



Development of an interpretive structural model (ISM) for the implementation of fintech in the banking industry

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Abstract

The advent of cutting-edge technologies coupled with customer's demand for safe and more user-friendly banking experience has led the banks and financial services to readily adoption of FinTech finance technology. Although the Fintec issue is heavily influenced by financial institutions around the world, there are only a few studies on how banks should draw a framework for the integration of phonetic. The purpose of this research is to formulate an interpretive structural model of Fintech implementation in the country's banking industry. In this study, using the Grounded Theory method of the foundation of 30 sub-components and 7 main components affecting the implementation of phinetics in the banking industry, then the relationship between these components was identified using the structural interpretive modeling method (ISM). Finally, using the MICMAC analysis of the types of components, according to the effectiveness and effectiveness on the implementation of the phinetics, it was divided into four levels. In order to implement the phinetics, the requirement of the components of upstream documents and decisions as the cornerstone of this industry is Pay special attention.

Keywords

fintech, Innovative Services, Open Banking, Grounded Theory, Interpretive Structural Modeling

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1. Introduction

The COVID-19 epidemic has accelerated digital transformation. In particular, the need to use digital services to replace physical interactions between consumers and providers, and in the processes that produce financial services, will be even more important for economies, financial service providers, businesses, and individuals in the aftermath of COVID-19 World. The epidemic, for example, has already accelerated the shift to digital payments (Auer et al 2020a). It has also intensified e-commerce (BIS 2020; Alfonso et al. 2021), which may benefit large technology companies and their financial activities. Countries with stricter policies for Covid-19 and less community mobility experienced a greater increase in the use of financial programs following the outbreak of the disease (Didier et al. 2021). Finally, it may accelerate work on central bank digital currencies (CBDCs) (Auer et al 2020b).

FinTech companies, which participate in the banking service space, have mediated with existing banks, which to some extent benefit from the current lenient regulations. In the area of lending, Tang (2019) argues that P2P platforms can generally be considered as a complement to banks and not as an alternative. In addition, as explained by Navaretti et al. (2018), Fintech companies can not replace banks, but coexist with them, collaborate with them or potentially become like banks. The financial technology revolution (Fintech) is taking place globally. Although technology has been a part of financial services in the pale industry since the 1850s, it is only in the last two decades that Fintech has become a term that typically describes advances in technology that have the potential to change the way financial services are delivered. They are stimulants. Creating new business models, applications, processes, and products also leads to consumer benefits (Arner, Barberis, & Buckley, 2015; Feyen, Frost, Gambacorta, Natarajan, & Saal, 2021; Sironi, 2016).

These developments have the potential to make markets more diverse, more competitive, more efficient, and more inclusive, but they can also increase focus. Innovation has created competition and increased inclusion, especially in emerging markets and developing economies (Pazarbasioglu et al 2020; Frost et al 2021). Fintech seems to have grown, especially in markets where the financial system was less developed (FSB 2020; Didier et al. 2021). However, the underlying economics of intermediation with new technology may lead to a shift between traditional and new financial service providers.

2. Theoretical Framework

• Definition of fintech

Fintech can be defined as "a set of innovations and an economic sector that focuses on the application of digital technologies and its development, focusing on financial services" (Wojcik, 2021a, 1).

Fintech advocates expect to improve access to capital and financial services, improve financial inclusion, effectively democratize finance, and reduce inequality. Some directly point to the high level of inequality, claiming that Fintech breaks the link between a city's financial wealth and its commercial power and acts as a leveler, allowing smaller cities and remote areas to move above their weight (Findexable, 2020). Douglas et al, 2017 Divided fintech into three stages, as shown in Table 1.

Table 1- Fintech evolution is revealed in three stages (Douglas et al., 2017)

Age	Description
First	The period from the installation of the transatlantic telegraph cable to the development of the global telex network depicts the long-term interactions between technology and finance.
Second	It covers the pre-GFC era, beginning with the digitization of traditional financial services, beginning and culminating in e-banking, with the first ATM
Third	Since the GFC, the speed of technology development and the expansion of startups and IT companies providing financial services has marked the third stage.

Fintech is a great achievement of economic development and scientific and technological progress. According to the Financial Stability Board (FSB), Fintech refers to financial

innovation created by technology that creates new business models, programs, processes, or products that have a significant impact on financial markets, financial institutions, or ways to enhance financial services (FSB). 2016). Some researchers also believe that participants are the five dimensions that add value, rules, strategies, and perspectives that change the fintech market (Hong and Lu, 2016). Fintech is also a wider expansion of the financial ecosystem (Gomber et al, 2017; Anagnostopoulos, 2018), which includes payment system innovations (including digital currencies), and credit markets (including P2P lending), and insurance, with smart blockchain-assisted contracts. It also plays an important role (Thakor, 2020).

