



Presenting a Model for Contributing Factors to Fin Tech Implementation in the Banking System of a Country Using a Blended Approach

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Abstract

Objectives: This paper aims to identify and present a model for the contributing factors to FinTech implementation in the country's banking system using a blended approach.

Design/methodology/approach: The scholar initially analyzed 30 specialists in the banking system in various stages in the qualitative section using a mixed approach. Secondly, in the quantitative section, the efficacy of variables was evaluated by distributing a questionnaire among 267 employees of Bank Refah Kargaran. This was conducted using Smart PLS Software and a structural equation approach.

Results: The results indicate that factors such as "economic governance of the state," "culture building and training," "structural preparation," "banking system transparency," and "facilities and incentives" can impact the implementation of FinTech in the banking system. Additionally, quantitative analysis in the next phase demonstrates that all research constructs, presented as five hypotheses, play a direct role in influencing FinTech implementation in the financial system.

Originality/value: As traditional banking around the world is transitioning into digital evolution, this paper focuses on one of the significant events in digital banking: FinTech. Despite the importance of FinTech, there have been few studies on its implementation.

Keywords: Financial Startups, Fin Tech, Implementation, Banking System, Blended, Theme, Validation.

1. Introduction

Today, banks are facing various challenges, including changes in customer expectations, technological advancements, regulatory requirements, and economic crises, which could influence changes in the banking system. Hence, banks benefit from firm development or startups in financial technology (FinTech) (Balyuk & Davydenko, 2019). Recent developments in financial technology have motivated rapid changes in new and innovative financial services, referred to as FinTech (Lee & Shin, 2018). On the other hand, due to immobility and bureaucratic structure, traditional banks must align with FinTech companies (Chishti & Barberis, 2016). Hence, banks adopt different strategies to address potential FinTech threats, the most prominent of which is the formation of strategic alliances. Among the advantages of FinTech's presence in the banking system, we can refer to efficiency in speed, cost, and access to new customers. The problems faced by traditional banks include developing complicated structures, high recognition levels, increased operational costs, presenting high-cost and timely banking services, a lack of innovation in providing services, and failure to meet customers' expectations (Llewellyn, 2014). Some factors and prerequisites must effectively align between the banking industry and FinTech. Jagtiani and Lemieux (2019) observed that one of the identifying factors for the use of FinTech in banks is the presence of well-documented rules and regulations. Legislators and lawmakers are cognizant of the potential of FinTech companies to address issues related to financial partnerships,

economic procedures, and knowledge, and are investing in this area to increase awareness and knowledge to attract more people by providing FinTech services to be effective in facing any risk and describe the rules on the advantages the users and new investors obtain (Jagtiani et al., 2021). One of the key success factors in reaching FinTech goals is preserving innovative features at the banking level (Drasch et al., 2018). The FinTech industry in Iran is not fully developed, and its application in financial services is

new. Despite the development of the industry in Iran and the emergence of some successful and operational companies, some challenges, like a monopoly in some banking services like the Country Payment System, a lack of maturity of financial tools, like financial validation systems, person-to-person facilities, and comprehensive rules in FinTech, are examples of growth barriers to FinTech advancement in Iran. FinTech in Iran is a challenging issue that must be organized, and standard relations must be established between companies, service providers, banks, and credit institutions. Regarding the application of FinTech in banking, banks have four options to respond to structural changes in financial services, resulting in the flourishing of FinTech innovators. These options are as follows (Hughes et al., 2019):

- 1) To do nothing (become archaic over time and eventually lead to exorbitant costs)
- 2) Using minimum resources to maximize FinTech benefits (cheapest and fastest)
- 3) Possessing a FinTech (potentially, but still expensive and demanding culturally)
- 4) Copying or imitating FinTech (slow and extremely expensive)

