

*Full Length Research Paper*

# Feasibility Study of Agricultural Products' Electronic Marketing According to the Point of View of Jihad Organization Experts in Fars Province, Iran

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The main purpose of this research was to determine the feasibility of electronic marketing of agricultural products from the point of view of Fars province Agricultural Jihad Organization experts. The statistical population of the current study included 780 experts working at Agricultural Jihad Organization in Fars Province. According to Krejcie and Morgan's table, the sample size of 354, selected through random sampling, was acceptable for this study. The main instrument for collecting data was a questionnaire, the content validity of which was confirmed by a panel of experts. The reliability of the questionnaire was calculated to be 0.83, using Cronbach's Alpha Coefficient. The data analysis was carried out using SPSS software application version 21. The results of ordinal regression showed that variables of information and communication infrastructure, management infrastructure, economic and support infrastructure, legal and security infrastructure, financial infrastructure, technical and technological infrastructure affected the implementation of electronic marketing of Agricultural products. Furthermore, the results of the exploratory factor analysis with main components analysis showed that the independent variables could explain 89.28% of the variance of the feasibility of implementing electronic marketing of agricultural products. In general, the improvement of information and communication infrastructure, increasing farmers' awareness of the importance of management, investment in e-marketing, more governmental attention to farmers and their economic support in the field of e-marketing, and security and reliability for sales sites can provide the ground for the feasibility of electronic marketing of agricultural products in Fars province.

**Keywords:** Electronic marketing, Agriculture products, Agriculture experts, Fars Province

## INTRODUCTION

The advent of information technology and its rapid growth has led to profound changes in business. In general, the old methods of marketing are being destroyed and new methods are being invented and replaced quickly. In this regard, the development of computer science and the expansion of the World Wide Web pave the way for conducting business activities in purchasing goods. Therefore, e-marketing is one of the

new marketing tools and methods that as a result of the emergence of the phenomenon of information and communication technology (ICT), and its most significant tool, the Internet, has a profound and wide impact on business processes. (Haghdoust Gilani & Mokhtaran, 2016).

Information technology is increasingly used in business. It affects relationships between companies,

consumers, as well as changes in business practices and market structure. Information technology enables many companies to gain a competitive advantage over their competitors by reducing costs and entering new markets (Strzembicki, 2015).

Recent decades have observed dramatic changes in carrying on business due to the development of science and technology in the field of electronic information transfer using communication networks and its tools. Today, in some countries, e-commerce is very popular. According to available sources, the use of e-commerce significantly reduces the percentage of commercial costs and has a significant effect on accelerating the process of domestic and international trade exchanges and reducing the time of ordering and conducting commercial competitions (Fazl Ali & Khosravi Farahani, 2008).

By using information and communication technology, it is possible to produce similar products at a lower cost, increase the level of production at the same cost and increase the speed of preparation of production factors, as well as the supply of products without the need to increase costs. (Meshbaki, 2011).

Population growth, rising food needs, optimal food supply, cost reduction, global trade rules, fierce global competition in agricultural production, rapid agricultural development, the rapid advancement of computer science, and now e-farming as an integral part of E-commerce activities have become the world's economic enterprises (Alizadeh, 2006).

Villages are one of the major centers of production and villagers are the main producers of any country. From ancient times, the supply of rural products, whether agricultural and livestock products or rural handicrafts, was done through intermediaries who bought these products from the villagers and offered them to consumer markets (Emadzadeh, 2000).

Today, information technology (IT) has a great impact on the business world. With the help of IT, business and operational processes that take days or weeks to complete, are done in a few seconds, and this factor has led to better customer service compared to the past (Sajjadi Amiri et al., 2013).

With the development of electronic tools and electronic marketing, manufacturing enterprises, especially commercial agricultural production enterprises, have also been affected. However, the existence of various issues and problems in the field of agricultural production and distribution and marketing has caused that despite the high quality of domestic agricultural products compared to foreign samples, Iranian agricultural products are not in a good position in the world market (Turkmani, 1999).

