment and technology. They often attract high-quality employees and investments, leading to growth and long-term success. Applying a technological risk management framework to improve the implementation of risk management is a relatively recent and significant area of study. This particular field of study has not received substantial attention thus far despite its significance.

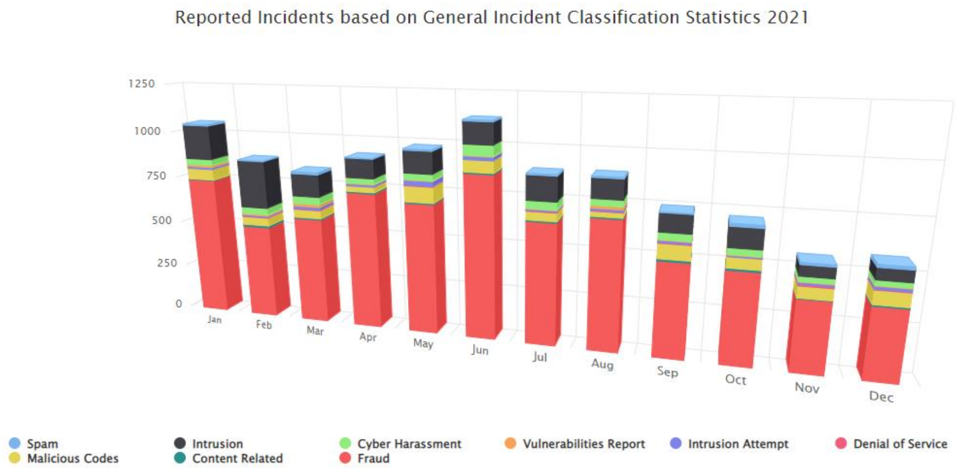

Fig. 2. Cyber Security Incidents in Malaysia in 2021 [17]

2.2 Implication of Legal Governance of Fintech

Fintech encompasses new business models, technical applications, and products that greatly influence financial markets and the delivery of financial services. This effect results from the innovative transformation of the financial system by utilising technological instruments. Financial technology, or Fintech, offers a wide range of potential application scenarios. The rapid progress and continuous advancements in underlying technologies have enabled a more profound integration of Fintech with financial infrastructure and business processes. Consequently, Fintech has been widely adopted in the financial and transaction industries. In addition, it has helped improve solutions for issues like information imbalance and transaction costs. However, Fintech displays a dual nature similar to a coin's two sides. It helps enhance financial market standards and operational effectiveness. However, it is crucial to recognise the inherent risks associated with Fintech that cannot be ignored.

The role of law is essential in managing risk in the fintech sector. Fintech innovation is subject to limitations imposed by the legal framework. Fintech innovation arises from the convergence of technological progress and market needs. Regulating this innovation is crucial for the legal system to manage the associated risks effectively. One way to accomplish this is by implementing market access restrictions that can restrict the scope and implementation of fintech innovation. In order to mitigate potential risks stemming from technical failures and market failures in fintech innovation, the legal system must intervene and prevent their occurrence and spread. In addition, fintech innovation firms must adhere to regulatory constraints set by the legal system. Fintech innovation relies heavily on the participation of various entities, including research and development organisations and application providers. These entities are instrumental in propelling the growth of the Fintech industry. The extent to which their actions align with sensible and compliant practices will significantly impact the emergence of fintech risks.

By implementing legal measures to regulate fintech-innovation entities, enforcing risk prevention as a core principle in fintech research and development, and encouraging responsible fintech innovation, the risks associated with reckless innovation motivated by market entities' self-interest can be effectively mitigated. Furthermore, the legal framework establishes the regulatory infrastructure and standards governing financial technology (Fintech) innovation. Due to the convergence of technology and business, Fintech often operates within a regulatory grey area. It utilises the legal system to enhance and refine the regulatory framework that governs its operations. It is necessary to establish the regulatory body supervising Fintech and clearly outline its authority and duties. In addition, it involves improving regulatory measures and rules to create a solid basis for implementing thorough and logical regulation on Fintech. These endeavours aim to efficiently manage, supervise, and tackle the various risks linked to Fintech.