- **Fintech financial areas and business models**

More than \$ 50 billion has been invested in approximately 2,500 companies since 2010 as this fintech redefine ways to save, save, lend, invest, move, spend, and protect money (Accenture, 2016). Fintechs can be divided into four sections based on their involvement in financial activities, which are listed in Table 2. (Dorfleitner et al., 2017; Lee and Shin, 2017):

Table 2 - Financial areas of fintech activities

The payment	Asset Management	Crowd Funding	Other parts of fintech
New payment methods Blockchain and currency codes fintechOther	Social trade Robotics consultants Personal financial management and Investment banking	Donation (charity) Rewards Collective investment Collective lending	Insurtech Legislation Money Transfer Institutions Infrastructure and information technology

Cooperation models of banks and fintech are given in Table 3:

Table 3: Cooperation models of banks and fintechs

Title Conclusion	Researcher Name and Year Research	Research Objectives	Conclusion
Model Drasch et al	Drasch et al., 2018	Identify the pattern of cooperation between the bank and fintech	Patterns of cooperation between the bank and Fintech: Investment Provide solutions and strategies for innovation Creating innovation in new banking services Access to capital markets Mutual services to the bank for innovation Venture capitalist
Wilson model	Wilson, 2017	Identify cooperation models between Bank and Fintech	Five models of cooperation between banks and Fintech: Partnership Assignment of services Investment Playing the role of accelerator for fintech Buy Fintech companies.

- **Fintech ecosystem**

Fintech ecosystem Sustainable coexistence plays an important role in the growth of the Fintech industry. (Dimers et al, 2015) have suggested that entrepreneurs, governments, and financial institutions are participants in a fintech ecosystem. We have identified five elements of the fintech ecosystem:

- Startup and fintech company (e.g., payment, wealth management, lending)
- Technology developers (e.g. Big data analytics, cloud computing)
- Government (for example, financial regulators and the legislature);
- Financial clients (eg individuals and organizations);
- Traditional financial institutions (such as traditional banks, insurance companies, joint-stock companies)

in the heart of the fintech ecosystem, is the fintech startup. These companies are primarily entrepreneurs and have introduced major innovations in payment, wealth management, lending, financing, capital markets, and insurance that meets lower operating costs, target more markets, and provide more personalized services than traditional financial firms. Provide. They are the driving force behind the separation of the financial services phenomenon, which is very destructive for banks (Walchek, 2015).

- **Challenges facing Fintech**

The financial industry is experiencing unprecedented change. A wide range of traditional banking products from payment to investment advice has been challenged by Fintech's innovative products. Blockchain technology consolidates many traditional banking services with better transaction security and faster money transfers at lower domestic and global costs. Fintech Innovation can outline the overall financial outlook for the coming years (Drummer et al, 2016). These challenges include investment management, customer management, regulation, technology integration, security and privacy, And risk management.

3. Literature Review

Entrepreneurship explosion and growth of startup culture are attributed as a path for fintech companies. This means that most banks now specialize in venture capital funds specializing in fintech support. (Temelkov, 2018). This is the position of the banks to change their position to respond to the threat of fintech companies. Thus, banks have begun to find more efficient channels through which they now serve their customers. Electronic channels are an alternative to traditional services. (Daka & Phiri, 2019)

Victor et al, 2022; In a study entitled *The Impact of the fintech Revolution on the Future of Banking: Opportunities and Risks*, they examined fintech services focusing on the opportunities and risks of banks, and preliminary results showed that fintech lenders were unlikely to replace banks, perhaps because banks were developing. Fintech platforms themselves or work with fintech startups. It also showed how regulation, global infrastructure, and geopolitical frictions will shape the future of banking.

With the growth of financial technology, it can be seen that some regions are more inclined to financial innovation than others. Government support, a culture of innovation-based innovation, customer engagement, expertise, and flexible regulation are some of the factors contributing to the growth of financial technology. (Rubini, 2017).

