

# The Feasibility of Electronic Marketing in Aquaculture Export Industry in Iran

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## ABSTRACT

The purpose of this study was to evaluate the feasibility of electronic marketing, aquaculture export industry in Iran. The method of this study was to examine the variables descriptive - survey In terms of the target applications, the run-time, cross-sectional, in the process of implementation, and quality of deductive logic is implemented. The population consists of all employees, managers and experts of all active companies and stores, in the fish supply. Sampling in this study is simple, of 360 executives, experts and employees of these companies, for example, to collect data, were estimated. To analyze data and test hypotheses, confirmatory factor analysis, structural equation using the software AMOS 20 was used. Finally, the attitude to have been approved. And the relationship between security and ease of use on attitude, security and ease of use on the perceived usefulness, ease of use, security and confidence, attitude and intention of use, intention to use the actual use of technology were confirmation.

**KEY WORDS:** feasibility, electronics marketing , aquaculture, exports industry.

## INTRODUCTION

E-marketing, as one of the most important aspects of innovation in business processes, many organizations and companies in the world has been used. Small and medium organizations, as a major economic sector of the country a vital role in the economic indicators have improved, and therefore the adoption of innovative methods and tools, and modern business processes and activities, such as email marketing plays an important role in the success of these organizations will (Bani, 2005). Email marketing represents a specific function that is associated with selling products and services, but the process of managing the relationship established between the organization and the client runs. Furthermore, electronic marketing process, not only insisted on the use of the Internet world, but unlike traditional marketing, the marketing methods used, and the opportunities available to us, such as marketing technique alone, or direct contact with Customer (Gholamrezayee, 2008, p. 4). The importance of planning for marketing, in recent years growth has been increasing. Marketing must specify the identity of each customer, and the characteristics of each of them separately, examined. The degree of correlation has been established between the organization and customers closer and More intimate is, the better they can be linked to your organization build. Establish the intimate relationship requires detailed information of our customers (Hoseini, 2011). Internet- Internet marketing, electronic marketing, - new facilities to achieve this goal, provided is. Email marketing is a process that includes more than traditional marketing is based on Internet technology. In this way, two-way communication between the organization and customers, makes (Hoseini, 2011). Considering the growing electronic market, and its position in international trade in developing countries, these practices improve business marketing industries as well, can play an important role. One of the non-oil export income areas of the country, is the field of aquaculture. Despite the good fishing grounds, and offers a variety of fish out of the country, but the most traditional views of company managers engaged in the export of fish, especially in marketing and lack of understanding of, and marketing advantages in the development of electronic markets, and enhancing the position of competitors, on the one hand, the lack of good sense, to evaluate the acceptance of email marketing, the management and staff of the company, in the industry is Vacuum the other hand, can be seen in this area.

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### **E-marketing**

Internet marketing, the process of creating and maintaining mutually beneficial relationships with customers through online activities, in order to facilitate the exchange of ideas, goods and services in a way that the objectives of both parties, fulfill (Bani, 2005). Strauss and Raymond electronic marketing, traditional marketing to know that, just from information technology to achieve their goals, and it will be marketing efficiency. In another perspective, which is formed when the electronic marketing, technical infrastructure (databases, suitable terminals, servers, software, etc.) to be provided, and connect with customers using these technologies Established. This communication is mainly in the form of web site design, attention problems and limitations placed. According to the final, to the development of some technologies, such as our developing countries is, in this study the definition of electronic marketing, to Use of the Internet in marketing activities is limited, and is assumed to internet marketing (Fathi, 2004)

- Khajooyi in 2004, to study the feasibility of e-commerce in four successive general need to be ready to mail, in the country stated that the development of e-commerce, culture and people, legal, technical and support are ready.

- Soheil Sarmad Saeedi, in 2003 the subject of doctoral research to examine barriers and provide a suitable model for their environment, has chosen. The use of e-commerce, this research survey, but the comparative method and case studies are used. To collect the data, the questionnaires were distributed. Sample of companies and internal organizations and experts and engage in e-commerce, which are, among them, 120 individuals or companies randomly selected for evaluation. The positive environmental factors (environmental, political, legal, economic, social, cultural, technological and demographic), or indirectly (business, competitors, customers, physical distribution units) to examine the data.