Farmers' products are mainly bought by intermediaries at low prices from farmers and sent to target markets, in which the marketing system of Iran's

agricultural products requires fundamental changes. One of the solutions that can be effective in this field and helps the marketing situation of Iranian agricultural products is electronic marketing. Most of Iran's agricultural products such as pistachios and saffron are exported; therefore, commercial and electronic marketing can solve many problems of agricultural producers and to some extent can be the hand of brokers and intermediaries in buying and selling agricultural products. (Alaviun et al. 2013; Wen, 2007).

The use of information technology in various economic sectors, including agriculture, is increasing in many countries. For example, in South Korea 56%, Singapore 50%, Cuba 45% and in Egypt 20% of farmers use information technology (Internet) (UNCTAD, 2010). There is a considerable digital gap between Iran's and global economy. In 2010, Iran ranked 69th in the digital economy and 102nd in the world in e-government (EIU, 2010).

The use of e-marketing technology in agriculture can be considered as a key to further opening of the global markets for Iranian agricultural products and e-commerce can be used to accelerate and facilitate marketing and agricultural trade (Jalalzadeh & Fami, 2007).

## THEORETICAL FOUNDATIONS OF RESEARCH

A review of previous articles has identified several definitions of marketing by Konda. Some of the most important of these definitions are:

- Marketing is a social and managerial process in which individuals and groups achieve what they want and want to generate value by creating, proposing, and exchanging with others;
  - Marketing is the art of creating customer satisfaction;
  - Marketing the right product to the right people at the right place and at the right time at the right price is the right and progressive relationship;
  - Marketing is an economic process in which goods and services are exchanged between the manufacturer and the consumer and their value is determined in the form of numerical price;
  - Marketing is a comprehensive system of interactive business activities designed to design, promote, and distribute products and services that meet the needs of existing and potential customers (Melas et al, 2011).
- The purpose of internet marketing is to use communication between customers (user to user) instead of company-customer communication to disseminate information about the product or service and therefore, faster and less costly acceptance by the market (Melas et al, 2011)

E-marketing means the use of information and programs that are used to plan and implement concepts,

distribution, promotion and pricing of goods and services and lead to transactions that will meet individual and organizational goals. E-marketing has a great impact on traditional marketing operations and e-marketing technologies are transforming many marketing strategies. When companies reduce costs through e-marketing, they can offer the product to the customer at a lower price. E-marketing reduces costs by saving buyer time and making shopping easier (Lai, et al, 2014).

E-commerce has received special attention around the world and perhaps in a short sentence it can be considered as e-business (Rial, 2013).

E-commerce in general means the use of new technologies to establish chain relationships between manufacturers, sellers, suppliers, generally suppliers of goods and services on the one hand and the buyer, consumer or customer in general on the other, in order to make better decisions., Optimization of goods and services, reducing costs and opening new channels (Vahid, 2016).

In the present era, globalization, trade liberalization and privatization, information technology (IT) play a central role to compete agricultural products in the global market through email, electronic banking, Internet and e-commerce. The Internet is currently the fastest growing communication medium. Online agricultural trade via the Internet is generally referred to as "agricultural e-commerce". And refers to electronic demand for agricultural products in commercial agriculture (Kuboye, 2013)

Farmers, consumers and intermediaries benefit from a marketing system. For farmers, marketing is a way to bring their products to the consumer market in better ways. For the consumer, marketing is a means to get the products he needs faster, with higher quality and cheaper price. It creates significant employment and income for intermediaries, who are influence the transfer of information from consumers to farmers and vice versa. The different interests of these three groups cause the farmer on the one hand to be looking for a market with higher prices for his products, and on the other hand consumers to benefit from speed, quality and low prices while receiving their desired products. And in the meantime, intermediaries should provide their livelihood efficiently with the services they provide to producers and consumers (Vahid, 2016).