Kowalewski & Pisany, 2022 In a study entitled "Consumer Lending Reaction of Banks to the Emergence of Fintech and Bigtech Credit in the Framework of Credit Information Processing", in their experimental study, they examined the information advantages of Fintech and Big-tech companies compared to banks and the use of alternative lenders. Developed markets, relationships between fintech and big-tech credit providers, and banks are similar and competitive in nature. However, consumer lending by banks is growing at the same time as the development of the fintech credit market in emerging economies, but is declining after the emergence of large technology credit.

The advantages of Fintech include: speed, more and faster access to financial resources and the use of various financial services, cost reduction, elimination of administrative formalities and time constraints and its disadvantages such as the culture of using financial technologies and users' incompatibility with The laws and rights of these systems also address security risks and the possibility of misuse of personal and private information and data (Rohani Rad, 2021).

One of the most important obstacles to the development of fintech startups in Iran is legislation, lack of transparent strategy in banks for cooperation, and macro-political and economic conditions of the country, especially sanctions, and strategies such as setting new standards and appropriate laws. The need for startups, and especially the facilitation of open banking processes and the mapping of the digital transformation roadmap of the banking

industry with the cooperation of key stakeholders, can lead to the development of startups (Moradi et al., 2021).

Mashhadi et al. 2020, in their research entitled Fintech-based strategic entrepreneurship analysis in the field of banking, examined Fintech developments in Iran and content analysis, which finally extracted the strengths, weaknesses, threats and opportunities in the field of entrepreneurship and innovation in this field. The results are presented in the SWOT strategy table, which according to the strengths, solutions are provided to cover the weaknesses, and by using the opportunities, solutions are provided to turn the threats into opportunities. Finally, the present study seeks to answer two key questions: What are the components affecting the implementation of fintech in the country's banking industry? How can these components be prioritized?

4. Methodology

This research has a fundamental orientation because it seeks to extract and discover the components affecting the implementation of fintech in the country's banking industry. On the other hand, it is considered practical because the results of this research can be applied to the banking industry. Mixed Method has also been used.

In the qualitative part of this research, the data strategy of the foundation was used. Also, the qualitative part has two stages. The first stage is a review of research literature and past articles and studies in the field of new financial technologies and the second stage is a semi-structured interview with experts in this field. The process of coding and classifying components based on data theory Done. In the Quantitative Part, interpretive structural modeling (ISM) was used.

Statistical population and sampling method: This study was conducted in two parts. The statistical population of this research is in the qualitative part of experts and specialists in the field of information technology of electronic banking services of banks and because of the limited space, the employees of the Central Province Bank and the available experts were used. In this study, the snowball sampling method was used to identify experts in this field and the interview process continued according to the saturation rule for up to 15 people. The software used in this section is Athlas.ti. Using this software, the coding process and the connection between the components were performed. In the second part of this research, the interpretive structural modeling method, systematic methods, and procedures for understanding the validity of model components and examining the effect of components on other components are discussed. (Faisal et al., 2016). The statistical population In the interpretive structural modeling method, it is suggested to use the opinions of at least five experts (Soti et al., 2010). In this research, the opinions of 10 experts and the frequency method (Mode) were used to reach their interactive matrix.

Validity and reliability: Validity and reliability of qualitative research is an important issue. In the qualitative part of this study, Guba and Lincoln's criteria were used in 1982 (validity, reliability, verifiability and transferability (Akbari, 1397). Also, qualitative analysis method was used to evaluate and ensure the reliability of the main components of the proposed Delphi analysis model. (Habibi et al., 2014) In a quantitative section, content validity was used to assess the validity. For this purpose, the self-interactive matrix questionnaire was used, the contents of which had been approved by experts in the previous (qualitative) stage. Is the MICMAC matrix (infiltration-dependency matrix) (Adel Azar, 2013).

A) The coding steps in the foundation data method

Open coding: This stage of coding is called open because the researcher coded the concepts with an open mind and does not place any restrictions on determining the codes. The purpose

of open coding is to classify interviews into small conceptual components (items). Items may be derived from a sentence or a paragraph. In addition to the concepts derived from the fragmentation and initial conceptualization of the text, they have a long list that must be combined with similar concepts to make them more elaborate than discovering the characteristics and dimensions of a category based primarily on interviews, and events observations, or notes. The researcher found this to happen (Cresswell 2005; 397).

Axial coding: The purpose of axial coding is to create a relationship between the generated categories (in the open coding stage). This is usually done on a paradigmatic basis and helps the theorist to simplify the theorizing process. The basis of communication in axial coding is based on the expansion of one of the categories. The main category (such as the central idea or event) is defined as the phenomenon, and other categories are related to this main category. (Rezaei, 2017).

