

Unraveling the Fintech Landscape: A Systematic Mapping Study on the Impact of Financial Technology Innovation on Investment Decision-Making in ASEAN Banking

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Abstract

This systematic mapping study identifies and analyses fintech innovations that influence investment decision-making in ASEAN banking. Through a rigorous literature search and screening process, 128 relevant studies were analyzed, identifying four key fintech innovations that impact investment decision-making in ASEAN banking: advisory platforms, blockchain technology, peer-to-peer lending, and mobile banking. The analysis of these innovations reveals their potential to improve investment decision-making in terms of cost efficiency, speed, accessibility, and transparency. However, the study also identified several challenges associated with these innovations, including cybersecurity risks, regulatory issues, and a lack of customer trust. This study provides valuable insights into the current state of fintech innovation in ASEAN banking and its impact on investment decision-making. The findings can help policymakers, regulators, and financial institutions make informed decisions about developing and adopting fintech innovations in the region.

Keywords: Financial Technology Innovation; Investment Decision; Systematic Mapping Study.

Abstrak

Studi pemetaan sistematis ini mengidentifikasi dan menganalisis inovasi-inovasi fintech yang memengaruhi pengambilan keputusan investasi di perbankan ASEAN. Melalui proses penyaringan dan penelusuran literatur yang ketat, 128 studi yang relevan dianalisis, mengidentifikasi empat inovasi fintech utama yang memengaruhi pengambilan keputusan investasi di perbankan ASEAN: platform penasihat, teknologi blockchain, pinjaman peer-to-peer, dan mobile banking. Analisis terhadap inovasi-inovasi ini menunjukkan potensi mereka untuk meningkatkan pengambilan keputusan investasi dalam hal efisiensi biaya, kecepatan, aksesibilitas, dan transparansi. Namun, studi ini juga mengidentifikasi beberapa tantangan yang terkait dengan inovasi-inovasi tersebut, termasuk risiko keamanan siber, masalah regulasi, dan kurangnya kepercayaan nasabah. Studi ini memberikan wawasan yang berharga mengenai kondisi inovasi fintech saat ini di perbankan ASEAN dan dampaknya terhadap pengambilan keputusan investasi. Temuan-temuan ini dapat membantu para pembuat kebijakan, regulator, dan lembaga keuangan untuk mengambil keputusan yang tepat dalam mengembangkan dan mengadopsi inovasi fintech di kawasan ini.

Kata kunci: Inovasi Teknologi Keuangan; Keputusan Investasi; Studi Pemetaan Sistematis.

INTRODUCTION

The literature on fintech innovation in the banking industry has grown rapidly in recent years. Fintech innovations have been identified as potential disruptors of the traditional banking industry, offering new ways of delivering financial services and improving customer experience. In the ASEAN region, the adoption of fintech innovations has been driven by the increasing demand for financial inclusion and the rapid growth of the digital economy (Karim, Naz, Naeem, & Vigne, 2022).

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Several studies have examined the impact of fintech on the banking industry, including investment decision-making. For example, research has shown that robo-advisory platforms can improve investment decision-making by providing cost-efficient and transparent investment advice. Blockchain technology has also been identified as a potential disruptor of traditional investment processes by enabling secure and transparent transactions. Peer-to-peer lending platforms have provided new opportunities for investment and credit access, while mobile banking has increased accessibility and convenience for customers (Lenz, 2016), (Maulana et al., 2022).

Despite the potential benefits of fintech innovations, several challenges are associated with their adoption. Cybersecurity risks, regulatory issues, and lack of trust among customers are some of the main challenges facing fintech adoption in the banking industry. Therefore, it is important to understand the current state of fintech innovation in ASEAN banking and its impact on investment decision-making to inform policy and regulatory decisions (Batunanggar, 2019), (Chueca Vergara & Ferruz Agudo, 2021), (Ozili, 2018).