A survey conducted by a global legal company named Mayer Brown shows three key areas in which typical banks today believe that partnerships with FinTechs result in profitability. They include (Jagtiani & Lemieux, 2018): Region 1 (saving costs): such savings are most likely due to lower costs in new business development as well as expanding the efficiency of traditional processes by using financial technologies and establishing an agile structure; Region 2 (rebranding): working with FinTechs expedites the path to market and allows banks to have a better position to provide services for a specific market and have a platform for flourishing; Region 3 (increasing income): more than half of the participants in the study believe that collaboration with FinTechs leads to more income. Most banks are challenged by complex collaboration scenarios, and previous studies have not kept up with current changes in the financial sector, especially in bank-FinTech partnerships (Jaubert et al.,



2014). Although previous studies have addressed several concerns about the factors contributing to the implementation of FinTech in the banking industry, the theory did not explain the nature of bank-FinTech collaboration (Drasch, Schweizer, and Urbach, 2018).

As mentioned earlier, the diversity of assessing variables in collaboration, the novelty of the topic of collaboration among banks as large, wealthy organizations equipped with complex structures, FinTechs as startup companies with simple structures and weak financial potential, and the lack of national and international studies make this study very important. To assess the issue and create a structure and model, the researcher is seeking a better understanding of the multifaceted topic addressed for the first time in the country. The research question is, "How is the FinTech implementation model in the banking industry, and what factors contribute?". In this regard, it is crucial to identify and assess the contributing factors that pave the way for the establishment and use of FinTech. As seen in previous studies, operational contributing factors to FinTech implementation have not been evaluated in terms of required policies and executive areas. Therefore, it is essential to assess the issue and create a comprehensive structure and model. Among other significant aspects, we can focus on the study's concentration on the target population with the most connections to the topic to evaluate the factors in the banking system with the most impact. Overall, this study aims to present an implementation model in line with the appropriate use of FinTech in the country's banking system and assess the concluding factors.

2. Theoretical principles and Literature Review

2.1. FinTech

FinTech, short for financial technology, refers to the use of new technologies to create products and services in the financial industry. It combines the words "finance" and "technology" and encompasses any business that leverages technology to enhance or automate financial services and processes. FinTech is a

rapidly growing industry that serves both consumers and businesses (Hertzberg et al., 2018). Its applications range from mobile banking and insurance to digital currency and investment platforms. The industry is vast and expected to continue expanding in the future.

One of the driving factors behind FinTech's growth is the increasing involvement of traditional banks, which are becoming more tech-savvy and investing in, acquiring, or partnering with FinTech startups to reach digitally-oriented customers. This allows them to better serve these customers while integrating technology into their financial services (Hughes et al., 2022).

The term "FinTech" encompasses all types of technology used in financial services, catering to both businesses and consumers. It includes companies that offer financial services through software or other technological means, such as mobile payment solutions and cryptocurrency platforms. Essentially, any company that utilizes the internet, mobile devices, software technology, or cloud services to provide or interact with financial services falls under the FinTech category. Many FinTech products are designed to streamline financial transactions for consumers and also cater to business-to-business technologies (Suryono et al., 2020).

Bhandari (2021) conducted a study on the strategies required for the deployment and implementation of FinTech. The research explored the role of electronic communication in organizational strategies and the use of assessment and modeling techniques for digital media content. The study also delved into the historical credibility of banks and how the current FinTech industry can learn from past mistakes. Additionally, the study provided insights into effective mechanisms for enhancing e-reputation. Bhandari (2021) suggested that implementing crowdfunding strategies, policies, and creating social networks for easy access to banking services could drive the development of FinTech within the banking system.

Lee and Shin (2018) highlighted how disruptive innovation, online banking, FinTech business models,



information technology, and innovation impact the financial services industry. Gai et al. (2018) focused on FinTechs providing dynamic solutions across five technical dimensions: security and privacy, data techniques, hardware and infrastructure, applications, and service model management.

Startups are newly established businesses centered around technology that operate in the realm of new technologies. They possess high growth potential but often lack a concrete business model and struggle with limited budgets and funding. Despite these challenges, startups have a flexible and agile structure, quick product development cycles, and market entry. Collaborating with the banking system can provide startups with financial support and brand credibility, enhancing customer value and strengthening the competitive advantage of banks (Balyuk, 2018).