2.3 Legal Governance Model for Fintech Risks

Financial technology, or Fintech, has experienced three distinct phases of growth. In the initial stage, this study employed financial information technology to use IT advancements. This involved using electronic and informational methods to offer software and hardware support, services, and solutions to the financial industry. Various technological advancements emerged during this phase, including the automated teller machine (ATM), point-of-sale terminal (POS), electronic registration and settlement system, and more. In the second phase, Internet finance rose, where network technology and financial operations became deeply intertwined. This phase enabled the smooth integration of different elements of financial operations, such as asset management, transactions, payments, and fund management. As a result, it has led to the emergence of a new type of financial companies that heavily depend on the Internet and mobile devices as their leading platforms and operational methods. The advent of Internet technology has enabled the implementation of various financial models, including peer-to-peer lending, mobile payment systems, equity-based crowdfunding, online investment platforms, and other forms of Internet-based finance. These models have greatly facilitated information exchange and commercial transactions, advancing traditional financial sector models and channels.

In the third stage, advanced Fintech emerged, revolutionising the processing of traditional financial information, investment strategies, and the roles of credit intermediaries. This was achieved by utilising cutting-edge technologies such as big data, cloud computing, AI, blockchain, and mobile Internet. Through the implementation of automation, intelligence, decoupling, and various other techniques, a complete transformation has been achieved in the structure of traditional financial markets. The emergence of quantitative trade, AI-Advisor, big-data credit investigation, virtual currency, and other new information technology applications during this period exemplified the financial sector's significant transformation due to these advancements. Fintech has numerous practical applications. The rapid and exponential growth of underlying technology enables Fintech to effectively address information gaps, transaction costs, credit, and other inherent challenges in the financial market. This enables Fintech to be seamlessly integrated with financial infrastructure and business processes. Furthermore, it has extensive applications in the financial industry and transaction field. However, improving the efficiency and effectiveness of the financial market is inherently interconnected. Regarding Fintech, one cannot overlook the associated risks.

While standard rules across all three legal governance paths categorise, Fintech based on application depth, risk degree, and influence strength in the financial market, it is critical to note that these laws are theoretical and have not been officially recognised in the system. Regulatory bodies exhibit inconsistent oversight of fintech risks, often shifting between suppression, indulgence, and reaction. Several factors may contribute to the emergence of this quandary.

Coordinating fintech regulatory objectives poses a significant challenge. Regardless of whether Fintech has fundamentally changed the business model of traditional finance, the industry has agreed that Fintech is the future of financial development. Many countries, including the United Kingdom and Singapore, are actively creating a favourable system and policy environment to support the development of fintech innovation centres. They are doing so by proactively promoting fintech innovation. The rapid growth of China's fintech industry is mainly attributed to market-driven innovation. However, the government and regulatory authorities will inevitably consider Fintech when formulating industrial control and financial regulations. This calls for the establishment of a regulatory environment that is relatively relaxed and accommodating towards Fintech. While acknowledging the presence of Fintech's inherent, application, and derivative risks, it is crucial for financial regulation to remain focused on its primary goal of mitigating financial risks. Implementing careful oversight of Fintech is critical in mitigating risks and requires stringent regulation of its research and development as well as application procedures. Regulatory authorities face the challenge of effectively coordinating industrial development and risk prevention. They often swing between prioritising security and efficiency, seeking a dynamic balance in regulatory goals through constant attempts. This results in different regulatory attitudes towards Fintech, with varying degrees of caution.

