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Investigating the effect of user interface quality on the performance of fintechs in Ansar Bank

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Abstract

In this study, entitled The effect of user interface quality on the performance of fintechs in Ansar Bank, important components of user interfaces on the performance of fintechs in Ansar Bank such as: website design quality, email advertising, electronic loyalty, trust E-satisfaction, e-satisfaction, enjoyment of websites, perceived quality of information, on e-business performance have been examined.

The method of the present study is descriptive and correlational. The statistical population of the study was the users and customers of Ansar Bank in Tehran. According to Morgan table and the population of 100,000 customers, a sample of 400 people was selected by available stratified sampling. The measuring tool was a questionnaire. Cronbach's alpha calculated for this study is 0.881 and indicates the high reliability of the questionnaire. Finally, the hypotheses were tested using structural equation modeling and SPSS and AMOS software. The results showed that the relationships of all components affecting the quality of user interfaces on the performance of fintechs were confirmed. As a result, the quality of website design, email advertising, electronic loyalty, electronic trust, electronic satisfaction of website enjoyment, perceived quality of information on the performance of fintechs in Ansar Bank were confirmed.

Keywords: quality of user interfaces, fintech performance, Ansar Bank.

Introduction

Today, factors such as globalization, increasing competitors and the rapid expansion of science and technology (specifically information and communication technology) have changed the business environment (Ashuri Kiwani et al., 2018).

Organizations must adapt to rapid technological change if they are to survive in an unstable competitive market environment. (Tabatabai Nasab & Mahvarpour, 2018).

In the last decade, information technology has greatly affected the banking industry, and due to the undeniable role of advanced technologies in changing business patterns, the need to enjoy the benefits of e-commerce has increased. At

present, the mere provision of electronic banking services by a bank does not create a competitive advantage or attract new customers. Given the growing popularity of e-banking in the country, there is a need to provide a coherent and scientific framework for such services (Andriz et al., 2009).

The increasing development of information and communication technology (ICT) on the one hand and the competitive pressures as well as the changing expectations of customers on the other hand have made the use of information and communication technology more necessary for all industries, organizations and businesses. In recent years, the use of information and communication technology as the axis of many global developments has been an undeniable thing and this has accelerated things (Mohammadnia & Hassan Gholipour, 2011).

The present century is known as the information age; It has brought about phenomena that, while emerging and unknown, have caused a fundamental change in the trade and economic relations of countries, and e-commerce is one of the most important of these phenomena, which also has requirements. The most important of these requirements is electronic banking, which of course has been less addressed (Kurd and Javadi Beyhaqi & Jaberi Koushki, 2011).

Given the focus of companies on e-business, e-banking can create a significant competitive advantage for banks. Therefore, this study intends to investigate the impact of the quality of user interfaces in Ansar Bank on performance based on different approaches in designing business models, Finn singles pay.

2- Theoretical foundations of research

An e-business model describing the roles and relationships between consumers, customers, allies and suppliers. It is the organization that identifies the main production, information,

financial flows as well as the main interests of the partners (Masanel et al., 2012: 98). The ontology of e-business models, which identifies issues related to e-business, also shows What companies need to consider in the age of the Internet in order to create value And pass it on to customers (Mahadvan, 2008). Due to the variety of electronic business models, the components considered by experts in this field are as follows: The most important of these components are partner network, distribution channels, strategic goals, core competencies, value Presentable, key success factors, target customers, product and service innovation, revenue sources, electronic intermediaries, Scope of activity, infrastructure management and suppliers (Will et al., 2001) Examining the views of various experts, including Stroelder And Pignor (2010), Amit and Zot (2001), Chesbrough (2003), Afua and Tochi (2001) , Nelson and Bach (2008) and Sahoot (2010) suggest that different models Each with its own focus on the limited segments of the financial and e-business components of its proposed components Have provided. Obviously, one of the most important characteristics of customers in terms of service delivery, timely receipt of services and access time to it, which has been considered by many researchers. However, the impact of new technologies and fintechs on faster service delivery has not been properly investigated in research and studies, which in this study to examine the impact of user interface quality on the performance of fintechs and E-business is paid for in the banking system. In this way, it helps the managers, specialists and stakeholders of Ansar Bank and the country's banking industry to be influenced. The entry of fintechs into the market, by modeling the proposed model, change your business model Because the business ecosystem of new businesses in Iran is not very old and still They

have not reached the stage of maturity and the present study is one of the first academic researches on the role of fintech developers in the monetary and economic environment of the country.

3- Research objectives
The main purpose of the research
Investigating the effect of user interface quality on fintech performance in Ansar Bank.
Sub-objectives
1) Investigating the effect of website design quality variable on the performance of fintechs in Ansar Bank.
2) Investigating the effect of perceived information quality variables on the performance of fintechs in Ansar Bank.
3) Investigating the effect of website enjoyment variable on the performance of fintechs in Ansar Bank.
4) Investigating the effect of electronic satisfaction variable on the performance of fintechs in Ansar Bank.
5) Investigating the effect of electronic trust variable on the performance of fintechs in Ansar Bank.

6) Investigating the effect of electronic loyalty variable on the performance of fintechs in Ansar Bank.
7) Investigating the effect of email advertising variables on the performance of fintechs in Ansar Bank.

4- Research hypotheses
The main hypothesis
1)   The quality of user interfaces affects the performance of fintechs in Ansar Bank.