Every type of business needs a set of infrastructures to continue its activities and support its customers. These infrastructures include facilities, equipment and processes. Choosing the right infrastructure to fit your business strategies will optimize your performance. Conversely, if one of the selected infrastructures is not in line with the strategies, you will feel unsuccessful and worried in any area of business. In order to implement electronic marketing of agricultural

products, it is necessary to pay enough attention to the necessary infrastructure to use this type of marketing.

## EMPIRICAL BACKGROUND OF THE RESEARCH

Waghulkar et, al (2017) in a study entitled Feasibility Study for Online Marketing Greenhouse crops in India concluded that interest in e-marketing of greenhouse crops has a significant relationship with farmers' knowledge of Internet commerce and technical and economical ability Farmers, however, believe that online order processing takes more time than offline acceptance. They also do not receive enough feedback from online shoppers.

Khodakaram et al. (2017) identified and studied the factors affecting electronic marketing in the field of banana export development. They found that technical and financial infrastructure are among the factors affecting the electronic marketing of banana exports. Also, the regression results showed that by changing a standard deviation in the technical infrastructure and financial infrastructure variables, the standard deviation of banana e-marketing standard will increase by 0.317 and 0.411, respectively.

Arayesh (2015), in his article, examined the effective financial and legal-security infrastructures in the feasibility of marketing implementation of agricultural products in Ilam province. The results showed that a significant relationship between financial and legal-security infrastructures with the feasibility of implementation. Moreover, financial and legal-security infrastructures were able to explain 48% of the variance in the feasibility of implementing e-marketing of agricultural products.

Javadi and Omidi Najafabadi (2014) concluded in their research that six technical and infrastructural factors, socio-cultural, policy-making, economic, supportive and extension education have been the most important factors influencing mobile apple marketing in the study area.

Alaviun et al. (2014) in a study entitled "Application of the theory of planned behavior on the acceptance of e-marketing by agricultural experts" concluded that the variables of individual skills in using the Internet, using the Internet at work, Families' access to the Internet, raising farmers' awareness, government support, and support for agricultural companies were among the variables influencing the acceptance of e-marketing by agricultural experts.

Traxler(2012) mentioned seven underlying structures for implementing e-marketing, including marketing, information and communication technology, finance and administration, implementation, customer service, human resources, and facilities, Moreover, he remarked to make sure every element of your

infrastructure supports your decisions as a valuable proposition.

Alaviun and Al-Hayari (2013) in the study of acceptance of electronic marketing by rice farmers in Gilan and using socio-cultural indicators concluded that the two variables of experience of paddy farmers in the ICT office to receive electronic services and personal skills in using the Internet affect the acceptance of e-tracking. They also found in their study that almost 80% of ICT office managers and 68% of rice farmers were very interested in using e-marketing for rice crop and more than 70% of respondents chose ICT office network as the best option for e-marketing.

Brush and Mcintosh (2010) examined the factors affecting the acceptance of e-commerce in small companies. In addition to expressing the benefits of the e-market that are perceived by farmers, the authors provided a list of some of the problems that may prevent farmers from accepting this type of marketing: Farmers' low computer skills, lack of trust and risk in Internet transactions, unaffordable prices similar to the traditional market, lack of bandwidth in Internet access, problems in evaluating product quality, problems with the timeliness of offers in the electronic market, lack of transaction history, satisfaction with cooperation with traditional market factors.

Kumar et al. (2010) surveyed 200 farmers in 40 impoverished and remote villages of India and concluded that three important factors influencing ICT adoption are rural living, differences in literacy, and differences in income. In the following research, the main obstacles to the use of ICT in agriculture are mentioned, which include: Uncertainty in the market for agricultural products is the lack of infrastructure at the village level and the lack of credit facilities.