The USSBA defines startups as businesses that typically revolve around technology and exhibit high growth potential (Tang, 2019). This growth potential necessitates a focus on financing, as startups often require more funding than small non-startup businesses. Steve Blank, a prominent figure in startup theory, defines a startup as an organization formed to discover a reproducible and scalable business model. According to Blank, startups are characterized by their ongoing search for a viable business model, the pursuit of a repeatable model, and a scalable business model that can cater to varying customer volumes (Wei and Lin, 2017).

Biotech, a portmanteau of finance and technology, refers to companies that utilize technology to disrupt traditional financial service models and transform the delivery of these services. By leveraging communication, the internet, and automated information processing, biotech companies aim to revolutionize the financial services sector (Fortnum et al., 2017; Arner, Barberis & Buckley., 2016a; Chen, 2016; Gabor and Brooks, 2017; Springer, 2016).

3. Research Methodology

This study combines an applied purpose with a research approach. The qualitative research method

and content assessment strategy were used in the first stage. The six stages of the content test using this approach are described below:

Step 1: Familiarize yourself with the data. At this stage, the researcher identifies, refines, and thematically categorizes relevant articles, research, and interviews with organizational experts and academic elites to identify interview codes.

Step 2: Creating the initial code and coding extracted from related articles, research, and the text of interviews with experts are presented in the form of a preliminary list.

Step 3: Search and identify topics After the data has been initially coded and compiled and a long list of different codes in the dataset has been prepared, the researcher focuses on the report at a higher level than the codes. The different codes are sorted, and all encoded data related to each theme is identified and collected. In other words, in this step, the codes are developed and analyzed in Table 3 as basic, organized, and comprehensive themes, and attention is paid to how different codes are combined to form the basic themes.

Step 4: Drawing a network of themes At this stage, the thematic networks are drawn, reviewed, and analyzed. Content networks are a tool for analysis, not examination itself. These networks help the researcher gain a deeper understanding of the meanings of the texts, describe the themes obtained, and identify their patterns. After creating thematic networks, the researcher must refer to the original text again and interpret it with the help of these networks.

Step 5: Analyzing the network of themes In this step, the thematic networks are drawn, reviewed, and analyzed. Content network is a tool for analysis, not insight itself. These networks help the researcher gain a deeper understanding of the meanings of the texts, describe the themes obtained, and identify their patterns.

Step 6: Compiling the Report Examination and compilation of the final research report are conducted at this stage. Writing a content study aims to tell a complete and complex story in the data so that the



reader is convinced of the validity and competence of the researcher's study. The interviewees were selected purposefully (directional or theoretical sampling). The data collection process continues until the researchers reach the saturation point in the data and no new material is added to the model. Table 1 shows the information about the interviewees.

Most qualitative methodologies rely on trustworthiness to evaluate qualitative results rather than reliability, validity, and philosophical foundations rooted in the quantitative paradigm. Trustworthiness includes four criteria: credibility, transferability, dependability, and confirmability. In this study, these strategies are utilized to ensure trustworthiness. A questionnaire is distributed following a specific pattern to measure research indicators in the second phase (quantitative). After describing the questionnaire and presenting it to five professors and relevant experts, the validity of the measurement tools is assessed. The concept of the population in this paper refers to all individuals to whom the results are intended to apply, and the nature of the study shapes the scope of the research. The statistical population in this study includes all staff members working in various departments of Bank Refah Kargaran; based on the Cochran Formula, a sample size of 267 individuals is estimated. The details of the statistical sample are outlined in Table 2.

The factor loadings of items that demonstrate the reliability of the measurement model are calculated

using the correlation values of the construct indicators. If the value is equal to or greater than 0.4, the reliability is considered acceptable. In this study, all items had factor load values >0.5, which were deemed acceptable. Additionally, reliability was assessed using Cronbach's alpha and combined reliability indices, while the validity of the construct was evaluated using divergent and convergent reliability. Table 3 displays the reliability and validity of the measurement model.

A confirmatory factor analysis was conducted to assess the reliability and validity of the measurement scale. The closer the factor load is to 1, the stronger the relationship between the questionnaire items and hidden variables. A factor load of 0 indicates no relationship between the two factors, while a negative factor load suggests an inverse relationship.

