

Research on the Influencing Factors of E-Commerce Development in Afghanistan

Muhammad Hasan Makhdomzada, Fuwei Zhong

Abstract— The present conceptual paper is about the development trends of e-commerce in Afghanistan, which promotes the continuous and steady development of e-commerce in the country. This paper attempts to use factor analysis to study the influencing factors of e-commerce. The questionnaire was adapted from the 5-point Likert scale, and data was extracted from 310 respondents with e-commerce experience living in major cities in Afghanistan. This paper analyzes the current situation of e-commerce and summarizes three driving mechanisms for the development of e-commerce, namely market-leading, government-leading, and government-leading. Finally, it puts forward countermeasures and suggestions to promote the in-depth development of e-commerce in Afghanistan, which lays a foundation for standardizing the sustainable development of e-commerce in Afghanistan.

Index Terms— Influencing factors; Afghan e-commerce; analysis factor method

I. INTRODUCTION

The Internet and E-commerce development are the most exciting developments in information technology (IT) (Eid, 2011)^[10]. With the widespread appeal of Internet technology, e-commerce has emerged as a new type of consumption in recent years. E-commerce has become the most crucial aspect of a regime that removes borders between countries and transforms societies, economies, and businesses worldwide to a new extent. Therefore, the world is now considered a global village. (Aslam, Ham, & Arif, 2017)^[2]. According to Statista (2018), 40 percent of the world population has access to the Internet, while in Afghanistan, this ratio is estimated to be only around 20% percent, which is growing by 8% percent every year. The annual growth rate of Internet access in Afghanistan is much faster than the country's population growth rate. E-commerce has gradually become a more critical part of social and economic life and profoundly affects residents' daily lives. the improvement of the network environment, and the guidance of national policies, e-commerce has gradually spread from cities to rural areas. According to public data from the Afghan Ministry of Commerce and the Afghan Ministry of Economy in TOLO TV(, in the first half of 2021^[3]. the domestic online business, including physical online merchandise. sales and online service transactions in the country are 100 million U.S. dollars, (AZIZ BANK's public data in 2021)^[1] increased year-on-year 8% compared with online merchandise in 2020, it can be seen that Afghanistan's e-commerce is developing

rapidly. Even though E-commerce has initiated and matured in the west, the 21-century E-commerce business has become more successful globally. China is the biggest subscriber to this type of E-commerce model in Asia. However, due to several reasons, such as infrastructure and production capacity, the number of subscribers in central Asia is Afghanistan^[14].

The Afghan government has clearly defined the development goal of e-commerce in Afghanistan, that is, by the end of 2019, three full coverage of e-commerce will be realized throughout the country, namely, the e-commerce system in large cities and the two-way circulation of e-commerce in Afghanistan. The application of e-commerce in the administrative province is fully covered. By 2024, a unified and open, orderly competition, honest and law-abiding, safe and reliable, green and flawed insurance e-commerce market system will be built. As a result of the high priority attached by the government, e-commerce in Afghanistan is beginning to bear fruit. According to the Afghan Department of Commerce data, by 2019, an e-commerce system in Afghanistan's major cities has made some achievements. We have completed the construction of 54495 e-commerce service stations^[3], 340 provincial public service centers, and 340 provincial public logistics distribution centers, with a national e-commerce transaction volume of U.S. \$100 million, accounting for 8 percent of the country's e-commerce volume. (According to the Tolo report in 2019)^[4] Although some achievements have been made in vigorously developing rural areas in Afghanistan, some problems exist, such as some e-commerce service stations do not have a service volume, third-party payments are not very reliable, and some projects are "empty shells." Someplace do not have Internet. Therefore, the main influencing factors of e-commerce development in Afghanistan and how to further promote the development of e-commerce have become the most concerning issues for the Government, logistics enterprises, security issues, online banking, internet issue financial enterprises, e-commerce enterprises, and experts and scholars.^[15]

II. SIGNIFICANCE

This paper examined E-commerce in Afghanistan and conceptually analyzed the trend factor analysis model to solve their challenges. To effectively promote the development process of e-commerce in Afghanistan, it is necessary to study its influencing factors. It is the key to promoting e-commerce in Afghanistan to grasp the development of e-commerce in our country, clarify the factors affecting e-commerce and analyze the internal relationship between these factors. The development of e-commerce in Afghanistan is conducive to building market institutions in Afghanistan and increasing people's income. Afghanistan is an agricultural country, and

Manuscript received April 06, 2022

Muhammad Hasan Makhdomzada, School of Management, Hefei University of Technology, Hefei 230009, China

Fuwei Zhong, School of Management, Hefei University of Technology, Hefei 230009, China

agricultural modernization development has an important practical significance, this article in the study of Afghanistan's e-commerce development factors, targeted to put forward relevant countermeasures and suggestions, can participate in e-commerce related enterprises government departments to formulate relevant policies to provide a specific reference.

III. RESEARCH DESIGN

This research design Afghanistan e-commerce questionnaire is divided into three stages. First, a large number of Afghan e-commerce literature. Based on this, according to the specific requirements of research objectives to induce and refine variables, design questionnaire specific measurement items, design the first draft of the questionnaire; Secondly, under the tutor's guidance, the author solicited the opinions of the scholars related to this research direction. Before the formal questionnaire survey, the number of respondents was about 310, and the questionnaire item was perfected to form the final questionnaire.

