

FinTech as a Financing Solution for Indian Startups: A Systematic Literature Review

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ABSTRACT

Purpose: This paper aims to review recent literature on FinTech adoption by reviewing published research papers on FinTech and digital finance using SLR techniques.

Methodology: Data were collected from 1 Database (Scopus) using PRISMA guidelines. In this context, the study summarizes the literature that focuses on FinTech variables contributing to Financial Technology adoption, specifically considering financing solutions for Startups in India.

Findings: This research offers valuable insights into how financial technology supports the survival and growth of emerging businesses by examining the specific financial requirements of startups and how FinTech innovations address these needs.

Limitations: The biggest constraint of this study is the use of only one database, despite the availability of numerous others. This limitation raises the possibility that articles from other sources may have been overlooked

Originality: The study is one of the types that underscores the increasing importance of FinTech in molding the future landscape of financial services and highlights its crucial function in bolstering entrepreneurial endeavors within developing economies such as India as no previous study has been conducted considering FinTech as a Financial solution for startups.

Keywords – FinTech, Financial Technology, Financing, Startups, PRISMA

JEL Code -O32, L26

1. INTRODUCTION

Nowadays FinTech and Startups both become important domains for researchers all over the world due to their increased importance in strengthening the economy of any country (Barroso & Laborda, 2022). FinTech is considered as a growing technology and Startups are an important and integral part of any economy and have a huge impact on the socio-economic development of the nation (Scillitoe & Birasnav, 2022). From the mid-2000s onwards, startups have increasingly become crucial for job creation and economic growth in developed nations, while emerging economies are striving to bolster their financial systems by emphasizing startup development (Morrison, Breen, & Ali, 2003). These innovative enterprises serve as essential catalysts for economic progress worldwide, particularly in developing and emerging markets. However, a prevalent issue that burdens startups is limited access to capital (Liu, Wang, Zhang, Fang, & Xiao, 2023). (Agboola, Adelugba, & Eze, 2023) indicated financing as one of the main challenges influencing startups. Without a doubt, the availability of capital affects company performance, either directly or indirectly. Numerous studies have discussed that startups are more constrained than large firms and are likely to have access to formal finance (Azeem & Khanna, 2023).

This study emphasizes the following research questions.

RQ1- How does the existing literature characterize the present landscape of FinTech research?

RQ2- What are the tools and techniques used to analyze the FinTech adoption?

RQ3- What are the merits of using FinTech as a source of financing for startups?

This study is organized as follows: Segment one introduces FinTech. Segment two discusses its theoretical foundation. Segment three outlines the research approach. Segment four contains the main results from the Systematic Literature Review (SLR). Finally, the fifth Segment offers concluding thoughts and identifies potential directions for future research.

2. THEORETICAL BACKGROUND

FinTech

Financial technology, commonly known as FinTech, has become a distinct category that primarily describes the technological innovations in the financial sector across various business and organizational operations. This classification is mainly concerned with using IT applications to improve the quality of services. (Gai, Qiu, & Sun, 2018). "FinTech," a portmanteau of "Financial" and "Technology," describes the fusion of modern Internet-based systems like cloud computing and mobile networks with conventional financial offerings (Aggarwal, Nayak, & Bhatt, 2023). Consequently, Fintech firms are entities that utilize technological innovations to boost the proficiency and productivity of financial services. They have become increasingly popular among SMEs and startups in recent years, providing innovative solutions and attractive options for growth of the Entrepreneurship (Guild, 2017).

The basic objective of this study is to scrutinize how "financial technology" is used to provide customers, like startups or small businesses, with financing solutions. The main goal of this research is to observe the utilization of financial technology as financing solutions for customers, such as Startups or small businesses. In the literature, the intention to adopt FinTech and its actual use is viewed as equivalent, both signifying engagement with FinTech adoption. As the fintech landscape continues to grow in terms of its ecosystem, business strategies, and operations, it becomes essential to grasp the elements that drive the uptake of fintech services. This research provides a novel perspective on the subject by assessing and outlining the motivations behind Startups' selection of fintech as a financial solution for their operations. By putting forth a theoretical framework based on recent scholarly work, this paper seeks to add to the body of knowledge already available on fintech and systematic review research.

Startups

The emergence of entrepreneurship has led to the widespread use of one of the most frequently employed terms in the business and finance sectors: "startups." Startups are crucial in innovation processes (Audretsch, Colombelli, Grilli, Minola, & Rasmussen, 2020) According to the widely recognized definition proposed by Steve Blank in 2010, a startup can be described as an organization or joint venture established to identify a viable and expandable business framework. The startup phase involves transforming novel concepts into economically sustainable enterprises that can be duplicated and grown.