Sub-hypotheses
1) The quality of website design affects the performance of fintechs in Ansar Bank.
2) The perceived quality of information affects the performance of fintechs in Ansar Bank.
3) Enjoying the website affects the performance of fintechs in Ansar Bank.
4)   Electronic   satisfaction   affects   the performance of fintechs in Ansar Bank.
5) Electronic trust affects the performance of fintechs in Ansar Bank.
6) Electronic loyalty affects the performance of fintechs in Ansar Bank.
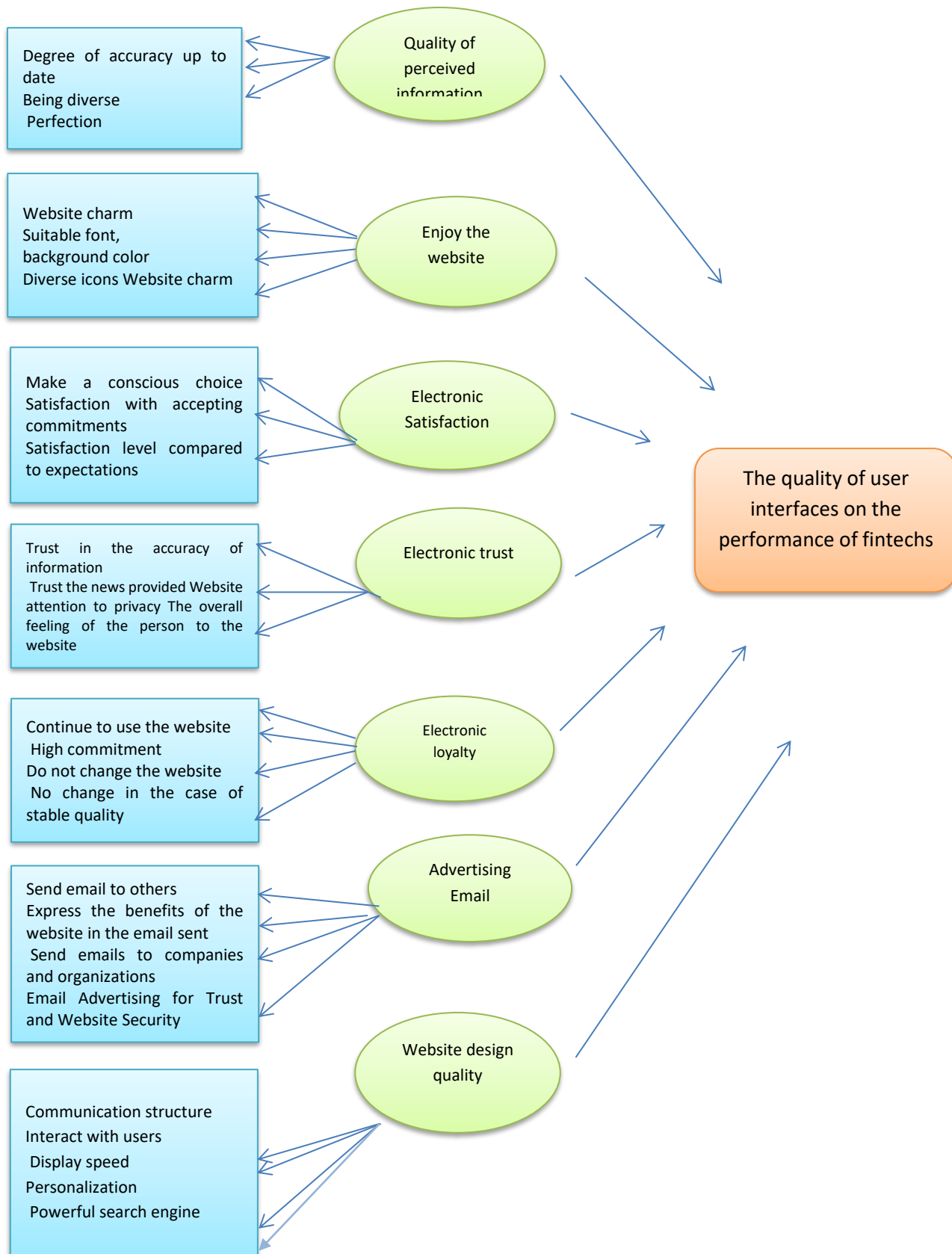7) Email advertisements affect the performance of fintechs in Ansar Bank.

5- Conceptual model of research

Degree of accuracy up to date
Being diverse
Perfection

Quality of perceived information

Website charm
Suitable font,
background color
Diverse icons Website charm

Enjoy the website

Make a conscious choice
Satisfaction with accepting commitments
Satisfaction level compared to expectations

Electronic Satisfaction

Trust in the accuracy of information
Trust the news provided Website attention to privacy The overall feeling of the person to the website

Electronic trust

The quality of user interfaces on the performance of fintechs

Continue to use the website
High commitment
Do not change the website
No change in the case of stable quality

Electronic loyalty

Send email to others
Express the benefits of the website in the email sent
Send emails to companies and organizations
Email Advertising for Trust and Website Security

Advertising Email

Communication structure
Interact with users
Display speed
Personalization
Powerful search engine

Website design quality

Figure (1): Conceptual Model of Model Integration Research, Lee and Shin, 2018, Kim et al., 2009, and Lennon, 2010, Hsaw Wang, 2008

6- Research background

A) A review of internal studies

- Nikbin et al. (2018) in an article entitled "Presenting an effective business model in the field of e-business with the treasury network method" examined the e-business model. This paper uses personal structure theory and network methodology The Treasury has introduced a new method for extracting entrepreneurs' cognitive understanding of the business model, which is useful for understanding and developing the business model.

- Amirreza Mehraban et al. (2017) in our research with the concept of business models and various frameworks in the field of online business models and examined the framework based on customer needs in full. This framework provides the possibility of providing an integrated model of the company's business activities in different areas, which is one of its strengths. What is certain is that choosing a specific business model alone will not lead to the success of the organization, and the important point is that the selected model fits the business context and environment, the company's capabilities are the specific needs of the customer. Karimi

- Alavijeh and Ahmadi (2014) also examined the effect of the quality of news website design on the loyalty and advertising of electronic recommendations. Findings showed that the quality of website design has a direct and significant effect on website enjoyment and perceived quality of information and has an indirect and significant effect on satisfaction, trust, loyalty and advertising of electronic recommendations.

B) A review of foreign studies

- Lee and Shin (2018) in an article entitled "Fintech: Ecosystem, Business Models, Decisions, Investments and Challenges" examines the paradigms New deal in e-business. This article introduces a new paradigm using destructive innovation, online banking, fintech business models, Has introduced information technology and innovation in the financial services industry.

- Guy et al. (2018) in an article entitled "Study and survey of fintechs" examined dynamic solutions in the field of fintechs. In this study, dynamic solutions for fintechs in the form of five technical dimensions that include security and Privacy, data techniques, hardware and infrastructure, applications and service model management Is provided.

- Leung et al. (2017) in an article entitled "Cultivating a FinTech Ecosystem: A Case Study of Startups for Youth Micro Loans in China" They paid small loans in the money market. In this paper, the development of a fintech ecosystem and its strategic capabilities for companies in the sector Financial market distributions are active and offer alternative solutions for out-of-market segments Has been.

- Hong and Leo (2016) examined the added value of fintechs in an article entitled "A Case Study of a Taiwanese Bank's Strategic Plan for Investing in Fintech." This article discusses the five dimensions of the Partes model, including actors, value-added, rules, tactics, and scope. And strategies for cooperation with Fintech, investment goals, added value, criteria for selecting companies, how to cooperate with Fintech is expressed as a partner or competitor and its legal and political barriers.

7- Research method

The present study is of applied type, because its purpose is to develop specific knowledge in the field of fintechs , Is the function and website by which a specific need is identified and addressed.

7-1- Research method

in terms of method Based on the collection of the desired data, the research is in the category of descriptive survey research of the correlation type.

7-2- Method of data collection

1- Library study: In this method, the researcher obtains the required information and related to the subject of his research from books and other resources available in libraries.

2- Field method: In this method, the researcher in order to obtain information from public opinion, opinions and views of the statistical community (customers of Ansar Bank branches in Tehran) on a specific topic and through a survey using his survey using Questionnaires or interviews are conducted on a significant number of members of the statistical community. (Sadei, 2004).

7-3- Research tools

A) Instruments and measurements of the subjects The scale used in this study is a distance scale. The distance scale has all the features of nominal and sequential scales, and in addition to them, in this scale, the distance of each attribute to its origin is also specified. (Khaki, 1388)

B) Data collection tools In this research, a questionnaire will be used to collect data.

7-4- Determining the reliability of the questionnaire

The reliability of a measure shows the stability and logical coordination of the responses in the measurement tool and helps to evaluate the accuracy and appropriateness of a measure. (Danaeifard et al., 2008). In this study, in order to determine the reliability of the test, "Cronbach's alpha" method and "SPSS20" software were used. Usually, the range of Cronbach's alpha reliability coefficient from zero means instability to positive one means complete reliability, and the closer the obtained value is to positive number one, the more reliable the questionnaire becomes.

