

The Current Situation Of Social Media Use By Young Farmers In Agricultural Product Consumption In The Northeast Region, Vietnam

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Abstract: The Northeastern region of Vietnam has extremely rich and diverse natural resources and is favorably supported for the development of typical mountainous agriculture. As an important shock force in the process of helping the agricultural sector integrate and reach out to the market not only domestically but also towards export, young farmers here have used social media to consume agricultural products, which is not only a trend of the times, but also has profound strategic significance in the process of modernization and digitalization of the agricultural sector. This article studies the current status of using social media by young farmers in consuming agricultural products in the Northeastern region of Vietnam to clarify from awareness, to the level of effectiveness, frequency of use, budget and method of determining the social media budget for agricultural products. The research results help promote the formation of a digital farming community, enhance mutual learning and the ability to link along the value chain. Thus, the application of social media is not only of economic significance, but also of profound social and cultural significance, contributing to creating a generation of modern farmers who are proactive, creative and in control of the process of consuming agricultural products in the digital age.

Keywords: social media, young farmers, digital transformation, agricultural products

1.INTRODUCTION

In recent years, social media has been confirmed by many domestic and international studies as an effective tool in the consumption of agricultural products, especially in the context of digital transformation and the strong development of e-commerce. In the world, the works of Muntinga et al. (2021) [1] and Kaplan & Haenlein (2022) [2] emphasize the role of social networks in increasing brand awareness, building trust and influencing agricultural consumption behavior. Reddy et al. (2023) in India demonstrated the effectiveness of TikTok and YouTube in connecting farmers in remote areas with urban consumers through storytelling videos and agricultural product livestreams [3]. In Southeast Asia, research by Nguyen & Nguyen (2021) showed that the use of Facebook and Zalo contributed to increasing online revenue for young farmers in Thailand and Vietnam [4]. In Vietnam, some studies such as Pham Thi Bich Huong & Nguyen Thi Nhan (2021) in Thai Nguyen showed that Facebook and Zalo are two popular channels used by farmers to sell tea, hill chicken and clean vegetables [5]. Meanwhile, Le Quang Hoa (2022) highly appreciated the impact of TikTok livestream on the effectiveness of OCOP product communication in the Northern mountainous region [6]. In addition, Nguyen Thi Thanh & Tran Van Tuan (2023) at Can Tho University applied the TAM model to analyze the relationship between the level of trust in social media content and the intention to buy organic products [7]. Domestic and foreign

studies have shown the great potential of social media in developing the agricultural product consumption market, while emphasizing the need to improve digital capacity and the ability to build communication content for farmers, especially the younger generation.

In the context of Vietnam promoting comprehensive digital transformation, agricultural product consumption activities are also facing strong requirements for innovation in methods, tools and thinking to approach the market. The tradition of consuming agricultural products mainly through wholesale markets, traders and physical distribution systems is revealing many limitations such as high intermediary costs, lack of transparency in market information and limited access to consumers. Meanwhile, the strong development of digital technology, social networks and e-commerce has opened up new opportunities for farmers, cooperatives and agricultural enterprises to directly approach customers and expand domestic and foreign markets. However, besides opportunities, people, especially young farmers, are also facing many challenges such as lack of digital skills, limited investment resources and the digital gap between rural and urban areas. Therefore, adapting to digital transformation in agricultural product consumption is not only an inevitable trend, but also an urgent requirement to increase agricultural value, develop the rural economy and ensure sustainable livelihoods.

2. RESEARCH METHOD

Desk research was conducted to build a theoretical basis and review the literature. This process includes a literature review, analysis of previous research works and identification of research gaps. The sources of documents include books, scientific articles, theses, conference reports and specialized documents related to farmers' digital capacity in product consumption in the context of digital transformation. Through this process, the study identifies key concepts and builds a theoretical framework for research on digital capacity education for young farmers in agricultural product consumption in the Northeast region of Vietnam in the context of digital transformation.

Quantitative research was conducted through a survey of young farmers in the Northeast region including four provinces: Tuyen Quang, Thai Nguyen, Lang Son, Cao Bang (according to Resolution No. 202/2025/QH15 dated June 12, 2025 of the National Assembly on the arrangement of provincial-level administrative units). The number of young farmers aged 18 to under 35 in the Northeast region as of June 15, 2025 is 1,202,072 people, applying Slovin's sampling formula:

$$n = \frac{N}{1 + \varepsilon^2 N}$$

In which:

n is the sample to be surveyed.

N: Total number of samples (1,202,072 samples)

ε : standard error (take the approximate value of 0.05).

Applying the above formula, $n = 399.8$ is rounded up to 400 people.

The survey period is from mid-June to the end of July 2025.

The research sample is designed according to a 5-level Likert scale from Good (5 points), Fair (4 points), Average (3 points), Weak (2 points), Poor (1 point).