The Start-Up India Action Plan stipulates that enterprises meeting the requirements outlined in G.S.R. notification 127 (E) by DPIIT are eligible for recognition under the program. Applicants must provide the necessary documentation during the application process. To be recognized as a start-up, the following conditions must be satisfied:

- The organization needs to be set up as a limited liability partnership, registered partnership, or private limited company.
- The company's annual turnover should not have exceeded ₹100 Crores in any preceding fiscal year,
- The business can maintain its start-up status for up to 10 years from its incorporation date,
- The business should concentrate on innovation or the enhancement of current goods, services, or procedures that have the potential to generate revenue or jobs. Businesses resulting from the splitting or restructuring of an existing company will not be classified as a "start-up".

3. METHODOLOGY

Research Method

This current study employs the "systematic literature review" (SLR) methodology described by (Tranfield, Denyer, & Smart, 2003). The study conducts SLR using the PRISMA "Preferred Reporting Items for Systematic Reviews and Meta-Analyses" method (Mohar, Tetzlaff, & Altman, 2009) utilizing its four-phase flow diagram (Figure 1) to synthesize the findings. SLR is a scientific, transparent, and reproducible research method used to comprehensively analyze research outcomes in literature (Kitchenham, et al., 2009). The process involves three main stages: planning the review, executing the review, and reporting the results (Tranfield, Denyer, & Smart, 2003). These stages are elaborated in sections 3.1 through 3.3.

3.1 Phase 1 – Planning the Review

Selection of keywords and database

The next stage after developing the research questions is to choose relevant databases and keywords for the literature search. To make these decisions effectively, it is crucial to determine the specific aspects that need investigation, choose suitable information sources, and establish the relevant time frame for the research. (Zhang, Babar, & Tell, 2011).

The terms included in the search string is "FinTech" or "Financing" or "Financing Technology" AND "Startups", The "Scopus" database is considered the most important cross-disciplinary bibliographic resource, allowing for searches within the document's title, abstract, or keywords indexed in the database. (Wang & Waltman, 2016). The study focused

solely on English-language articles from journals and peer-reviewed conference proceedings. Criteria for inclusion and exclusion are outlined in Table 1

Eligibility Criteria

This systematic review considered studies examining FinTech's influence and significance across various domains, including banking and corporate sectors. The selection criteria encompassed: (i) Publications from 2013 to 2024 (ii) English language texts (iii) Exclusively open-access materials (iv) Research papers, articles, conference papers, and similar documents (v) Topics covering “Business Management and Accounting, Economics, Econometrics & Finance, Social Science, and Arts and Humanities” (vi) Scopus database as the source.

Table 1 Inclusion and Exclusion Criteria

Basis	Inclusion	Exclusion
Database	Scopus	All databases, with the exception of those mentioned in the inclusion
Study Topic	FinTech as a financing source for startup	Other than the referred topic
Study Language	English	Other than English language
The time frame of the Study	Published from 2013 to 2023	Published before 2012
Type of Document	Research articles	Review articles
Subject Area	“Business Management and Accounting, Economics, Econometrics & Finance, Social science, and Arts and Humanities”	Other than mentioned in the inclusion

Examine the Procedures for Data Collection and Selection

Following the preliminary literature searches using keywords, abstracts, and titles in a variety of academic databases, the pertinent studies were evaluated and screened further using the PRISMA flow diagram (Figure 1)

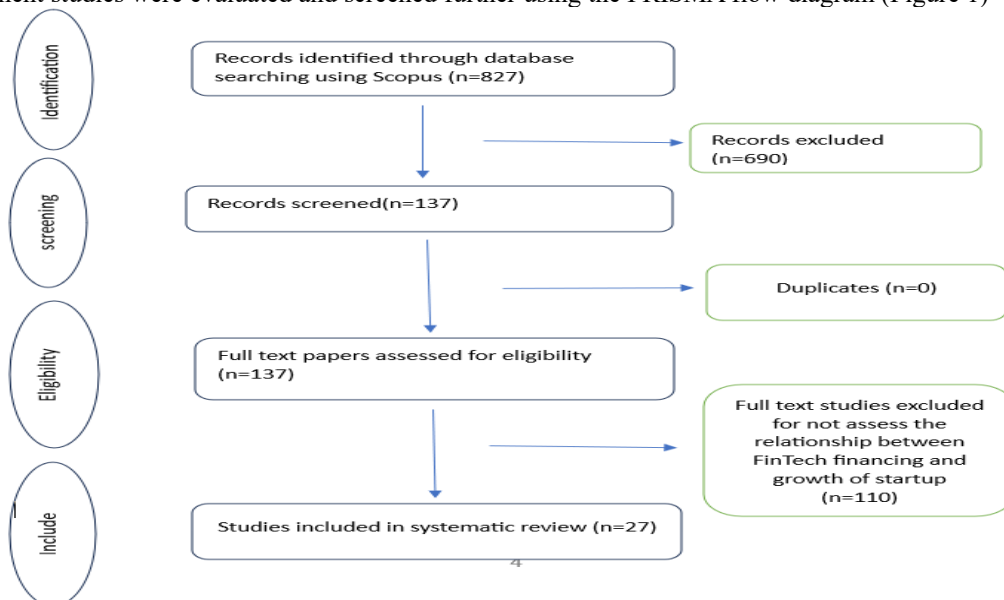


Figure 1 shows the PRISMA flow diagram for the paper selection procedure used in the systematic review study.