Table (1): Summary of the reliability results of the questionnaire using Cronbach's alpha coefficient

number of items	Cronbach's alpha
27	0.881

Table (2): Calculation of Cronbach's alpha coefficient of research variables

result	Cronbach's alpha coefficient	Number of questions	Variables
confirmation	0.70	5	Website design quality
confirmation	0.70	4	Email Ads

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confirmation	0.77	3	Verification Electronic Loyalty
confirmation	0.72	4	Confirmation Electronic Trust
confirmation	0.75	3	Confirmation Electronic Satisfaction
confirmation	0.76	4	Confirmation Enjoy Website
confirmation	0.79	4	Verification Perceived Information Quality

Validity

Narration means being true. Validity means that the measuring device can measure the desired property with certainty. Validity is an important part of a research that helps the purpose of testing and realizing hypotheses. (Danaeifard et al., 2008).

Confirmation factor confirmation

In this study, a questionnaire was used to collect data. Therefore, using confirmatory factor analysis, the general structure of research questionnaires has been content validated. The measurement model represents the factor loads of the observed variables (factor) for each latent variable. The strength of the relationship between the factor (hidden variable) and the visible variable is indicated by the factor load. The factor load is a value between zero and one. If the factor load is less than 0.3, a weak relationship is considered. The operating load is between 0.3 to 0.6 on average and if it is greater than 0.6 is very desirable. In confirmatory factor analysis, it is also important to pay attention to the fit of the model. Common fit indices in measurement models for latent research variables are presented below each figure. Among the fit indices, if the ratio of chi-square to the degree of freedom is less than 2, the model has a good fit. RMSEA index less than 0.05 is desirable. The closer the other indicators are, the more desirable they are (Ghasemi, 2010).

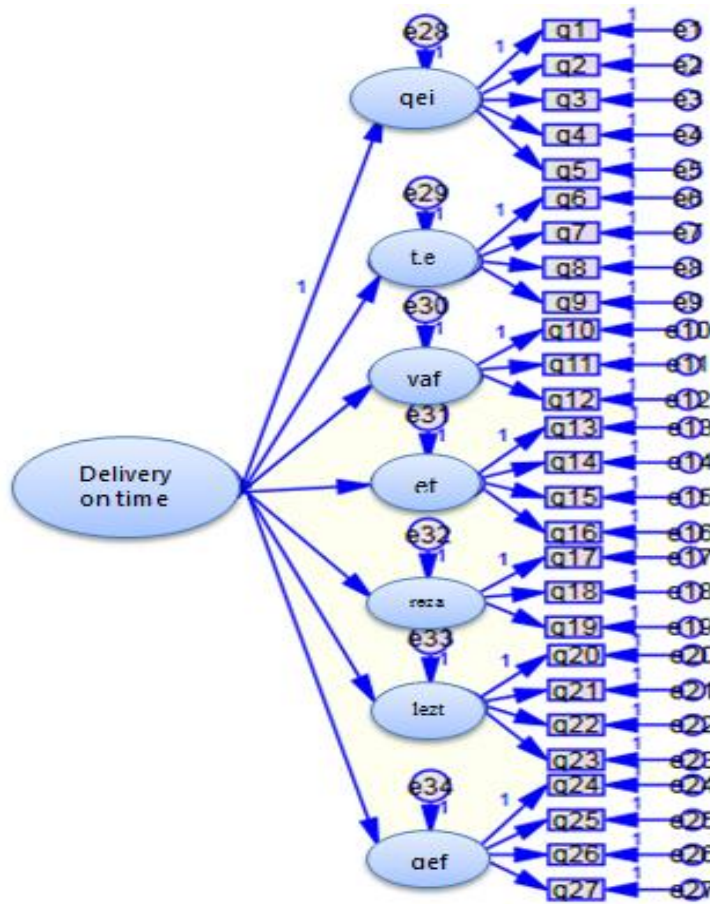**Total confirmatory factor analysis**

Figure (2): Assessing the normality of research data

Table (3): Assess the normality of the general model data

Variable	Minimum	Maximum	Tilt Critical	Ratio Stretch	Ratio	Critical Ratio
q27	1. 000	5. 000	-. 248	-2. 022	-. 280	-1. 143
q26	1. 000	5. 000	-. 361	-2. 949	-. 413	-1. 687
q25	1. 000	5. 000	-. 425	-3. 471	-. 436	-1. 780
q24	1. 000	5. 000	-. 431	-3. 521	-. 395	-1. 614
q23	1. 000	5. 000	-. 492	-4. 013	-. 080	-. 329
q22	1. 000	5. 000	-. 134	-1. 095	-. 711	-2. 904
q21	1. 000	5. 000	-. 576	-4. 702	-. 223	-. 912
q20	1. 000	5. 000	-. 385	-3. 147	-. 546	-2. 227
q19	1. 000	5. 000	-. 183	-1. 490	-. 799	-3. 260
q18	1. 000	5. 000	-. 486	-3. 971	-. 373	-1. 521
q17	1. 000	5. 000	-. 447	-3. 652	-. 066	-. 268
q16	1. 000	5. 000	-. 529	-4. 316	-. 199	-. 812
q15	1. 000	5. 000	-. 450	-3. 677	-. 103	-. 421

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q14	1. 000	5. 000	-. 489	-3. 995	-. 116	-. 472
q13	1. 000	5. 000	-. 692	-5. 652	-. 121	-. 492
q12	1. 000	5. 000	-. 447	-3. 650	-. 520	-2. 123
q11	1. 000	5. 000	-. 542	-4. 427	-. 205	-. 837
q10	1. 000	5. 000	-. 412	-3. 363	-. 340	-1. 387
q9	1. 000	5. 000	-. 570	-4. 652	-. 167	-. 680
q8	1. 000	5. 000	-. 317	-2. 591	-. 398	-1. 624
q7	1. 000	5. 000	-. 447	-3. 651	-. 462	-1. 888
q6	1. 000	5. 000	-. 487	-3. 976	-. 584	-2. 385
q5	1. 000	5. 000	-. 816	-6. 664	023 .	093 .
q4	1. 000	5. 000	-. 324	-2. 648	-. 570	-2. 326
q3	1. 000	5. 000	-. 715	-5. 834	126 .	515 .
q2	1. 000	5. 000	-. 615	-5. 019	049 .	200 .
q1	1. 000	5. 000	-. 817	-6. 670	567 .	2. 314
Multivariate					157. 790	39. 874

According to Table (3), the absolute magnitude of critical elongation ratios is often less than 2.58 and therefore the above variables are normal. "Mardia coefficient" in the last line and its critical value is more than 2.58. Therefore, the above variables do not have a normal multivariate distribution.

Specific and unspecified models

In order for the model to be clear, it is necessary to have two conditions called "rank condition" and "rank condition". Which is a ranking condition for the general model. Because the degree of freedom of the model must be zero or positive, which is below 317 according to the output.