LITERATURE REVIEW

Scopus

Scopus is a scholarly journal reference index published by Elsevier. Back in 1993, Scopus was released to the world for the very first time. Web of Science (WOS) by Thomson Reuters is the biggest data repository in the world, and Scopus is often seen as a competitor to it. Scopus uses state-of-the-art technology to look for and trace down information. Scopus can track author cooperation by mapping search results mainly on the author's topic, keywords, publisher, year of release, and keywords. Services for evaluating a journal's significance are also available through Scopus (Pranckutė, 2021). Donthu et al., (2021) state the best dataset to do a bibliometric analysis comes from the Scopus database to gain the newest update on trends and updated data of publications worldwide. In order to gain valuable insights into the opportunities and challenges of fintech adoption in the region, we utilized the Scopus database to gather expert publications.

Scopus and Systematic Mapping Study

This systematic mapping study aims to identify and analyze the fintech innovations that affect investment decision-making in ASEAN banking. The study analyzes the current state of fintech innovation in ASEAN banking and its impact on investment decision-making by conducting a rigorous literature search and screening process. The findings of the study can provide valuable insights into the opportunities and challenges associated with fintech adoption in the region (Setiawan, Nugraha, Irawan, Nathan, & Zoltan, 2021), (Firmansyah, Masri, Anshari, & Besar, 2022), (Candy et al., 2022).

Joint Word Analysis

Is this so (Lin, Tang, Lin, Changlai, & Hsu, 2022) Co-word analysis can be performed by counting the occurrences of specific search terms within a document. The author typically chooses the criteria keywords for the search document; the greater the frequency with which these keywords occur in the documents under analysis, the closer the two are related. The co-occurrence of important or distinctive words in a piece is the sole basis for a keyword-on-keyword analysis. In

this case, a quick glance at the headline or synopsis is all that's needed to make a decision (Radhakrishnan, Erbis, Isaacs, & Kamarthi, 2017). The assessment of the difficulty yields the vocabulary used to describe an idea. You'll get a wide range of dates when you use uncommonly important terms. For uniformity, a lexicon is used, and a word or phrase that describes a concept is called a description (Rahman, Sahudiin, & Syahrial, 2016).

Financial Technology Innovation

The term "Financial Technology" (FinTech) refers to the use of innovative technology to provide financial services and improve financial processes. The emergence of FinTech has revolutionized the way financial services are delivered, disrupting traditional financial systems and processes (Varma, Nijjer, Sood, Grima, & Rupeika-Apoga, 2022). The literature on FinTech innovation covers a wide range of topics, including the adoption and impact of FinTech on the financial industry, the challenges and opportunities associated with FinTech, and the potential implications for financial regulation and policy.

Studies have shown that FinTech has the potential to transform the financial industry by improving efficiency, reducing costs, and increasing access to financial services (Wu, Bai, & Chen, 2023). For example, the use of mobile banking and payment systems has enabled customers to access financial services more conveniently, while peer-to-peer lending platforms have opened up new opportunities for investment and credit access. Robo-advisory platforms, which use algorithms to provide investment advice, have also gained popularity for their cost-efficiency and transparency (Poornima, 2022).

However, the adoption of FinTech also poses several challenges, including cybersecurity risks, regulatory compliance, and consumer protection (Jain, Kumar, Sood, Grima, & Rupeika-Apoga, 2023). Cybersecurity risks associated with FinTech are a major concern, as the use of technology for financial services may increase vulnerability to cyberattacks. Regulatory compliance is also a challenge, as FinTech innovations often operate outside traditional regulatory frameworks. Consumer protection is another concern, as the use of new and unfamiliar financial services may expose consumers to financial risks and fraud.

In recent years, the adoption of FinTech has gained momentum globally, with many countries promoting FinTech development and innovation. The ASEAN region has also seen a rise in FinTech adoption, driven by the growth of the digital economy and the increasing demand for financial inclusion (Supartoyo, 2022). As such, there has been a growing interest in exploring the impact of FinTech on the banking industry and investment decision-making in ASEAN Banking 6. Moreover, deciding on the investment requires a lot of information inside the bank and data.