Amiri et al. (2016) in a study entitled "Factors affecting the acceptance of e-commerce in Iranian agriculture", concluded that perceived usefulness, mental norm and attitude directly affect the tendency to accept e-commerce in the agricultural sector and financial risk, time risk, security risk, operational risk, perceived ease indirectly affect the willingness to adopt e-commerce in the agricultural sector.

Yazdani, Zangheh, and Khosravi Pour (2010) in their research concluded that factors such as compatibility, comparative advantage, knowledge of the profitability of managers' knowledge about IT, the level of participation of senior managers, cost, and the number of employees, competitive pressure and government support in acceptance affect e-commerce.

Given the importance of e-marketing in the sale of agricultural products and the impact that this sector has on social and regional development, the present study focuses on the feasibility of electronic marketing of agricultural products. Therefore, the main question of the

present study is whether it is possible to implement electronic marketing for agricultural products from the perspective of experts of the Jihad Agricultural Organization of Fars Province and what are the necessary infrastructures to do it? We hope that the results of the present study can provide useful guidelines for designers, planners and policy makers to improve the agricultural conditions of the region and to achieve rural development goals.

## METHODOLOGY

Fars province in the south of Iran is located between 31 27 degrees north latitude and 50 to 55 degrees north longitude of the Greenwich meridian. The area of the province is 123,946 square kilometers, which is equal to 7.5% of the total area of the country. The amount of usable agricultural land is about 4.4 million hectares, which is equal to 34.7% of the province's area. At present, 1,870,670 hectares, i.e., 38.8% of the total existing agricultural lands are used, of which the remaining 2,229,629 hectares are not used due to water shortage and various other reasons. Fars province in terms of the production of wheat, corn, figs and almonds, tomatoes and pomegranates has the first place, in terms of citrus production has the second place, in the production of paddy and grapes, barley and cotton, sugar beet, onions and beans has the third place and in rice production has the fourth place in the country. Also, this province ranks the first in country with the production of 129,220.2 tons, equal to 16.9%, of horticultural products in total and ranks the second with the production of 299,270.29 tons, equal to 9.8% of agricultural products. Fars is one of the provinces where most of the agricultural products belong to and has a high potential to increase production. (Central Union of Rural and Agricultural Cooperatives of IRAN, 2017). Due to this level of production and the vast area of the province, both in terms of geographical location and in terms of diversity of agricultural products to develop and facilitate marketing of products produced in the province, the use of electronic marketing system can play an important role in reducing costs and increasing production profits.

The purpose of the present study was to investigate the feasibility of implementing electronic marketing of agricultural products in Fars province. The research method used in this study is based on the mentioned classifications in terms of purpose, applied and in terms of the amount and degree of control of field variables, in terms of the nature of the data is quantitative, in terms of research problem, causal and in terms of data collection, it is a descriptive and non-experimental (non-experimental) research. A sample size of 354 was chosen based on Krejcie and Morgan

table from among a pool of 750 experts from Fars Jihad Agricultural Organization a researcher-made questionnaire was used to collect data in the present study. Expert panel was used to assess the validity of the questionnaire. The reliability of the questionnaire was calculated to be 0.83, using Cronbach's Alpha Coefficient.

Independent research variables included information and communication infrastructure, technical and technological infrastructure, economic and support infrastructure, managerial infrastructure, legal and security infrastructure, financial infrastructure and the dependent variable of the research were the possibility of conducting electronic marketing of agricultural products. Mean, mode, median, frequency percentage, variance and standard deviation were used to analyze the data in the descriptive statistics section, and Spearman correlation coefficient, exploratory analysis of variance and sequential regression were used in the inferential statistics section. SPSSv21 software was also used for data analysis.