Computation of degrees of freedom (Default model)

Number of distinct sample moments:	378
Number of distinct parameters to be estimated:	61
Degrees of freedom (378 - 61):	317

378 Number of non-redundant elements of the variance-covariance matrix of the observed variables.

61 is the number of free parameters defined in the model. The degree of freedom is the difference between these two values and therefore to modify the model, another 317 parameters can be defined in the model as free parameters.

Model 8 also has the order condition because it is possible to perform computational operations on the algebra of the matrices in order to estimate the parameters and reproduce the variance-covariance matrix of the observed variables.
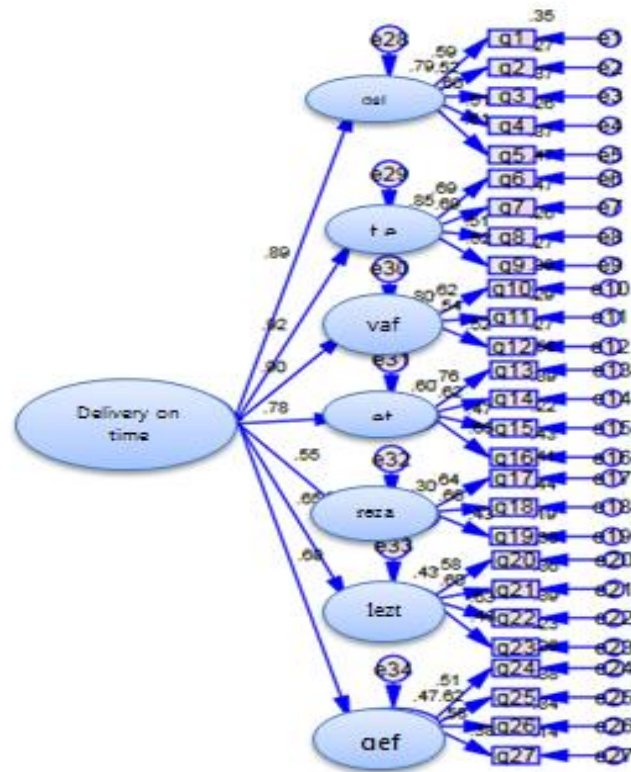
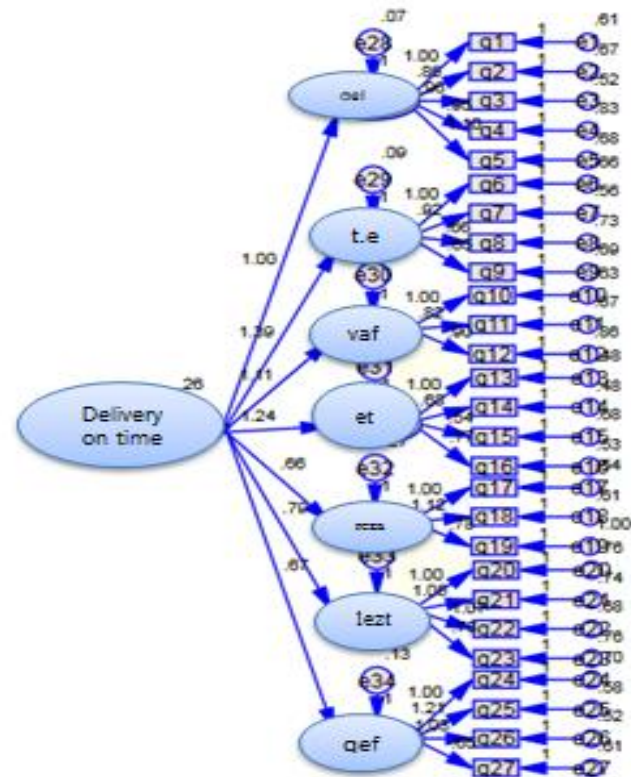**Figure (3): General model with non-standard coefficient**

Figure (4): General model with standard coefficients

8- Statistical methods

8-1- Statistical analysis Descriptive analysis:

In this method, the researcher describes the phenomena from a statistical point of view by comparing them. (Khaki, 2009)

In this study, we will first describe the age, gender, education and work experience of the statistical community through tables and graphs.

Inferential

analysis SPSS software was used to analyze the data and AMOS software was used for modeling and final analysis. Which is under exploratory research on the effect of website quality on the performance of fintechs and e-business in the branches of Ansar Bank in Tehran. The purpose of inferential analysis is to generalize the results of the researcher's observations in the selected samples to the main population. (Khaki, 1388). From inferential methods in the form of correlation coefficients, non-parametric, parametric tests and. . . Used.

8-1- Structural equation model

Structural equation modeling, or SEM for short, is one of the newest statistical methods and one of the most powerful methods of multivariate analysis, which some refer to as structural analysis of covariance, causal laser modeling or Amo.

9- The realm of research

Subject area of research : The scope of the presentation is in the field of strategic marketing studies and e-commerce. An attempt has been made to conduct research taking into account the internal conditions of the country.

Spatial scope of research : The spatial domain of the statistical population is the research of Ansar Bank in Tehran.

Research time domain :The time domain of this research is from the beginning of July 1399 to the end of August 1399.

10- Method of analyzing the findings Table

Table (4): Operational definitions of research

Research resources	Extracted index	Key factor	row
Wong and Strong, 1996	Degree of accuracy	Quality of perceived information	1
Young and Hyun Jo, 2011	up to date		2
Young and Hyun Jo, 2011	Being diverse		3
Chi et al., 2002	Perfection		4
Oroglu et al., 2003	Website charm	Enjoy the website	1
Oroglu et al., 2003	Suitable font		2

Hu And Lemon, 2010	Diverse icons		3
Young and Hyun Jo, 2011	Background color		4
Kerwin et al., 2000	Make a conscious choice	Electronic satisfaction	1
Lynn and Wong, 2006	Satisfaction with accepting commitments		2
Heseo,2008	Satisfaction level compared to expectations		3
Wong and Strong, 1996	Trust in the accuracy of information	Electronic trust	1
Giffen et al., 2003	Trust the news provided		2
Giffen et al., 2003 Heseo,2008	Website attention to privacy		3
Giffen et al., 2003	The overall feeling of the person to the website		4
Lynn and Wong, 2006	Continue to use the website	Electronic loyalty	1
Lynn and Wong, 2006	High commitment and no change of website		2
Lynn and Wong, 2006	No change in case of quality stability		3
Oroglu et al., 2003	Send email to others	Email ads	1
Oroglu et al., 2003	Express the benefits of the website in the email sent		2
Oroglu et al., 2003	Send promotional emails to companies and organizations		3
Oroglu et al., 2003	Email Advertising for Trust and Website Security		4
Azizi and Negahdari, 2012	Communication structure	Website design quality	1
Azizi and Negahdari, 2012	Interact with users		2
Azizi and Negahdari, 2012	Display speed		3
Hu And Lemon, 2010	Personalization		4
Azizi and Negahdari, 2012	Powerful search engine		5
-	27 index	7 Agent	

10-1-Partial fit indices (critical ratio and significance level)