The main category (such as the central idea or event) is defined as the phenomenon, and other categories are related to this main category. Related concepts are:

- Causal conditions: Factors that affect the central phenomenon and lead to the occurrence or growth of the phenomenon.
- Axial phenomenon: It is a category in which all factors and influences move in the direction of describing it.
- Underlying conditions: These are the conditions under which strategies and actions manage the phenomenon
- Intervenor Conditions: Broad and general conditions such as culture, space, etc., which act as facilitators or limiters of strategies.
- Strategies: Specific actions or interactions that result from a central phenomenon. Strategies and actions are plans and actions that help design the model.
- Implications: Includes effective outputs for model implementation. (Strauss and Corbin, 2011)

Selective coding: Based on the results of open coding and axial coding, the main stage is theorizing. In this way, it systematically links the central category to other categories and presents those relationships within the framework of a narrative, and modifies the categories that need further improvement and development.

B) Structural Interpretive Analysis (ISM)

Interpretive structural modeling (ISM) is an interactive learning process in which (Agarwal et al., 2007; Warfield, 1974) a complex system is structured into several subsystems (elements) (Matawale et al., 2013). The model formed in this way shows the structure of a problem or complex problem, a system, or a field of study in a carefully designed model (Agarwal et al., 2007). Shows the relationship between the elements (Huang et al., 2005; Kalantari and Khoshalhan, 2018).

The ISM method is interpretive because experts judge whether and how variables are related (Kumar et al, 2014). It is a structure because it provides a structure that is derived from the relationship of a complex set of variables (Agarwal et al., 2007). And modeling this structure in a comprehensive system model (Kumar et al, 2014), (Agarwal et al., 2007). Used by the legal system by several researchers (Kumar et al, 2014).

ISM is a quantitative method for transforming a complex structure into various alternatives that make it easier to understand and create a structural model based on expert judgment (Warfield, 1974). This method is mainly used in the management problem which has a complex structure and using this method, this structure is divided into sub-categories, identifying and summarizing the relationship between elements (Sage, 1977). The steps used in the ISM method are as follows (Kumar, 2018. Chowdhury et al., 2019):

Step 1: Identify the components, dimensions, and indicators

Step 2: Determine the relationship between the components using ISM.

A) Structural self-interaction matrix (SSIM) mapping is developed for barriers that show the pairwise relationship between the components. In this step, experts consider the criteria in

pairs with each other and respond to pairwise comparisons based on the following They give. That is, in each comparison, the two criteria use the letters V, A, X, and O based on the following definitions.

Table 4: Symbols of Relationship (Kumar et al, 2014; Kalantari and Khoshalhan, 2018)

Symbol	The relationship between component i and j
V	Component i affects component j
A	Component j affects component i
X	Components i and j have a two-way relationship
O	There is no relationship between the two components i and j

B) Formation of the initial access matrix using the criteria or variables identified in the first step, a relationship between them is defined according to each pair of criteria. Content relation means the conceptual content relation between the components of the system, in such a way that it is semantically and content-appropriate to the goals of the system (Warfield, 1974).

Table 5: Convert symbols to numbers

A symbol	Number	Symmetrical number
V	1	1
A	-1	0
X	2	1
O	0	0

C) The final access matrix is examined using the developed self-interactive structural matrix. And this matrix is examined for expansiveness. Expanding the content relationship is a basic hypothesis in interpretive structural modeling. Expansion means that if the variable "a" is related to the variable "b" and the variable "b" is also related to the variable "c", then the variable "a" is also related to the variable "c".

D) Determining relationships and leveling components

To determine the relationships and level of the criteria in the ISM interpretive structural model, a set of outputs and a set of inputs for each criterion must be extracted from the received matrix.

- Achievement set (effects or outputs): includes the criteria themselves and the criteria by which they are affected. More simply, all the components in the row related to the desired component have the number 1.
- Prerequisite set (effectiveness or inputs): includes the criteria themselves and the criteria that affect them. More simply, all the components that have the number 1 in the column related to the desired component

After determining the access set and the prerequisite set, the subscription of the two sets is calculated. The first variable whose share of the two sets is equal to the achievable set (outputs) will be the first level. Therefore, the elements of the first level will have the most influence From other variables in the model (dependent variable) and the last level will be selected as the most effective level (independent variable).

After identifying the first level indicators, these elements are removed and the process of calculating the set of acquisition and prerequisites continues. This process continues until all indicators are removed.

Step 3: Based on the relationships defined in the access matrix, a directional graph is drawn and the expansion relationships are eliminated.