Fornell and Larcker (1981) established two criteria for factor load: observed variables should have factor loads greater than 0.5, and the total reliability of variables should exceed 0.6. The results of the confirmatory factor analysis, as shown in Table 3, reveal that the factor loads of variables are mostly around 0.5 or higher. Additionally, Cronbach's alpha coefficient indicates a reliability and internal validity greater than 0.6, confirming that the items reflect the factors.

Based on these results, we can affirm the reliability and validity of the model at the construct level, as per Fornell and Larcker's criteria, by examining the correlations and average variance extracted (AVE).

Table 1. The information of respondents

| | | |
|-----------------|-------------------------|----|
| Gender | Male | 25 |
| | Female | 5 |
| Education | Master's | 9 |
| | PhD | 21 |
| Work experience | Between 5 and 10 years | 2 |
| | Between 10 and 15 years | 4 |
| | Between 15 and 20 years | 6 |
| | Between 20 and 25 years | 8 |
| | Between 25 and 30 years | 10 |
| Field of study | Financial management | 12 |
| | Financial engineering | 13 |
| | Economy | 5 |



Table 2. The demographical statistics of the quantitative section

| Specifications | Classification | Number | Frequency percentage |
|-----------------|-------------------------|--------|----------------------|
| Age | Between 20 and 30 | 89 | 33.3 |
| | Between 31 and 40 | 85 | 31.8 |
| | Between 41 and 50 | 79 | 29.6 |
| | More than 50 | 14 | 5.2 |
| Work experience | Between 5 and 10 years | 65 | 24.3 |
| | Between 10 and 15 years | 53 | 19.9 |
| | Between 15 and 20 years | 53 | 19.9 |
| | Between 20 and 25 years | 46 | 17.2 |
| | Between 25 and 30 years | 50 | 18.7 |
| Education | Bachelor's | 123 | 46.1 |
| | Master's | 126 | 47.2 |
| | PhD | 18 | 6.7 |

Table 3. The convergent reliability and divergence of variables

| Variable | Cronbach | CR | AVE | Variable | Cronbach | CR | AVE |
|--|----------|-------|-------|---|----------|-------|-------|
| Structural integration in bank | 0.746 | 0.817 | 0.416 | Controlling macroeconomic indicators | 0.679 | 0.757 | 0.696 |
| Centralism | 0.921 | 0.951 | 0.869 | Aligning governmental policies | 0.910 | 0.830 | 0.549 |
| Progressivism and systematization | 0.614 | 0.861 | 0.732 | Government economic capacity building | 0.891 | 0.792 | 0.943 |
| Stabilization of financial affairs | 0.769 | 0.908 | 0.762 | Specialization and framing | 0.908 | 0.847 | 0.859 |
| Information integration | 0.865 | 0.816 | 0.791 | Discourse and culture-building in society | 0.940 | 0.833 | 0.617 |
| Reducing financial speculation | 0.671 | 0.855 | 0.617 | Building trust among investors | 0.729 | 0.794 | 0.768 |
| Customers' access to financial information | 0.651 | 0.891 | 0.652 | Adapting strategies with FinTech | 0.910 | 0.891 | 0.959 |
| Establishing model financial tools | 0.781 | 0.916 | 0.762 | Adaptation to FinTech standards | 0.905 | 0.891 | 0.946 |
| Providing the required incentives | 0.671 | 0.619 | 0.865 | Financial discipline in bank | 0.759 | 0.850 | 0.896 |

4. Research findings

As previously mentioned, respondents answered the relevant questions. The 30 interviews yielded 416 codes, which were then reduced to 380 after review and integration of similar codes. Scholars identified five themes after conducting theme analysis: state economic governance, transparency, structuralism and unification, facilities and incentives, and culture-building and training. Table 4 displays the basic organizer, learner, and interviewee codes:

After following the above steps, a connection was established between the categories resulting from the open coding stage. By expanding one of the categories in the axial coding, which is the basis of the communication process, the output of the Fin Tech implementation model in the country's banking system is finally shown in Figure 1.