- Kumar et al., in 2010 a study of 200 farmers in 40 villages in the poor and remote India began, and impacts that are of rural life, ICT concluded that three factors mentioned in the adoption of ICT in agriculture, differences in education and income disparity. Following the study, the main obstacles to the application, including a lack of knowledge about the technology, uncertainty of market for agricultural products, lack of infrastructure, lack of credit facilities are in the village.

- Shahata and colleagues in 2006, the feasibility of e-commerce in the form of agricultural cooperatives 147 Cooperative manager, the interview began. The results of the survey showed that almost 46% of their interest in the use of e-commerce showed, and of these, 33 percent require technical assistance, and 19 percent are willing to invest in the project. Shahata suggests, a portal designed to link the cooperative, that is, or company which, cooperatives deliver their products with the name of the company, and the cooperative will require annual cost of buildings, staff and equipment to pay for ads.

- Kayenerk, Tatglu and cola (2005), in his study on factors affecting the willingness of organizations in the use of e-commerce have. In this study of 287 companies in Turkey, have been studied, receiving orders from costumers, placing orders to suppliers, communication within companies, electronic payment protocol file transfer, promotion of employment, a video conference. The benefits of e-commerce, in 4 categories in the name of market development, sales and promotion performance, ease of availability and cost, and 18 trace elements are classified. The limitations of e-commerce, this research in three main categories of cost constraints, the limited number of users and security issues, were classified.

### **RESEARCH METHODOLOGY**

This study, for the purpose of this research is applied. The study deductive logic implementation, in terms of time and cross-sectional study of how implementation of quality research, in terms of the type of data descriptive and correlation. The research community all employees, managers and experts of all active companies and stores, is offering fish. To collect data for the analysis of questionnaires were used. The questionnaire aimed at the feasibility of electronic marketing, aquaculture export industry is that Iran including 2 of 7 Section 35 is the question. The questionnaire consists of two parts, the question of demographics (The questionnaire), the general characteristics of respondents, such as, gender, age, education, etc., and the second part includes questions of perspective, to determine the factors the real use of employees, and managers and aquaculture industry experts from electronic devices. In this study, stratified random sampling method is used, the number 360 is selected. To

calculate the sample size, at first using a preliminary sample mean and variance were calculated, using Cochran formula to calculate the volume of the sample analyzed.

**Assumptions**

- Hypothesis 1: The reliable electronics, and attitude to use it, there is a significant positive relationship.
- Hypothesis 2: Between security and attitude to use it, there is a significant positive relationship.
- Hypothesis 3: the ease of use, and attitude to use it, there is a significant positive relationship.
- Hypothesis 4: between security and perceived usefulness, there is a significant positive relationship.
- H5: the ease of use and perceived usefulness, there is a significant positive relationship.
- H6: Between Perceived usefulness, and reliability of electronics, there is a significant positive relationship.
- H7: the security and reliability of electronics, there is a significant positive relationship.
- Hypothesis 8: the ease of use and reliability of electronics, there is a significant positive relationship.
- Hypothesis 9: The attitude toward use, and intention to use electronic technology, there is a significant positive relationship.
- Hypothesis 10: the intention to use and actual use of electronic technology, there is a significant positive relationship.

**Findings**

Check the normality of data

In this study, a valid test Kolmogorov - Smirnov, to check the assumption of normality of the data is used. Data reliability, security and efficiency, Kolmogorov-Smirnov test, according to the result of a normal distribution is not as significant level obtained from this test is less than 05/0. But because the sample size was 180, and more than 30 are, according to the central limit theorem, the distribution of these variables is normal. Perceived ease of variables, attitudes, intentions and actual use, the Kolmogorov-Smirnov test, according to the result of a normal distribution, the significance level obtained from this test is greater than 0/05. Since the sample size, 180 times and is more than 30, according to the central limit theorem, the distribution of these variables is normal.