In addition, the People's Bank of China oversees the printing of currency, the processing of transactions, and the development of financial market infrastructure. Additionally, it oversees macroprudential regulation. The CBIRC, formed from the merger of CBRC and CIRC, oversees Fintech in the banking and insurance sectors, while the CSRC oversees Fintech in the securities and futures sectors. Local financial regulatory authorities, alongside central financial regulatory authorities, exert control over the growth and risk management of Fintech within their respective jurisdictions. For instance, local financial regulatory bodies oversee the regulation of peer-to-peer loan sites. The rise in popularity of cross-industry and cross-market financial services has led to a constant stream of mergers between financial institutions and businesses. These risk forms and spreads become more complex.

Similarly, the intricate nature and significance of fintech systems give financial businesses an air of virtuality and obscurity, effectively concealing financial risks. The traditional financial regulatory framework, rooted in institutional regulation, may result in ambiguity and disorder within the fintech regulatory body. When there is uncertainty about regulatory authority and a lack of effective regulation and coordination, different departments tend to pursue their regulatory policies, resulting in fragmented governance and a scattered regulatory scale.

Furthermore, the current perception of risk in the realm of financial technology (Fintech) is inadequate. Although Fintech poses potential business risks, regulatory agencies and the financial sector have acknowledged the presence of spillover effects. In addition, significant attention has been given to analysing the risk factors associated with Fintech. There is a dearth of comprehension regarding the mechanisms by which risks are generated and conveyed, the magnitude of their severity, and their potential ramifications on financial security and stability. There is a possibility that the risks related to financial technology (Fintech) could manifest in ways that differ from the expected patterns observed in the industrial cycle. Insufficient comprehension of Fintech risks results in regulatory bodies having inconsistent and incomplete expectations regarding these risks. As a result, various regulatory frameworks and governance strategies emerge. The indulging approach was first adopted in the realm of peer-to-peer (P2P) lending because regulatory authorities were initially unaware of the potential moral hazard and systemic risks associated with the P2P industry. Strict regulations were implemented in response to the emerging risks. Regulatory authorities have raised concerns about the potential risks of equity-based crowdfunding. These concerns primarily revolve around the difficulties in verifying information disclosure and the limited involvement of investors in corporate governance. As a result, they imposed restrictions under the public-issuance system of the Securities Law. Yet, these authorities may not have fully explored the potential of technological advancements, such as big data and blockchain, in addressing these concerns. The lack of comprehensive knowledge regarding the risks associated with financial technology (Fintech) has greatly impeded regulatory agencies' capacity to supervise Fintech expansion adequately. As a result, this resulted in a regulatory approach that alternated between excessive and insufficient measures.

Furthermore, the risk management mechanisms in the realm of financial technology (Fintech) are considered insufficient. Due to inadequate risk-control mechanisms, regulatory authorities face challenges in effectively managing the risks associated with financial technology (Fintech). The current regulatory framework is limited, primarily consisting of screening and control mechanisms for fintech innovation through market access. It also includes continuous monitoring through filing and registration obligations. Utilising a policy instrument that provides only two choices, namely permitting or banning, tends to oversimplify the evaluation of Fintech and hampers the capacity to tackle Fintech risks effectively. The main reason is the absence of a consistent regulatory system and enhanced regulatory measures, which hinders the capacity to respond to these risks rationally. In addition to policy instruments, incorporating information and technical tools can positively impact the management of fintech risks. Efficient control of information technologies can be achieved with minimal involvement and regulatory expenses. Fintech innovation is marked by creating and exchanging information, which possesses distinct qualities. Integrating information tools can be vital to improve financial regulation and reduce risks. Numerous strategies exist for utilising information tools to establish risk governance. These strategies involve imposing information-disclosure responsibilities on fintech research and development (R&D) and application businesses, promoting information disclosure by regulatory authorities, and establishing a public credit information platform. The Fintech industry is currently marked by its intricate technology, which has led to continuous examination in the fields of technical regulation and the development of regulatory technology. The tools required for efficiently managing risks associated with Fintech are still maturing. The lack of adequate tools for regulatory bodies in this context challenges the development of a cohesive and continuous risk-governance plan.

