Exploring Critical Success Factors for Fintech Entrepreneurship Success : A Qualitative Examination using NVivo

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ABSTRACT

Offering cutting-edge solutions and upending conventional wisdom, the rise of Financial Technology (Fintech) startups has completely changed the face of traditional financial services. With only a small percentage of Fintech businesses long-term succeeding, many faces formidable obstacles in the middle of this dynamism. For scholars as well as practitioners, it is crucial to comprehend the Critical Success Factors (CSFs) that support the success of Fintech enterprises. A thorough examination of the CSF's essential to the success of Fintech entrepreneurship is presented in this study. The research study aims to identify critical success factors for fintech entrepreneurship based on a thorough analysis of scholarly works, industry reports, and expert opinions. Technological innovation, regulatory compliance, customer-centricity, strategic collaborations, talent acquisition, financial management, and scalability are all identified as key future prospects in context of FinTech Entrepreneurship.

Keywords : *Entrepreneurship, Fintech, NVivo, Qualitative analysis.*

1. Introduction

A new era of innovation and upheaval in the financial services sector has been brought about by the emergence of financial technology, or Fintech (Slaats, L. H. M. (2015)). Driven by changes in consumer tastes and technology, fintech firms have put old banking and investment paradigms to the test by presenting innovative solutions that promise increased efficiency, accessibility, and transparency. But even with this innovative surge, starting a Fintech business comes with a lot of obstacles, and success is not always assured.

It is crucial for all parties involved in the ecosystem to comprehend the key success factors (CSFs) that support the success of Fintech businesses. Comprehensive awareness of these CSFs is critical for anybody involved in the Fintech industry, be it legislators drafting regulations, investors assessing funding opportunities, entrepreneurs navigating the intricacies of market entry, or educators training the next generation of Fintech leaders.

The Fintech sector is known for its quick evolution, which has been influenced by changes in consumer behavior, regulations, technology breakthroughs, and competitive dynamics. As a result, there are many different and ever-changing success determinants for Fintech entrepreneurship, necessitating constant adaptability and strategic planning. Examining these variables in-depth will enable this research to provide useful information that will support strategic choices and ensure the long-term viability and expansion of Fintech initiatives.

2. Literature Review

AL-Dosari, K., Fetais, N., & Kucukvar, M. (2024) investigated how AI may affect Qatari banks' cybersecurity. Nine specialists in Qatar's banking sector were interviewed, and their interviews were subjected to a thematic analysis. With the NVIVO 12 tool, a qualitative thematic analysis was carried out.

Moussavou, J., & Ji-Yong, L. E. E. (2024) proposed an entrepreneurial approach based on ambidexterity (AO) in an effort to add to the body of knowledge on entrepreneurship. It closes a gap in the literature and helps us understand the behavior of entrepreneurs by highlighting the reconciliation of exploration and exploitation. Regarding the creation of ambidextrous entrepreneurial groups, the study provides theoretical and practical consequences.

Moh'd Anwer, A. S. (2024) investigated the primary obstacles that these developing-nation entrepreneurs face. A random sample of 85 early-stage digital entrepreneurs

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participated in semi-structured interviews for this study, which made use of a digital startup database kept by Jordan's Ministry of Digital Economy and Entrepreneurship (MoDEE). Policymakers may find the study's recommendations to be a useful tactical guide for eliminating the primary obstacles that nascent digital entrepreneurs and their companies need to get past.

Allen II, D. R. (2023) assessed if perceptions of risk and reliability influence decisions to invest in and use FinTech software tools. It focused on participants' evaluations of these factors. Conducted using interpretative phenomenological analysis (IPA), it suggests the need for further research to enhance training and exposure to FinTech tools for fostering sustainable innovation culture.

AlBenJasim, S. et. al. (2023) discussed measures that can successfully manage FinTech cybersecurity risks, together with the cybersecurity difficulties that the FinTech business faces, in this Systematic Literature Review (SLR). Studies show that developing a cybersecurity framework for FinTech may be beneficial and presents a fresh viewpoint by illustrating a logical expansion of the body of information already available.