Based on the above work, the content of the questionnaire in this study mainly includes three categories, one is the central part of the research variables, the item is randomly arranged, the other is divided into "very satisfied" according to the degree of the respondents' approval, "Relatively satisfied," "generally satisfied" "" not satisfied "and" very dissatisfied "five grades, the integral way is Likert five-point formula, the other category according to the subjective judgments and objective knowledge of the respondents divided "Yes," "No" type variables, scoring methods using 0-1 assignment, online shopping experience, logistics, people's awareness of e-commerce development in Afghanistan in four dimensions: the second is the basic information of respondents, including age, education and other information: The third is to introduce the background of the questionnaire, the questionnaire and response requirements are explained, and pointed out the identity of questionnaire sender and questionnaire response information confidentiality obligations, in order to improve the reliability and effectiveness of questionnaire information .

IV. ESTABLISH A FACTOR ANALYSIS MODEL

Through the introduction of factor analysis, we can conclude that there are four basic steps to reduce data dimension. First, determine whether the original variable is used in exploratory factor analysis. Before using the sample data, the KMO (Kaiser -Meyer -Olkin) Test whether the sample data are suitable for exploratory factor analysis. Second, common factors are extracted from sample data. The principal component method is usually used to extract common factors in actual research and analysis. Extracting common factors reduces the dimension of the data so that the public factors are as independent as possible, which is to extract the main factors of user experience. Third, carry out factor transfer to achieve maximum difference between the various factors. In

practical research, it is usually required to ensure that the components are not correlated, so the orthogonal transfer method is chosen to transfer the factor load. It makes it easier to interpret common factors by making them more distinct. Fourth, explain the common factor. By observing which variables in the sample data are dominated by the extracted common factors, the extracted public factors are named according to the meaning of these variables.

4.1. Main steps of exploratory factor analysis

Exploratory factor analysis procedure contains five basic steps. First, determines whether the selected variables are suitable for factor analysis. The results of KMO and Bartlett test are used to judge whether the selected variables are suitable for factor analysis. If the K MO value is greater than 0.7 and the result of Bartlett test is significant, then the selected variable is suitable for the factor analysis. Otherwise, it is not. Second, *determine the number of factors*: the number of factors can be assumed in advance according to the actual situation, and the number of factors can also be determined according to the criterion of the characteristic root greater than 1 or the gravel criterion. In this paper, the number of factors will be determined according to the eigenvalue greater than 1. Third, *factor extraction*: This will extract the factor according to the principal component method. Forth, *factor rotation*: Because the initial factors are too comprehensive, it is difficult to find the practical significance, so it is generally necessary to rotate the factors in order to explain the structure of the factors. Fifth, *Interpretation of the factor structure*: specific interpretation of factors according to the actual situation and load size.

Econometrics equations of model

$$X_1 = a_{11} * F_1 + a_{12} * F_2 + \dots + a_{1m} * F_m + e_1$$

$$X_k = a_{k1} * F_1 + a_{k2} * F_2 + \dots + a_{km} * F_m + e_k$$

Here, Xi denotes the observed variables ; F is a common factor ; e_1 is a special factor of Xi sometimes called error; a_i is the load of the common factor; and m is the number of common factors F_1, F_2, \dots, F_m . k is the number of observed variables X_1, \dots, X_k $m < k$.

V. EMPIRICAL ANALYSIS

This survey has a history of three months, from August 2021 to November 2021. Through online and offline related to the combination of questionnaires. Offline mainly through the development of e-commerce around Afghanistan influence factors, the questionnaire source is accurate, reliable information, through online questionnaires and offline entities to issue questionnaires, a total of 310 questionnaires were collected, and the effective questionnaires were 303. The total recovery of the questionnaire was 98%.

Table 5.1. Indicators related to the Afghanistan E-commerce survey

Index	Contents
X1	have Internet
X2	Satisfaction of the speed of the Internet in your home
X3	e-commerce service stations in your country
X4	Your satisfaction with the distance you have to travel to pick up the delivery
X5	online experience

X6	Satisfaction of the quality of online shopping
X7	satisfaction with the good condition of the goods shipped
X8	ever proxied a purchase from a rural e-commerce service
X9	Satisfaction of the type of National Logistics Company
X10	Satisfaction of the timeliness of updating logistics information
X11	Satisfaction of the logistics company SMS or phone notification you
X12	Is there a special product in your hometown?
X13	would you choose to sell online
X14	willing to work in e-commerce
X15	How much do you know about e-business in Afghanistan

5.1. Sample situation analysis

Table 2 gives an overview of the essential demographic characteristics of the sample. In terms of age, 18-25 accounted for the highest proportion of 40.9%, followed by 26-30, 31-40, 51-60, 41-50, 34.3%, 17.2%, 5%, 2.6%, respectively; In terms of educational background, most of the respondents were undergraduate students, followed by those with master's degree or above. From the monthly income, 34.7% of the respondents in the annual income of 10000 to 30000 Afghani. From the source of income, the migrant workers accounted for the most significant total sample, about 54.1%, and farmers accounted for only 20.5%; 84.2% of the respondents have Internet and online shopping experience, and 84.2 percent of the survey respondents have their hometown specialty products. From the way of sales, 34.7% of the respondents contact buyers to sell products, 37% of respondents are self-produced, 28.4% through other ways of selling products; From the survey of the attitude of online sales of products, 60.1% of the respondents held a positive attitude, 34.7% of the respondents feel that online sales of products in general, and only 5.3% of respondents have a negative attitude; In addition, 90.8% of the respondents have the opportunity, would like to choose online sales products, this result is consistent with the previous survey of online sales of products. From the monthly online shopping frequency, more than 60% of the respondents more than three times a month online shopping, of which 21.5% have more than ten times online shopping per month; There are 59.7% of respondents have e-commerce service stations in their hometown, more than half of the respondents have the experience of online shopping from the e-commerce service station, and 80.9% of them are willing to engage in e-commerce.