Fintech undergoes a distinct life cycle, encompassing research, development, and application processes, which may give rise to potential hazards. Various factors contribute to the overall level and market perception of fintech risk. These factors include the inherent risk of technology, the application risk in financial business integration, and the derivative risk arising from the interaction process with the entire financial system. These risks are interconnected, not isolated. The interconnectedness of fintech activities carries inherent risks characterised by specific interdependencies. Therefore, the legal supervision of fintech risks must cover all process aspects, from research and development to eventual implementation. Effective risk governance is crucial when implementing Fintech in financial services and conducting R&D in fintech businesses or financial institutions. Risk governance is vital for the fintech business model, the technological infrastructure supporting it, and its implementation strategy.

3. Methodology

This study employed a systematic literature review (SLR) approach following the guidelines of the Preferred Reporting Items for Systematic Reviews [18]. The study aimed to thoroughly assess the existing scholarly research on legal governance and Fintech. The systematic literature review (SLR) procedure was developed to analyse quantitative and qualitative data using meta-analysis. The study's objective was to examine the current trends and challenges in the Fintech industry, specifically focusing on research from the Google Scholar and Dimensions database [18,19]. The SLR procedure consisted of four stages: identification, screening, eligibility, and inclusion or data extraction (Figure 3).

3.1 Identification Stage

The research questions in this study were established to discern the gaps and patterns within the realm of legal governance and Fintech. The research was retrieved and compiled from the Google Scholar and Dimensions database, which is widely recognised among academics as a reliable source for conducting systematic literature reviews and ensuring the suitability and quality of the included studies. The search terms used to retrieve the database data were classified according to Fintech and legal governance domains. The terms used to retrieve data from the Scopus database were Fintech, Financial Technology, e-wallet, mobile apps, online payment, and fintech platforms. This study utilised the Google Scholar database to conduct a comprehensive search for papers relevant to each keyword.

The initial search results displayed some duplication due to multiple keywords. Duplicate records have been successfully removed. The output includes various scholarly resources, including conference papers, books, reviews, articles, and other academic literature forms. Only articles and review papers were selected for this study due to their frequent production by academics or scholars and publication in scientific, peer-reviewed journals. A common type of journal article is the research paper, which relies on primary data. They both present and generate fresh data. On the other hand, review articles aim to critically evaluate existing secondary data, identifying any deficiencies or limitations and offering recommendations for future research.

3.2 Screening Stage

Only articles published within the realm of Fintech were included in the identification phase results, as they were obtained through a filtering process. This study has compiled a collection of fintech articles published from 2017 to 2022.

3.3 Eligibility Stage

Approval has only been granted to publications published in journals rated Q1, Q2, Q3, or Q4 according to the SCIMAGO institution rankings. During this stage, this study excluded journal papers that lacked ranking and articles written in languages other than English.

3.4 Synthesis Methods

The software version 2.100.0 of Mendeley was utilised to load all 14 articles as data files into the Research Information Systems (RIS) (Research Information Systems *.ris) file format, specifically designed to be compatible with the VOS viewer version 1.6.17. This study imported all the files into Mendeley, carefully reviewed the list, and identified articles lacking magazine information. By utilising the URL link provided in the Microsoft Excel file (RRID: SCR_016137), this study obtained all the necessary information to organise the document effectively. All the essential information was provided, including the title, author names, years, magazine names, International Serial Numbers (ISSNs), Digital Object Identifiers (DOIs), and additional details.

3.5 Results

A total of 289 articles and review papers were identified during the PRISMA recognition stage. The SLR process matched them and subsequently analysed them for this study. Upon removing the duplicate records, the remaining count stood at 44. A total of 440 studies were identified in the selected research articles and reviews. After the recognition phase, a total of 347 documents were selected. The works in this collection were released from 2017 to 2022. Before 2016, there existed only two narratives. Therefore, only papers published from 2017 to 2022 were selected. A total of 347 stories were recorded. Following the qualifying step, a total of 347 papers were selected. In addition, an article was discarded due to its non-English language. This study was left with 44 papers that were suitable for this study.

