EFFECTS OF COMBINING THE O2O MODEL, REGIONAL PRODUCTS AND EDUCATIONAL EXPERIENCE ON THE DEVELOPMENT OF VIETNAM'S RURAL E-COMMERCE

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SUMMARY

Rural E-commerce has performed as a new area to consider, primarily takes spontaneous nature and it does not have an obvious orientation. As a result, rural E-commerce needs to select a suitable development model to form the breakthrough premise for Vietnam's agriculture. Moreover, the core goal of this model is to intensify agricultural trading to build a modern agricultural product trading system (1 out of 3 new TAM NONG ideological criteria). Along with the purpose to exploit the potential in rural areas, increase the farmers' income and improve the standard of living - a foundation to create a green, clean and beautiful environment, modernize the agricultural economy; the research is also of great significance in the development of modern TAM NONG policy with recent 4.0 technology in Vietnam. This research uses a cross-sectional descriptive method, aiming at shedding light on the key factor for the development of rural E-commerce in Vietnam based on the O2O model, including the ability to participate in E-commerce (age, gender, etc), living areas (rural, urban), academic level, combining of cultural, rural, regional specialties in developing field-trip ecotourism, managing logistics. As a result, our research aims to establish a new rural E-commerce combining 3 in 1: E-commerce O2O model, rural specialties, together with rural educational experience.

Keywords: E-commerce O2O, regional specialties, rural educational experience, Vietnam rural E-commerce.

1. INTRODUCTION

Agriculture plays a vital role in many economic sectors of Vietnam, from time-to-time people have taken agriculture as a pre-building and stabilizing the socio-economic situation in Vietnam. These days, although Vietnam is becoming more and more developed, we cannot separate ourselves from agriculture's enormous spreading role. Attending the conference to summarize the agricultural industry 2020 in the context of the COVID-19 epidemic, the Prime Minister of Vietnam evaluated that in the context of unprecedented difficulties, the agriculture sector still contributes over 10 billion USD to the trade surplus of our economy and emphasized this was a successful year with quite a few comprehensive bright points of the industry. In difficult situations, the agricultural industry shows a survival role in ensuring food security and being important support for the whole economy (Le et al., 2020).

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Not only are Vietnam's agricultural products very diverse (4 seasons of farm produce), but its regions also have quite a few specialties. The addressed question here is how to bring the products to domestic and worldwide consumers, especially when the issue of the Covid-19 epidemic can be prolonged remains head-splitting. Nevertheless, the recent situation seizes a golden opportunity for the agricultural sector to develop. Through the e-commerce system, especially O2O for trading agricultural products only (diversifying local specialties) controlled by domestic laws, e-business paves the way for the expansion of agriculture.

According to the E-commerce index report (2020), Vietnam has over 64 million internet users which accounts for 66% of the total population and there are 62 million social network users with over 143 million mobile subscribers (Vietnam's E-commerce Association, 2020).

Meanwhile, 80% of the total population has still not accessed E-commerce, which left high surplus growth. Based on this, E-commerce

becomes a potential field to be boosted in Vietnam. Many countries around the world that have such developed agricultural economies have always concentrated on the question: Which criteria do rural E-commerce belong to in the latest "Tam Nong" ideology? (Lin and Wu, 2016). Known as a country with a population of billions, China places much value on food assurance, involved in subsistence agriculture within the country. China avoids being dependent on food sources outside the country, which plays as the crux of stable economic development through the years. The two authors suggested one of the orientations in the expansion of Tam Nong is to modernize the business system during the period of agricultural modernization (Lin and Wu, 2016). "Developing and modernizing the economic system" can be seen as the expansion of the "rural E-commerce model" in selling farm produce – a national strategy that China has carried out to expand the rural economy (Quang, 2020, VTV24).

E-commerce has been mentioned by quite a few researchers in Vietnam as well as around the world. Numerous researches were made public through prestigious journals that have much influence on E-commerce. Groves and Darin (1999) have early broached the rapid development of the Internet allowing enterprises to have strong connections with business operations and the market. Furthermore, they also found out that the Internet eliminates lots of traditional exchange processes to increase productivity and profits as well as potential benefits of entrepreneurs in rural areas including accessing products' information, managing purchasing effectively, decreasing distribution cost, etc (Groves and Darin, 1999).