Chakraborty, I., Ilavarasan, P. V., & Edirippulige, S. (2023) identified key success factors (CSFs) for health-tech firms, addressing gaps in understanding. Through thematic analysis of interviews, eighteen CSFs and five themes emerged: actor knowledge and communication; service value and effectiveness; robust technology infrastructure; revenue generation ability; and regulatory management.

Otieno, G., & Kiraka, R. (2023) used a mixed-methods approach to look into how different aspects affect the success of innovations. Through the use of quantitative and qualitative surveys, data from 321 lead users and eight regulators were gathered. SPSS and NVivo were then used for analysis. It provides insights into the functions of the innovation process and regulatory bodies, and it illuminates lead user innovation by demonstrating that variables other than trends and benefits can impact innovation outcomes.

Sreelekshmi, G., & Biju, A. V. (2023) explored the emerging field of green fintech research, focusing on Indian climate fintech. Through qualitative methods and a review of previous studies, it provides insights into the current state of the concept. Additionally, the study suggested that climate fintech initiatives have potential in supporting India's climate ambitions, offering recommendations for future advancements.

Kiraka, R., & Strathmore, U (2022) highlighted how innovation processes and regulators affect innovation, which will improve the ability to identify various lead user groups and management procedures for the fintech industry, and therefore success or failure criteria. Offering fresh perspectives, the study connected lead user innovation outcomes to the innovation process and regulatory bodies.

Alzyadat, M., Baruah, B., & Ward, A. (2021, September) addressed gaps in understanding how SME organizations can inspire engineers to become intrapreneurs and develop innovation capabilities. Conducted within a UK-based FinTech firm, data was collected through semi-structured interviews with managers and engineers. The results aim to aid firms in recognizing engineers' intrapreneurial potential and establishing supportive organizational frameworks to unleash and stimulate their capabilities.

Divatia, A. S., Tikoria, J., & Lakdawala, S. (2021) determined the salient features that typified the organization cluster's maturity level of BI&A capacity. The results indicated that businesses with a higher level of BI&A maturity were applying the technique to a greater number of functional areas and were also able to see its success in more areas than did organizations with a lower level of maturity.

Denysiuk, L. (2021) explored success factors in corporate-startup collaborations within the Austrian financial sector, focusing on partnership goals, collaboration models, and challenges. It identifies three key variables: regulatory environment, collaboration structure, and resource base. The research highlighted the importance of supportive third-party organizations and adaptive regulations for fostering positive environments and fruitful cooperation.

Suryono, R. R., Budi, I., & Purwandari, B. (2021) examined the state of fintech P2P lending in Indonesia by analyzing data from Indonesian online news sources, looking into specific situations, and comprehending regulations and guidelines. Four stakeholders participated in the qualitative study using a case study methodology and focus group discussion methodologies. The research revealed five case themes—public awareness, data privacy, illicit lending, and marketing ethics—as well as recurring phrase clusters in the Indonesian fintech P2P lending market.

Ayllon, T. W. I. (2020) examined how digital advancements in banking, particularly in Peru, can improve financial inclusion. It explored key concepts like the digital economy and FinTech, focusing on the BIM mobile wallet's efforts to serve the unbanked. The findings highlight FinTech's potential to enhance access to financial services and promote inclusion.

Ladagu, N. D. (2020) examined the sustainability of the FinTech (financial technology) sector in Nigeria as well as its success and failure rates. The study's output is a solid framework that is presented as a means of addressing the variables influencing the sustainability of operations in the Nigerian FinTech sector. The findings of this study also contributed significantly to the corpus of information and scholarly inquiry concerning the development and sustainability of financial technology in Nigeria and around the world.

Gewald, H., Wagner, H. T., & Wolff, B. (2019), investigated the interactions between FinTechs and large enterprises, the organisational configurations that were selected, and the means of organising knowledge transfer to ensure a fruitful working relationship.