The initial search process yielded 827 studies (Scopus, n= 827). Upon examining the title, abstract, and keywords of all database-searched studies (n=690), numerous studies were excluded from the systematic review due to their unsuitability. No studies (n=0) were eliminated because of duplication. Consequently, 137 studies (n=137) were chosen for the full-text eligibility stage. Among these selected studies, 110 (n=110) were excluded as they did not evaluate the connection between FinTech financing and startup growth. Ultimately, 27 studies (n=27) were selected for the systematic review.

3.2 Conducting the Review

As per (Tranfield, Denyer, & Smart, 2003) A comprehensive Systematic Literature Review (SLR) examines a diverse array of research articles and produces a two-component report. This paper includes a field description and a thematic

analysis that uses data extraction techniques of significant contributions to highlight existing knowledge. The thematic analysis might take either an interpretative or an aggregative approach.

Numerous metrics are presented in the descriptive analysis, such as yearly publication counts, research methodologies employed, study sources (conferences or journals), and the primary journals publishing relevant papers. This information is gathered to identify trends in the research area.

The thematic analysis aims to compile data addressing research questions. It begins with a comprehensive reading of the articles to gain familiarity with their content. Codes are then created based on themes (research questions) to categorize essential information. Following this, the process involves identifying, documenting, merging, and assembling topics within each thematic category.

3.3 Reporting the results

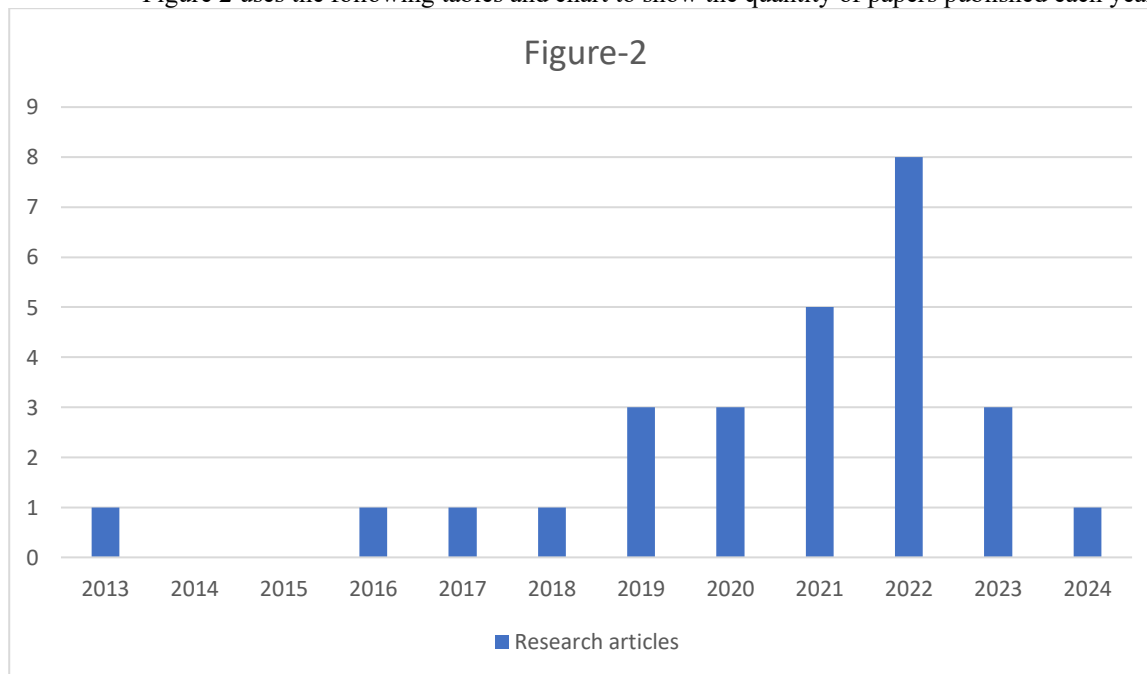
To conclude the systematic literature review (SLR), a comprehensive report is necessary to ensure reproducibility and elucidate the overall findings (Tranfield, Denyer, & Smart, 2003). The analysis and synthesis processes were conducted in arrangement with the previously established research questions, leading to the identification of key trends and discoveries. The subsequent section will present and elaborate on these findings through both descriptive and thematic analyses.