The structural equation modeling technique tests the research hypotheses derived from the conceptual model. Figure 2 shows the path coefficient model for hypothesis testing:



Table 4. The results of the respondents' analysis

| Basic themes | Organizing themes | Inclusive themes | Interviewee's code |
|---|---|--------------------------------------|---------------------|
| Failure to connect to knowledge-based companies by identifying FinTech needs in the banking industry can make achieving FinTech requirements and components difficult. Therefore, downsizing the government disrupts the recruitment of elites in the banking industry. | Lack of elite recruitment in the government due to the downsizing of the government | specialism | First interviewee |
| The traditional bureaucratic system in government must be transformed to meet the requirements of FinTech. Therefore, the banking system must comply with the latest international standards. | Bureaucratic and traditional management systems in government | Centralism | Second interviewee |
| The formulation of public policies by the central bank to implement the FinTech system can facilitate alignment mechanisms between all branches and banking centers. | Reforming public policies of FinTech implementation | Polycymaking | Third interviewee |
| Developing long-term and short-term plans to effectively index and periodically monitor banking developments to comply with FinTech requirements in the form of a FinTech roadmap is necessary and inevitable. | Developing long-term and in-depth plans for the digital banking industry | Polycymaking | Third interviewee |
| Developing and imagining a favorable vision for the transformation of the banking industry can facilitate and smooth the goals and strategies in a transcendent way to achieve and implement financial startups. | Drawing the right perspective for the banking industry | Polycymaking | Third interviewee |
| Alignment and orientation of all banking measures with banking development models can activate industrial and economic policies. One of the most important elements of implementing FinTech is paying attention to industrial and economic policies. | Alignment of the banking development model with industrial and economic policies | alignment of the banking industry | Fourth interviewee |
| Attention and emphasis on global standards and compliance and non-deviation from international laws and norms in the banking industry can connect the banking industry to global markets. | Paying attention to global standards and monitoring global markets in this industry | Per international standards | Fifth interviewee |
| Iran's economic structure based on FinTech standards must change. | Reforming the economic structure | Structural discipline-making | Sixth interviewee |
| Creating economic stability can pave the way for the formation of digital transformation in the field of investment in the banking system. This leads to a good foundation for playing FinTech roles. | Establishing long-term economic stability | Establishing stability | Seventh interviewee |
| Creating value for existing businesses to implement FinTech can lead to an increase in the GDP growth rate. | Increasing the growth rate of GDP | Controlling macroeconomic indicators | Eighth interviewee |
| Based on the digital transformation in the banking industry and the facilitation of investment exchanges in the context of the FinTech platform, it can grow the production-oriented economy. | Production-oriented economy | Polycymaking | Ninth interviewee |
| Economic and political sanctions have caused the greatest damage to the banking industry. This has disrupted many financial mechanisms in international monetary and banking relations. Therefore, reducing political and economic sanctions to implement FinTech can be effective. | Reducing political and economic sanctions | Removing sanctions | Tenth interviewee |
| Iran's economic structure based on FinTech standards | Reforming the economic | Providing | Eleventh |