Table (5): Regression estimates of the research model

Parameter	<---	Parameter	Estimate	S. E.	C. R.	P
Website design quality	<---	Electronic business	1. 000			
Email ads	<---	Electronic business	1. 546	.158	9. 774	***
Electronic loyalty	<---	Electronic business	1. 118	.141	7. 932	***
Electronic trust	<---	Electronic business	1. 453	.172	8. 454	***
Electronic satisfaction	<---	Electronic business	.517	.093	5. 562	***
Enjoy the website	<---	Electronic business	.490	.101	4. 864	***
Perceived quality of information	<---	Electronic business	.656	.101	6. 493	***
q1	<---	Website design quality	1. 000			
q2	<---	Website design quality	.791	.103	7. 671	***
q3	<---	Website design quality	1. 116	.124	8. 988	***
q4	<---	Website design quality	.890	.115	7. 737	***
q5	<---	Website design quality	1. 070	.127	8. 461	***
q6	<---	Email ads	1. 000			
q7	<---	Email ads	.846	.067	12. 650	***
q8	<---	Email ads	.474	.064	7. 363	***
q9	<---	Email ads	.571	.063	9. 126	***
q10	<---	Electronic loyalty	1. 000			
q11	<---	Electronic loyalty	.853	.101	8. 473	***
q12	<---	Electronic loyalty	.908	.100	9. 119	***
q13	<---	Electronic trust	1. 000			
q14	<---	Electronic trust	.596	.051	11. 668	***
q15	<---	Electronic trust	.462	.061	7. 630	***
q16	<---	Electronic trust	.680	.060	11. 306	***
q17	<---	Electronic satisfaction	1. 000			
q18	<---	Electronic satisfaction	1. 153	.139	8. 286	***
q19	<---	Electronic satisfaction	1. 125	.155	7. 266	***
q20	<---	Enjoy the website	1. 000			
q21	<---	Enjoy the website	.524	.100	5. 216	***
q22	<---	Enjoy the website	1. 152	.127	9. 057	***

q23	<---	Enjoy the website	.852	.107	7. 946	***
q24	<---	Perceived quality of information	1. 000			
q25	<---	Perceived quality of information	1. 184	.133	8. 909	***
q26	<---	Perceived quality of information	.969	.118	8. 207	***
q27	<---	Perceived quality of information	.641	.095	6. 780	***

According to Table 5, a significant level for all relationships was less than 0.05 and equal to zero, which indicates the confirmation of relationships, but because the data were not normally distributed, self-management should be done first.

Table (6): Standard coefficients of relations in the model

Parameter	<---	Parameter	Estimate
Website design quality	<---	Electronic business	.826
Email ads	<---	Electronic business	.923
Electronic loyalty	<---	Electronic business	.911
Electronic trust	<---	Electronic business	.846
Electronic satisfaction	<---	Electronic business	.445
Enjoy the website	<---	Electronic business	.379
Perceived quality of information	<---	Electronic business	.629
q1	<---	Website design quality	.608
q2	<---	Website design quality	.486
q3	<---	Website design quality	.725
q4	<---	Website design quality	.492
q5	<---	Website design quality	.609
q6	<---	Email ads	.727
q7	<---	Email ads	.670
q8	<---	Email ads	.390
q9	<---	Email ads	.480
q10	<---	Electronic loyalty	.592
q11	<---	Electronic loyalty	.527
q12	<---	Electronic loyalty	.494

q13	<---	Electronic trust	.790
q14	<---	Electronic trust	.569
q15	<---	Electronic trust	.415
q16	<---	Electronic trust	.596
q17	<---	Electronic satisfaction	.601
q18	<---	Electronic satisfaction	.627
q19	<---	Electronic satisfaction	.573
q20	<---	Enjoy the website	.594
q21	<---	Enjoy the website	.306
q22	<---	Enjoy the website	.691
q23	<---	Enjoy the website	.536
q24	<---	Perceived quality of information	.515
q25	<---	Perceived quality of information	.623
q26	<---	Perceived quality of information	.552
q27	<---	Perceived quality of information	.382

10-2- Comparison of four methods of estimating self-government

Table (7): Selection of the best estimation method

		Method of calculating the degree of closeness of reconstructed covariance structures with the statistical population			
		GLS	ML	ADF	ULS
Method of estimating parameters	GLS	477. 031	984. 608	19130. 096	1021. 970
	ML	536. 475	486. 608	26625. 282	555. 103
	ADF	-	-	-	-
	ULS	680. 112	745. 895	32636. 438	520. 464

Therefore, using four different methods, generalized squares (GLS), maximum likelihood (ML), asymptotic free scale (ADF) and weighted squares (ULS) near structures Reconstructed covariance was calculated with the covariance structures of the statistical population. The averages obtained in each step are reported in Table 7. Finally, we select each cell column that has the lowest mean and select the row estimation method that has the highest number of marked cells. Due to the fact that there are two marked items in the GLS line, the GLS method was used as the best method for self-management because it has a lower average.

10-3- Results of self-management by GLS method

Table (8): Autonomy regression estimates

Parameter			SE	SE-SE	Mean	Bias	SE-Bias
Website design quality	<---	Electronic business	.000	.000	1. 000	.000	.000
Email ads	<---	Electronic business	.183	.009	1. 526	.016	.013
Electronic loyalty	<---	Electronic business	.170	.009	1. 148	-. 005	.012
Electronic trust	<---	Electronic business	.214	.011	1. 390	-. 014	.015
Electronic satisfaction	<---	Electronic business	.160	.008	.543	.010	.011
Enjoy the website	<---	Electronic business	.135	.007	.522	.012	.010
Perceived quality of information	<---	Electronic business	.140	.007	.670	.001	.010
q1	<---	Website design quality	.000	.000	1. 000	.000	.000
q2	<---	Website design quality	.134	.007	.832	.016	.010
q3	<---	Website design quality	.144	.007	1. 108	.012	.010
q4	<---	Website design quality	.142	.007	.983	.021	.010
q5	<---	Website design quality	.131	.007	1. 016	-. 011	.009
q6	<---	Email ads	.000	.000	1. 000	.000	.000
q7	<---	Email ads	.078	.004	.815	.002	.006
q8	<---	Email ads	.085	.004	.524	.009	.006
q9	<---	Email ads	.082	.004	.544	-. 005	.006
q10	<---	Electronic loyalty	.000	.000	1. 000	.000	.000
q11	<---	Electronic loyalty	.123	.006	.786	-. 001	.009

q12	<---	Electronic loyalty	.133	.007	.858	.003	.009
q13	<---	Electronic trust	.000	.000	1. 000	.000	.000
q14	<---	Electronic trust	.073	.004	.590	.003	.005
q15	<---	Electronic trust	.086	.004	.508	.011	.006
q16	<---	Electronic trust	.091	.005	.693	.003	.006
q17	<---	Electronic satisfaction	.000	.000	1. 000	.000	.000
q18	<---	Electronic satisfaction	.247	.012	1. 180	.029	.017
q19	<---	Electronic satisfaction	.287	.014	1. 103	.046	.020
q20	<---	Enjoy the website	.000	.000	1. 000	.000	.000
q21	<---	Enjoy the website	.191	.010	.656	.023	.013
q22	<---	Enjoy the website	.205	.010	1. 280	.036	.014
q23	<---	Enjoy the website	.201	.010	.975	.030	.014
q24	<---	Perceived quality of information	.000	.000	1. 000	.000	.000
q25	<---	Perceived quality of information	.180	.009	1. 187	.007	.013
q26	<---	Perceived quality of information	.167	.008	.946	.005	.012
q27	<---	Perceived quality of information	.166	.008	.658	.019	.012

As you can see, for all routes in the self-governing method, the average is between the upper and lower limits, and therefore all relationships are confirmed. The following table categorizes the components of website quality over e-business.