Table 2. Descriptive analysis

Index	Classification	Frequency	Percent	CP
Age	18-25	124	40.9	40.9
	26-30	104	34.3	75.2
	31-40	52	17.2	92.4
	41-50	15	5	97.4
	51-60	8	2.6	100
Education	Junior high school	20	6.6	6.6
	High school technical secondary school	47	15.5	22.1
	University	152	50.2	72.3
	College or above	84	27.7	100
annual income range	under 10000 Afghani	57	18.8	18.8
	10000-30000 Afghanni	105	34.7	53.5
	30000-50000 Afghani	80	26.4	79.9
	above 50000 Afghani	61	20.1	100
main sources of income	Farming	62	20.5	20.5
	Working	164	54.1	74.6
	Other	77	25.4	100
have internet	Yes	255	84.2	84.2
	No	48	15.8	100
online experience	Yes	255	84.2	84.2
	No	48	15.8	100
Is there a special product in your hometown?	Yes	240	79.2	79.2
	No	63	20.8	100
How do you sell your home produce?	their own contact buyers	105	34.7	34.7
	self-produced self-marketing	112	37	71.6
	Other	86	28.4	100
The attitude about the sale of products	Optimistic	182	60.1	60.1

Research on the Influencing Factors of E-Commerce Development in Afghanistan

Index	Classification	Frequency	Percent	CP
through the Internet	General	105	34.7	94.7
	Negative	16	5.3	100
would you choose to sell online	Yes	275	90.8	90.8
	No	28	9.2	100
frequency of online shopping	3 times less	117	38.6	38.6
	3-5 times	96	31.7	70.3
	5-10 times	25	8.3	78.5
	10 times more	65	21.5	100
e-commerce service stations in your country	Yes	217	71.6	71.6
	No	86	28.4	100
ever proxied a purchase from a rural e-commerce service	Yes	181	59.7	59.7
	No	122	40.3	100
willing to work in e-commerce	Yes	245	80.9	80.9
	No	58	19.1	100

5.2. Descriptive statistics of research variables

According to the results of descriptive statistical analysis for each variable, It can be seen from the speed of the network, the quality of online shopping, the distance to take the express, the type of logistics company, the timeliness of logistics information update and logistics company SMS or phone call to pick up express the average is less than 3. It shows that the respondents are less satisfied with e-commerce services and logistics.

Table 3. Descriptive analysis

Variable	Mean	SD
have internet in	1.16	0.36
online experience	1.16	0.37
Is there a special product in your hometown?	1.21	0.41
would you choose to sell online	1.09	0.29
e-commerce service stations in your country	1.28	0.45
ever proxied a purchase from a rural e-commerce service	1.40	0.49
satisfaction of the speed of the Internet in your home	2.58	1.16
satisfaction of the quality of online shopping	2.64	0.95
satisfaction of the type of National Logistics Company	2.40	0.94
satisfaction of the timeliness of updating logistics information	2.66	1.07
satisfaction with the good condition of the goods shipped	2.51	1.03
Your satisfaction with the distance you have to travel to pick up the delivery	2.50	1.06
satisfaction of the logistics company SMS or phone notification you	2.35	1.03
willing to work in e-commerce	1.19	0.39

According to the statistical analysis results, in the process of development of e-commerce in Afghanistan, from the perspective of infrastructure, performance in the home network broadband access speed, e-commerce construction and express stations distance four aspects, When consumers use the Internet to buy goods, express delivery to the hands of consumers is the last section of online shopping, the distance of the express station greatly affects the quality of the Afghan residents to buy online, so the satisfaction with the distance you have to travel to pick up the delivery 2.50; No matter big cities or small cities, consumers pay more and more attention to online shopping experience, good shopping experience not only drives afghan consumers to use online shopping, Also conducive to business to build product reputation, promote greater consumption, and online shopping quality assurance is very good shopping experience foundation and core, the highest average value of this item 2.64; To some extent, the variety of logistics companies first determines whether consumers choose to shop online or in physical stores, Secondly, it makes it easier for consumers to choose the express that fits their preferences, so that consumers can track all the goods. The average of this option is 2,35.

5.3. Establish a factor analysis model for the development of e-commerce in Afghanistan

Reliability Statistics

Reliability is an index that reflects the stability and consistency of measurement. The reliability of the questionnaire refers to the stability and consistency of questionnaire results. This study used Cronbach's Alpha coefficient to analyze the reliability of the collected samples. Table 4 was obtained by reliability analysis of the scale and its dimensions with SPSS 22.0. From Table 4, we know that the overall Cronbach coefficient of the scale is 0.857, more significant than 0.8, which shows that the internal

consistency of the questionnaire is excellent, the reliability is very high, and the reliability of each measurement index is acceptable or above.