An investment choice is one in which money or other resources are put into a venture or commodity with the expectation of future gain (Gründl, Dong, & Gal, 2016). This choice can be made at any level of an organization, and it typically entails weighing danger, time commitment, and possible reward. Stocks, bonds, real estate, mutual funds, and other financial tools are just some of the many possible outcomes of an investor's choice to buy, sell, or hold a commodity (IMF, 2022). Interest rates, inflation, market circumstances, and the basic aspects of commodities or initiatives to be invested in all play a role in influencing investment choices (Suharyanto, et al., 2021). The market, the industry, and the product or planned endeavour must all be thoroughly researched and analyzed before any financial choices can be made. Investment choices should be made after careful consideration of the investor's risk tolerance, time horizon, and overall financial picture.

Therefore fintech can't be separated from a banking process, which gathers, hold, and handle monetary resources. Financial services provided by banks include, among others: accepting assets; lending money; making payments and transactions; and offering investment services (Anugrah, Fathanudien, & Tendiyanto, 2020). Most of the time, banks play the role of an intermediary between their clientele, who need financial resources, and those who themselves need such resources. Banks must manage risks associated with financial operations just as they handle risks associated with any other business operation (Kunz & Heitz, 2021). In addition, banks are crucial to a country's economic development because they facilitate the availability of capital and lend backing to businesses and initiatives that can contribute to that development. Governments and financial organizations frequently control banks to safeguard their customers' money and prevent predatory lending and other harmful business practices (Packin & Nippani, 2022).

The literature on FinTech innovation provides valuable insights into the potential benefits and challenges associated with the adoption of FinTech in the financial industry. Future research could address the challenges and risks associated with FinTech adoption, develop effective regulatory frameworks, and explore the potential implications for financial policy and regulation.

RESEARCH METHOD

This study employs quantitative techniques in conjunction with Systematic Mapping Study. Systematic Mapping Study methods are used to quantify what needs to be done and to assess scientific productivity (Duarte, 2022). This search will overview the mapping and trends associated with recent searches for fee Financial Technology Innovation and Investment Decisions.

The approach to statistics series and Systematic Mapping Study is summarized in Figure 1. This study attempts to compile statistics and search for articles by utilizing the SCOPUS database, which will be peer-reviewed by the end of 2023. The top search strings for this research are "Financial Technology Innovation" and "Investment Decision." For further development of the search string in the Scopus database search, namely: ("Financial Technology Innovation" OR "Investment Decision" AND "Banking").