## RESULTS AND DISCUSSION

### Descriptive findings of the studied statistical population

According to the research findings, 52% of the experts studied were between 50 and 40 years old. The youngest person in the study population was 22 years old and the oldest person was 68 years old. 56% of the respondents had a bachelor's degree and 38% had a master's degree and a doctorate. 22% had work experience between 25 and 20 years and 22% had work experience over 25 years. Also, the lowest work experience of the statistical population was one year and the highest person had 35 years of work experience. Independent variables are ranked based on the coefficient of variation. Table (1) shows the ranking of the independent variables based on the opinions of the respondents. As it turns out, they have considered the most important variables affecting the use of e-marketing of agricultural products in the study area, including technical and technological variables, information and communication variables, and economic and support variables, respectively

**Table 1:** Ranking of effective independent variables for using e-marketing of agricultural products

Research Variables	independent	Dependent Variables	mean	S.d	C.V	rank
Technical and technological variables		E-marketing of agricultural products	3.61	0.564	0.156	1
Information and communication variable			3.57	0.676	0.192	2
Economic and support variable			3.51	0.756	0.215	3
Legal and security variables			3.06	0.773	0.252	4
Management variable			3.26	0.912	0.279	5
Financial variable			3.15	1.08	0.342	6

## INFERENTIAL FINDINGS

To analyze the data in the present study, Spearman correlation coefficient test, exploratory factor analysis test and sequential regression were used.

### Spearman correlation coefficient results

The results of correlation analysis of independent variables with the variable of the feasibility of using electronic marketing of agricultural products are given in Table (2). Based on the results of the table, all the studied variables have a significant positive relationship with the variable of the possibility of using

electronic marketing of agricultural products. In this regard, the variable of information and communication infrastructure with a correlation coefficient of  $r = 0/352$  has the highest correlation with the variable of the feasibility of using electronic marketing of agricultural products. Economic infrastructure and support and information and communication infrastructure and legal and security infrastructure are among the important independent variables that have a significant positive relationship at the level of 99% with the dependent

variable. That is to say, at the same time with the positive changes in the above items in the study area, the feasibility of using electronic marketing of agricultural products also increases. Conversely, it is also possible that in this case, the emergence of negative economic, information and legal changes as major obstacles to the creation and development of electronic marketing of agricultural products. Management and technical

infrastructure and technology and financial infrastructure are important factors affecting the creation and development of electronic marketing of agricultural products, which show a positive relationship and 95 significant percentage level with the dependent variable of the feasibility of using electronic marketing of agricultural products.

**Table 2:** Correlation of independent variables with the possibility of using electronic marketing of agricultural products

The first variable	Influential variables	r	sig
feasibility of implementing electronic marketing	Information and communication infrastructure	0.352**	0.000
	Technical and technology infrastructure	0.323**	0.000
	Economic infrastructure and support	0.285*	0.045
	Management infrastructure	0.297*	0.036
	Legal and security infrastructure	0.343**	0.001
	Financial infrastructure	0.228*	0.011

### Exploratory factor analysis of research variables

In order to ensure the suitability of the data in terms of the adequacy of the samples and their uniqueness, the Kaiser Mir and Bartlett test has been used, the results of which are given in Table (3). Due to

the fact that the KMO index is more than 0.6 and also the significance level of Bartlett test is less than 5%, it can be said that the data are sufficient.

**Table 3:** Factor analysis of research variables

Influential variables	KMO	Chi-square	df	sig
Information and communication infrastructure	0.741	1374.21	28	0.000
Technical and technology infrastructure	0.728	818.65	21	0.000
Economic infrastructure and support	0.712	898.38	21	0.000
Management infrastructure	0.710	878.26	21	0.000
Legal and security infrastructure	0.717	1012.25	21	0.000
Financial infrastructure	0.700	951.57	21	0.000
feasibility of implementing e- marketing	0.708	839.42	36	0.000

Based on the results of factor analysis, Table (4), the first factor of the variable (information and communication infrastructure), with a specific value of 21.68 alone explains 39.20% of the total variance. And these 6 factors (information and communication infrastructure, management infrastructure, legal and

security infrastructure, financial infrastructure and technical and technological infrastructure), in total, were able to explain 89.24% of the total variance of the possibility of implementing e-marketing. And the remaining values are related to the variables that were not examined in this study.