Through investigating the developing situation of agricultural products E-commerce of Son Tay Province (China), not only opportunities and threats but also strategies have been analyzed and brought forward to foster agricultural O2O model (Han and Bai, 2016).

From the business perspective combining the experience of consuming agricultural O2O domestically and abroad; through analyzing the actual situation and the existence of consuming agricultural specialties O2O, Co District, Son Tay Province proposed corresponding strategies. Eventually, the two authors suggested that the development of other rural areas in China should consider the experience on the usage of the O2O model in purchasing agricultural specialties in Co District, Son Tay province as a telling example before applying in specific places (Liu, 2017).

Recently, Chen has researched deeply into logistic development strategies for agricultural fresh produce in Quang Tay based on the E-commerce O2O model to find out suitable strategies for smooth circulation of those products (Chen, 2021).

Guo and Zhou from Hebei University of Economics and Business had a post on Journal of Science discussion and Inheritance to analyze the development of rural E-commerce model in Hebei Province then concluded combining rural model, co-operative, E-commerce, the marketization of the E-commerce O2O model's core (Guo and Zhou, 2021).

Along with the growth of rural E-commerce, apart from agricultural regional products and E-commerce O2O model, the experience of rural tourism plays such a necessary role, especially focus on fresh and idyllic natural scenery, accompanied by the rural stories, legends, folktales that are traditionally stored, and ancient relics, etc are recently headline-grabbing. Those features are regarded as specific highlights with the uniqueness that only appear in Vietnam's countryside – a small country with a long history of preserving its territory, against the invaders and taking agriculture as the major sector to develop the economy.

Ma et al., have mentioned the value of rural traditional cultures and based on this to produce traditional tangible and intangible products then attract tourists to develop the rural regional

economy (Ma et al., 2021).

Shi selected the inheritance model and digitalization to revitalize the rural economy. Optimizing the rural inheritance model, associating to local Government to promote specialties and rural ecotourism then impulse local economy (Shi, 2020).

According to the assessment on the Internet about rural tourism based on the resource control foundation, the researchers mentioned the most efficient usage of farmland to organize rural tourism's resources (Jiang et al., 2021).

From previous discrete researches, we combine quite a few factors to establish a rural E-commerce model towards developing the rural economy with multi-income sources based on progressive and modern "Tam Nong" ideology. This ideology is suitable to the available natural conditions in Vietnam's countryside based on the E-commerce O2O model, rural regional specialties, and rural educational experience.

2. Data and research method

2.1. Data

The research subjects are Vietnamese people all over the country, who utilize E-commerce, regardless of gender, age, educational background, or region. We submitted a random survey of 700 people in the period of one year from December 2019 to December 2020. There were over 500 samples, however, after being selected, 436 papers were qualified enough to be collected.

The design of the questionnaire concentrates on the willingness to use E-commerce and the factors influencing this behavior. The questions were consulted by experts and then we conducted a test survey to ensure that its content and words are suitable for the goals as well as the examined subjects.

2.2. Research method

To generally evaluate whether in the combination of O2O E-commerce mode, agricultural specialties, and rural educational experience potential factors are promoting the development of rural E-commerce or not, we use the cross-sectional method on each group of factors to analyze and evaluate. The frequency and quantity table, which describes the characteristics, situations, or the level of evaluation and comment, reveals the percentage that each type of component characteristic makes up for in the study sample.

Inferential statistics, which analyzes the relationship among qualitative variables, was used in this study as Chi-Square (ratio comparison). The Chi-square test belongs to a family of widely used statistical hypothesis testing methods to analyze the influences of one variable on another (qualitative variable).

Wu Linlin and Wu Zhong are the two authors applying the Chi-square method in the process of acquiring knowledge (Wu and Wu, 2009).

The authors mentioned a modified Chi-square used specifically for multifactorial data analysis (Mahieu Benjamin et al., 2021).

The problem of creating a statistical model that suits the examined data to test how well the model reflects the data, and how close the observed values to those expected in the fitted model can be solved by a statistical test – Chi-square Goodness of Fit Test (Chi-Square Goodness of Fit Test, 2021).

Quite a few authors have used this method or have improved it to study different topics. Therefore, based on the reference to some of the mentioned studies, we suggested the following hypotheses:

The given hypothesis:

H0: No relationships among groups (no difference in percentage);

H1: There are relationships among groups (There are differences in ratio among the groups).