D) MICMAC analysis

MICMAC analysis is based on the influence (influence) and the degree of dependence (influence) of each variable and allows further investigation of the range of each variable. In this method, which was first proposed by Dugrin and Goodet (1973), the importance of variables is measured more based on indirect relationships between them, and in this analysis, variables are divided into four groups: autonomous, dependent, link (Interface) and independent.

- Autonomous: have low dependency and conductivity. These criteria are generally separated from the system because they have poor connections to the system. A change in these variables does not cause a serious change in the system.
- Dependent: These variables have strong dependence and poor conductivity. These variables generally have a high impact and low impact on the system.
- Independent: These variables have low dependence and high conductivity, in other words, high impact and low impact are the characteristics of these variables.
- Interface: These variables have high dependence and high conductivity, in other words, the effectiveness of these criteria is very high and any small change in these variables will cause fundamental changes in the system.

5. Results

To answer the research questions based on the qualitative approach after extracting the codes from the interviews, the Grounded Theory method (Strauss and Corbin approach) was used to analyze the data. In the first step after the implementation of the interviews, the code or words that refer to these factors, the code is assigned (open coding). Then, open-source code was assigned to a component according to the common cases so that the categories were formed to finally present the research model for theorizing. Then, based on the deductive approach, an attempt is made to explain the dimensions of the model identified in the target community (quantitative target community) Structural Interpretive Analysis (ISM) to create a more coherent understanding of the nature of the theoretical framework and Identify the most effective components of Fintech implementation to enhance stakeholder decision-making power.

A) Qualitative part

Step 1: Open Coding

From the interviews conducted in the first stage, you extracted 123 open-source codes. From the analysis of the code, 30 sub-categories and 7 main categories were extracted.

The second step is axial coding

At this stage, based on the approach of Strauss and Corbin, related concepts were identified and classified, which are shown in Table 6.

Table 6: Classification of research components

No.	Dimensions		Main components	Sub-component
1	Binding dimension	Causal factors	Upstream documents	The role of legislation
2				The role of policies
3				Legal infrastructure
4			Decisions	Government facilities
5				Legal incentives
6				Reform macro-government policies
7	Groundwork dimension	Axial phenomenon	Structural arrangements	Create an integrated structure
8				Transparency and proper flow of information
9				Reengineering the economic structure
10				Privatization of industry
11				Professional executive elements
12		Background factors	Culture	Intention to use technology
13				Culture of participation
14				Entrepreneurial culture
15				People taking risks
16				The role of learning and teaching
17				The role of trust-building
18	The facilitator dimension	Interfering factors	Technology	Financing and investing in the field of innovation and technology
19				Localization of technology in the country
20				The role of technology service development companies in startups

No.	Dimensions		Main components	Sub-component
21				The role of accelerator in economic innovation
22				Progress of the country in the field of financial technology and new banking services
23				Create communication channels
24		Process	Strategic strategies	Cybersecurity
25				Establish financing processes
26				Financing strategies using fintech
27				Accessibility
28	Implications of fintech		Consequences	Improve business climate
29				Performance improvements
30				Virtual Banking

Step 3: Selective coding

Accordingly, "components: structural arrangements" as the central category of modeling based on causal conditions "components: policy-making, legislation, decisions" through actions and interactions, including "component: process", taking into account "components: technology and culture" (As a model and context) and leads to the realization of the consequences or success of the model (Strauss and Corbin, 1998; 145; Lee, 2001; 145).

Data validation

In this study to evaluate the quality of research from 4 criteria of validity, reliability, comprehensibility, controllability and generality based on the opinion of Guba and Lincoln (1980) which is shown in Table 7. Used.

Table 7: Criteria for evaluating the quality of research

No.	Criterion	Description of activities
1	Credibility	Credibility means making a conscious effort to ensure that the meaning of the data is interpreted correctly. The full text of all interviews with coding and first grades was sent to the supervisor and the full text of 2 interviews with coding was sent to the respected classes was used. consulting professors. And extraction of primary
2	Dependability	The criterion of stability is the stability of data over different times and conditions. In this research, open source code was used by a foreign observer to increase the stability of the research.
3	Confirmability	Verification indicates the relationship of data with sources and the emergence of results and interpretations of these sources. The work process was provided to several research colleagues to confirm the accuracy of the research.
4	Transferability	Transferability refers to the extent to which study findings can be transferred or used in other groups or places. In order to facilitate transferability, the researcher should provide a clear description of the context, how the participants were selected and their characteristics, data collection, and analysis process so that the reader can judge the applicability of the findings in other situations.