**Table 1. Kolmogorov-Smirnov test variables**

Actual use	Intent	Attitude	Ease	Usefulness	Security	Confidence	Variable	
180	180	180	180	180	180	180	Sample size	
4/89	4/95	4/93	4/91	4/90	4/87	4/91	Average	The parameters of the normal distribution
0/92	1/24	1/14	1/12	1/15	1/36	1/14	SD	
1/12	1/35	1/10	1/11	1/64	2/04	1/39	Kolmogorov statistic	
0/161	0/052	0/176	0/170	0/009	0/000	0/042	Significant level test	
Not normal	Test result							
normal	As a result, according to the central limit							

Source: Calculations Research

**The correlation between the variables**

To calculate the correlations between all variables, the normality of the data distribution, the Pearson correlation test was used. According to the table (2), as can be seen, a significant level (sig) test, for all the relationships between variables times the amount of (0.000) is less than (0/05), respectively. The null hypothesis (H0) statistical correlation between the two variables not to, and rejected the hypothesis of research indicated that their relationship is confirmed.

**Table 2. Correlation test results**

Actual use	Intent	Attitude	Ease	Usefulness	Security	Confidence	Variable
0/45 0/000 Sig=	0/41 0/000 Sig=	0/38 0/000 Sig=	0/48 0/000 Sig=	0/35 0/000 Sig=	0/30 0/000 Sig=	1	Confidence
0/47 0/000 Sig=	0/41 0/000 Sig=	0/43 0/000 Sig=	0/44 0/000 Sig=	0/50 0/000 Sig=	1	-	Security
0/36 0/000 Sig=	0/38 0/000 Sig=	0/40 0/000 Sig=	0/47 0/000 Sig=	1	-	-	Usefulness
0/45 0/000 Sig=	0/43 0/000 Sig=	0/60 0/000 Sig=	1	-	-	-	Ease
0/56 0/000 Sig=	0/53 0/000 Sig=	1	-	-	-	-	Attitude
0/56 0/000 Sig=	1	-	-	-	-	-	Intent
1	-	-	-	-	-	-	Actual use

Source: Calculations Research

**Test the hypothesis**

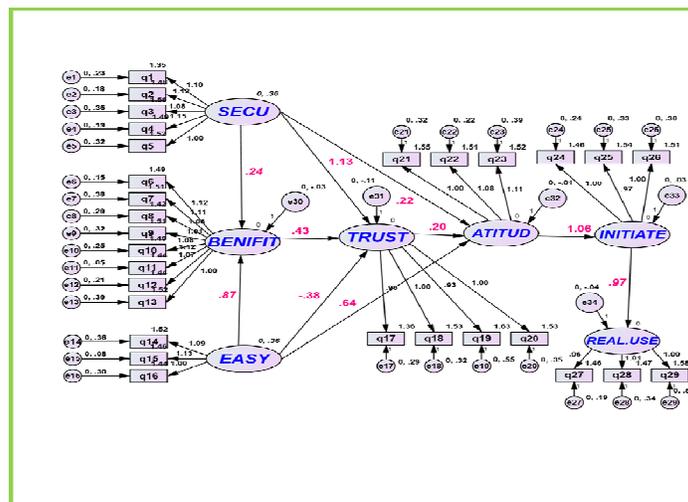
In general, structural equation modeling techniques and software AMOS 20 research hypothesis, we have tested. To achieve this, the first test of the normality of the data was conducted. The confirmatory factor analysis for each of the surveys have been conducted. Finally, the model of the main hypotheses and assumptions sub-study was conducted.

**Research structural model**

Variables, as Table 3 in the graphical model, named

**Table 3. Model code name of research**

Variable name	Code
trust	TRUST
Security	SECURITY
benefit	BENEFIT
easy	EASY
attitude to use	ATTITUDE
intended use	INITIATE
actual use	REAL.USE