4. RESULT

Following an examination of FinTech literature, a method for categorizing the research was developed. The studies were evaluated, examined, and sorted according to several criteria: publication year distribution, source distribution, journal distribution, mentioned techniques and tools, and advantages of FinTech. This was followed by a discourse, identification of research gaps, concluding remarks, limitations, and suggestions for future investigations.

4.1 Descriptive analysis

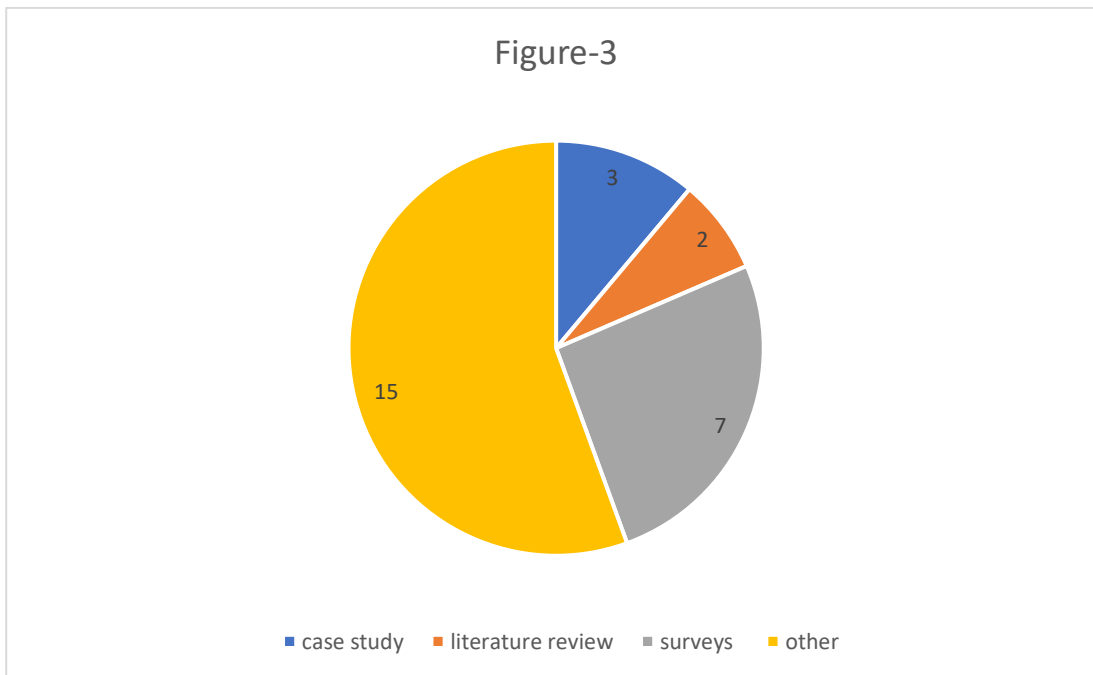
Figure 2 uses the following tables and chart to show the quantity of papers published each year.



Source- Author's compliance

The number of papers published annually is shown in Figure -2.

The dispersal of articles by research methodology is depicted in Figure 3. Survey-based studies account for the largest portion, with 7 articles falling into this category. A total of 5 articles are split between literature reviews (2) and case studies (3). The remaining publications do not fit into these classifications, instead presenting conceptual frameworks or concentrating on particular tools. Figure 3 illustrates the breakdown of papers according to their research approaches.



Source- Author’s compliance

Figure 3: Article count by research method

Table 2 provides insights into the publication sources of FinTech-related journals, highlighting those with the highest concentration of articles. This information serves as a treasured resource for scholars exploring the FinTech field, offering a comprehensive overview of relevant publication outlets.

4.2 Thematic Analysis

Across various papers, authors provided differing definitions of FinTech and its adoption based on consumer preferences, taking into account diverse aspects and benefits of FinTech. Tables 3 and 4 in the Thematic analysis offer a comprehensive outline of the papers utilized in the Systematic Literature Review (SLR).