If the sig in the table < 0.05, H0 is rejected, which means there is a difference in the proportion (relationship) among the groups.

Chi-square formula:

$$X_C^2 = \sum \frac{(O-E)^2}{E} \quad (1)$$

In which:

E is the expectation, O is the observed value, H0 is rejected when:

$$X_C^2 = X^2(\alpha df) \quad (2)$$

α is the level of significance, df is the degree of freedom = the number of groups – 1.

3. RESULTS AND DISCUSSION

3.1. Analyzing the relationship among age, gender, education, living area, and the willingness of using E-commerce

Table 1. Statistics of survey subjects according to the degree of willingness to join the transactions

			Q1. Are you ready to join the E-commerce transaction?			
			Not really	**Ready**	**Pearson Chi-Square Tests**	
Q2. Gender	Male	Quantity	33	186		
		Ratio %	15.1%	84.9%	Chi-square	2.403
	Female	Quantity	22	195	df	1
		Ratio %	10.1%	89.9%	Sig.	.121
Q3. Age	More than 50	Quantity	11	40		
		Ratio %	21.6%	78.4%	Chi-square	5.346
	From 18 to 30	Quantity	35	244	df	2
		Ratio %	12.5%	87.5%	Sig.	.069
	From 31 to 50	Quantity	9	97		
		Ratio %	8.5%	91.5%		
Q4. Education	Secondary school	Quantity	9	44		
		Ratio %	17.0%	83.0%	Chi-square	8.596
	Bachelor	Quantity	26	197	df	5
		Ratio %	11.3%	88.7%	Sig.	.126[b]
	Vocational training and college	Quantity	9	55		
		Ratio %	14.1%	85.9%		
	High school	Quantity	9	65		
		Ratio %	12.2%	87.8%		
	Postgraduate	Quantity	2	20		
		Ratio %	9.1%	90.9%		
Q61. Living and working area	City center – developed towns	Quantity	24	235	Chi-square	6.488
		Ratio %	9.3%	90.7%	df	1
	Rural, coastal, or mountainous areas	Quantity	31	146	Sig.	.011[*]
		Ratio %	17.5%	82.5%		

As shown in table 1, the results in the table illustrate that only the relationship between the living and working area and the readiness of customers is statistically significant (sig = 0.001 < 5% significance level), which means about 235 people are ready to use the service, equivalent to 90.7% urban dwellers while those figure in the countryside is 82%. In other words, people living in towns tend to have a higher level of participation.

For other examined pairs, such as gender, age, education, no statistical significance was found in the relation to willingness or unwillingness.

The two factors living and working areas are significant for the development of rural E-commerce in Vietnam. It is said that the more convenient environmental conditions, the more favorably the E-commerce can develop. According to the data on Vietnam's E-commerce white paper, cities and developed areas witness more flourishing E-commerce development, as well as greater investment, which coincides with the data of Vietnam's E-commerce White Paper, reported in 2020 (Vietnam E-commerce White Paper, 2020).

3.2. Analyzing the relationship between the living area and the forms of purchasing local agricultural products

Table 2. Describe the forms of local specialty sales

			Q61. Living and working areas	
			City center – developed towns	**Rural, coastal, or mountainous areas**
Q6. Using a reputable E-commerce exchange guaranteed by the government in terms of E-commerce law	Not yet	Count	165	135
		Column N %	63.7%	76.3%
	Yes	Count	94	42
		Column N %	36.3%	23.7%
Q7. Using social media (Zalo, Facebook…) to purchase rural specialties	Limited	Count	90	62
		Column N %	34.7%	35.0%
	Never	Count	47	40
		Column N %	18.1%	22.6%
	Always	Count	122	75
		Column N %	47.1%	42.4%
Q8. Purchasing agricultural products directly in markets, supermarkets, self-opened stores…	Rarely	Count	103	58
		Column N %	39.8%	32.8%
	Never	Count	18	12
		Column N %	6.9%	6.8%
	Always	Count	138	107
		Column N %	53.3%	60.5%
Q9. Using self-sufficient products at homes (autarky)	Yes	Count	127	135
		Column N %	49.0%	76.3%
	No	Count	132	42
		Column N %	51.0%	23.7%
Q11. Owning online kiosks on rural E-commerce exchanges guaranteed by governments	Yes	Count	49	33
		Column N %	18.9%	18.6%
	No	Count	210	144
		Column N %	81.1%	81.4%

As shown in table 2, after combining the hypothesis test table with the description table, we find out that there is a statistically significant relationship between Using a reputable E-commerce exchange guaranteed by the government in terms of E-commerce law (Q.6) and the living areas. At the same time, the figures reveal that the rate of online trading use in urban areas is 36.3%, which is 23.7% higher than those living in the countryside.