Table (9): Rank of research factors

Test result	Significance factor	Significance level	Exploratory components	The dependent variable

confirmation	.826	0.000	Website design quality	Electronic business
confirmation	.923	0.000	Email ads	
confirmation	.911	0.000	Electronic loyalty	
confirmation	.846	0.000	Electronic trust	
confirmation	.445	0.000	Electronic satisfaction	
confirmation	.379	0.000	Enjoy the website	
confirmation	.629	0.000	Perceived quality of information	

According to Table (9), the relationships in the model based on the relationship between website design quality, email advertising, e-loyalty, e-trust, e-satisfaction, website enjoyment and perceived quality of information with e-business were confirmed (significant levels All less than 0.05). But in the meantime, email advertisements had the highest rank among other variables (importance coefficient 0.923). After email advertisements, respectively, electronic loyalty with a coefficient of 0.911, electronic trust with a coefficient of 0.846, respectively. Website design quality with a coefficient of 0.826, perceived quality of information with a coefficient of 0.629, electronic satisfaction with a coefficient of 0.445 and enjoyment of the website with a coefficient of 0.379 were the next ranks in e-business.

Table (10): Statistics related to the main hypothesis

Average standard error	Standard deviation	Average	Sample size	
0.02	0.50	3.59	400	The main hypothesis
0.03	0.67	3.71	400	The first sub-hypothesis
0.04	0.74	3.59	400	The second sub-hypothesis
0.04	0.75	3.54	400	Third sub-hypothesis
0.03	0.71	3.74	400	The fourth sub-hypothesis
0.04	0.78	3.39	400	Fifth sub-hypothesis
0.04	0.74	3.44	400	Sixth sub-hypothesis
0.03	0.62	3.59	400	The seventh sub-hypothesis

Table (11): T test for the main hypothesis

Mean confidence interval with confidence 95		Mean difference	Significance level	Degrees of freedom	Value of test statistics	
Low limit	upper line					Test value = 3
0.54	0.64	0.59	0.000	399	23.84	The main hypothesis
0.65	0.78	0.71	0.000	399	21.41	The first sub-hypothesis
0.52	0.66	0.59	0.000	399	15.96	The second sub-hypothesis
0.46	0.61	0.54	0.000	399	14.25	Third sub-hypothesis
0.67	0.81	0.74	0.000	399	20.83	The fourth sub-hypothesis
0.31	0.47	0.39	0.000	399	10.04	Fifth sub-hypothesis
0.37	0.52	0.44	0.000	399	12.01	Sixth sub-hypothesis
0.54	0.64	0.59	0.000	399	23.84	The seventh sub-hypothesis

10-4- Ranking related to managerial components and suggestions According to the results of the research and considering the rankings in each of the hypotheses, the following priorities are suggested for the development and improvement of each of the variables in each hypothesis:

Table (12): Ranking related to the quality component of website design

Rank	Weight	index
1	0. 648	Communication structure
2	0. 601	Interact with users
3	0. 598	Display speed
4	0. 565	Powerful search engine
5	0. 51	Personalization

According to the above ranking, it is suggested to pay attention to the communication structure in the initial stages and to interact with customers, and to achieve the quality of website design, the other variables included in the table should be observed in order.

11- Conclusions and research suggestions

Considering the exploratory aspect of the research and the novelty of its subject in the Iranian banking industry, it cannot be considered completely in line with previous researches, but from the methodological aspects,

it can be considered in line with the researches of Allah Nikbin et al. (1397). Mehraban et al. (2015), Karimi et al. (2014), stated that the model obtained through meta-combination has been approved by relevant experts and can be a basis for future research. Given that the start-up ecosystem of start-ups in Iran is not very old and has not yet reached maturity, the actors and the relationship between them have not yet been properly drawn, the necessary institutions for a successful entrepreneurial ecosystem are low quality and few, capital companies Risky investments are very few, startup accelerators are few, entrepreneurial groups and startups do not have the necessary experience in this field, the laws in this field are still flawed and in Fintech we are still in the early stages of growth, so hope Other banks active in the country's banking industry should follow this example by following the proposed model. The most important issue seems to be the banks' distrust of third-party companies and partnerships with them. Banks often prefer in all areas, including

Provide e-banking services to invest in the company under your ownership. Banks, on the other hand, should look at these start-ups as partners rather than competitors. These collaborations can be at different levels such as providing skilled labor, upgrading equipment and hardware and software infrastructure, or providing various banking and non-banking services.

The first managerial proposal
1) Remove any unnecessary and additional steps from the review process.
2) Try to add a few optional steps to it.
3) Allow users to easily order and purchase products. This includes quality, size and so on.
4) Include the phrase return to the main menu on the site
5) Remove irrelevant components such as product article links, recent offers, etc.

Table (13): Rankings related to the email advertising component

Rank	Weight	index
1	0. 715	Express the benefits of the website in the email sent
2	0. 701	Send email to others
3	0. 595	Send promotional emails to companies and organizations
4	0. 473	Email Advertising for Trust and Website Security

According to the weights obtained from the table of variables with standard coefficients to improve email advertising, sending email to others and expressing the benefits of the website in the email sent in the early stages and then sending promotional email to companies and organizations and email advertising for trust and website security It will work in the next steps.

The second managerial proposal
Strategic planning to increase the brand value of Ansar Bank in the long run by using timely and reliable services; According to the studies conducted in this bank and banks with other names and brands, therefore, with strategic planning and the use of desirable and capable e-business in the long run, the confrontation between delivery to Eliminate time and quality

and increase advertising; Increase customer satisfaction and increase their market share. And this is possible with ads such as sending emails and email marketing. E-mail marketing basically occurs when a business sends a business message via email to a group of people to promote their product or service. Email

Marketing sends an email to expand the relationship. Pays attention to email marketing with a potential customer or current customer, these emails usually have promotional, promotional, promotional, etc. content and are sent to help build loyalty, trust or brand awareness**.**

Table (14): Rankings related to the electronic loyalty component

Rank	Weight	index
1	0. 65	No change in case of quality stability
2	0. 59	High commitment and no change of website
3	0. 45	Continue to use the website

The table above shows the priority of variables with standard coefficients in relation to the customer relationship that no change in the quality of stability is the highest rank and the continued use of the website is in the lowest rank.

Third management proposal

Take advantage of relationship management with specific customers. By increasing the expectations and changing the behavioral styles of consumers and different tastes, it is possible to establish a closer relationship with different groups of customers and apply their personal tastes to increase loyalty.

Table (15): Rankings related to the electronic trust component

Rank	Weight	index
1	0. 715	Trust in the accuracy of information
2	0. 67	Trust the news provided
3	0. 66	The overall feeling of the person to the website
4	0. 479	Website attention to privacy

According to the weights obtained from the table of variables with standard coefficients to improve electronic trust in fintech, trust in the accuracy of information and trust in the news provided in the early stages and then the general feeling of the website and website attention to privacy in later stages It will be effective.