| Basic themes | Organizing themes | Inclusive themes | Interviewee's code |
|--|---|----------------------------------|------------------------------|
| must change. | structure | structural discipline | interviewee |
| With the implementation of financial startups, many economic cartels and business enterprises in the country have entered the field of financial startups. | The entry of large industrial holdings into this industry | Providing structural discipline | Eleventh interviewee |
| The government can enter the field of financial startups with small and large shares and provide the foundations for the formation of FinTech through effective rail laying. | State's participation with fewer shares | State's governance | Twelfth interviewee |
| The Vice President for Science and Technology facilitates the implementation of FinTech by establishing government research and technology funds and liaising with the private sector. | Transferring shares of government research and technology funds to the private sector | Providing structural discipline | Fifteenth interviewee |
| One of the essential factors for success is creating discourse and a culture of community participation in the development of financial startups. | Creating a common understanding of the development of financial startups | Building culture | Sixteenth interviewee |
| Having different climates, cultures, schools, religions, political tastes, social systems, and geographical dispersions, Iran must create a banking system to meet the requirements of FinTech and provide solutions appropriate to the above cases. | Building culture through the geographical dispersion of | Building culture | Nineteenth interviewee |
| It is necessary to create interaction among the pillars of the banking system to implement FinTech. Therefore, the type of interaction, exchange, and sharing of information among the executive elements of the industry, market banking, and capital markets is important. | Proper interaction between industry actors and financial startups | Economic relations and exchanges | 22 nd interviewee |
| Networking among financial startup industry actors is one of the success factors in creating civil and administrative partnerships in the implementation of FinTech. | strong networking among financial startup industry actors | Economic relations and exchanges | 23 rd interviewee |
| Many investors pay attention to the financial risks in FinTech, which can increase the challenges in this area. | The attention of risky investors to financing based on the life cycle | Risk-taking | 25 th interviewee |
| Rapid and convenient access to capital by companies and customers is one of the advantages of implementing FinTech. | Proper and rapid access to capital | Economic relations and exchanges | 27 th interviewee |
| Legal mechanisms are effective in determining the requirements of FinTech. Development of property rights for individuals: Structural discipline | Establishing legal mechanisms | Providing structural discipline | 28 th interviewee |
| One of the key issues in developing financial startups is the creation of intellectual property rights structures. | Developing property rights of individuals | Providing structural discipline | 29 th interviewee |
| The formation of centralized structures for information validation can be considered an official reference in the startup process. | Establishing a formal and legal reference for information validation | Providing structural discipline | 30 th interviewee |