Table 4. Reliability statistics

Cronbach's Alpha	N of Items
0.857	14

Validity analysis

The Bartlett sphericity test is used to test whether the variables are independent. The greater the statistic value or the corresponding associated probability is less than the given significance level, the stronger the correlation between variables, the more suitable for factor analysis. Table 5 is obtained by exploratory factor analysis with SPSS. Data from Table 4 show that the overall KMO value is 0.845, Close to 1, and the significance of Bartlett's sphericity test is 0.000, less than 0.05, indicating that this scale is suitable for factor analysis.

Table 5. KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.845
Bartlett's Test of Sphericity	Approx. Chi-Square	1756.643
	df	91
	Sig.	0.000

Factor analysis

After analyzing the reliability and validity of each item of the questionnaire, to understand the main influencing factors of e-commerce development in Afghanistan and the relationship between different influencing factors, factor analysis was carried out with SPSS software. The original index data was standardized before eliminating the influence of dimensional differences on the analysis structure. Results shows that four eigenvalues greater than one potential factor was obtained by principal component analysis, and their cumulative contribution rate was 64.23%, indicating that these four potential factors could explain 64% of the total variance of the original variables. The four potential factors are named F1, F2, F3 and F4. Factor F1 concentrates 31.758% of the complete information of all indicators, factor F2 concentrates 13.953%, Factor F3 concentrates 9.729% of the complete information of all indicators, and factor F4 concentrates 8.791% of all indicator's comprehensive information.

Table 6. Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	CP	Total	% of Variance	ofCP	Total	% of Variance	ofCP
1	5.125	36.61	36.61	5.125	36.61	36.61	4.446	31.758	31.76
2	1.65	11.787	48.397	1.65	11.787	48.39	1.953	13.953	45.71
3	1.208	8.632	57.029	1.208	8.632	57.023	1.362	9.729	55.44
4	1.008	7.201	64.23	1.008	7.201	64.23	1.231	8.791	64.23
5	0.866	6.189	70.419						
6	0.819	5.852	76.27						
7	0.703	5.021	81.291						
8	0.676	4.828	86.119						
9	0.526	3.755	89.874						
10	0.395	2.822	92.696						
11	0.334	2.389	95.085						
12	0.299	2.138	97.223						
13	0.223	1.59	98.813						
14	0.166	1.187	100						

Note. CP denotes cumulative percentage

Table 7 shows the factor load matrix after rotation, from which we can see that the most loaded factor F1 is X4 (Express station distance), the most significant load on the public factor F2 is X3 (rural e-commerce service station construction), The most significant load on the public factor F3 is X12 (Network Marketing Awareness of Special Products), and the biggest one on the common factor F4 is X14 (Willingness to Work in E-commerce). The larger the load of the original variable on the common factor, the higher the correlation between the original variables and the common factors.

	Component			
	1	2	3	4
X4 Your satisfaction with the distance you have to travel to pick up the delivery	0.865	0.047	-0.002	0.097
X9 satisfaction of the type of National Logistics Company	0.864	0.182	0.188	-0.056
X7 satisfaction with the good condition of the goods shipped	0.832	-0.004	-0.011	0.165
X10 satisfaction of the timeliness of updating logistics information	0.775	0.177	0.079	-0.101
X6 satisfaction of the quality of online shopping	0.739	0.256	0.126	-0.102
X11 satisfaction of the logistics company SMS or phone notification you	0.694	0.245	-0.158	0.262
X2 satisfaction of the speed of the Internet in your home	0.692	0.263	0.158	-0.195
X3 e-commerce service stations in your country	0.194	0.816	0.225	-0.086
X8 ever proxied a purchase from a rural e-commerce service	0.126	0.771	-0.008	0.016
X5 online experience	0.196	0.556	0.017	0.224
X12 s there a special product in your hometown?	0.098	0.133	0.838	-0.022
X13 would you choose to sell online	0.055	0.026	0.689	0.350
X14 willing to work in e-commerce	-0.135	-0.081	0.091	0.715
X1 have internet in	0.171	0.312	0.137	0.61

Table.7 Rotated Component Matrix

Table 7 is a pre-rotation factor load matrix from which the factor model of e-commerce in Afghanistan can be obtained:
 $F1=0.335*X1 + 0.743*X2 + 0.532*X3 + 0.803*X4 + 0.414*X5 + 0.782*X6 + 0.755*X7 + 0.42*X8 + 0.878*X9 + 0.776*X10 + 0.711*X11 + 0.278*X12 + 0.193*X13 - 0.1*X14$
 $F2=0.467*X1 - 0.115*X2 + 0.465*X3 - 0.258*X4 + 0.343*X5 - 0.113*X6 - 0.248*X7 + 0.376*X8 - 0.142*X9 - 0.197*X10 - 0.101*X11 + 0.518*X12 + 0.56*X13 + 0.39*X14$
 $F3=0.231*X1 - 0.104*X2 - 0.511*X3 + 0.212*X4 - 0.205*X5 - 0.043*X6 + 0.278*X7 - 0.505*X8 + 0.083*X9 + 0.007*X10 + 0.088*X11 + 0.176*X12 + 0.421*X13 + 0.49*X14$
 $F4=0.365*X1 - 0.186*X2 - 0.031*X3 + 0.067*X4 + 0.26*X5 - 0.105*X6 + 0.106*X7 + 0.194*X8 - 0.139*X9 - 0.089*X10 + 0.335*X11 - 0.594*X12 - 0.27*X13 + 0.377*X14$