Table 2: Paper Count for Each Journal

Title	Type	No. of Articles
“Journal of Business Venturing”	Peer reviewed	1
“Humanities and Social Sciences Communications”	Peer reviewed	1
“Financial Innovation”	Peer reviewed	2
“Journal of Open Innovation: Technology, Market, and Complexity”	Peer reviewed	3
“Borsa Istanbul Review”	Peer reviewed	1
“Acta Oeconomica”		1
“International Journal of Information Management”	Peer reviewed	1
“International Entrepreneurship and Management Journal”	Peer reviewed	1
“SAGE open journal”	Peer reviewed	1
“Sustainability”	Peer reviewed	4
“Intellectual Economics”	Peer reviewed	1
“European Journal of Innovation Management”	Peer reviewed	1
“Journal of Risk and Financial Management”	Peer reviewed	1
“Small Business Economics”	Peer reviewed	1
“Technological Forecasting and Social Change”	Peer reviewed	3
“Emerging Markets Review”		1
“Finance: Theory and Practice”	Peer reviewed	1
“Problems and Perspectives in Management”	Peer reviewed	1
“Journal of Industrial Economics”	Peer reviewed	1

Table- 3 Data of the literature

Author	Context	Country	No. of citation
(Bracht, Mahieu, & Vanhaverbeke, 2024)	Entrepreneurship	Belgium	0
(Nabiyev & Ovenc, 2023)	Commercial Banks	Turkey	0
(Irimia-Diéguez, Martín, & Camacho, 2023)	FinTech Innovation	Spain	14
(Nazir & Tbaishat, 2023)	Technology Startups	UAE	0
(Carbó-Valverde, Solas, & Fernández, 2022)	FinTech	Spain	7
(Akhtar & Nosheen, 2022)	Banks	Pakistan	0
(Gao, Gu, Niu, & Ryu, 2022)	Startups	China	0
(Horváth, Kerény, & Szabó, 2022)	Commercial banks	Hungary	2
(Wang & Schött, 2022)	Startup	Denmark	15
(Beyhan & Findik, 2022)	Startups	Turkey	0
(Khan & harby, 2022)	Financial intermediation	Saudi Arabia	0
(Camilleri & Bresciani, 2022)	Small businesses and startups	United Kingdom	15
(Albarrak & Alokley, 2021)	FinTech	Saudi Arabia	7
(Hornuf, Klus, Lohwasser, & Schwienbacher, 2020)	Banks	Germany	102
(Setiawan, Nugraha, Irawan, Nathan, & Zoltan, 2021)	FinTech adoption	Hungary	61
(Zarrouk, Ghak, & Bakhouch, 2021)	Startups	UAE	30
(Abbasi, Alam, Du, & Huynh, 2021)	SMEs	Pakistan	76
(Nigam, Benetti, & Johan, 2020)	Startups	France	24
(Hommel & Bican, 2020)	Entrepreneurship	Germany	35
(Ahluwalia, Mahto, & Guerrero, 2020)	Startup	United States	141
(Cavallo, Ghezzi, Era, & Pellizzoni, 2019)	Entrepreneurship	Italy	99
(Qun Zhao, 2019)	Banking	China	85
(Ezangina & Evstratov, 2019)	SMEs	Russia	3
(Yan, Wang, Tsai, & Zhou, 2018)	Startups	China	4
(Leong, Tan, Xiao, Tan, & Sun, 2017)	Startups	China	203
(Southern, 2016)	Small Business	United States	0
(Conti, Thursby, & Thursby, 2013)	Startups	United States	101

Table-4 Findings of the Literature

Author	Data collection method	Tools Used for Analysis	Results & Conclusions
(Bracht, Mahieu, & Vanhaverbeke, 2024)	Secondary data	Robustness tests, and instrumental variable estimations.	In this paper, the author finds out the impact of a firm's choice of legal structure on debt availability for a sample of German enterprises. The findings show that compared to their high-capital competitors, entrepreneurs who select a

			authorized form with low paid-in minimum capital necessities incur significantly less debt.
(Nabiyev & Ovenc, 2023)	Hand collected dataset	Probit Model	The findings show that rather than investing in fintech firms, the banks in Turkey typically work with them on product-related projects. Larger banks would rather collaborate with fintech companies that don't offer payment services than those that do. Finally, the majority of young fintech companies work in the payment services environment, in this regard Istanbul-based companies are probably going to collaborate strategically with commercial banks.
(Irimia-Diéguez, Martín, & Camacho, 2023)	questionnaire.	Structural Equation Models (SEM).	The study's conclusions show that the researcher's model, which is deemed acceptable, explains 62.3% of the variance in the behavioral use of Fintech services. The findings show that the Theory of Planned Behavior can be used to analyze how small and medium-sized businesses (SMEs) are implementing Fintech services. Moreover, the model demonstrates sufficient predictive power outside of the sample, enabling the assessment of its generalizability across a range of demographics.
(Nazir & Tbaishat, 2023)	Secondary data	Descriptive statistics and exploratory analysis using variance inflation factor (VIF) test	To conclude, our findings indicate a U-shaped association among the amount of capital raised and post-money valuation, implying that the total capital acquired positively influences market valuation. This investigation contributes to the existing knowledge base regarding the significant effect of venture capital fundraising events on a company's market value.
(Carbó-Valverde, Solas, & Fernández, 2022)	Secondary data using a database	Regression	The study's results indicate that a significant portion of these enterprises fail within their first three years of operation. Empirical research demonstrates that FinTech companies established by individual entrepreneurs in incubator or accelerator programs, which are large and financially stable, have a higher likelihood of achieving profitability and longevity. This conclusion is drawn from a combination of panel data analysis and survival studies. Additionally, FinTech firms that secure seed funding tend to reach their break-even point more rapidly.
(Akhtar & Nosheen, 2022)	Secondary data	Descriptive statistics, paired-sample t-test panel regression,	The study's conclusions demonstrate the effect of bank and fintech M&As on acquirer performance. This suggests that the acquisition approach of fintech companies by banks enhances their post-merger operating performance.
(Gao, Gu, Niu, & Ryu, 2022)	Secondary data	Descriptive statistics and exploratory analysis	Our research demonstrates that the growth of foreign tourism can help startups raise money since foreign visitors bring with them fresh business prospects. The study makes a substantial influence to the corpus of literature. By verifying the actual