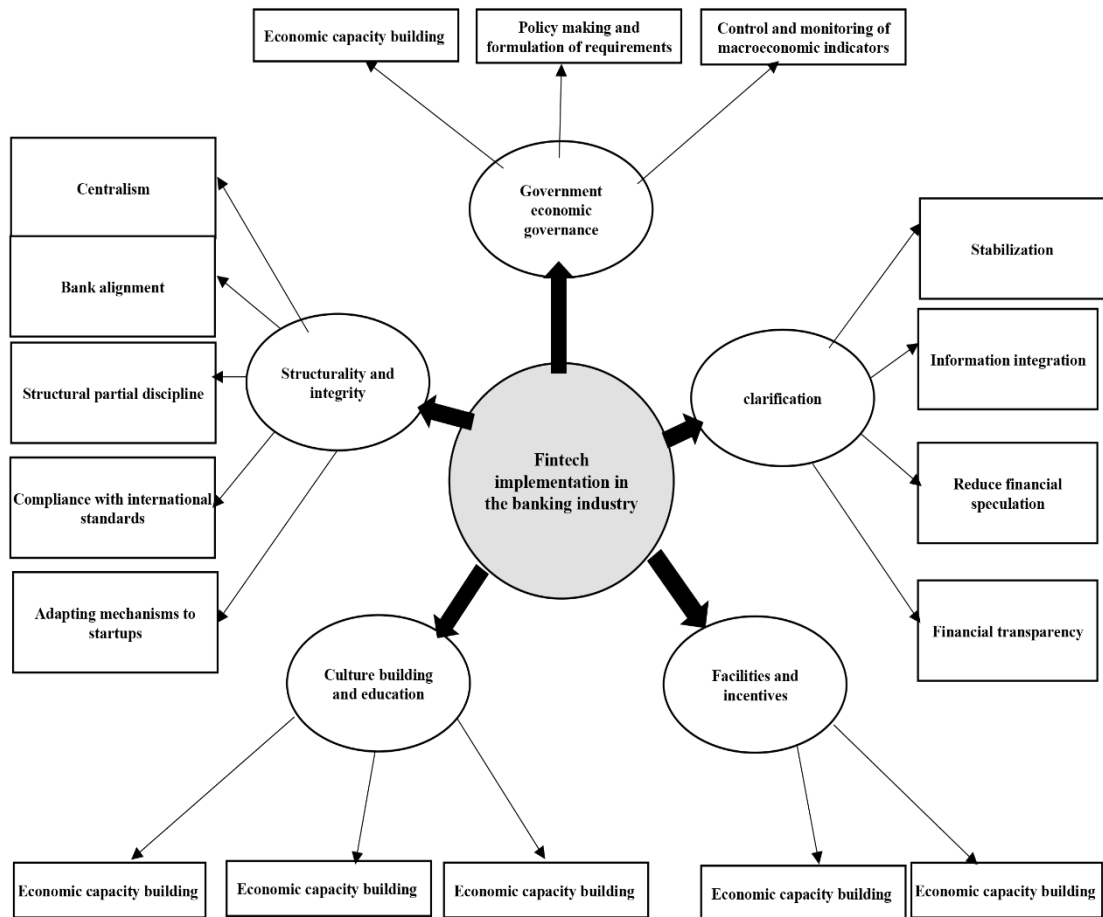


Figure 1. The output of the FinTech implementation model in the country's banking system



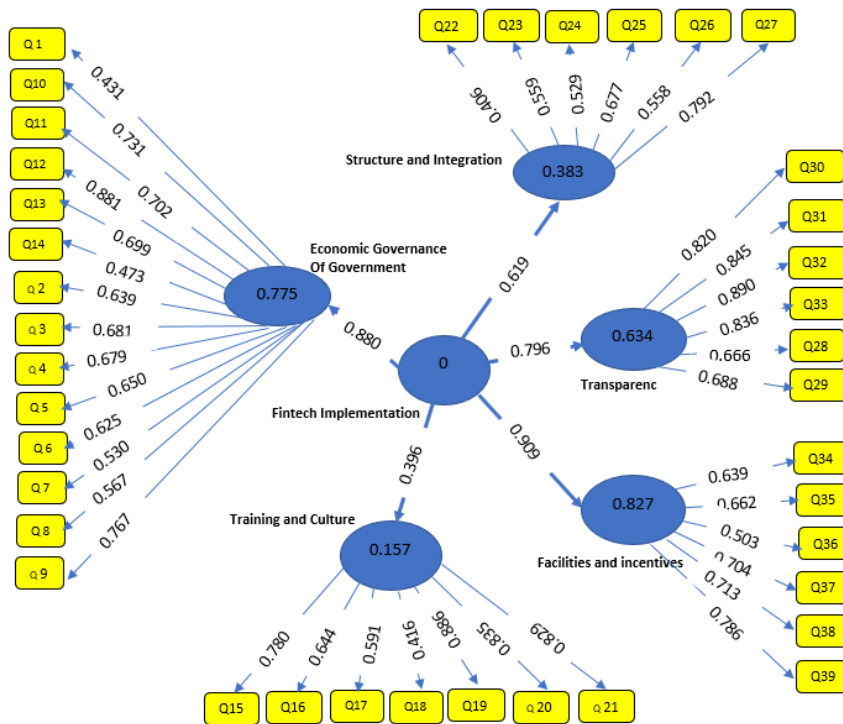


Figure 2. The research model is in the form of standard path coefficients

To assess the significance of the path coefficients, the T statistic value for each path should be displayed. If the T statistic value at a confidence level of 95% is greater than 1.96, then the effect of the path coefficient is considered significant.

Table 4 confirms all research hypotheses. In Figure 2, the impact of state economic governance on FinTech implementation in the country's banking system is 0.880; structuralism and unification on FinTech implementation in the banking system is 0.619; transparency on FinTech implementation is 0.796; training and culture building on FinTech implementation is 0.396; and facilities and incentives on FinTech implementation is 0.905. The R2 value for different constructs is deemed acceptable.

Furthermore, based on the Q2 value, the predictability of research constructs is of medium to large value, indicating that the model has appropriate

predictability. The GOF criterion is used to evaluate the overall fit of the model, which is derived from the average mean root of reflective constructs in the coefficient of determination of endogenous constructs.

$$GoF = \sqrt{\text{communicating} \times R2}$$

The mean common construct value (AVE) is 0.698, and the mean coefficient of determination of the hidden endogenous variable is 0.741, so the GOF value is equal to 0.651. Since these three values are 0.01, 0.25, and 0.36, referring, respectively, to weak, medium, and strong values for GOF, the figure of 0.398 shows a strong fitting for the research model.