Fourth managerial proposal
Updating IT in order to better respond to customers Gaining their sense of trust Due to the increasing development of technology and communication knowledge, at the same time the expectations of customers are increasing and their needs are changing. As they demand higher

levels of service in a shorter time, so with the synchronization of e-business in Fintech, equipped with modern technologies, it will be possible to respond to these demands properly. And the sense of trust of customers to receive services from these websites increases.

Table (16): Rankings related to the electronic satisfaction component

Rank	Weight	index
1	0. 74	Satisfaction plan compared to expectations
2	0. 54	Satisfaction with accepting commitments
3	0. 49	Make a conscious choice

According to the table above, the three variables of satisfaction plan compared to expectations, satisfaction of accepting commitments and conscious choice have been assigned to electronic satisfaction from high priority to low, respectively.

Fifth management proposal
(Matching the demand of customers and users with the services and products provided in proportion to, market elasticity and receiving the order). With the studies conducted on the above component and interviews with experts active in the field of e-business, the lack of coordination between supply and demand and the elasticity of the external environment weakens electronic satisfaction and creates a kind of confusion. Eventually, the delivery time to the customer increases and causes their dissatisfaction, which can be overcome by planning.

Table (17): Rankings related to the website enjoyment component

Rank	Weight	index
1	0. 784	Diverse icons
2	0. 654	Website charm
3	0. 554	Background color
4	0. 433	Suitable font

According to the above ranking, it is recommended to identify various icons in the early stages and pay good attention to them, and to increase the attractiveness of the website, and to achieve the desired website, other variables such as background color Convenient, and appropriate and legible fonts included.

Sixth management proposal

(Comprehensive review of the strengths and weaknesses of the website in order to arrange the desired strategies in order to satisfy customers and users), it is recommended that the Fintech website with its similar activities, strengths and weaknesses Develop reviews and strategies to improve strengths and mitigate weaknesses in order to obtain optimal results in the form of e-business performance and user enjoyment in the shadow of strategic plans.

Table (18): Rankings related to the perceived quality component of information

Rank	Weight	index
1	0. 643	up to date
2	0. 579	Being diverse
3	0. 518	Degree of accuracy
4	0. 328	Perfection

According to the weights obtained from the table of variables with standard coefficients for the perceived quality of information, the up-to-dateness and diversity of the website in the initial stages and then the degree of accuracy and completeness in the later stages should be considered.

Seventh management proposal

(Predicting the trend of accepting Fintech websites for planning to prevent customer surprise and dissatisfaction) By examining the performance of e-business in many years in different economic and political conditions of the country, we find that by changing Rapid and sudden trends in technology and variety of digital devices for online shopping, customers are faced with shock, cross-sectional and sometimes permanent dissatisfaction is seen in them, so it is recommended to predict the environmental conditions. And government decisions to prevent such conditions from arising. Regarding infrastructure management, respectively, cyber security, accessibility, infrastructure, financial technology management, support Different platforms, data integrity, key processes, and integrity in the user interface are important Is. Therefore, it is proposed that the government enact transparent laws and regulations to ensure the safety of trucks in the environment Cyber and prevent hacking of Internet payment gateways to support this issue. In this regard, the EU standard also reviews the activities of fintechs that threatened the security of users. Put. In the

field of consequences and in terms of improving the business environment, respectively, technological progress, increasing investment security, Improving the performance of the financial system, creating transparency in the financial field and developing the financial system with priority and importance It can be said that aspects related to technology change include innovations that reduce related costs By collecting, storing, processing and transmitting information or transforming tools, so that customers Easily access banking products and services, thus improving equipment and upgrading financial technologies Electronic, improves the user programming interface and creates more user-friendly systems that can be used for Everyone is simple and comfortable.

12- Suggestions for future research

In this study, we explored the factors that affect the quality of websites on business and fintechs. Since the discovered components are native influential components, it is suggested to measure the impact of these variables on market share or other dependent variables, which are discussed in the following sections:

- The impact of e-business on increasing market share
- The impact of e-business on brand trust
- The relationship between e-business and the mental image of e-commerce companies.

Resources

1) Agarwal, R., Sambamurthy, V., & Stair, R.M. (2018). The evolving relationship\p

between general and specific computer self-efficacy – an empirical assessment. [Electronic version]. Information Systems Research, 11(4)1-16.

2) Amit R., Zott C.,2001''Value creation in e-business'',Strategic Management Journal, 22pp.493-520.

3) Anderson B.B.,Hansen J.V.,Lowry P.B.,Summers S.L.,2005,''Model checking for design and assurance of e-Business processes''Decision Support Systems 39pp.333-344 .

4) Andreas C. S., Stavros A. Z. (2009) "Delivering e-banking services: an emerging internet business model and a case study", Working Paper, Hermes Center of Excellence on Computational Finance & Economics, Vol. 17, No. 2.

5) Anshari, M., Almunawar, M. N. & Masri, M. (2019). An Overview of Financial Technology in Indonesia, Financial Technology and Disruptive Innovation in ASEAN, Hershey, PA: IGI Global, PP 216-224.

6) Ashuri Kiwani M, Fakour Sagheyam, Malekzadeh Ghar (2019), The effect of beliefs based on Efficiency and theory of innovation dissemination based on beliefs based on the acceptance of Internet banking. Technology Development Management Quarterly, 1 (6), 159-133.

7)Azar, Adel 2012. Statistics and its application in management, Volumes 1 and 2, 20th edition, Tehran: Samat.

8) Bhandari V. (2019). FinTech: A Study of Enablers, Opportunities, and Challenges in the Banking and Financial Services Sector, Financial Technology and Disruptive Innovation in ASEAN, Hershey, PA: IGI Global, PP 108-118. DOI:10.4018/978-1- 5225-9183-2.ch005

9) Businessmen, A. (2015). Investigating the Impact of Electronic Business on Export Leap: Identifying the Priorities of the Industrial Sector in the Country, Information Technology Research and Business Statistics Deputy, Information Technology Research Management Section, Commercial Publishing Company.

10) Chan, S.C., & Lu, M. (2014). Understanding Internet banking adoption and use behavior: A Hong Kong perspective. [Electronic version]. Journal of Global Information, 12(3), 21-44.

11) Chen S., 2015, Strategic management of e-business , 2nd Ed. John Wiley & Sons, Ltd.

12) Chesbrough H. (2010) Business model innovation: Opportunities and barriers, Long Range Planning, New York: McGraw-Hill.

13) Danaeifard, Hassan, Alvani, Seyed Mehdi and Azar, Adel (2010). Quantitative research methodology in management: a comprehensive approach, first edition, Tehran: Saffar-Ishraqi Publications.

14) Donnelley, T, Jr. (2014). Extending the technology acceptance model: Additional factors affecting the adoption of e-commerce by senior American residents. [Electronic version]. (Doctoral dissertation, Nova Southeastern University, 2004). AAT3154152.

15) European Commission Enterprise Directorate General, 2005,''The European e-business report'' www.europa.eu.int/comm/enterprise/ict/policy/watch/index.htm, 15 january .

16) Gai K, Qiu M, & Xiaotong S. (2018). A survey on FinTech. Journal of Network and Computer Applications, 103: PP 262-273.