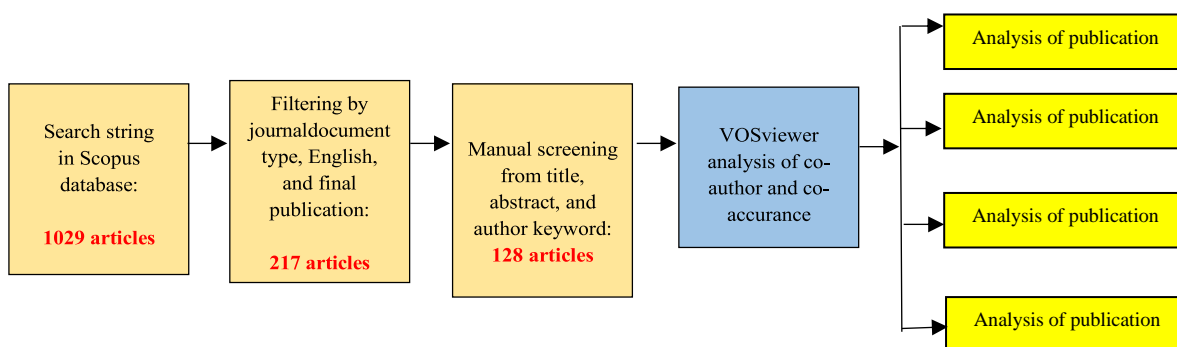


Figure 1 Procedure for Data Collection and Systematic Mapping Study

When the results are insufficient when derived from the article's entire textual content, the search string is included in the article's keywords, titles, and abstracts. Between 1993 and 2023, over 217 journal articles, e-book chapters, conference proceedings, and editorials were published due to the search. Only English language journal articles and 128 most recent publications were included in the search results. Manual keyword, title, and abstract exploration. Omit irrelevant articles.

By searching for the abbreviation SME, irrelevant articles are filtered out. Certain Financial Technology Innovation abbreviations, such as involvement of ASEAN Banking 6, the company's engineering community, ASEAN Banking 6 organization editors, ASEAN Banking 6 organization experience, and ASEAN Banking 6 enterprise investment, are no longer immediately associated with Investment Decisions. The guide's exploration yielded five relevant journals with fifty-eight citations collection of several articles organized as a Systematic Mapping Study database, followed by similar processing using the VOSviewer software. The gathered research is then poured into a Systematic Mapping Study database, which can be processed in the same manner using the VOSviewer software.

RESULTS AND DISCUSSION

Systematic Mapping Study Analysis of Publications and Citations

The Systematic Mapping Study database is a collection of several articles organized in a structured manner. The VOSviewer software is then used to do the same. The collected research is poured into a Systematic Mapping Study database that can be processed in the same way with the help of the VOSviewer software. In 1993, articles on Financial Technology Innovations and inventory expenditures were considered. They continued to trip up when a significant increase in the search for rate Financial Technology Innovation and inventory expenses occurred between 1993 and 2023 (see figure 2).

In most cases, mentions far outpaced the output of new papers during any given year. A common theme among the most cited works is the importance of considering the investment decision when considering an ASEAN 6 Banking. There was one paper published in 2023 that was cited 128 times. How the Financial Technology Innovation score is arrived at is the topic of this essay.

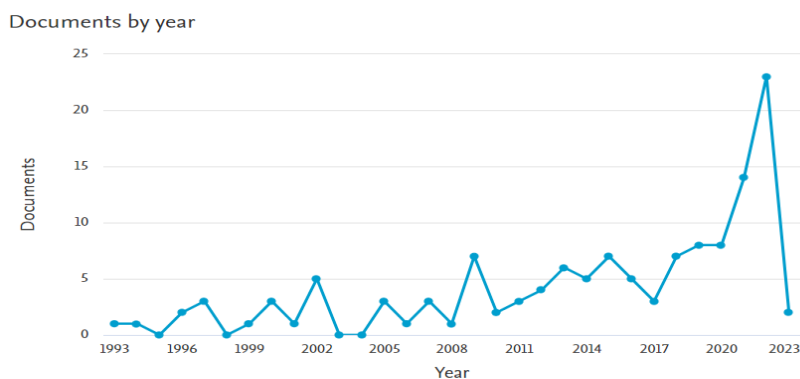


Figure 2 Publication Trends of Financial Technology Innovations and Investment Decision from 1993 to 2023 in the Scopus Database

Systematic Mapping Study of countries

In the search results, ten author-affiliated international locations contribute to the Financial Technology Innovations and Investment Decision article. Figure 3 illustrates the distribution of articles across ten international locations from various sectors, with a minimum of one report article. Ten countries have more than one document: the United States, United Kingdom, China, Italy, India, Germany,

Canada, France, Hongkong and Spain. A large number of publications does not guarantee a large number of citations. United States are the country and files with the most diverse sources from the University de Valencia. Figure three indicates the country's affiliate network is centered on two international locations. These findings demonstrate that United States significantly contribute to finding fee Financial Technology Innovation and Investment Decision.