**Figure 1. Research structural model, with standard coefficients**

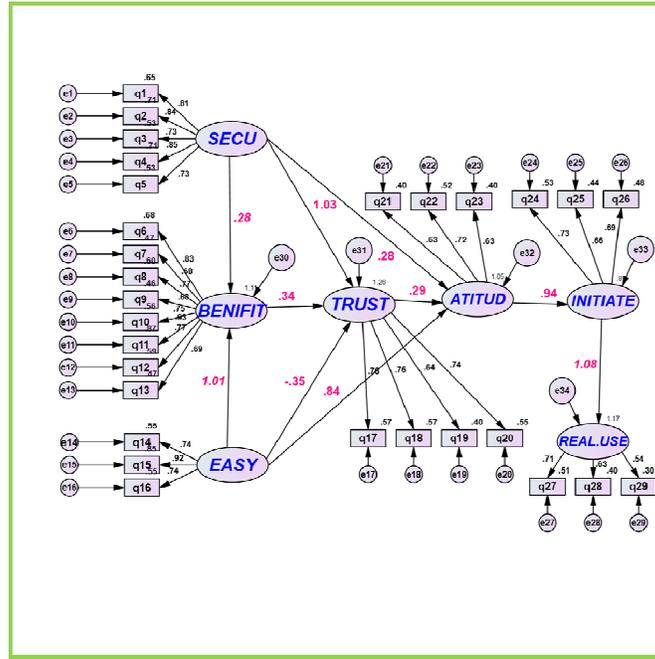


Figure 2. Shows the structural model of the standard rate

Measures overall research model

Table 4. Overall index model

PCFI	PNFI	PRATIO	RFI	IFI	CFI	NFI	RMSEA	X2/df	The general model
>0/50	>0/50	>0/50	>0/9	>0/9	>0/9	>0/9	<0/05	<2	Acceptable level
0/53	0/47	0/40	0/47	0/59	0/58	0/52	0/14	17/08	The calculated values

Chi-square of the structural model, the degrees of freedom equal to 4/08, and inappropriate. Comparative fit index, all less than 90%, and inappropriate. RMSEA index higher than 5%, and inappropriate. Frugal indicators (economy), mostly below 50 percent, and inappropriate. Thus the need for reforms in the model. Using a modification of Amos, the model was modified (modified indicators come in Appendix). As a result of the reform indices recovered.

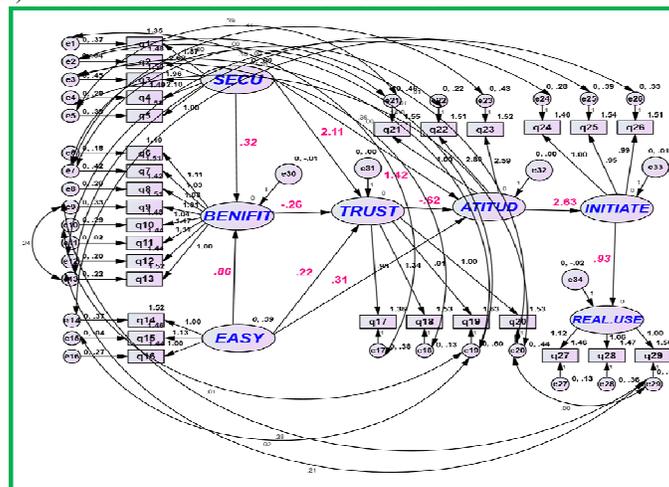


Figure 3. Structural reform model study, the rate of non-standard

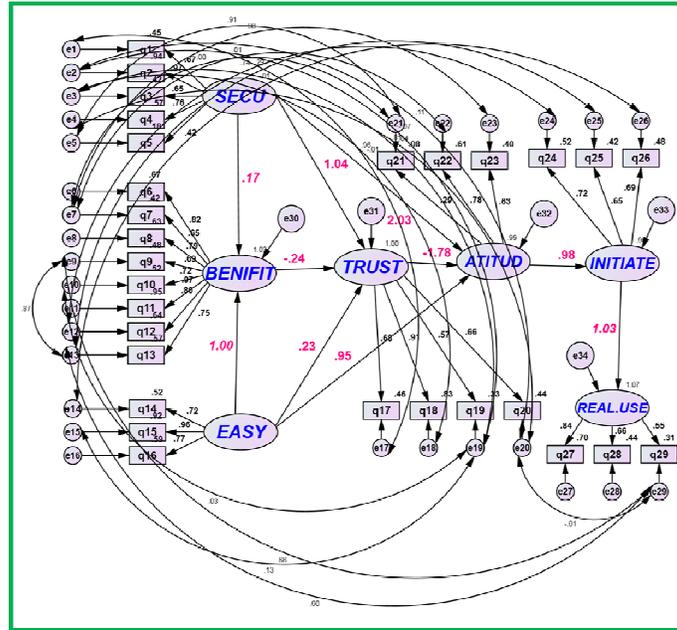


Figure 4. Model of structural reforms, with the standard rate

Table 5. Overall model Indexes

PCFI	PNFI	PRATIO	RFI	IFI	CFI	NFI	RMSEA	X2/df	The general model
>0/50	>0/50	>0/50	>0/9	>0/9	>0/9	>0/9	<0/05	<3	Acceptable level
0/458	0/480	0/92	0/92	0/75	0/85	0/95	0/053	2/98	The calculated values