The three-dimensional organisational structure, according to our findings, significantly influenced how well external knowledge is integrated, which in turn influences how well innovation sourcing works.

Heggland, H., & Nadav, O. (2019) based their studies on three circumstances were chosen: those who have choose to stay apart fintech companies not working together businesses and conventional banks,work together as allies and decide on a strategic alliance plan, or decide on a mergers and acquisitions plan.

Mehmood, H., Ahmad, T., Razaq, L., Mare, S., Usmani, M. Z., Anderson, R., & Raza, A. A. (2019) discovered addressing of problems with record-keeping, late payments, collection, distribution, and money safety, digitalization can bolster and sustain established ROSCAs. Furthermore, it permits the establishment of payment histories for individuals, which can be utilised to evaluate their financial reliability.

Ash, J., Anderson, B., Gordon, R., & Langley, P. (2018) focused that control is a smooth or automatic exercise of power, focusing instead on the need for both continuity and discontinuity as essential components of action modulation in the digital age. In order to transcend current control research and comprehend the particularities of interface interactions, we provide a lexicon of friction, thresholds, and transitions.

Becker-McNabola, T. (2018) delved into the tactics employed by female leaders to ascend the corporate hierarchy within the Fintech sector and scrutinised the attributes of the sector itself. Concepts utilising thematic analysis to find patterns. The six key themes that came out of this study were its primary findings: One's own self-assurance, mentorship/sponsorship, networking, an inclusive workplace, social undermining at work, a conflict between job and family life, and assertiveness.

Madzime, I. T. (2018). According to the research, CIOs frequently interacted with the board through ad hoc engagements, board committees, and board meetings. The board was frequently briefed by CIOs on digital technology, potential for digitization, and challenges associated with it.

Morton, J., Stacey, P., & Mohn, M. (2018) The executive information technology (IT) leaders are a specific professional group that has garnered notice recently for its changing strategic role at the forefront of businesses. This article focuses on their context. It then conceptualises these activities in an agenda and framework for managers after identifying and illuminating several strategies these players exhibit in developing and sustaining strategic agility.

Thermaenius, V., & Östling, L. (2018). According to the report, as financial and digital literacy skills are greater in the upper half of the financially excluded segment, fintech companies have the potential to significantly increase financial inclusion there. The fintech companies in the lower half of the financially excluded group confront substantial acquisition expenses, which raises doubts about their capacity to offer the lower portion of the segment an inexpensive and sustainable service.

Breidbach, C. F., & Ranjan, S. (2017, December) highlighted the goals, contents, and economic players that each P2P lending platform targets and show how these platforms match their value-facilitating techniques to the particular requirements of their various user groups (lenders and borrowers).

Slaats, L. H. M. (2015) focused on Dutch traditional banks that take part in FinTech APs. Qualitative interviews with staff members of these banks, AP directors, start-up founders, and experts are used to assess the various propositions included in the conceptual model. A focus group is then scheduled to go into further detail on a few areas of knowledge integration.

3. Objectives of the Study

- To identify and analyze the critical success factors (CSFs) that contribute to the success of Fintech entrepreneurship.
- To explore the future prospects for Fintech Entrepreneurship.

4. Research Methodology

The current study employed a qualitative research approach to investigate people's experiences, attitudes, and views on financial socialization in great detail. Scholarly articles have been sourced from a number of databases, including Science Direct, SAGE, Emerald, Springer, etc. We have reviewed 45 publications and research papers. Qualitative methods work best when collecting multiple points of view and closely analyzing complex phenomena.

The NVivo 12 Plus program from QSR International was used to perform a preliminary study of the literature. Data types that can be examined with NVivo software include PDFs, text documents, audio and video files, databases, spreadsheets, digital images, web pages, social media, and bibliographical data. Understanding of the content was enhanced by using a word frequency search query for qualitative analysis. The next part provides an overview of the Nvivo 12 Plus results.