During the data-gathering phase, this study meticulously examined 347 articles and carefully selected 14 that specifically addressed one of the fintech models mentioned by Imerman and Fabozzi [20]. This study omitted around five articles as they focused on the influences on the adoption and reception of Fintech without addressing any specific business strategies. This study reviewed 39 papers to identify any discussions pertaining to the six issues outlined in [21]. Our analysis revealed that these issues were discussed in a mere 14 articles. This study found that 14 papers examined and incorporated one of the six issues and a vertical or horizontal business plan. The section labelled "Results" presents the various tests conducted on the collected data to address the study's inquiries. This section discusses various forms of analysis, including meta-analysis and bibliometric analysis.

Table 1
The search string used in the systematic review procedure

Database	Search string
Google Scholar	("fintech") (financial technology OR e-wallet OR mobile pay) AND "legal governance" OR "law governance"
Dimensions	"fintech" OR "financial technology" OR e-wallet OR "mobile pay" AND "legal governance" OR "law governance"

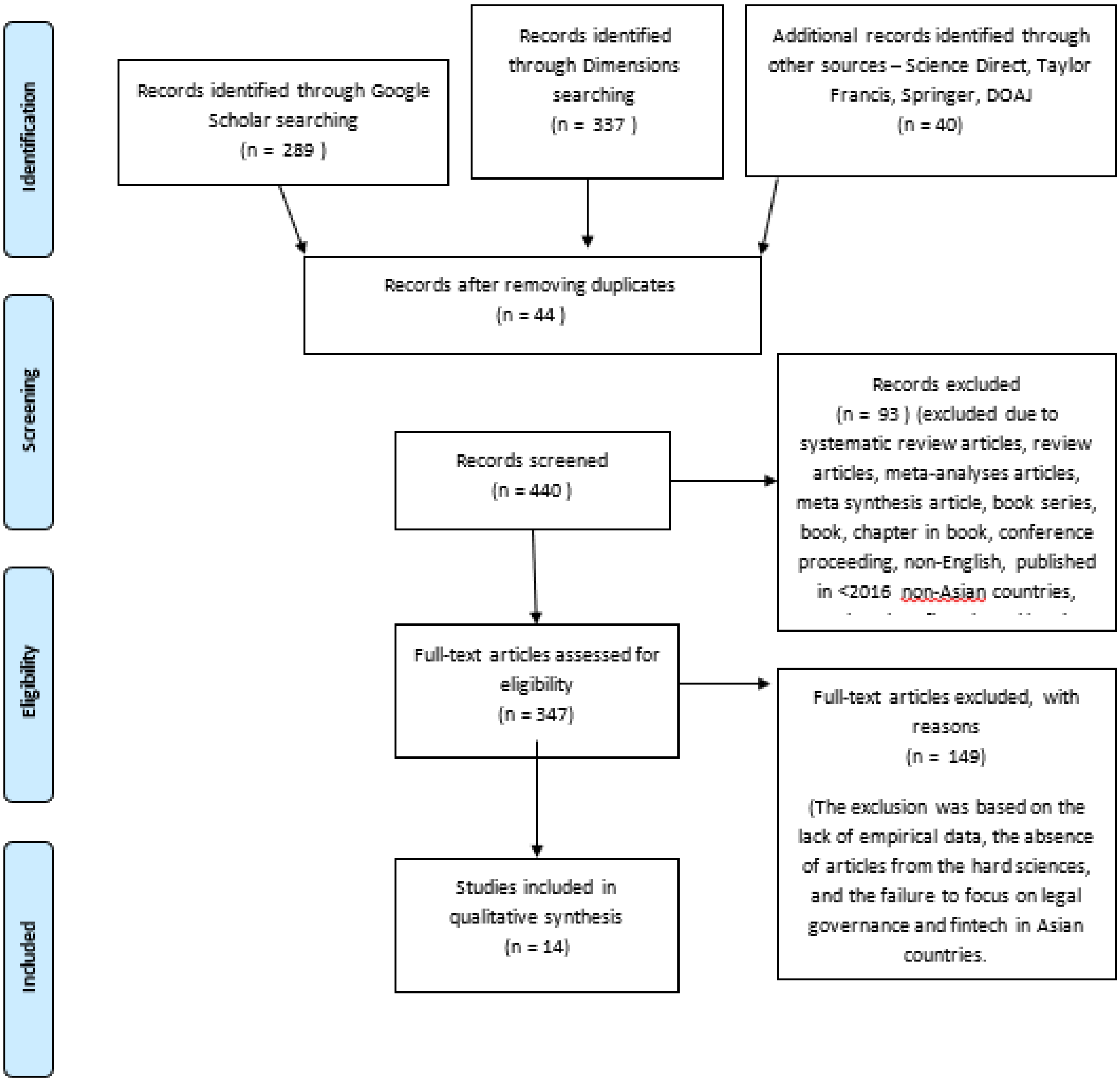

Fig. 3. The flow diagram of the study [22]

4. Results and Discussion

This study has generated significant interest in the field of legal governance and fintech risk, capturing the attention and enthusiasm of researchers dedicated to supporting this crucial industry. The primary focus of the fintech industry currently revolves around the realms of fintech risks and legal governance. It is worth noting that the interest in Fintech has grown significantly due to the emergence of the COVID-19 pandemic.

4.1 Fintech Risks

Although the notion of innovation in finance is not novel, there has been a significant increase in emphasis on technological advancements and their rapid pace of development. Fintech solutions that employ big data analytics, artificial intelligence, and blockchain technology are swiftly emerging. These new technologies are transforming the financial industry, offering numerous opportunities for a broader and more convenient array of financial services. Although FinTech solutions provide certain benefits, they pose significant risks that can potentially undermine consumer protection and financial stability. Relevant risks to consider are the potential underestimation of creditworthiness, market risk, non-compliance, fraud detection, and cyber-attacks. Regulatory authorities prioritise fintech risk management and require the development of innovative measuring techniques.