17) Hafeznia, Mohammad Reza 2009. Introduction to the research method in the humanities, first edition, Tehran: Samat.

18) Hauge E., Eikebrokk T.R., Olsen D.H., Moe C.E., Braadland F., 2002. ''SMEs competence for e-business success: exploring the gap between the needs for e-business competence and training offered'' , Edgar Research Serviceboks 415, N-4604 Kristiansand .

19) Hooman, Haidar Ali (2005). Statistical Inference in Behavioral Research, First Edition, Tehran: Samat

20) Hung J.L, & Luo B. (2016). FinTech in Taiwan: a case study of a Bank's strategic planning for an investment in a FinTech company. Journal of Financial Innovation, 2(15): PP 1-16.

21) Kha L., 2000, ''Critical success factors for business-to-consumer e-business : lessons from Amazon and Dell'' , Master of Science in Management of Technology Thesis , June , Massachusetts Institute of Technology.

22) Khaki, Gholamreza (2009). Research Method with an Approach to Dissertation Writing, First Edition, Tehran: Scientific Research Center of the country in collaboration with the Tact Publishing Cultural Center.

23) Lal K., 2005, ''Determinants of the adoption of e-business technologies'', Telematics and Informatics 22, 181-199 .

24) Lee I, & Shin Yong J. (2018). Fintech: Ecosystem, business models, investment decisions, and challenges. Business Horizons, 61: PP 35-46.

25) Leong C, Tan B, Xiao X, Tan FTC, & Sun Y. (2017). Nurturing a FinTech ecosystem: The case of a youth microloan start up in China. Journal of Information Management, 37: PP 92–97.

26) Liao S., 2003, ''Knowledge management technologies and applications – literature review from 1995 to 2002'' , Expert Systems with Applications 25 pp. 155-164 .

27) Lin C.T., Chiu H., Tseng Y.H., 2005 ''Agility evaluation using fuzzy logic'' , Int. J. Production Economics , In Press, Correct Proof , Available online, 19 March.

28)Mahadevan B. (2008) "Business models for internet-based e-commerce: An anatomy", California Management Review, Vol. 42, No.18.

29) Mallahotra Y., 2000, ''Knowledge management for e-business performance : Advancing information strategy to internet time'' , Information Strategy , The executive's journal , vol. 16(4), summer, pp.5-16.

30) Masanell R., Ricart J. E. (2012) "From strategy to business models and onto tactics", Long Rang Planning. Vol. 43, No. 8.

31) Mehraban, A. Jalali, A. Good news, n. (2018). Architecture of e-business models in e-commerce. Fourth National Conference on Electronic Commerce. Tehran. 3 and 4 Azar.

32) Millar T., Matthew L.N., Shen S.Y., Shaw M.J., ''E-Business management models ''.

33) Moodley S., 2003, ''The challenge of e-business for the South African apparel sector'' , Technovation 23, pp. 557-570.

34) Nikbin, H., Badiezadeh, A., Davari, A., Hosseini Nia, G. H. (2018). Provide an effective business model in the field of e-business with the treasury network method. Technology Development Management Quarterly, (1), 6, 159-137.

35) Noori, R. (2006). Assessing the maturity of e-commerce of exporting industrial companies. Quarterly Journal of Business Research. No. 42. pp. 165-147.

36) Pikkarainen, T., Pikkarainen, K., Karjaluoto, & Pahnila, S. (2014). Consumer acceptance of online banking: an extension of the technology acceptance model. [Electronic Version]. Internet Research, 14(3), 224-235.

37) Plouffe, C.R., Holland, J.S., & Vandenbosch, M. (2013). Richness versus parsimony in modeling technology adoption decisions – Understanding merchant adoption of a smart card-based payment system. [Electronic version]. Information Systems Research, 12(2), 208-228.

38) PwC. (2016). Blurred lines: How FinTech is shaping financial services. PwC Global FinTech Report. Available at:

https://www.pwc.de/de/newsletter/finanzdienstl eistung/assets/insurance-inside ausgabe-4-maerz-2016.pdf [Accessed May 2018].

39) Quaddus M., Xu J., 2005, ''Adoption and diffusion of knowledge management systems : field studies of factors and variables'' , Knowledge-Based Systems 18 pp. 107-115.

40) Rezvani M., Correction M. (2016), presenting the electronic business model of the country's banking industry using mixed research science. Journal of Organizational Resource Management Research, 6 (4), 41-19.

41) Riskinanto A, Kelana B, & Hilmawan D.R. (2017). The Moderation Effect of Age on Adopting E-Payment Technology. Procedia Computer Science, 124: PP 536-543.

42) Ross J., Vitale M., Weill P., 2001, ''From place to space : Migrating to profitable electronic commerce business models'' , MIT Sloan school of management, working paper, November , no. 4358-01.

43) Royal, C. (2014). Framing the Internet in gendered spaces: An analysis of iVillage and AskMen. [Electronic version]. Media Report to Women, 32(3), 6-15.

44) Salehi M., Alipour M. (2010) E-banking in emerging economy: Empirical evidence of Iran, International Journal of Economics and Finance, Vol. 2, No.1.

45) Sambamurthy V., Bharadwaj A., Grover V., 2003, ''Shaping agility through digital options: Reconceptualizing the role of information technology in contemporary firms'' , Quarterly Vol. 27 No. 2 , pp. 237-263/June

46) Sarmad, Zohreh, Bazargan, Abbas and Hejazi, 2004. Research Methods in Behavioral Sciences, Eighth Edition, Tehran: Ad Publishing Institute.

47) Selwyn, N., Gorard, S., Furlong, J, & Madden, A. (2013). Older adults' use of information and communications technology in everyday life. [Electronic version]. Ageing and Society, 23(5), 561-583.

48) Seshasai S., Gupta A., Kumar A., 2005, ''An integrated and collaborative framework for business design : A Knowledge engineering approach'' , Data & Knowledge Engineering 52 pp. 157-179.

49) Shaw M.j., ''E-business Management: A Primer'' . Shevchenko A.A., Shevchenko O.O., 2005, ''B2B e-hubs in emerging landscape of knowledge based economy'', Electronic Commerce Research and Applications 4, 113-123 .

50) Tabatabai Nasab Sam, Mahavarpour F (2019),. Factors affecting the promotion of technology reputation and its role on the company's business performance. Technology Development Management Quarterly, 4 (5), 132-103

51) Taft J. (2007) "An examination of the antecedents of electronic banking technology acceptance and use", A Dissertation Presented to the Faculty of the College of Business Administration of Touro University, Requirements for the Degree of Doctor of Philosophy.

52) Tavakol, Najmeh; Sardari, Ahmad; Ghazizadeh, Mustafa (2014). "Study of the effect of e-banking acceptance factors on word of mouth advertising with emphasis on the mediating role of customer satisfaction and loyalty" (Case study: Branches of Shiraz New Economy Bank), Business Strategies, 21 (3), 49-60

53) Weill P., Vitale R. M., (2001) Place to space, migrating to e-business models, Harvard Business School Press, ISBN 1-57851-245-X.

54) Zott C, Amit R, & Massa L. (2011). The Business Model: recent developments and future research. Journal of Management, 37 (4): PP 1019–1042.