5. Findings and Discussions

NVivo has been utilized to analyze and comprehend existing material regarding the impact of Fintech Entrepreneurship through the use of a variety of visuali-

zation techniques. 30 research papers and articles on Fintech Entrepreneurship found by running a work frequency search query in the NVivo program. The results are displayed below as a word cloud and comprise the top 100 frequently used terms together with their synonyms that are at least four letters long.

The twenty-one most popular terms and the number of times they have appeared in literature are displayed in the following table:

Table 1 : *20 most frequently used words in the literature*

Word	Length	Count	Weighted Percentage (%)
fintech	7	2777	0.91
research	8	1937	0.63
financial	9	1908	0.62
business	8	1610	0.53
banks	5	1479	0.48
innovation	10	1365	0.45
collaboration	13	1338	0.44
digital	7	1304	0.43
services	8	1173	0.38
companies	9	1011	0.33
study	5	991	0.32
technology	10	953	0.31
knowledge	9	886	0.29
management	10	866	0.28
analysis	8	786	0.26
process	7	749	0.25
start	5	707	0.23
firms	5	702	0.23
banking	7	700	0.23
based	5	683	0.22

Source : *NVivo 12 computation.*

For convenience the top 20 terms and how often they have appeared in literature are displayed in the above table for ease of use. This highlights the significance of phrases like fintech, financial, innovation, collaboration, banking, digital, analysis, finance, management, technology, and so on and provides an idea of what the majority of authors are talking about in terms of keywords.

To find well-known words, phrases, or expressions in the NVivo-imported sources, a "text search query" (TSQ) was initially employed. This is a valuable final result and a great tool for understanding the underlying information in the material. The primary subjects for discussion are banking, digital, technology, fintech, research, innovation, and collaboration, as this chart makes evident. *(Fig. 1 & 2)*

"Cluster analysis" was the function carried out. This exploratory tool groups nodes or sources graphically according to any property, term, value, or other similarity that seems to be shared in order to visualize trends in data study. Fintech, research, innovation, business, banks, manage, firms, and digital are among the terms that are employed. *(Fig. 3a & 3b)*

The word cloud *(Fig. 4)* illustrates the various viewpoints and writings that authors have taken on the subjects of Fintech, research, innovation, business, banks, manage, firms, collaboration, knowledge, technology, and digital.

A "tree map" is the kind of hierarchy chart that is displayed below. By showing the coding for several of the articles and authors in the literature, it becomes evident which topics are more and less relevant. The tree map shows that the most common phrase, "fintech," is followed by "research," "financial," "business," "bank," and so forth based on the size of the boxes. *(Fig. 5)*

Figure1 : *Word Cloud of most frequent words in the literature*
Source : *NVivo 12- word cloud representation.*

Figure 2 : *Word Cloud of top most 20 frequent used words in the literature*
Source : *NVivo 12 word cloud representation.*