**Table 4:** Extracted factors with specific value and percentage of accumulated variance

Factor	Special value	Percentage of variance of eigenvalue	Cumulative percentage of variance
1	21.68	39.20	39.20
2	10.06	22.80	62
3	6.37	14.93	76.93
4	3.19	7.25	84.18
5	2.00	4.55	88.73
6	0.66	1.51	89.24

Rank regression has been used to explain the collective role of independent variables in explaining the variance of the dependent variable in the rank scale. In this type of regression, regression coefficients show how changes in independent variables affect the probability of change in dependent variable levels. To perform sequential regression, due to the high bias of the data, the complementary log function has been used. Based on the obtained result, the fitting test of the sequential

regression model, the chi-square value was 2247.9, which confirms the model at 99% level. Therefore, the role of independent variables in the formation of the probability of the dependent variable is confirmed and the model is appropriate. The model estimated in Table (5) is also confirmed based on Chi-de-Pearson and Doviante statistics. Therefore, the regression model is a suitable model and independent variables are well able to predict the changes of the dependent variable.

**Table 5:** fit of sequential regression model the role of research variables on the feasibility of implementing e-marketing

Model	-2loglikelihood	X <sup>2</sup>	df	P
Correct values model	2247/98	-----	-----	-----
Regression model	0.000	2247.98	72	0.000
Chi-square Pearson	-----	672419	7617	0.000
Chi-square doviants	-----	1870	7617	1

### Pezdo scale or pseudo-R<sup>2</sup>

The Pezdo or R<sup>2</sup> quasi-scale on the Cox and Snell scales (0.99) on the Nagel Kirk scale (1) and the McFadden scale (0.969) show a very good explanation of the dependent variable of the feasibility of conducting e-marketing through independent variables .Given the

values of each of the scales in Table (6), the independent variables can be a very good predictor for the dependent variable of the feasibility of performing e-marketing.

**Table 6: Pezdo scale or pseudo-R<sup>2</sup>**

scale type	Value
Cox and Snell	0.99
Nagel Crack	1
McFadden	0.969

### Test of parallel lines

In order to investigate the similarity of the significance coefficients of the independent variables, the hypothesis of equal significance of the influential variables has been rejected. Hence, influential variables affect the dependent variable with different coefficients. Based on the result of rank regression in Table (7), the

variables of information and communication infrastructure, managerial infrastructure, economic and support infrastructure, legal and security infrastructure, financial infrastructure and technical and technological infrastructure, respectively, can be implemented. E-marketing of agricultural products has been influential.

**Table 7:** Results of parallel sequential regression test lines the role of research variables in the implementation of e-marketing of agricultural products

Model	-2loglikelihood	X <sup>2</sup>	Df	P
Null hypothesis	2702.98	----	-----	-----
General hypothesis	2672.53	67.09	72	0.000

## CONCLUSION AND RECOMMENDATIONS

The results of this study showed a significant agreement between the feasibility of electronic marketing of agricultural products with information and communication infrastructure at the level of 99% confidence. The results of the research were in line with the research of Alaviun (2014), Brush and McIntosh, (2010), and Traxler, (2012).

Moreover, the results of this study showed a significant agreement between the feasibility of conducting electronic marketing of agricultural products with economic infrastructure and support at the level of 99% confidence. Research results were in line with the research of Amiri et al. (2016), Javadi and Omid Najafabadi (2014), Alaviun et al. (2014), Waghulkarn et al. (2017) Kumar et al. (2010).

The results of the study also showed a significant agreement between the possibility of electronic marketing of agricultural products with legal and security infrastructure at the level of 99% confidence. The results of the research were similar to the researches of Amiri et al. (2016), Arayesh (2015).