Fitting component indices (the ratio of critical significance level)

Table 6. Estimates of the overall model

			Estimate	S.E.	C.R.	P
BENIFIT	<---	SECU	.320	.038	8.466	***
BENIFIT	<---	EASY	.863	.064	13.379	***
TRUST	<---	SECU	2.107	.197	10.695	***
TRUST	<---	BENIFIT	-.265	.121	-2.181	.059
TRUST	<---	EASY	.217	.102	2.117	.034
ATTITUDE	<---	TRUST	-.619	.431	-1.437	.151
ATTITUDE	<---	EASY	.312	.033	9.555	***
ATTITUDE	<---	SECU	1.419	.869	1.633	***
INITIATE	<---	ATTITUD	2.634	.283	9.297	***
REALUSE	<---	INITIATE	.929	.101	9.171	***

**Conclusion**

According to the first hypothesis, the hypothesis significantly to 0/151, and more is 0/05, so assume this is rejected, meaning that the trust electronics, and the perception of its use, a significant positive correlation There. The findings Hoseini (2010) are in line.

According to the second hypothesis significance level equal to 0.000 and less than 0/05. So, it is assumed to research confirms, that is, the security, and the perception of it, there is a significant positive relationship. The relationship 1/419 is, given that this is a positive factor, and its effect is direct. And with the findings of Azizi one and others (2005), in line, and states that, between security and attitude, there is a significant relationship. The results showed a significant level of the third hypothesis, is equal to 0.000 and less than 0/05, the hypothesis is confirmed, which means that the ease of use, and attitude to use it, there is a significant positive correlation. The amount of this 0/312, given

that this is a positive factor, its effect directly, in other words, by changing the unit (increase), ease of use at a rate of 0/312 percent, attitudes to increase.

The results showed a significant level of fourth hypothesis, is equal to 0.000 and less than 0/05, the hypothesis is confirmed, which means that the perceived security benefits, there is a significant positive relationship. The 0/320 is the relationship, given that this is a positive factor, its effect directly, in other words, by changing the unit (increase) security, the amount of 0/320% of Perceived usefulness increases. Fathi findings (2004), in relation to the security of e-business, is in line.

According to the results of the fifth hypothesis significance level, is equal to 0.000 and less than 0/05, the hypothesis is confirmed, which means that the ease of use and perceived usefulness, there is a significant positive relationship. The 0/863 is the relationship, given that this is a positive factor, its effect directly, in other words, by changing the unit (increase), ease of use at a rate of 0/863%, perceived usefulness increases. The results showed a significant level of sixth hypothesis, is 0/05 to 0/057 and more, so the hypothesis is rejected, which means that the perceived benefits of, and confidence in a positive and significant relationship there. The results of the seventh hypothesis significance level, is equal to 0.000 and less than 0/05, the hypothesis is confirmed, which means that the security and reliability of electronics, there is a significant positive relationship. The 2/107 is the relationship, given that this is a positive factor, its effect directly, in other words, by changing the unit (increase) security, the rate of 2/107 percent confidence in e-heals. With the findings of a sepehri and others (2004), is consistent with a trust.

According to the results of the eighth hypothesis significance level, is 0/05 to 0/217 and more, the study confirmed the hypothesis and the null hypothesis is rejected, which means that the ease of use, and reliability of electronics, there was a significant positive correlation There. And The Van (2009), a line is about trust.

According to the results of the ninth hypothesis significance level, is equal to 0.000 and less than 0/05, the hypothesis is confirmed, which means that the attitude toward use, and intention to use electronic technology, a significant positive correlation There. The 2/634 is the relationship, given that this is a positive factor, its effect directly, in other words, by changing the unit (increase) approach, to use a rate of 2/634 percent, the intention to increase.

According to my hypothesis significance level equal to 0.000 and less than 0/05. So, it comes hypothesis is confirmed, which means that the intention to use and actual use of electronic technology, a significant positive correlation There. This rate is 0/929, given that this is a positive factor, its effect directly, in other words, by changing the unit (increase) intention to use the 0/929%, the actual use increases.

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