Table 3. Test the relationship of living and working areas

Pearson Chi-Square Tests		
Q6. Using a reputable E-commerce exchange guaranteed by the government in terms of E-commerce law	Chi-square	7.734
	df	1
	Sig.	.005*
Q7. Using social media (Zalo, Facebook…) to purchase rural specialties	Chi-square	1.568
	df	2
	Sig.	.457
Q8. Purchasing agricultural products directly in markets, supermarkets, self-opened stores…	Chi-square	2.362
	df	2
	Sig.	.307

Pearson Chi-Square Tests		
Q9. Using self-sufficient products at homes (autarky)	Chi-square	32.524
	df	1
	Sig.	.000*
Q11. Owning online kiosks on rural E-commerce exchanges guaranteed by governments	Chi-square	.005
	df	1
	Sig.	.943

As shown in tables 2, 3: Besides, another meaningful relationship ($p \leq 0.001$) between the use of self-cultivated products and the living areas is also found. The proportion of autarky in rural areas is 76.3%, higher than that in the city, reaching 49%.

The table also shows that there is not any link among other indicators with living areas.

Feng mentioned the issue of popularizing the rural Taobao, one of the biggest rural E-commerce exchanges in China, which has greatly contributed to the development of rural economic development in recent years. This is such a reputable E-commerce trading platform that has a separate section for agricultural products (Feng, 2021).

The results showed that reputable O2O online exchanges, self-cultivated products exert a considerable impact on the revitalization of rural E-commerce in Vietnam.

3.3. Analyzing the relationship among education, knowledge, and level of barcode

As shown in Tables 4 and 5, the results show that the connection between educational level and barcode issues has statistical significance (sig is < 0.05, level of significance 5%). The description also reveals that the higher the education level increase, the greater the positive options related to barcodes will become.

Table 4. Description of the relationship between education/region, knowledge and barcode

			Q4. Education					Q61. Living and working areas	
			Secondary school	City center – developed towns	City center – developed towns	High school	Postgraduate	City center – developed towns	Rural, coastal, or mountainous areas
Q21. Having scanned barcodes before	Never	Count	36	103	39	32	5	103	112
		Column N %	67.9%	46.2%	60.9%	43.2%	22.7%	39.8%	63.3%
	Always	Count	6	18	6	5	1	28	8
		Column N %	11.3%	8.1%	9.4%	6.8%	4.5%	10.8%	4.5%
	Ever did	Count	11	102	19	37	16	128	57
		Column N %	20.8%	45.7%	29.7%	50.0%	72.7%	49.4%	32.2%
Q22. Products are guaranteed by the government	No	Count	49	143	40	53	9	156	138
		Column N %	92.5%	64.1%	62.5%	71.6%	40.9%	60.2%	78.0%
	Yes	Count	4	80	24	21	13	103	39
		Column N %	7.5%	35.9%	37.5%	28.4%	59.1%	39.8%	22.0%
Q23. Having acquired the knowledge about customer's benefits	Have not known	Count	32	113	26	23	9	123	80
		Column N %	60.4%	50.7%	40.6%	31.1%	40.9%	47.5%	45.2%
	Have known	Count	21	110	38	51	13	136	97
		Column N %	39.6%	49.3%	59.4%	68.9%	59.1%	52.5%	54.8%
Q24. Being promulgated by organizations	No	Count	35	107	31	28	9	114	96
		Column N %	66.0%	48.0%	48.4%	37.8%	40.9%	44.0%	54.2%
	Yes	Count	18	116	33	46	13	145	81
		Column N %	34.0%	52.0%	51.6%	62.2%	59.1%	56.0%	45.8%