			impact of visitor counts and expenditures on initial capital.
(Horváth, Kerény, & Szabó, 2022)	In-depth interviews with open-ended questions	Qualitative research method,	In this study, we looked at how banks responded to creative FinTech businesses and investigated the rewards and shortcomings of bank-launched FinTech accelerator programs. Four primary stakeholder groups were identified at the outset of the research for interviews: banks, investors, regulators, FinTech startups and scaleups.
(Wang & Schött , 2022)	Secondary data	Descriptive statistics, correlations	The study found that because most businesses don't pursue both money and innovation, coupling is a rare occurrence. Usually, a startup is creative or well-funded. Researchers presume that because coupling's competitive advantage hasn't yet emerged at conception, the relationship is initially somewhat loose.
(Beyhan & Fındık, 2022)	Secondary data,	SEM	The research demonstrates that a firm's prior equity capital and philanthropic support from outside funding sources play a critical role in determining whether accelerators will select it for social or environmental sustainability.
(Khan & harby, 2022)	Secondary data	Covariance, and correlation analysis	This study assesses Saudi Arabia's usage of financial technology and digital finance. It makes use of a variety of digital payment instruments' graphical/trend analysis, covariance, and correlation analyses. Therefore, it is anticipated that non-bank Fintech businesses are another way that financial technology is facilitating financial intermediation. This indicates that the financial sector's use of technology is improving small and medium-sized businesses' access to formal funding as well as people's access to financial services.
(Camilleri & Bresciani, 2022)	Secondary data	“The Preferred Reporting Items for Systematic Reviews and Meta-Analyses” (PRISMA)	After a careful analysis of the pertinent literature, project initiators and crowd investors may find that rewards-based crowdfunding, peer-to-peer (P2P) lending and equity crowdfunding present a variety of opportunities and obstacles.
(Albarrak & Alokley, 2021)	Secondary data	“Structural Equation Modeling” (SEM)	The study's conclusions demonstrate that some important system participants have made good progress. In particular, companies, customers, and laws are all headed in the right direction. On the other hand, conventional financial institutions ought to get more involved and establish a network of support for the sector.
(Hornuf, Klus, Lohwasser, & Schwienbacher, 2020)	Secondary data	Quantitative approach, Regression analysis	According to the article's results, the author looked at how digitalization has affected the banking sector by examining the traits of banks that influence their partnerships with fintech companies. Additionally, we looked into the elements that matter when a bank invests in a fintech as opposed to partnering on a product.
(Setiawan, Nugraha, Irawan,	Questionnaire	“Structural Equation	The findings demonstrate that Fintech adoption must be maximized at both the macro and micro levels. By building infrastructure,