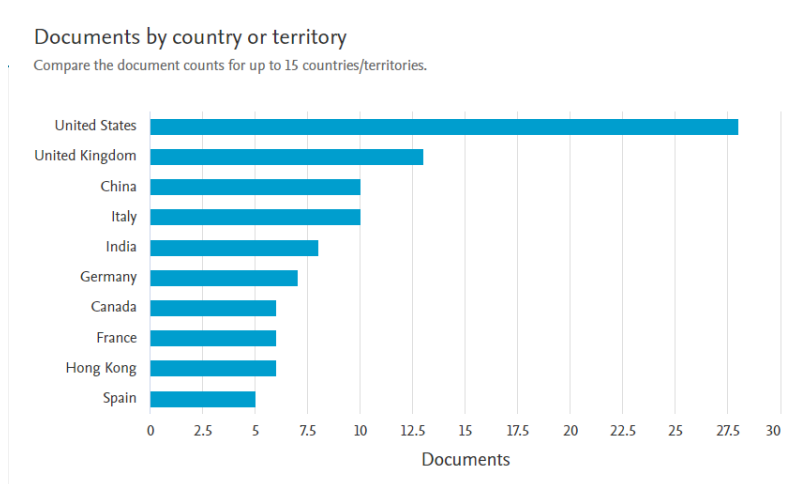


Figure 3 Number of Publications and Keyword Quotations for Each Country With a Minimum of Five Documents

Systematic Mapping Study analysis of keywords

The author's article contains 356 keywords. Before examining the keywords, Taurus was used to replace critical phrases with identical meanings as those in table 1. The period 1993 to 2023 contains numerous exceptional texts that serve the same purpose. Additionally, keyword filtering is performed on articles with a minimum of five occurrences in the article database, resulting in 128 relevant key phrases appearing. The most frequently used terms are Financial Technology Innovation and Investment Decision and Banking.

Table 1 Thesaurus Terms

No.	Keyword tags	Replace with
1	Financial Technology Innovation	Financial Technology Innovation
2	Investment Decision	Investment Decision
3	Banking ASEAN	Banking

Systematic Mapping Study Analysis of Paper Type

Data compilation in Microsoft Office 2019 Excel using a taxonomy of 128 items categorized using a reference. Finally, due to the nature of quantitative methods, they have been used by the vast majority of prior scholars, with 75% of research from search results using quantitative methods techniques in the scholarly paper being tried and reviewed. At the same time, up to 24% of studies employ a qualitative methodology (see figure 4).

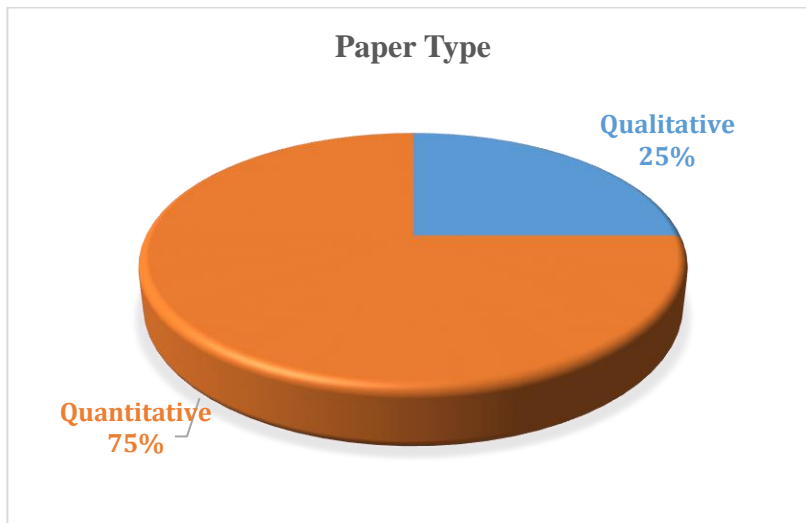


Figure 4 Systematic Mapping Study Analysis of Paper Type

Systematic Mapping Study Analysis Cluster Topics

Each article's keyword usage was examined for any overlap. The energy of association technique is used to draw the network's graph. Figure 5 is a community visualization that was processed through VOSviewer, which took five occurrences of a crucial sentence and sorted them into different categories. A similar hue is assigned to groups of keywords that are closely related to one another. Table 2 displays the keyword analysis results that yielded three units in addition to the two main critical phrases (Financial Technology Innovation, Investment Decision and Banking).