			Q4. Education					Q61. Living and working areas	
			Secondary school	City center – developed towns	City center – developed towns	High school	Postgraduate	City center – developed towns	Rural, coastal, or mountainous areas
Q25. The benefits of barcode tracking	Non-benefit	Count	6	12	5	4	0	11	16
		Column N %	11.3%	5.4%	7.8%	5.4%	0.0%	4.2%	9.0%
	Normal benefit	Count	23	39	19	11	3	49	46
		Column N %	43.4%	17.5%	29.7%	14.9%	13.6%	18.9%	26.0%
	Very great benefit	Count	8	65	22	24	15	80	54
		Column N %	15.1%	29.1%	34.4%	32.4%	68.2%	30.9%	30.5%
	Great benefit	Count	16	107	18	35	4	119	61
		Column N %	30.2%	48.0%	28.1%	47.3%	18.2%	45.9%	34.5%

Table 5. Relationship test (Pearson Chi-Square Tests)

		Q4. Education	Q61. Living and working areas
Q21. Having scanned barcodes before	Chi-square	25.554	24.169
	df	8	2
	Sig.	.001*	.000*
Q22. Products are guaranteed by the government	Chi-square	24.566	15.058
	df	4	1
	Sig.	.000*	.000*
Q23. Having acquired the knowledge about customer's benefits	Chi-square	13.897	.222
	df	4	1
	Sig.	.008*	.637
Q24. Being promulgated by organizations	Chi-square	10.411	4.400
	df	4	1
	Sig.	.034*	.036*
Q25. The benefits of barcode tracking	Chi-square	46.541	9.675
	df	12	3
	Sig.	.000*,	.022*

3.4. Analyze the relationship between region and knowledge as well as the level of the barcode

As shown in tables 4 and 5: The results illustrate that living and working area has a statistically significant relationship with the use of barcodes, local products with barcodes, and the popularization of barcodes' knowledge as well as its benefits. Those who live in towns or developed areas stand a higher percentage of positive choices than those living in the countryside.

The three researchers Jun, Ping, and Ling in the research on the food traceability system based on the barcode tracking techniques emphasized the benefits of customers when purchasing agricultural products (Yang et al., 2014).

The results showed that to develop rural E-commerce in Vietnam, it is necessary to speed up the construction of barcodes for local products. However, since education plays an important role in the development of a clear understanding of barcode issues, it is suggested that strengthening the knowledge about barcodes and their importance for Vietnamese be vital. Additionally, we should encourage rural residents to complete education with the motto of learning, learning more, learn forever to improve their education.

3.5. Evaluating the current situation in combining local specialties and tourism, educational experiences in different geographical regions

As shown in tables 6, 7: The results reveal that the connection between the living and working areas and the assessment of localities with entertainment areas, study zones, modern E-commerce zone, experience area has

statistical significance with the level of significance < 1% ($p \leq 0.001$). The developed area contributes to increasing the higher percentage of the above indicators as "yes" than that of rural ones.

In this study, we add the experience of rural education as a factor that exerts beneficial influences on the development of rural E-commerce. Along with the current trend, which has the distinctive characteristics of Vietnam's countryside, the experience areas based on local farm product, the local charming scenery, the modern logistics, local specialties' manufacturing process, traditional agricultural culture with a local identity, rural scenic spots, fairy tales about countryside's products or historical figures, which are considered as the unique national identity during such a long history of the war that no other countries are the same. In our research, this can be regarded as an innovative point in comparison to the previous ones in building a model of rural E-commerce in Vietnam. Therefore, it can be said to be one of the most creative points that haven't been mentioned before. The combination is integrated into the rural E-commerce trading exchange to increase the belief of customers in local products (Times International Education, 2019).

Table 6. Description of the combination of specialties, tourism, and experiences

			Q61. Living and working areas	
			City center – developed towns	**Rural, coastal, or mountainous areas**
Q35. Combination: [Local food learning areas]	Yes	Count	129	46
		Column N %	49.8%	26.0%
	No	Count	130	131
		Column N %	50.2%	74.0%
Q35. Combination: [Entertainment areas]	Yes	Count	181	86
		Column N %	69.9%	48.6%
	No	Count	78	91
		Column N %	30.1%	51.4%
Q35. Combination: [Modern E-commerce areas and logistics experience]	Yes	Count	82	29
		Column N %	31.7%	16.4%
	No	Count	177	148
		Column N %	68.3%	83.6%
Q35. [Local specialty packaging experience areas]	Yes	Count	122	48
		Column N %	47.1%	27.1%
	No	Count	137	129
		Column N %	52.9%	72.9%
Q35. Combination: [Local agricultural culture experience areas]	Yes	Count	133	48
		Column N %	51.4%	27.1%
	No	Count	126	129
		Column N %	48.6%	72.9%
Q35. Combination: [the locality has at least one scenic monument]	Yes	Count	177	111
		Column N %	68.3%	62.7%
	No	Count	82	66
		Column N %	31.7%	37.3%