Nathan, & Zoltan, 2021)		Modeling” (SEM)	like an internet network, the government participates in macroeconomic activity and by providing financial services to individuals in both urban and rural locations. Expanding access to formal financial services also requires the active participation of actors in the financial industry, who supply financial products based on community needs.
(Zarrouk, Ghak, & Bakhouché, 2021)	Semi-structured Questionnaire	post hoc qualitative method	The outcome demonstrates that the FinTech sector is taking shape and is having a big influence on the financial sector. The government of the United Arab Emirates has established regulatory guidelines to encourage the financial sector to use more severely destructive technology, acknowledging the disruptive impact of fintech.
(Abbasi, Alam, Du, & Huynh, 2021)	Secondary data	Generalized Method of Moments (GMM) Hansen-J test	Our research has significant management and practical ramifications. Initially, our findings bolster the endeavors of legislators in crafting regulations intended to augment the number of FinTech enterprises.
(Nigam, Benetti, & Johan, 2020)	Secondary data	Logistic regression	In this study, we looked at the factors that affect the success of startup financing campaigns that are related to the overall venture characteristics of one of the largest ECF platforms in Brazil.
(Hommel & Bican, 2020)	Structured Interviews	SEM, The post hoc qualitative method	The study's conceptual model and arguments necessitate empirical evaluations prior to implementation. We urge academics studying entrepreneurship to do research to determine whether system stakeholders' investment decisions are influenced by transaction cost minimization.
(Ahluwalia, Mahto, & Guerrero, 2020)	Primary data using semi-structured interviews	Case study	The findings illustrate how FinTech ecosystems have changed over time from the standpoints of service innovation and socio-technical system theory. By applying the socio-technical system approach, it was able to understand the roles that technological, social, and organizational players played in the development of these ecosystems.
(Cavallo, Ghezzi, Era, & Pellizzoni, 2019)	Questionnaire	correlation, and regression analysis	This study offers an interesting perspective on the ongoing discussion surrounding digital entrepreneurship. In line with other academics, researchers acknowledge that, in digital entrepreneurship, where multiple actors are typically participating in the entrepreneurial process, an individual perspective is still significant.
(Qun Zhao, 2019)	Secondary data	Synthesis, method of expert assessments, system, and structured approach	The research made it possible to pinpoint a number of crucial sectors in Russia where crowd-investing needs to grow. The objective is to establish a co-financing initiative for crowd-investing vesting projects from inception, while simultaneously developing a robust regulatory structure for crowd-investing platforms. This structure may include the implementation of self-regulation mechanisms.

(Ezangina & Evstratov, 2019)	Secondary data	Correlation coefficient, Regression,	According to the findings of the study, venture capital serves as the foundation for an entrepreneur's resource integration strategy and is an essential resource for entrepreneurial activities. This essay sought to understand how uncertainty avoidance functions as a social culture regulator and how educational background and prior entrepreneurial experience affect Internet entrepreneurship financing.
(Yan, Wang, Tsai, & Zhou, 2018)	Primary and secondary data.	Case study research methodology	The findings demonstrate that Entrepreneurs' internet funding is positively influenced by their technical training background, as well as their online and offline entrepreneurial experiences. As entrepreneurs engage in more online and offline activities related to Internet finance, the importance of uncertainty avoidance in their host countries diminishes. Additionally, the extent of ambiguity avoidance among entrepreneurs' home nations plays a regulating role in this relationship.
(Leong, Tan, Xiao, Tan, & Sun, 2017)	Secondary sources	Multiple regression	This case study looks at a Chinese youth microloan startup to extract lessons that can help businesses better handle obstacles and take advantage of opportunities in the current financial sector disruptions
(Southern, 2016)	Secondary data	PLS-SEM	According to the conclusion of the article, small business owners and entrepreneurs who want to expand their enterprises must be watchful and work to get the most accurate economic forecasts possible so they can anticipate future developments in advance of others and take proactive rather than reactive measures.
(Conti, Thursby, & Thursby, 2013)	Secondary data	Descriptive statistics	The study's findings suggest that patents function in entrepreneurial financing as signals that reduce knowledge asymmetry. A theoretical model provides conditions for a unique separation equilibrium wherein entrepreneurs of startups apply for patents to both appropriate value and indicate to investors the quality of their inventions.

5. MERITS OF USING FINTECH

Table-5 Merits of Using FinTech

Category	Pros	Authors
Greater Convenience	Financial technology can provide startups with affordable investment management guidance, leading to faster loan processing and disbursement. This technology also enables small and medium-sized enterprises in rural areas to attain swift and dependable credit services.	(Albarrak & Alokley, 2021)
Accessibility	Digital platforms in the fintech sector have expanded access to financial services, reaching a wider population, including individuals in isolated regions. FinTech software is designed to be accessible from anywhere, making it easier for small business owners or new Startups to manage their finances on the go. With financial	(Setiawan, Nugraha, Irawan, Nathan, & Zoltan, 2021; Horváth, Kerény, & Szabó, 2022)

	technology, small business owners and Startups can access their financial information and make decisions from their desktop, laptop, or mobile device.	
Innovation	By offering digital payment options, FinTech firms simplify the process of collecting funds from clients while minimizing the chances of payments being lost or delayed.	(Ezangina & Evstratov, 2019; Hommel & Bican, 2020),
Enhanced Security	Startups performing online financial transactions now feel safer and more trusted thanks to improved security features in fintech platforms.	(Stewart & ürjens, 2018)
User-Friendly Services	Financial services are now easier to utilize due to the evolution of fintech. Startups can now effortlessly manage finances with the help of user-friendly platforms and apps.	(Gomber P. , Kauffman, Parker, & Weber, 2018)

6. DISCUSSION

The Systematic review of the Twenty-eight publications mentioned above provided the necessary information to answer the three initial Research Questions.

RQ1- How does the existing literature characterize the present landscape of FinTech research?