Although various legislations exist to protect consumers and investors, the rise of lending fintech has resulted in "disintermediation," requiring further measures to ensure the safety of consumers and investors. Eliminating technical risks in Fintech is a formidable challenge due to its inherent technical characteristics. The reason for this is the inherent incompleteness and vulnerability of the technology. During the various phases of research, development, application, operation, and maintenance, it is inevitable that Fintech will encounter technical vulnerabilities and leaks. This is due to its inclusion of various entities with varying technical capabilities. The technological limitations of Fintech, its potential network-security risks and other inherent flaws, and the opacity of algorithms and real-time data processing or other technical aspects can all contribute significantly to technological hazards.

In addition, technology-related issues have been included within the scope of operational risk, which is recognised as a significant type of financial risk, credit risk, market risk, and legal risk [23]. This study suggests that with the increasing digitisation and datafication, it is vital to recognise technological risks, such as cybersecurity and data privacy, as a separate risk category, distinct from traditional operational risks. Technology risks can arise within organisations and through the interconnections between institutions. In addition, technology hazards can potentially impact the trust and stability of the financial system directly. The digital financial transition has led to the emergence of cybersecurity as a significant source of systemic risk in the financial system.

The safety of transactions is influenced by the risks associated with Fintech. However, Fintech has the potential to enhance transaction security by employing accurate risk assessment and highly efficient transaction execution using technological and data-driven approaches. The potential incompleteness of Fintech could impact its stability and dependability, potentially causing a divergence in financial activities. Fintech could lead to a disparity in research, development, and implementation, creating an environment conducive to market manipulation and financial crime. Various subjective and non-subjective factors can contribute to uncertainty in financial transactions conducted via Fintech, potentially affecting transaction security.