Table 7. Combining relationship test

Pearson Chi-Square Tests		
		Q61. Living and working areas
Q35. Combination: [Local food learning areas]	Chi-square	24.826
	df	1
	Sig.	.000*
Q35. Combination: [Entertainment areas]	Chi-square	20.090
	df	1
	Sig.	.000*
Q35. Combination: [Modern E-commerce areas and logistics experience]	Chi-square	12.929
	df	1
	Sig.	.000*
Q35. [Local specialty packaging experience areas]	Chi-square	17.655
	df	1
	Sig.	.000*
Q35. Combination: [Local agricultural culture experience areas]	Chi-square	25.430
	df	1
	Sig.	.000*
Q35. Combination: [the locality has at least one scenic monument]	Chi-square	1.485
	df	1
	Sig.	.223

3.6. Evaluating the relationship between Vietnam's rural E-commerce model and the regional ones.

As shown in Tables 8, 9: The results illustrate that the connection between reviews of E-commerce models such as the E-commerce community, the appearance of supermarket chains within 100 m – 1 km, and living areas. Urban areas and developed towns witness a higher rate than others.

Zhou and Hu mentioned the development of the O2O E-commerce model in purchasing agricultural products of Chau Son, and the statistic shows that 95% of those products are consumed from online transactions, 90% of payments are made virtually… Hence, they proposed to develop Chau Son rural E-commerce (Zhou and Hu, 2020).

Chen and Guang in their research on the same topics but Anhui pointed out that one of the basic factors that make the foundation for E-commerce here is the selection of a suitable model (Chen and Guang, 2019).

The Chinese researchers in their study in 2016 mentioned that the development of mobile E-commerce for fresh agricultural products based on the O2O E-commerce model (Jiao, 2016).

From the results obtained, we choose the O2O E-commerce model as the basis for Vietnamese rural E-commerce with a chain of convenient supermarkets to provide products and exchange for trading in rural E-commerce only.

The analysis illustrates the imbalance of rural E-commerce in Vietnam is the gap between urban and rural areas' economic level, so it is necessary to promote the development of E-commerce cooperatives in rural localities (especially those with specialties), strengthen the expansion of delivery locations (chains of supermarkets) within a radius of 100 m to 1 km in densely-populated areas.

Table 8. Ratio description between E-commerce model and regional ones

			Q61. Living and working areas	
			City center – developed towns	**Rural, coastal, or mountainous areas**
Q36. There are branches of local specialty stores.	Yes	Count	118	51
		Column N %	45.6%	28.8%
	No	Count	141	126
		Column N %	54.4%	71.2%
Q37. Branches within 100 meters and 1 kilometer	Yes	Count	81	39
		Column N %	31.3%	22.0%
	No	Count	178	138
		Column N %	68.7%	78.0%
Q38. The diverse connection of local specialties	Some local products	Count	192	136
		Column N %	74.1%	76.8%
	Products from all over the country	Count	67	41
		Column N %	25.9%	23.2%
Q39. Build up E-commerce community in Vietnam	Yes	Count	111	45
		Column N %	42.9%	25.4%
	No	Count	148	132
		Column N %	57.1%	74.6%

Table 9. Relationship test

Pearson Chi-Square Tests		
		Q61. Living and working areas
Q36. There are branches of local specialty stores	Chi-square	12.422
	df	1
	Sig.	.000*
Q37. Branches within 100 meters and 1 kilometer	Chi-square	4.500
	df	1
	Sig.	.034*
Q38. The diverse connection of local specialties.	Chi-square	.413
	df	1
	Sig.	.521
Q39. Build up E-commerce community in Vietnam	Chi-square	13.907
	df	1
	Sig.	.000*