Data processing method: Use SPSS version 22.0 software to calculate the average score. The results of calculating the score range with $k = (5-1)/5 = 0.8$, the results of calculating the score range with $k = (5-1)/5 = 0.8$, so the criteria in the range from 1-1.80 are classified as poor/strongly disagree/very ineffective/very infrequent/very unimportant, the range from 1.81-2.60 is classified as weak/disagree/ineffective/infrequent/unimportant; the range from 2.61-3.40 is classified as average/undecided/normal; the range from 3.41-4.20 is classified as fair/agree/effective/frequent/important and the range from 4.21-5.00 is classified as good/strongly agree/very effective/very frequent/very important.

3. RESEARCH RESULTS AND DISCUSSION

3.1. Assessment of the importance of awareness of using social media tools in agricultural product consumption in the Northeast region, Vietnam

Figure 1 shows that young farmers in the Northeast region of Vietnam have a relatively good awareness of the importance of social media tools in the context of digital transformation in the agricultural product consumption process, with 44.5% of opinions assessing it as very important, 23.25% of opinions assessing it as important, and 19.25% of opinions assessing it as normal. When interviewing in depth, a young farmer in Lang Son province said: “I myself have used social media tools in the consumption of agricultural products produced by my family, so I realized that it has helped shorten the distance between farmers or cooperatives and consumers, eliminating many intermediaries. This is especially important in the context of agricultural products being easily forced to lower prices or depending on traders to buy agricultural products”. However, there are still opinions that are not important (8.75%) and opinions that are very unimportant (4.25%).

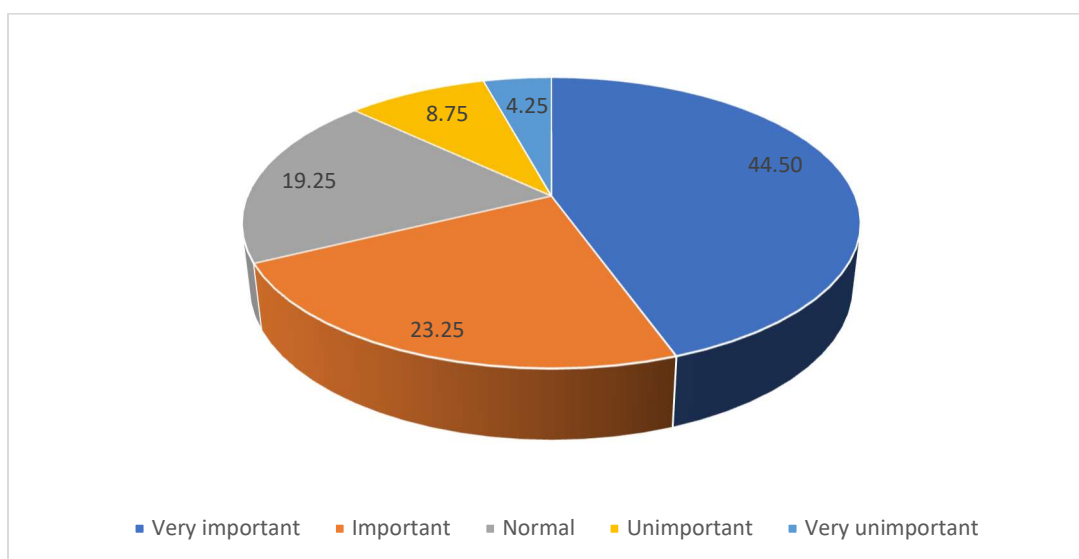


Figure 1: Survey results on the importance of social media in the context of digital transformation in the process of consuming agricultural products

(Source: Survey)

The reason is determined to be that most farmers still lack knowledge about social media platforms, they do not realize that this is not only an entertainment tool but also an effective sales tool, many people still have difficulty using smartphones, installing applications, creating content or managing interactions with customers. This comes from a combination of limitations in digital capacity, traditional culture, lack of trust and inadequate support from agencies and local authorities to accompany training programs on the use of social media in the consumption of agricultural products. In general: In the context of digital transformation of agriculture and rural economic development, social media is not only a promotional tool but also a strategic platform in agricultural value chain management. Effective use of social media helps improve competitiveness, increase brand value and sustainable development in agricultural product consumption.

3.2. Current status of the level of use and effectiveness of social media tools in agricultural product consumption in the Northeast Region, Vietnam

When studying the level of use and effectiveness of social media tools in agricultural product consumption in the Northeast Region, Vietnam, it shows that young farmers have an infrequent level of use (average score: 2.54 points) and a normal level of use (average score: 2.84 points).