Delphi analysis findings

Delphi technique is a research approach to collecting opinions on specific topics and finding collective agreement using a series of questionnaires. Delphi analysis is also a bridge between qualitative and quantitative analysis because by evaluating the components of the model, it is possible to explain the extracted components in quantitative research. Gives. In this study, Delphi analysis has been used to evaluate and ensure the reliability of the extracted components. In order to assess the components of the research components based on the spectrum of 7 Likert options were distributed among the panel members and the reliability of the components was evaluated based on two rounds. The evaluation criteria in this approach (agreement coefficient, mean and standard deviation) are in each round. In the 7-degree range, an average above 5 is also the basis for decision-making with an agreement coefficient greater than 0.5 and a standard deviation below 1. The results of data analysis in this step are shown in Table 8. Indicates the confirmation of the reliability of research components.

Table 8: Delphi analysis findings of research components

The main components of research	The first round of Delphi			The second round of Delphi			Result
	Agreement coefficient	Standard deviation	Mean	Agreement coefficient	Standard deviation	Mean	
Upstream documents	6.29	0.67	0.78	7.50	0.72	0.70	Confirm
Decisions	5.71	0.62	0.77	6.54	0.71	0.72	Confirm
Structural arrangements	6.00	0.54	0.68	5.93	0.63	0.80	Confirm
Cultural factors	5.27	0.69	0.72	6.40	0.68	0.73	Confirm
Technological factors	5.56	0.50	0.67	7.42	0.79	0.75	Confirm
Strategies	5.72	0.77	0.72	6.25	0.69	0.76	Confirm
Consequences	5.65	0.59	0.60	7.12	0.71	0.78	Confirm

B) Quantitative section**Structural Interpretation Analysis (ISM)**

In the qualitative stage, after coding the interview, according to the data approach of the foundation, 7 main components were finally identified. In Table 9, a symbol was assigned to each component to form the matrix. In the step, after identifying the effective components for implementing Fintech in the country's banking industry, we form the developed structural interactive matrix (SSIM), then the Initial access matrix, and finally the Final access matrix.

Table 9: Effective components in the implementation of fintech based on the consensus of experts

Dimension	Component name	Symbol
Binding dimension	Upstream documents	C01
	Decisions	C02
Groundwork dimension	Structural arrangements	C03
	Culture	C04
The facilitator dimension	Technology	C05
	Strategic strategies	C06
Implications of fintech	Consequences	C07

A) self-interaction matrix (SSIM)

In this research, to determine the content relations between the identified components that have been identified using the data theorizing method regarding the implementation of fintech in the banking industry of Iran and also to rank and test the extractive model, the interpretive structural modeling method is used. And was used by 10 experts in the field of information technology and banking and fintech. Because this research is one of the qualitative research, the use of central indicators such as the average for determining relationships and scores is not appropriate, for this purpose, the "fashion" index is used (Warfield, 1974) after collecting questionnaires. Distributed structural self-interaction matrices were prepared. This matrix is a matrix with the dimensions of the variables listed in Table 10. Subsequently, the structural self-interaction matrix became the zero and one matrix, which is called the initial access matrix. The placement rule is ascribed in Table 5.

Table 10: Primary access matrix

	C01	C02	C03	C04	C05	C06	C07
C01		2	1	1	1	1	1
C02	-		1	1	1	1	1
C03	-	-		2	2	1	1
C04	-	-	-		2	1	1
C05	-	-	-	-		2	1
C06	-	-	-	-	-		1
C07	-	-	-	-	-	-	

In the next step, according to the initial matrix and what has been said before, we will form the final access matrix. Table 11 shows the final access matrix of the research.

Table 11: Final access matrix

	C01	C02	C03	C04	C05	C06	C07
C01	1	1	1	1	1	1	1
C02	1	1	1	1	1	1	1
C03	0	0	1	1	1	1	1
C04	0	0	1	1	1	1	1
C05	0	0	1	1	1	1	1
C06	0	0	0	0	1	1	1
C07	0	0	0	0	0	0	1

Table 12 shows the dependence and independence of the effective components in Fintech implementation. According to Table 11, the two components of "upstream documents and decisions", as the binding dimension with the most influence and least dependence, have the greatest impact on the formation of the fintech implementation model in the country's banking industry.