Through the PRISMA Protocol studies/articles from Scopus are identified and the total number of (n=27) studies were included in this study which gives a large glimpse of FinTech adoption. Figure 1 shows the number of publications from year 2013-2024 and the number of studies in each year. To answer the first research question table 1 also shows various countries including 3 studies from China, 3 studies from the USA, and 2 studies that are more common in many countries such as Spain, Pakistan, Saudi Arabia, and Germany, and several studies were identified from various countries as Dubai, Hungary, Denmark, Switzerland, Indonesia, UAE, France, Russia, and Australia.

RQ 2- What are the tools and techniques used to analyze the FinTech adoption?

The systematic review article summarized in the table reveals that most prior investigations were quantitative, descriptive studies. Several researchers employed cross-sectional data to meet their study goals. Data collection and objective measurement were conducted using structured questionnaires, with numerous studies applying correlation and regression techniques for data analysis. Additionally, some researchers utilized Structure Equation Modeling (SEM), while studies based on secondary data employed various analytical models to interpret their findings.

RQ3- What are the merits of using FinTech as a source of Financing for Startups?

This systematic review of studies as shown in Table 2, considered the majority of the studies related to the intended benefit of FinTech to Entrepreneurship, startups, and SMEs. Among the total reviews, five of the studies were in the context of Banking, and the other mostly talked about FinTech Innovation and opportunities and challenges of FinTech. As the literature shows various studies are concerned with entrepreneurship, startups, and SMEs so the paper based on that shows the pros of using FinTech as a source of Financing for Startups.

Table 3 shows a detailed view of the pros of FinTech such as Greater convenience, Accessibility, Innovation, Enhanced Security, and Speed which are helpful for startups to avail of various services provided by FinTech and meet their challenges to receive finance.

7. RESEARCH GAP IDENTIFIED

After conducting a thorough review of the existing literature, it became evident that the majority of studies about this subject are concentrated in the domains of entrepreneurship, startups, and small and medium-sized enterprises (SMEs). Still, at the same time all are indicates that FinTech is used as an Innovation factor for their activities, but not as a financing constraint. The literature also shows not a single study has been conducted in India as India is an emerging market for both FinTech and Startups. So It is crucial to recognize the positive impact of fintech on fostering collaboration in the funding of startups. According to a comprehensive analysis of existing literature on fintech and startups, leveraging technology's benefits to streamline and enhance startup processes is essential.

8. CONCLUSION

To summarize, this comprehensive analysis reveals that the financial technology sector is undergoing remarkable expansion and wielding considerable impact on the financial industry. This influence is particularly evident in domains such as payment systems, asset management, peer-to-peer funding, credit services, financial markets, and risk protection

services. Extensive research has been conducted to explore the FinTech landscape, including its structure, opportunities, challenges, and applications across various sectors, including banking and SMEs. The research indicates that FinTech significantly influences entrepreneurship by offering cutting-edge technological solutions and improving business processes. The study underscores the vital importance of FinTech services in bolstering the financial health and enduring viability of new ventures. These offerings, including crowdsourcing platforms, direct lending between individuals, and electronic payment methods, provide customized financial solutions that are transforming the startup landscape and fostering sustainable economic development. It is anticipated that the results of this study will be a useful tool for scholars and decision-makers, particularly in terms of directing approaches to FinTech adoption by startups in developing nations such as India. The insights gained from this research illuminate how FinTech is transforming the startup landscape and provide a foundation for future studies and policy decisions in this field.

9. LIMITATIONS

This systematic literature review has two main constraints. The first is the use of only one database, despite the availability of numerous others. This limitation raises the possibility that articles from other sources may have been overlooked. The second constraint involves potential bias in publication selection, which was addressed by following a predetermined set of inclusion and exclusion criteria. Although the academic community has shown growing interest in fintech and startups, only the most pertinent databases related to the subject were chosen.

10. SCOPE FOR FUTURE RESEARCH AND SUGGESTIONS

Future research on FinTech and startup funding should examine how conventional financial entities, especially banks, can adopt FinTech solutions to enhance credit availability for new businesses, particularly in emerging economies. Researchers might also explore how FinTech advancements like decentralized finance (DeFi) and digital currencies could reduce expenses and boost transparency for banks in underserved areas.

Empirical and long-term studies could evaluate how FinTech platforms enhance the financial viability of startups over time, analyzing crucial indicators such as funding rounds and business expansion. Comparative analyses could highlight the disparities in FinTech adoption between industrialized and developing nations, providing insights into how these technologies affect financial access and startup performance across various markets.

Moreover, future studies should investigate the evolution of regulatory frameworks to facilitate cooperation between traditional banks and FinTech, ensuring consumer safeguards, data protection, and financial stability, while promoting startup financing in developing financial markets.

DECLARATIONS

Availability of data and materials

Not Applicable

Disclosure of Conflicting Interests

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