4. CONCLUSION AND RECOMMENDATIONS

The region, age, qualifications, certificates, talents, logistics, barcode traceability, diversity of local agricultural specialties, the usage of social networks, means of payment, the prestigious exchange has been ensured by legal law, combined with rural tourism experiences, etc. exert impact on the development of local products. It can be seen that these analyses have firmly supported us to continue developing our research towards the E-commerce O2O model as the core for Vietnam rural E-commerce one. In there, taking advantage of Vietnam's diverse rural specialties and fostering rural educational experience locally help increase income for the rural economy and boost customers' trust in the product on the E-commerce platform. There are some proposals we would like to bring about to expand Vietnam rural E-commerce based on the E-commerce O2O model, rural agricultural specialties, and educational experience as below:

1) Giving impetus to the development of rural prestigious E-commerce platform,

establish E-commerce co-operative with an aim to receiving the insurance, support from the Government about infrastructure, law, etc, as well as training E-commerce talents based on E-commerce O2O. Consumers also need to be protected while using E-comm so so the regulation under the law should be enacted. Last but not least, the consumers are encouraged to use prestigious and orthodox E-commerce platforms.

2) Establish logistics management system as well as professional staff with closet agricultural markets, convenience store chains to the customers' private houses. The agricultural delivery places should be residential neighborhoods, apartment buildings, co-operatives, near public offices, etc. Furthermore, the traffic system needs to be stepped up, exclusive lanes for delivery also need to be built to bring agricultural products to consumers as soon as possible. We also can consult the logistics solution of 100m, the last mile of Chinese and International E-commerce.

3) All diverse specialties of each region must be authorized to label and attach barcode traceability. The local Government supports and manages barcode as well as manufacturing processes following rigorous standards by the legal system.

4) Hastening the establishment of banks' electronic payment applications with the assurance of a national legal system.

5) In parallel, establishing manufacturing zones for regional specialties will be places for the educational experience system which is inherent in local identity, specialties. In addition, educational stories will also be built to educate people about the cultures.

6) Proposing strategies for E-commerce ruralization, consulting experiences from rural Taobao, rural Jingdong, etc of Chinese rural E-commerce.

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REFERENCES

1. Le Ben, Hoang Anh, Tung Dinh (2020), https://nongnghiep.vn/thu-tuong-du-hoi-nghi-tong-ket-nganh-nong-nghiep-2020-d280335.html

2. Vietnam E-commerce Association (2020), https://drive.google.com/file/d/1KBHUngRvqs1ZrHTucs5RePamqm7KQPLy/view.

3. LinXing, WuChunmei; 2016. Analysis of Xi Jinping's "Three Rural" Thoughts — Interpretation based on the spirit of Xi Jinping's series of important speeches since the 18th CPC, Journal of Huazhong Agricultural University, (4).

4. Anh Quang; Rural e-commerce - China's national strategy[OL], Anh Quang (VTV24), 03/02/2020.

5. Groves và Da Rin, 1999 "Demand and Supply of Internet Content for Australian Farm Businesses. Canberra: Rural Industries Research and Development Corporation".

6. Han Jingling, Bai Dongrui, 2016. Research on O2O Development Countermeasures of Agricultural Products in Shanxi Province, Rural Economy and Science-Technology, 27(23).

7. Liu Zhuang, 2017. Research on O2O Model Problems and Countermeasures of Special Agricultural Products — Taking Gu County in Shanxi Province as an Example, Regional Development, The Economist, Issue 9.

8. Chen Yumei, 2021. Research on the Development Countermeasures of Guangxi's Fresh Agricultural Products Logistics under the O2O E-commerce Mode, Agricultural Staff.

9. Guo Na, Zhou Aosuo; 2021. Analysis of Rural E-commerce Development Model in Hebei Province, Industry and Technology Forum, 20 (08).

10. Ma Xiaolong; Wang Rong; Dai Meiling; Ou Yanghong, 2021. The influence of culture on the sustainable livelihoods of households in rural tourism destinations, Journal of Sustainable TourismVolume 29, Issue 8.

11. Shi Meng, 2020. Digital Road and Industrial Model Selection for Rural Economic Revitalization, Agricultural Economics, (12).

12. Jiang Xue; Song Xiaoya; Zhao Hongyu; Zhang Haoran, 2021. Rural Tourism Network Evaluation Based on Resource Control Ability Analysis: A Case Study of Ning'an, China. Land Volume 10, Issue 4.