Fintech risk has the potential to impact market stability due to its broad applicability and cross-industry transmission. Fintech frequently achieves efficiency gains by leveraging the scale effect. This necessitates the management of large volumes of data and the widespread adoption of technology across various financial transaction channels. Whenever there is risk in the fintech operation process, the risk will likely be transmitted vertically in the transaction process and horizontally within the same sector, leading to an expansion of risk. Fintech companies and financial institutions will benefit from it. The Internet has facilitated the creation of a financial-relation network, which has given rise to new forms of systematic risk in Internet finance. These include concepts like "too fast to fail" and "too connected to fail," in addition to the inherent characteristics of complexity and rapid spread [24]. In addition, it is worth noting that a large portion of Fintech's customer base consists of vulnerable demographics. Therefore, any potential risk could substantially impact the financial system's stability [25].

In addition, the rise of fintech risk poses a growing challenge to protecting financial customers' rights and interests. Fintech has not altered the fundamental aspects of financial transactions. However, it has exposed customers' rights and interests to potential abuses by the established financial industry. In contrast to established players in the banking industry, fintech startups are often driven to prioritise short-term earnings over long-term activities that could potentially create value [26]. However, the emergence of fintech risk will pose new challenges for financial clients. Take, for instance, the case of Fintech. This field heavily depends on big data and the Internet, which in turn exposes financial users' personal information to potential security risks. The consequence of such risks could manifest in data leaks or even abuse. The network security issue in the fintech industry could potentially compromise the asset security of financial clients. As an illustration, hackers exploited a vulnerability in the smart contract to transfer digital currency assets. In addition, digitalising financial transactions will enable the hiding of illegal activities and pose challenges for bank clients in asserting their legal rights.

4.2 Legal Governance on Fintech

Fintech's application will revolutionise the conventional financial transaction model. Whether it's an AI-Advisor utilising artificial intelligence algorithms or token issuance based on blockchain technology, they all diverge from the current regulatory system to some extent. Fintech's application will also present compliance risks if the legal system and regulatory rules are not promptly updated. In addition, when a fintech company that combines advanced technology and business expertise encounters a technical failure during the application process that negatively impacts financial consumers, it can be challenging to determine the exact legal responsibilities between the technical and business entities. This lack of clarity can lead to disruptions in assigning legal liabilities.

The law is crucial in governing the risks associated with Fintech. The legal framework imposes restrictions on the extent and magnitude of financial innovation. Technological advancements and market demand drive fintech innovation. Thus, in an effort to ensure responsible innovation, the legal system can regulate Fintech through measures such as market access. This helps control the risk level and prevent potential issues caused by technical or market failures in spontaneous fintech innovation. Furthermore, fintech-innovation firms face limitations due to the legal structure.

Fintech innovation entities drive growth, such as research, development, and application entities. These entities' intelligence and adherence to regulations will significantly influence the emergence of fintech risks. By utilising the legal system, we can effectively control the actions of fintech-innovation entities. Enforcing risk prevention measures in all fintech research and development applications is crucial. Additionally, responsible fintech innovation must be prioritised to prevent the risks associated with reckless innovation driven by self-interest. In addition, the legal system plays a crucial role in establishing the regulatory framework and standards for fintech innovation. Fintech's dual nature allows it to avoid regulation conveniently. The legal system has been utilised to establish and enhance the regulatory framework for Fintech to address this issue. This includes defining the regulatory body, outlining its responsibilities, and refining the corresponding regulations. The efforts have established a robust regulatory framework that enables the implementation of appropriate and practical fintech regulations and the effective prevention, monitoring, and management of various fintech risks.