	Component			
	1	2	3	4
X9 satisfaction of the type of National Logistics Company	0.878	-0.142	0.083	-0.139
X4 Your satisfaction with the distance you have to travel to pick up the delivery	0.803	-0.258	0.212	0.067
X6 satisfaction of the quality of online shopping	0.782	-0.113	-0.043	-0.105
X10 satisfaction of the timeliness of updating logistics information	0.776	-0.197	0.007	-0.089
X7 satisfaction with the good condition of the goods shipped	0.755	-0.248	0.278	0.106
X2 satisfaction of the speed of the Internet in your home	0.743	-0.115	-0.104	-0.186
X11 satisfaction of the logistics company SMS or phone notification you	0.711	-0.101	0.088	0.335
X3 e-commerce service stations in your country	0.532	0.465	-0.511	-0.031
X5 online experience	0.414	0.343	-0.205	0.26
X13 would you choose to sell online	0.193	0.56	0.421	-0.27
X1 have internet in	0.335	0.467	0.231	0.365
X8 ever proxied a purchase from a rural e-commerce service	0.42	0.376	-0.505	0.194
X14 willing to work in e-commerce	-0.100	0.390	0.490	0.377
X12 s there a special product in your hometown?	0.278	0.518	0.176	-0.594

Table 8. Component Matrix

According to the above factor analysis, we can see that the first public factor F1 contains the leading indicators for X4 (the distance of courier stations), X9 (the type of logistics companies) and X7 (Good or Bad Condition of Goods), X10 (Update Speed of Logistics Information) and X6 (Online shopping quality), X11 (logistics company service quality) and X2 (speed of the network), so the factor can be named "e-commerce logistics service quality"; The second public factor, F2 contains the leading indicators X3 (rural e-commerce service station construction), X8 (use of rural e-commerce service station purchasing), and X5 (have online shopping experience), reflect the e-commerce infrastructure; this factor can be called "e-commerce infrastructure situation"; The third common factor F3 contains the main indicator X13 (Online Marketing Willingness of Products), X12 (Internet Marketing of Featured Products Awareness), reflecting the survey of online marketing awareness and online marketing willingness, the factor can be named "e-commerce awareness"; The fourth common factor F4 contains the main indicator X1 (Internet broadband) and X14 (willingness to work in e-commerce), reflecting the degree of awareness of e-commerce, can be called "willingness to sell online."

5.4. Model result analysis

Table 8 shows the factor load analysis. The first common factors are F1 and X7 (good or bad condition), X10 (Logistics Information Update Speed), X11 (Service Quality of logistics company), x4 (Distance of courier station) and x9 (Types of logistics companies). X15 (e-commerce awareness), X14 (willingness to work in e-commerce), x6 (online shopping quality level), and x2 (speed of the network) are closely related; as a bridge between consumers and producers, e-companies must ensure the quality of goods while supplying goods. Logistics companies must improve service quality in the distribution process, reflecting that the development of e-commerce in Afghanistan cannot do without e-commerce companies. Logistics enterprises and other e-commerce services' primary support, combined with other variables, can be named "E-commerce awareness and support services, including e-commerce services, network infrastructure, logistics. There are four aspects of people's awareness of e-commerce. The second public factor, F2 is closely related to X3 (construction of e-commerce service stations in Afghanistan) and X8 (whether or not they use e-commerce stations for purchasing), reflecting the function of e-commerce stations. This factor can be called "Afghanistan e-commerce service station utilization": the third public factor, F3 is closely related to F12 (specialty product marketing awareness) X13 (product marketing wellness); it reflects the willingness of people to sell local products online according to the resource endowments of different regions. The factor can be named as "online sales willingness": the fourth public factor F4 and X1 (with or without internet broadband), X5 (online shopping experience or not) are closely related, reflecting the support of online purchasing behaviour for e-commerce in Afghanistan, this factor can be called "online purchasing experience."

Therefore, considering the weight of each common factor, selecting the common factor with more significant variance contribution weight, there are four main influencing factors of e-commerce in Afghanistan: e-commerce awareness and support services, Afghan e-commerce service station utilization, online sales intention and online purchase experience.

First, e-commerce awareness and support services are the essential factors for e-commerce development in Afghanistan. With the implementation of the full coverage of e-commerce in Afghanistan, to achieve e-commerce in the region of Afghanistan to promote the need for the network environment, the more important is the people's awareness of e-commerce and Afghan e-commerce system support. On the one hand, the quality of service provided by logistics companies and e-commerce companies affects people's

preference for buying and selling products through e-commerce, thus causing a particular impact on people's acceptance of e-commerce. The stronger the people's awareness of e-commerce, the more sensitive to market information. They tend to use the advantages of e-commerce in Afghanistan to make their profits, so people are more inclined to participate in Afghan e-commerce activities and develop e-commerce production impact on Afghanistan.