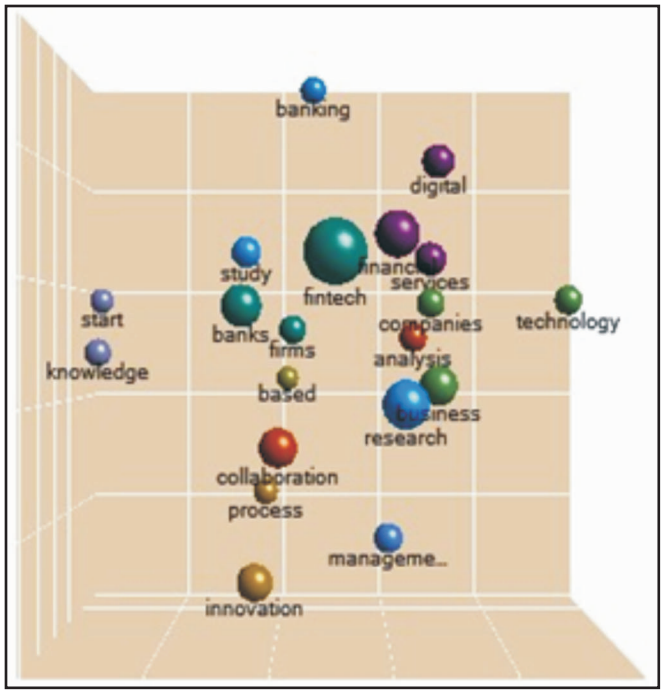

Figure 3a : *Cluster Analysis Chart (Top 20 words)*
Source : *NVivo 12 cluster representation.*

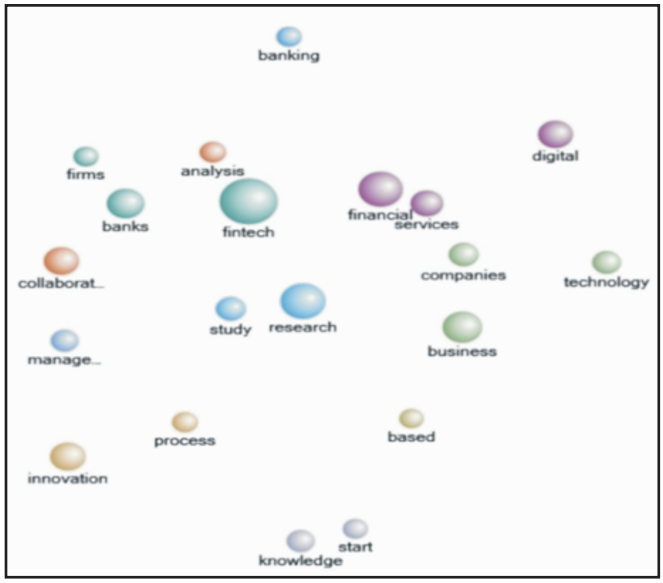

Figure 3b : *Cluster Analysis Chart (Top 20 words)*
Source : *NVivo 12- cluster representation.*

6. Data Interpretation

Fostering cooperation and using technology breakthroughs are crucial success elements for fintech startup. It is important to comprehend the latest trends and advancements in fintech and to be at the forefront of technological innovation. Strong networks are essential for partnerships and cooperative initiatives. To make well-informed judgments, data analysis and market research must be ongoing processes. The study underlines the way