5. Conclusion

Based on the literature, it is evident that Fintech is an information technology-driven company that develops cutting-edge financial products to address the limitations of traditional financial institutions. The limitations were related to efficiency, cost, and regulatory factors. Fintech offers customer-centric and user-friendly innovative products. Fintech has brought about substantial changes in the financial system. Fintech has both enhanced operational efficiency and facilitated financial inclusion. However, it has also brought new risk profiles and challenges to the financial market. The financial technology sector in Malaysia is still in the early stages of adoption. However, the lack of progress in establishing a proper regulatory framework and its failure to keep up with industrial advancements have led to risk incidents. These incidents have hindered the progress of financial technology innovation, causing disruptions and setbacks.

The Fintech ecosystem encompasses a network of interconnected stakeholders who collaborate to enable the development and delivery of innovative solutions in the field of Fintech. The Fintech ecosystem includes a wide range of stakeholders, such as traditional financial institutions, customers, regulatory bodies, NGOs, the public, government entities, the IT sector, media outlets, and investors. Numerous FinTech companies operate across different sectors, including wealth management, financing, big data, insurance, and exchanges. These stakeholders can have an impact on the FinTech industry, whether through direct or indirect means.

Fintech is widely acknowledged as a disruptive innovation that fosters innovation across various industries. Most of the research articles analysed showed an apparent inclination towards disruptive innovation. FinTech offers significant benefits such as cost reduction, increased profitability, and the introduction of innovative solutions that improve efficiency and convenience. On the other hand, the main challenges faced by the fintech industry involve cyber risk, stability and sustainability prospects, legal considerations, and increasing scrutiny from regulatory bodies. However, the current data is insufficient to establish FinTech as the convergence of industries.

Applying the established framework for financial risk governance is crucial in managing fintech risks and promoting the sustainable and organised expansion of the fintech industry. This is a novel domain within the realm of financial law, particularly in the era of Fintech. Due to several factors, such as the challenges in coordinating regulatory goals, the lack of clear division of regulatory powers, limited understanding of risks, and underdeveloped regulatory tools, the legal oversight of fintech risks has oscillated between different approaches of governance - suppression, indulgence, and response - without establishing a stable framework of ideas and institutions. The author suggested that a cautious approach to legislation should involve prioritising, evaluating, and reducing risks related to financial technology (Fintech) initiatives. Efficient utilisation of resources by financial authorities in Malaysia is recommended to proactively and effectively address the risks associated with Fintech. The legislative framework can help implement interventionist governance measures, establishing a proactive and constructive governance structure to address risks related to financial technology (Fintech). The achievement lies in clearly defining the intervention entity's legal status and authority and analysing the legal basis and consequences of the intervention methods. The principles and rules governing the composition of the intervention object are clearly defined.

This study has analysed existing literature to present a comprehensive definition of Fintech, which helps differentiate this phenomenon from other financial institutions by encompassing all previously described aspects of Fintech. Moreover, the FinTech ecosystem can assist investors and institutions affected by the rise of these new players in the financial technology sector. This publication offers valuable insights for researchers researching the same topic. This information could benefit authorities looking to understand the complexities of Fintech and its associated business.

5.1 Future Direction

It is crucial to commence the implementation of legislation concerning fintech risks, utilising local resources for financial regulation and adhering to the rule of law. We should strive for increased engagement and support for fintech risks, using the legal framework to enable governance through intervention. Additionally, it is recommended that a robust and supportive framework for managing fintech risks be established. This analysis focuses on the legal aspects of the intervention entity, including its authority and the legal consequences of intervention. Improving the presence and effectiveness of veto players and veto points in the fintech industry is imperative. It is crucial to enable various organisations to prevent Fintech entry into specific domains. Ensuring the safety and stability of Fintech is no longer considered enough. In order to effectively limit the influence of Fintech in specific social sectors, it is crucial to establish legislative frameworks that offer various options to external entities [6].

6. Data Availability

All data underlying the results are available as part of the article, and no additional source data are required.

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