Second. The use of e-commerce service stations is the foundation for e-commerce development in Afghanistan. Although Afghanistan has achieved full coverage of the construction of Afghan e-commerce service stations, most of the service stations are in the initial stage of operation, the volume of business is small, not giving full play to the advantages of service stations carrying out business. An E-commerce service station in Afghanistan is an effective means to promote people's enthusiasm. The development of e-commerce in Afghan needs to make full use of the E-commerce station of Afghanistan and give full play to its functions.

Third, online sales willingness and online purchase experience are essential factors in developing e-commerce in Afghanistan. As one of the main subjects of e-commerce in Afghanistan, people's willingness to use the Internet to sell local Afghan products and network experience dramatically impact the level of awareness of Afghan e-commerce. Due to age, education and other restrictions, people use an e-commerce platform to sell local products that is not high, for local products caused a particular impact on the upward. An excellent online shopping experience will lead to an unforgettable experience. People in online shopping will rely on their own online shopping experience, explore the characteristics of e-commerce and this thing, people clear its strengths and weaknesses, and make their e-commerce advantages to bring benefits, indirectly affect the Afghan e-commerce downlink circulation.

6. COUNTERMEASURES AND SUGGESTIONS TO PROMOTE THE DEVELOPMENT OF E-COMMERCE IN AFGHANISTAN

This paper investigates the development of e-commerce in Afghanistan by issuing questionnaires to Afghan residents and obtaining relevant data. The main influencing factors of e-commerce development are summarized as four factors: awareness of e-commerce and supporting services, Afghanistan e-commerce station utilization, network sales willingness, and network purchase experience. This chapter for the five aspects of factors put forward relevant countermeasures and suggestions to promote the in-depth development of Afghan e-commerce.

6.1. Innovate the e-commerce service system and improve the country's e-commerce service quality

A sound e-commerce service system cannot be separated from the support of e-commerce service subjects. To innovate e-commerce service systems, we must start with e-commerce service providers. First of all, to cultivate e-commerce service enterprises in Afghanistan, vigorously support the establishment of the Afghan e-commerce association, and by the association led the formation of specialized service organizations, providing technical training, brand building and maintenance, information consulting and other specialized services, for the people to participate in e-commerce activities to provide favorable conditions.

Secondly, e-commerce enterprises and logistics companies should make every effort to provide quality services and create service brands in the quality and safety of goods and distribution. E-commerce enterprises should give full play to the core advantages of their products and adequately position the price of goods. Ensure the quality and safety of goods, increase repeat customers: logistics companies in the speed of distribution, service attitude and publicity mode should establish a cooperative relationship with the local government to form a mutually reinforcing situation, rational distribution of local courier flow centre so that Afghanistan online shopping benefits from logistics and online banking. Furthermore, the development of e-commerce in Afghanistan needs the support of logistics distribution networks and online banking. Moreover, most logistics distribution networks are only to cities, counties, villages, districts, townships; a level of logistics distribution networks has not been fully established, the vast areas in the logistics distribution links still exist significant problems. Therefore, the logistics distribution network should be established as soon as possible to meet the needs of Afghan consumers, according to the characteristics of online shopping goods, the establishment of a suitable distribution network and online banking, smooth product circulation channels. Finally, due to traditional ideas, people use the Internet to trade. Therefore, e-commerce enterprises and logistics companies can consider cooperation with insurance companies to provide security for goods, risk management in the whole process of online transactions can eliminate the burden of people's hearts.

6.2. Strengthen national e-commerce awareness mobilize people and e-commerce enthusiasm.

Due to the traffic conditions and people's cultural level restrictions, each province, county, rural, regional information block, people's awareness of e-commerce in Afghanistan is relatively scarce. People use e-commerce to engage in e-commerce work will significantly reduce. Therefore, various measures should be taken to stimulate people's interest in learning about e-commerce, strengthen people's awareness of e-commerce, and mobilize people's enthusiasm to participate in e-commerce. On the one hand, leading cadres organize regular training on e-commerce in Afghanistan, starting from training people to operate computers so that the local people can be trained as essential talents in e-commerce. On the other hand, in areas of Afghanistan with e-commerce service stations, we should base ourselves on helping people to become rich, use service stations to publicize the knowledge of Afghan e-commerce to the people, and actively carry out business incubation

activities by putting up posters, to help the people increase their income through e-commerce and promote more local employment.

6.3. Make full use of the capacity of the national e-commerce service station to increase the business volume of the service.

In promoting full coverage of people's e-commerce, although the number of e-commerce service stations in Afghanistan has reached more than 200,000, many sites exist zero business phenomenon, did not achieve the desired effect of development. Therefore, in a beginning station, the government to increase the publicity of e-commerce in Afghanistan, from the service station to express enterprises, layers of the check.

First, improve the operation mechanism of e-commerce service stations in Afghanistan to strengthen the cities, counties, villages, service station business training, and technical support. The quality supervision to encourage express enterprises to increase the wrong section of the investment in transport and delivery, shorten the time limit for sending pieces in Afghanistan, improve the level of mail end delivery. Moreover, to encourage express delivery enterprises to increase Afghanistan received subsidies, improve the service station express business battalion level.