Table 2 Keyword Clusters With Occurrence

No.	Keywords	Incident	Strength	Total Link
1	Financial Technology	28		57
2	Investment Decision	35		82
3	Banking	65		139
Group 1				
1	Financial Technology	45		62
2	Investment Innovations	52		85
3	Banking	68		146
Group 2				
1	Financial	89		137
2	Investment	145		210
3	Bank	250		319

thorough research and analysis before investing in any FinTech company, and to have a long-term investment strategy that takes into account the potential risks and uncertainties in the industry.

The second cluster, colored yellow, contains the keywords Financial and Investment and Banking. The second cluster shows the relationship between Financial and Investment and Banking. These keywords indicate that the second cluster describes The process of administering and offering financial services to people, companies, and governments is referred to as financial banking. This can involve giving out services like credit cards and other financial goods, making loans, accepting deposits, and giving investment guidance. Investment banking, on the other hand, refers to the process of facilitating financial transactions between investors and companies. This can include services such as underwriting and issuing securities, advising companies on mergers and acquisitions, and managing ASEAN Banking 6.

Both financial and investment banking play important roles in the global economy (Sahay et al., 2015). Financial banking provides individuals and businesses with access to the financial products and services they need to manage their finances and grow their businesses. Investment banking helps companies raise capital and finance their operations, which can lead to job creation and economic growth. However, both areas of the financial industry can also be subject to risks and challenges. Financial banking is heavily regulated to protect consumers, but can also be vulnerable to fraud and other forms of financial crime. Investment banking is subject to market fluctuations and can be affected by economic conditions and shifts in investor sentiment.

The Model of Implementation Financial Technology

Implementing financial technology in the ASEAN region has become a trend for every trade transaction and is a measure of economic development in a country—however, this study is known as to be related to the fintech model used.

Table 3 Financial Technology models

Stage	Scope	Act
Phase 1	Knowledge of Financial Technology	At this stage, the banking user community has been directed to the introduction of financial technology, such as financial transactions and purchases of goods and services.
Phase 2	Regulation Country	The government must provide regulation on the use of financial technology, regulation of users and providers of financial technology services
Phase 3	Security Systems	Transaction security provided by the State and financial technology service providers.

Table 3, shows the steps that must be taken by a country in implementing a financial technology model. Moreover, the researcher belief the model of Financial Technology in table 4. consist of the core of previous study that has been review in this research. Therefore the financial technology model above was propose to research further to use as the references for further research, or implement the policy in further countries.

CONCLUSION

This Systematic Mapping Study overviews Scopus publications on Financial Technology Innovations, Investment Decisions and Banking. The search results for Financial Technology Innovations strings and share expenses on Scopus should be analyzed, and the abbreviation for Financial Technology Innovations for ASEAN Banking 6. The search results indicate that posted rate Financial Technology Innovation and inventory costs continued to grow between 1993 and 2023. The United States had the most citations from the University de Valencia. Four cluster issues have been identified due to the co-occurrence keyword analysis. Most subjects are concerned with Financial Technology Innovations, Investment Decisions and Banking.

There are two problems with this finding. For starters, this search is predicated on a relatively small group of keywords to find documents. Second, the paper relies on a Systematic Mapping Research, but the author's interpretation of the results is still prone to mistake. The number of keywords used in future queries and the rate limit structures and datasets used should be expanded so that a more accurate pattern assessment can be made. It is also suggested that bibliometric assessment tools be used to assess the outcomes.

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