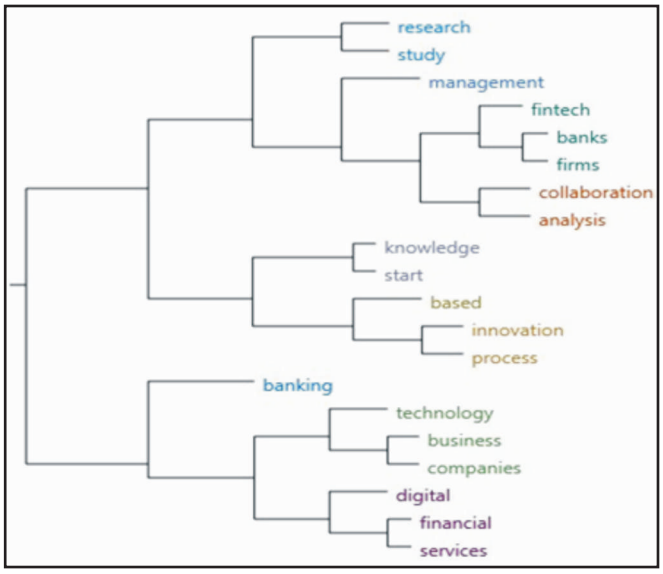

Figure 4 : *Word Tree*
Source : *NVivo 12- word tree representation.*

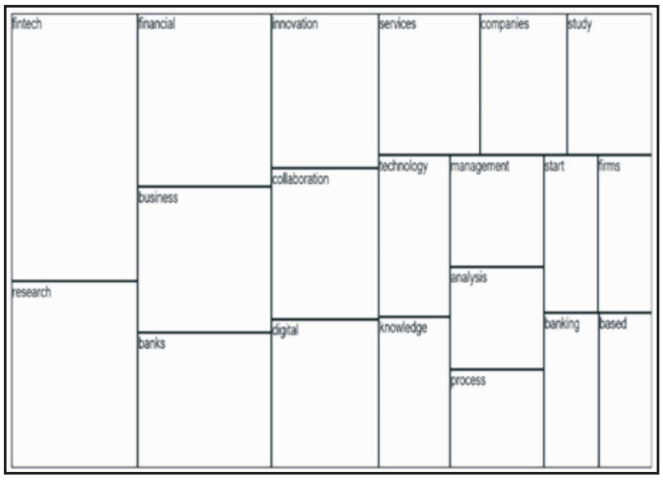

Figure 5 : *Hierarchy chart (tree map)*
Source : *NVivo 12- word tree representation*

frequently words like fintech, finance, innovation, teamwork, and digital crop up in academic talks. The industry's emphasis on technological developments and cooperative efforts can be seen by the identification of key topics, which include banking, technology, fintech, and research. Tree maps further highlight the dominance of fintech, followed by terms correlated to research, finance, and business. Cluster charts show that fintech, business, banks, and management are frequently mentioned.

6. Future prospects

- **Deep Dive into Regulatory Dynamics :** Being heavily regulated, fintech operates at the nexus of technology and finance. The study of how regulatory frameworks affect the success of fintech entrepreneurship may be the main focus of future investigations. Examining the opportunities and difficulties posed by regulations as

well as how business owners get over regulatory roadblocks to succeed are included in this (Kar, M. H. C., Faizal, S., & Chinnasamy, S. (2019)).

- **Technological Innovations :** The fintech sector will change as a result of new developments in fields like cyber security, block chain, and artificial intelligence. It would be interesting to investigate how these technical developments affect the crucial success criteria for fintech businesses (Allen II, D. R. (2023)). For instance, how can business owners use block chain technology to ensure secure transactions or AI to improve customer experience.
- **Globalization and Market Expansion :** As they look for new opportunities and markets, fintech firms are spreading out around the globe more and more. Subsequent studies may look at the crucial success elements for fintech companies looking to expand internationally. This can entail being aware of how cultural, legal, and economic variations affect expansion plans and how business owners modify their tactics accordingly.
- **Partnerships and Ecosystem Collaborations :** Effective cooperation among fintech companies, traditional financial institutions, and regulatory agencies is important for their success within the ecosystem. Partnerships and ecosystem cooperation may play a significant influence in fintech business success, according to research (Gewald, H., Wagner, H. T., & Wolff, B. (2019)). To do this, it could be necessary to examine effective partnership tactics, assess how ecosystem dynamics affect business endeavors, and pinpoint the most effective ways for teamwork.
- **Financial Inclusion and Social Impact:** Fintech holds promise in promoting financial inclusion and tackling societal issues like inequality and poverty (Thermaenius, V., & Östling, L. (2018)). Future studies should look at the crucial success variables connected to fintech entrepreneurship as well as how it promotes social impact and financial inclusion. This could entail looking at business models that put the needs of underprivileged people first, evaluating how well fintech solutions work to empower and educate consumers about money, and investigating how policy interventions can support inclusive fintech ecosystems (Heggland, H., & Nadav, O. (2019)).
- **Risk Management and Resilience:** Fintech enterprises are subject to a range of risks, including market volatility, cybersecurity attacks, and regulatory changes, as a result of operating in a complex and quickly evolving environment. The study of risk management and shock resistance strategies used by fintech entrepreneurs could be the main focus of future research. (Chakraborty, I. et. al. (2023)). This could entail looking at risk management techniques, assessing how risk affects entrepreneurial results, and figuring out what makes financial businesses more resilient (Ladagu, N. D. (2020)).

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