The second is to encourage Afghan e-commerce service station rich features, the development of comprehensive convenience services colleagues, superimposed courier service delivery and self-service functions, in addition, seek business partners, the enterprise brand and national product brand effect, Enterprises with the help of national e-commerce service station platform, through the expansion of brand connotation, the formation of differentiated competition, promote the construction of Afghanistan's brand e-commerce, enhance their competitiveness, at the same time, increase the transaction volume of e-commerce service stations in Afghanistan.

6.4. Establish a national product online sale platform to promote national product online sales

The government should give full play to the leading role and actively guide, support and promote Afghanistan's market. Product network sales development. First of all, through bidding to guide e-commerce enterprises to enter the Afghan market, enterprises can establish their Afghan e-commerce service platform in the local setup unique product online sales channel for direct origin supply and establish Afghanistan product's market production traceability system so that urban consumers can rest assured to buy.

Secondly, in the local selection of leading enterprises to carry out network sales pilot, establish network sales demonstration base. Afghan products should be standardized production, from packaging style to quality standards are unified, through the demonstration effect, to stimulate the broad masses of people acting through the sale of local products. At the same time, the demonstration base should give full play to additional functions, popularize product standardization production knowledge, and carry out the relevant industry policies, with more than one belt, a little belt to promote the formation of network sales.

Finally, through the investment of funds for the Afghan product network sales to develop relevant preferential policies, stimulate people to sell Afghan products through the

network, establish and improve the Afghanistan product legal system, strengthen the protection of Afghanistan's products network sales.

6.5. Optimize the national network environment and promote national online purchases

The development of e-commerce in Afghanistan needs to create an exemplary network environment, especially the support of online banking and network broadband and related network equipment. Although the Afghan regional network penetration rate continues to climb, there are still parts of the Internet's complicated problem. As the development of Afghanistan needs convenient transportation, the current development of e-commerce in Afghanistan requires "road repair", an exemplary network environment, and online banking for the Afghan e-commerce industry has a pivotal role in the downlink.

First, local governments should thoroughly implement the implementation of local network projects. Appropriate incentives can be taken to stimulate people's families to install broadband network enthusiasm encourage and guide the majority of people's households connected to Internet broadband.

The second is to provide people with a safe online payment environment. E-commerce service platforms should work with the government to monitor and control, ensure the security of the electronic payment process (online banking), and improve the threshold for merchants to enter the platform. For the existence of irregular business, acts should be severely punished, establish people's trust in online shopping, urge people to break through the barriers of traditional consumption concept, accept new ways of shopping, and use the network to buy goods.

In the context of "Internet +," Afghanistan emerged as the times require, effectively promoting the rapid development of the Afghan economy. E-commerce, as a link between small and big markets, makes up for the gaps in Afghan industry, optimizes the industrial structure and brings opportunities for Afghanistan's economy to achieve leapfrog development. To this end, we should make full use of this development opportunity, effectively carry out e-commerce in Afghanistan, promote the people to increase income industrial and agricultural modernization development, to improve the level of economic development in the Afghan region.

This paper is closely linked to reality based on the overall situation of the development of the Afghan electronic paper that foreign development summed up the power mechanism of e-commerce development in Afghanistan. Afghanistan's leading model for e-commerce development and analysis of the status quo of e-commerce. Based on this, through the questionnaire survey to collect the relevant data of e-commerce in Afghanistan, using factor analysis method of e-commerce development of Afghanistan impact factors empirical analysis, and detailed analysis of the model results, the development of e-commerce for Afghanistan's main factors, the corresponding countermeasures and suggestions. The specific research contents are as follows:

1. Based on reading many references, according to the principle of comprehensiveness and feasibility, 15 secondary indicators were selected from the four dimensions of Afghan infrastructure online shopping experience, logistics, people's awareness of

e-commerce to analyze the factors affecting the development of e-commerce in Afghanistan.

2. Using the factor analysis method, we extract the influential factors of e-commerce development in Afghanistan by extracting the common factors and getting four main influential factors. E-commerce awareness and support services, people's e-commerce service station utilization, network sales willingness and network purchase experience.
3. Propose countermeasures to promote the further development of e-commerce in Afghanistan. Based on the above research, the following recommendations are made for the development of e-commerce in Afghanistan; Innovate e-commerce service system to improve the quality of e-commerce services in Afghanistan; Strengthen the people's awareness of e-commerce, mobilize the people to participate in Afghan e-commerce enthusiasm; Make full use of people's e-commerce service station functions, increase service station business; Establish online sales platform for people's products to promote online sales of local products; Improve the Afghan network environment, promote people to buy online.