Furthermore, the results indicated a significant agreement between the feasibility of conducting electronic marketing of agricultural products with financial infrastructure at the level of 95% confidence. As in the research conducted by Khodakaram et al. (2017), Amiri et al. (2016), Arayesh (2015), Traxler (2012), and Wen, (2007), there is a significant relationship between these variables and the possibility of electronic marketing of products.

Findings of the study showed a significant correlation between the possibility of implementing electronic marketing of agricultural products and technical infrastructure and technology at the level of 95% confidence with a significant relationship with the possibility of implementing electronic marketing of agricultural products. So that in the researches conducted by Khodakaram et al. (2017), Javadi and Omid Najafabadi (2014), Alaviun (2013), Waghulkar, et al. (2017), there is a significant relationship among these variables and the feasibility of implementing electronic marketing of agricultural products.

The results showed a significant correlation between the feasibility of electronic marketing of agricultural products and management infrastructure at

95% confidence level with a significant relationship with the possibility of electronic marketing of agricultural products. The results of this part of the research were in line with the results of research conducted by Yazdani (2009), Zanganeh and Khosravi Pour (2010).

In the next part of the study, sequential regression was used to investigate the collective role of independent research variables in explaining the variance of the research dependent variable. The complementary log communication function was used to perform sequential regression due to the high bias of the data. Based on the obtained results, the fitting test of the sequential regression model, the value of chi-square statistic equal to 2247.9 was obtained, which confirms the model at 99%. This statistic tests the assumption that the estimated regression model is the same as the integer model, which suffices only for the probabilities of the dependent variable. In other words, according to the results, the role of independent variables in the formation of probabilities of the dependent variable at different levels is confirmed and the model is appropriate. Also, the parallel line test was performed to investigate the similarity of the significance coefficients of the independent variables and the assumption of equal importance of the influential variables was rejected. Therefore, influential variables affect the dependent variable with different importance coefficients. Based on the results obtained from rank regression, the variables of information and communication infrastructure, managerial infrastructure, economic and support infrastructure, legal and security infrastructure, financial infrastructure and technical infrastructure and technology, respectively, on the feasibility of implementing electronic marketing of products. Agriculture has been influential. In the third part of the study, the exploratory factor analysis method with the principal component analysis approach was used. The results of this section showed that the studied independent variables were able to explain 89.24% of the variance of the possibility of conducting electronic marketing of agricultural products. This research finding is confirmed by the research findings of Khodakaram et al. (2017), Javadi and Omid Najafabadi (2014), Sabzevar (2015), Dyerson et al, (2009), Arayesh (2015). Improving the information and communication infrastructure such as facilitating farmers' access to the

Internet and increasing farmers' awareness of the importance of management, investing in e-marketing and paying attention to economic issues and support in the field of e-marketing, improving farmers' knowledge Regarding e-marketing, amending the rules and regulations related to e-marketing can provide the basis for the possibility of establishing e-marketing in Fars province. Based on the findings of the research, the following can be suggested:

-Appropriate investment should be made in the telecommunication platforms required for the establishment and application of e-marketing and the necessary funds should be provided for the development of these infrastructures.

-The government should provide more financial support to e-commerce networks in the agricultural sector and take the necessary steps to set up rural e-homes and improve them.

-Increase security and create the necessary and sufficient confidence for the use and implementation of electronic marketing. Measures such as informing people about compensation, training people to use services, increasing the security of sales sites, informing people about the legality of their activities, which will gain more public trust and turn to electronic marketing of products. Will have.

-Promoting patterns of using e-marketing among farmers through local media, counting ambiguities and intellectual gaps, accepting new patterns of buying and selling products, including e-marketing.

-Facilitate access to new technologies, use of non-governmental organizations to create a culture and provide a suitable platform for the implementation of e-marketing.

-Increase and improve awareness about the benefits of e-marketing in the agricultural sector through educational and information programs, holding courses and workshops in the field of e-marketing for farmers.

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