13. Wu Linlin, Wu Zhong; 2009. Chi-square method in knowledge acquisition, Tianjin Science Research.

14. Mahieu Benjamin; Schlich Pascal; Visalli Michel; Cardot Hervé, 2021. A multiple-response chi-square framework for the analysis of Free-Comment and Check-All-That-Apply data. Food Quality and PreferenceVolume 93.

15. Chi-Square Goodness of Fit Test[OL]. http://www.stat.yale.edu/Courses/1997-98/101/chigf.htm

16. Vietnam E-commerce White Paper 2020. Ministry of Industry and Trade Department of E-commerce and Digital Economy.3rd quarter of 2020.

17. Feng Haiyang, 2021. Research on Rural E-commerce Development Model and Promotion Path, Agricultural Economics, (04).

18. Yang Liejun, Qian Qingping, Yang Huiling, 2014. Research on agricultural product traceability system based on QR code technology, Journal of Chifeng University (Natural Science Edition, 30(12).

19. Times International Education; http://trainghiemcungthoidai.com/dau-tu-trai-nghiem[OL]; 2019.

20. Zhou Jinghan, Hu Bao, 2020. Discussion on the development status and countermeasures of the O2O model of agricultural product e-commerce in Zhoushan City, Zhejiang Agricultural Sciences,61(06).

21. Wang Chen, Gua Wei Guang, 2019. Research on Measures of O2O-based E-commerce Development of Agricultural Products of Anhui Province, Modern Agricultural Research,(11).

22. Jiao Xianglin, Xue Mingxuan, Wu Yilin, Ru Jiahui, 2016. Research on the development of mobile e-commerce of fresh agricultural products under O2O mode -Taking Baicaibang as an example, Agriculture and Technology, 36(15).

ẢNH HƯỞNG CỦA SỰ KẾT HỢP MÔ HÌNH O2O, SẢN PHẨM VÙNG MIỀN VÀ TRẢI NGHIỆM GIÁO DỤC ĐẾN SỰ PHÁT TRIỂN THƯƠNG MẠI ĐIỆN TỬ NÔNG THÔN VIỆT NAM

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TÓM TẮT

Thương mại điện tử nông thôn đã hoạt động như một lĩnh vực mới cần xem xét, chủ yếu mang tính chất tự phát và không có định hướng rõ ràng. Do đó, TMĐT nông thôn cần lựa chọn mô hình phát triển phù hợp để tạo tiền đề đột phá cho nền nông nghiệp Việt Nam. Hơn nữa, mục tiêu cốt lõi của mô hình này là tăng cường buôn bán nông sản để xây dựng hệ thống kinh doanh nông sản hiện đại (1 trong 3 tiêu chí mới của tư tưởng TAM NÔNG). Cùng với mục đích khai thác tiềm năng ở nông thôn, nâng cao thu nhập cho nông dân và nâng cao mức sống - nền tảng để tạo môi trường xanh, sạch, đẹp, hiện đại hóa nền kinh tế nông nghiệp; nghiên cứu cũng có ý nghĩa quan trọng trong việc xây dựng chính sách TAM NÔNG hiện đại với công nghệ 4.0 gần đây ở Việt Nam. Nghiên cứu này sử dụng phương pháp mô tả cắt ngang, nhằm làm sáng tỏ yếu tố then chốt đối với sự phát triển của Thương mại điện tử nông thôn ở Việt Nam dựa trên mô hình O2O, bao gồm khả năng tham gia Thương mại điện tử (độ tuổi, giới tính...), khu vực sinh sống (nông thôn, thành thị), trình độ học vấn, kết hợp văn hóa, nông thôn, đặc sản vùng miền trong phát triển du lịch sinh thái dã ngoại, quản lý hậu cần. Do đó, nghiên cứu của chúng tôi nhằm mục đích thiết lập một Thương mại điện tử nông thôn mới kết hợp 3 trong 1: Mô hình Thương mại điện tử O2O, đặc sản nông thôn, cùng với trải nghiệm giáo dục nông thôn.

Keywords: đặc sản vùng miền, mô hình O2O, TMĐT nông thôn Việt Nam, trải nghiệm giáo dục nông thôn.

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