REFERENCE

- [1] Abdul Fareed Delawari. [j]Journal of Emerging Economies and Islamic Research (2019) Vol. 7, No. 2
- [2] UNCTAD. (2017). B2C E-commerce index 2017. Retrieved from http://unctad.org/en/PublicationsLibrary/tn_unctad_ict4d09_en.pdf
- [3] Ministry of Communication and Information Technology. (2018). Telecom Sector Recent Achievements. Retrieved from <http://mcit.gov.af/en/page/public-documents/6005>
- [4] Aziz bank report in Tolo news (2019, October) Online Shopping increase in Afghanistan. Retrieved from <https://www.tolonews.com/bazar/bazar-online-shopping-increases-Afghanistan>
- [5] Click.af. (n.d.). Online Shopping Afghanistan. Retrieved from <https://www.click.af/>
- [6] (1) Mankiw wrote: Liang Xiaoming, Liang Qiaoyi, Principles of Economics: 7th ed. Microeconomics Fascicle [M]. Peking University Press
- [7] 曼昆著:梁小民,梁砾译,经济学原理:第7版.微观经济学分册[M].北京:北京大学出版社。
- [8] Putit, L. (2013). Factors influencing Saudi Arabian women's shopping behaviour in online purchase activities/Areeg ALMowalad, Lennora Putit. Journal of Emerging Economies and Islamic Research, 1(2), 1-13.
- [9] Euid, Reichie. (2017, February). 10 of the Largest E-commerce Markets in the World by Country. Retrieved from <https://www.business.com/articles/10-of-the-largest-e-commerce-markets-in-the-world-b/>
- [10] USAID. (2012). The State of Communication and Internet in Afghanistan: An Assessment Report.

- Retrieved from [https://www.usaid.gov/sites/default/files/documents/1871/The%20State%20of%20Telecoms%20and%20Internet%20in%20Afghanistan%20\(2006-2012\)%20Low-Res.pdf](https://www.usaid.gov/sites/default/files/documents/1871/The%20State%20of%20Telecoms%20and%20Internet%20in%20Afghanistan%20(2006-2012)%20Low-Res.pdf)
- [11] Michael Kyobe .the impact of Entrepreneur Bahaviors on the of E-commerce security: A compariso of Urban and Rural finding [J]. Journal of Global information Technology Management ,2008,11(2):58-79.
- [12] 郑亚琴,郑文生.关于构建电子商务评价指标体系的探讨[J].技术经济,2007(03):63-67
- [13] Zheng Ya-qin, Zheng Wen-sheng. A Discussion on the Construction of Evaluation Index System of E-commerce [J]. Technology and Economics, 2007,(03): 63-67
- [14] Afghan Bazar. (n.d.). Buy & Sell Everything Online in Afghanistan. Retrieved from <http://afghanbazar.com/>
- [15] Click.af. (n.d.). Online Shopping Afghanistan. Retrieved from <https://www.click.af/>
- [16] Goharshad. (n.d.). Online Store Afghanistan. Retrieved from <https://www.goharshad.af/>
- [17] Reuters. (2018, June) Afghan Shoppers go online to avoid bombs, harassment. Retrieved from <https://www.reuters.com/article/us-afghanistan-online/afghan-shoppers-go-online-to-avoid-bombsharassment-idUSKCN1J5028>
- [18] OECD "Measuring ICT usage and electornic commerce in enterprises:proposal a model question on ICT usage "[R].DSTI/ICCP/IIS,paris,2001
- [19] UNCTAD. (2017). B2C E-commerce index 2017. Retrieved from http://unctad.org/en/PublicationsLibrary/tn_unctad_ict4d09_en.pdf
- [20] UNCTAD. (2017). Information Economy Report 2017. Retrieved from http://unctad.org/en/PublicationsLibrary/ier2017_o_verview_en.pdf
- [21] USAID. (2012). The State of Communication and Internet in Afghanistan: An Assessment Report. Retrieved from [https://www.usaid.gov/sites/default/files/documents/1871/The%20State%20of%20Telecoms%20and%20Internet%20in%20Afghanistan%20\(2006-2012\)%20Low-Res.pdf](https://www.usaid.gov/sites/default/files/documents/1871/The%20State%20of%20Telecoms%20and%20Internet%20in%20Afghanistan%20(2006-2012)%20Low-Res.pdf)
- [22] Hamayun Khan, et. al. "Factors affecting Customers' Satisfaction of Online Shopping–Evidence from Kabul, Afghanistan" IOSR Journal of Business and Management (IOSR-JBM),22(5), 2020:11-17
- [23] Economy of Afghanistan, https://en.wikipedia.org/wiki/Economy_of_Afghanistan
- [24] Tolo news. (2016, October) Unemployment Rate Spikes in Afghanistan. Retrieved from <https://www.tolonews.com/afghanistan/unemployment-rate-spikes-afghanistan>
- [25] World Bank Database. (2018). Gross Domestic Saving as a percentage of GDP of Afghanistan. Retrieved from <https://data.worldbank.org/indicator/NY.GDS.TOTL.ZS?locations=AF>
- [26] World Bank Database. (2018). Gross Domestic Saving as a percentage of GDP of Afghanistan. Retrieved from <https://data.worldbank.org/indicator/NY.GDS.TOTL.ZS?locations=AF>
- [27] Wajeeha Aslam, Business Administration Department, Iqra University, Karachi, Sindh 75500, Pakistan.
- [28] Arzanqemat. (n.d). Afghanistan's 1st online store. Retrieved from <http://arzanqemat.com/>
- [29] Azadbazar. (n.d.). The no.1 market place of Afghanistan. Retrieve <https://www.azadbazar.af/search/result.jsp>
- [30] Central Statistic of Afghanistan. (2018). Annual Trade Report. Retrieved from <http://cso.gov.af/en/page/economy-statistics/6323/annual-trade>
- [31] Delawari, A. F. (2018). A time series analysis of determinants of FDI in Afghanistan: Which one matters the most, security or economic growth?. Journal of Emerging Economies & Islamic Research, 6(2).