5. Discussion and conclusion

To identify and enumerate the factors influencing FinTech implementation in the banking industry, interviews were conducted with experts in the field. Ten specialized questions were designed for this purpose, and 30 experts from Iranian banks such as Rafeh-e Kargar, Parsian, Pasargad, Mellat, and Melli, as well as academic professionals, including financial graduates, were included in the study. The identified factors were sorted into five basic dimensions. These dimensions include:

1. State governance, which oversees strategic decisions and requirements to align executive actions in the banking industry with FinTech processes.
2. Structural and integration, which focuses on creating the infrastructure, executive contexts, and formal mechanisms for the FinTech operations at both macro and micro levels of the organization.
3. Facilities that enhance the advancement of FinTech goals, strategies, and planned activities.
4. Education and culture-building, and promoting the development of financial startups among individuals.
5. Clarification of measures to create transparency in the mechanisms of the banking industry. Due to the interrelationship between these dimensions, the study determined the levels of influence of factors on FinTech implementation in the banking industry.

To adopt effective strategies in the FinTech sector of the banking industry, the prioritization of the identified factors is crucial. The prioritization operations were conducted using the structural equation method to determine effectiveness. The results were formulated into five main hypotheses. Based on the findings of the structural equation analysis:

- ◀ The first hypothesis, "State governance has a positive and significant effect on implementation in the country's banking system, was confirmed with a path coefficient

of 0.880 and a significance level of 0.001. This aligns with previous studies by Jagtiani and Lemieux (2019) and Sharma et al. (2018), on the impact of government actions on FinTech implementation.

- ◀ The second hypothesis, "Structural and integration have a positive and significant effect on FinTech implementation in the country's banking system," was confirmed with a path coefficient of 0.619 and a significance level of 0.015. This is consistent with findings by Hertzberg, Liberman, and Paravisini (2018) and Hughes et al. (2022), regarding the effectiveness of aligned banking structures.
- ◀ The third hypothesis, "Clarification has a positive and significant effect on FinTech implementation in the country's banking system," was confirmed with a path coefficient of 0.796 and a significance level of 0.027. This supports the importance of clarification in the banking system, as noted by Suryono et al. (2020).
- ◀ The fourth hypothesis, entitled "Education and culture-building has a positive and significant effect on FinTech implementation in the country's banking system," was confirmed with an impact factor of 0.396 and a significance level of 0.001. This is in line with the significance of education highlighted by Sharma et al. (2018) and Lee and Shin (2018).
- ◀ The fifth hypothesis, "Facilities and incentives have a positive and significant effect on FinTech implementation in the country's banking system," was confirmed with an impact factor of 0.905 and a significance level of 0.022. This finding is consistent with the results of Balyuk (2016).

6. Research Suggestions

- 1) It is suggested that to determine the limits of activities in FinTech, a FinTech policy document should be compiled. Some existing



laws in the banking industry may need to be amended and optimized.

- 2) It is suggested that to implement FinTech, the development of instructions and directives as well as the correct implementation of FinTech provisions should be examined.
- 3) It is suggested that to align and direct all activities, the Central Bank should develop executive policies that meet the needs of FinTech and notify all executive bodies in the banking industry.
- 4) It is suggested that the wording of laws related to financial transparency in banks and institutions be prepared and announced to implement FinTech and fulfill the role of social responsibility by the banking industry.
- 5) Appropriate mechanisms should be developed to design a performance appraisal system for financial startups in the banking industry that can facilitate entry into the FinTech arena.
- 6) It is suggested that long-term and short-term plans are necessary and inevitable to effectively monitor banking developments periodically and comply with FinTech requirements in a FinTech roadmap.
- 7) It is suggested that the banking industry's favorable outlook should be facilitated to align goals and strategies for the realization and implementation of financial startups.
- 8) It is suggested that appropriate culture and capacity be built, and proper strategies be expressed to connect startups with the banking industry
- 9) It is suggested that the economic structure of Iran should be changed based on FinTech standards.

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