Table 12: Influence and dependence of components

	C01	C02	C03	C04	C05	C06	C07
Influence power	7	7	5	5	5	3	1
The power of dependence	2	2	5	5	6	6	7

In the last step, in order to determine the relationships between the components and the leveling, we level the components using the final access matrix. After identifying the first level indicators, these elements are removed and the process of calculating the set of acquisition and prerequisites continues. This process continues until all indicators are removed. The elements of the first level will have the most impact in the model and the last level will be selected as the most effective level. Table 13 shows the leveling of components.

Table 13: Leveling of model components

Dimension	Comp	Subscription level	Collection	Access set	Lvl
Binding dimension	C01	1,2	1,2	1,2	4
	C02	1,2	1,2	1,2	4
Groundwork dimension	C03	3,4,5	1,2,3,4,5	3,4,5	3
	C04	3,4,5	1,2,3,4,5	3,4,5	3
The facilitator dimension	C05	3,4,5	1,2,3,4,5	3,4,5	3
	C06	5,6	1,2,3,4,5,6	5,6	2
Implications of fintech	C07	7	1,2,3,4,5,6,7	7	1

After determining the levels of all components, the structural interpretive model (ISM) of this research is drawn as Figure 1.

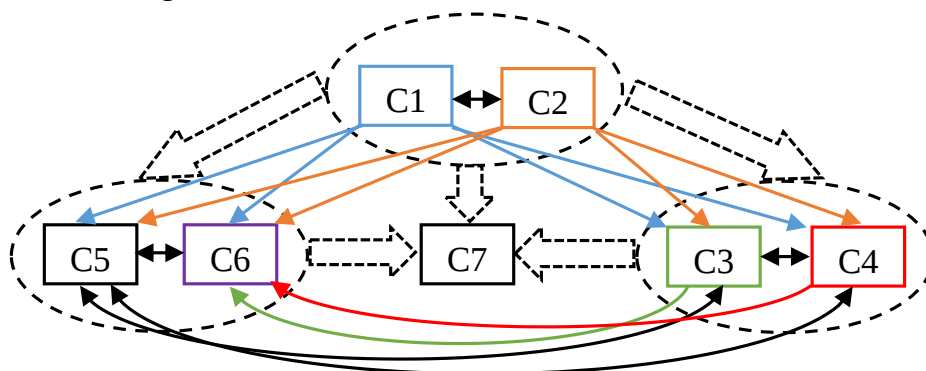
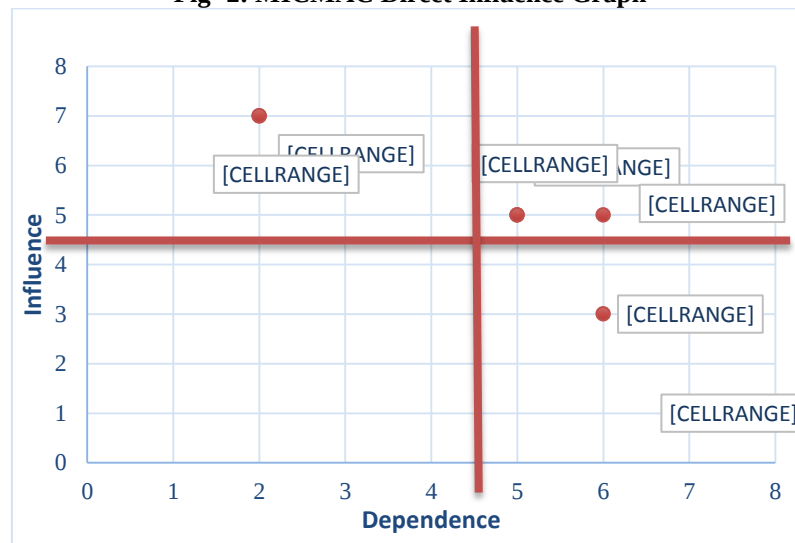


Figure1: Structural Interpretive Model of ISM Barriers to Tourism Development in Iran
MICMAC analysis

After determining the driving force and dependence of the research components, all components can be divided into four groups: autonomous, dependent, link (interface), and independent, and form the MICMAC matrix. The number of components is equal to 7 components. The boundary points of the matrix are usually one unit larger than The average number of components so the boundary point is 4.5. However, the boundary points must be

such that they can categorize the various components in their group. Figure 2 shows the MICMAC matrix of the model.

Fig -2: MICMAC Direct Influence Graph



6. Discussion and Conclusion

The purpose of this study was to formulate an interpretative structural model for the implementation of Finjan in the Banking industry. According to the opinion of the experts of this research, 7 main components were confirmed and selected. Then, to analyze the relationships between them and their structural modeling, the interpretive structural modeling (ISM) method was used. These components included factors related to legal requirements and high manual documents, cultural factors, technological factors, infrastructure, strategies, and consequences for the implementation of Fintech. Also, based on the interpretive structural model, the identified indicators were classified on the surface of the surface and show that lower levels have more effect on higher levels. Therefore, the interpretation of the findings is also based on their importance and levels from the level of four to the level of one. The first and perhaps the most important component identified in the implementation of Fintech is formed legal requirements and upstream documents, which for realizing the traditional ruling system towards the modern financial industry, this transformation requires some of the measures and policies in Iran in all of the phenetics subcategories? , Payments, Cryptographic currencies, Insurance, Financing Index Startups. The most important challenge that Fintech faces in Iran is regulatory and legislative. Governments and sovereignty organizations can use this opportunity. We have many parts of the law of silence and did not specify the assignment that this activity is legal or not, (for example, the Crypto Exchange and other examples), which creates a lot of losses for everyone around, is also confused by the law. The retarded reality does not know who can trust when the service provider is suspended in the situation and does not know its work is legal or illegal. This is not more beautiful than Creating corruption.

Governments should play their regulator quickly, even if it is imperfect, they can give the initial version of the law and update the next versions of the law. The same thing that the startups are doing to bring the product to the product will put themselves into water and fire, with an MVP with a bug. The legislator should not be a generation that includes a large part of mobile programmers.

Another point is the proportion of the government and the personnel of their institutions and their competition with the private sector, which is a catastrophe, and there is no supervisory in this regard and very naturally treated with this phenomenon. The observer's institutions

must take their duty seriously and they will not easily be left behind, which, of course, has rooted in other interpretations.

On the third level, is the index of structural, technological, and cultural factors. The importance of paying attention to these factors as the groundwork dimension in the research (also shown in the research)The structural pillars of the ecosystem or the financial industry system will be realized. In addition, in addition to the Fintech Startup, various actors, including traditional financial institutions, including banks and ..., financial services customers, governance and policies (government, central banks, and ministries such as the Ministry of Economic Affairs and Assets And the Ministry of Information and Communication Technology, Parliament and Judiciary), Research and Medical Centers, facilitator and mediator organizations, such as the Iranian Informatics Center, organizations of institutional organizations, such as the "Fintech Single Iranian" Association in the interactive network, address the effective duty of the functions and The obstacles or abnormalities of existing resolutions and the necessary infrastructure will be provided to lead to the creation and development of innovation, economic mobility, facilitating competition and cooperation and eventually creating benefits and benefits for consumers of financial industry services.

Another indicator of the second level was the index of strategies and strategies for the implementation of Fin single. We are not worn that today all measures to implement strategies and strategies that map our way to implement new financial technologies. Depends on the economic banking industry. Also, in the absence of these strategies, we are witnessing a waste of energy and capital and the lack of significant improvement in the banking industry. At the first level, which has the most effectiveness of other factors, the component of the consequences of the implementation of Finn Single in the country's banking industry, which should be said in the final summing up, given the importance of implementing Finn Single in the banking industry of modern business industry. And banks increase access to financial services, and accordingly, the expansion of the activities of these companies by creating the necessary infrastructure and government support can lead to the development of citizens' access to financial services and increase public satisfaction from financial and banking services. ; On the other hand, the government, with the support of Finns, can create quality and creative services in the field of financial industries that have not paid much attention due to its lack of economic actors. The presence of fines as new and innovative businesses in the financial industries can lead to monopoly in the field of financial services. Also, the use of modern business model in providing financial and economic services is one of the requirements of motion of digitization to intelligence, indicating the importance of their finish subject and its position in the economic transformation and future generation of the country's economy.

The results of the MICMAC analysis show that the binding dimension, including legal requirements and decisions, has the largest impact on Fintech, and accepts the lowest effect, They act like the model's infrastructure stone and they should be prioritized in the implementation of fintech. On the other hand, the components of the contextual dimension, including culture and infrastructure, are affected by the requirements dimension in addition to affecting other components. These components are non-static because any change in them can affect the model. According to the results of the study, the components of strategies adopted based on technological components, culture and structure, as well as the consequences resulting from the implementation of fintech industry in banking in the country, are effective and dependent, in other words, other components are involved for the occurrence of these components and they themselves can be less likely to pave the way for the occurrence of other components.

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