Table 1: Results of the assessment of the level of use and effectiveness of social media tools in agricultural product consumption in the Northeast Region, Vietnam

Tools	Usage level						Effectiveness					
	Very often	Frequently	Normal	Infrequently	Very infrequent	Average score	Very effective	Effective	Bình thường	Ineffective	Very ineffective	Average score
1.Email marketing	0	11	33	42	314	1,35	0	16	39	54	291	1,45
2. Search Engine Marketing (SEM)	0	32	46	67	255	1,64	0	27	42	87	244	1,63
3. Social network						3,05						3,47
Facebook	194	106	49	27	24	4,05	221	87	69	17	6	4,25
Tiktok	26	67	84	97	126	2,43	34	71	86	116	93	2,59
Youtube	132	73	52	65	78	3,29	207	81	68	36	8	4,11
Instagram	4	18	39	73	266	1,55	24	42	67	98	169	2,14
Zalo	172	98	81	32	17	3,94	213	105	52	25	5	4,24
4.Website	38	81	94	102	85	2,71	47	89	105	138	21	3,01
5.Blog marketing	0	8	30	61	301	1,36	0	16	42	79	263	1,53
Average score						2,54						2,84

(Source: Survey)

Most young farmers are interested in, use regularly and most effectively the social network group (Usage level: 3.05; Effectiveness: 3.47), with Facebook being the most frequent tool (Usage: 4.05; Effectiveness: 4.25), followed by the zalo channel with a regular level (Usage level: 3.94; Effectiveness: 4.24), some young farmers also know how to exploit the Youtube channel (Usage level: 3.29; Effectiveness: 4.11); tiktok is an emerging tool that is attracting users' attention although still limited (Usage level: 2.43; Effectiveness: 2.59), the instagram tool is very few young farmers choose (Usage level: 1.55; Effectiveness: 2.14). The advantages of social networks include allowing information to spread instantly to millions of users without being limited by space or time, creating conditions for sellers and buyers to interact in two ways through comments, messages, surveys, etc., helping to build customer relationships, increase engagement and collect instant feedback; the subject conveys images, stories and brand values in a flexible and intuitive way (through photos, videos, livestreams, etc.).

Ranked second is the website (Usage level: 2.71; Effectiveness: 3.01), many young farmers have established cooperatives and agricultural enterprises, so developing a website with a friendly interface is a way to approach the market, the website is a privately owned channel, allowing the business unit to control all images, content, interface and customer shopping journey. Customers often search for products via Google, when the website is well optimized for SEO, it can be at the top of search results,

helping to attract natural traffic without spending much on advertising, this is one of the channels that brings high and sustainable conversion rates for sellers.

Ranked 3rd is Search Engine Marketing (SEM) (Usage level: 1.64; Effectiveness: 1.63), effective SEM requires users to know how to write attractive advertising content, choose keywords that match customers' search behavior, and optimize landing pages. However, most young farmers have not been properly trained in website design, content writing, or conversion rate optimization, leading to low efficiency despite having a supporting advertising budget. SEM operates on a pay-per-click (PPC) basis, so it requires a stable advertising budget. With limited resources, many young farmers do not have enough budget to maintain long-term campaigns or lose effectiveness due to running out of budget too soon.

At the bottom of the list are email marketing (Usage level: 1.35; Effectiveness: 1.45) and personal blogs (Usage level: 1.36; Effectiveness: 1.53), both of which are very infrequent and very ineffective. Email marketing and personal blogs require the ability to create in-depth, engaging, and targeted content. However, many young farmers have not been properly trained in storytelling, presenting products in a branded style, or structuring content to optimize conversions. This reduces the effectiveness of message delivery and the level of interest from recipients. Email marketing and blogs are only effective when content is maintained regularly and at the right time (e.g., seasons, promotions, product updates). However, many young farmers do not have a clear content plan, or give up halfway due to being busy with production. This lack of consistency causes customers to disengage or underestimate professionalism.

3.3. Current status of the frequency of using social media tools in agricultural product consumption in the Northeast region, Vietnam

Although each tool has its own advantages when young farmers choose to use social media tools in their agricultural product consumption, the initial results show that young farmers have searched and filtered the tools to suit their own knowledge, the applicability of each tool, the ability to train, the cost, and the conversion of customer purchasing behavior. But in general, it is not strong. Young farmers are people with good access to science and technology, but their digital capacity is limited, so most of them are using it out of habit (because of the large number of friends in the digital environment), low cost (non-fee tools such as Zalo, Facebook, ...), popularity, ease of use and easy connection (Facebook, Zalo, Tiktok, website, ..). The results of the assessment of the frequency of use of social media tools in agricultural product consumption in the Northeast Region, Vietnam are shown in the following table:

Table 2: Results of the assessment of the frequency of use of social media tools in agricultural product consumption in the Northeast Region, Vietnam

Tools	Statistics of number of uses						Percentage of use					
	Do not use	01 time	From 2-5 times	From 6-10 times	From 11-15 times	Over 15 times	Do not use	01 time	From 2-5 times	From 6-10 times	From 11-15 times	Over 15 times
1.Email marketing	355	37	8	0	0	0	88,75	9,25	2,00	0,00	0,00	0,00
2. Search Engine Marketing (SEM)	382	12	6	0	0	0	95,50	3,00	1,50	0,00	0,00	0,00
3. Social network												
Facebook	0	3	6	56	85	250	0,00	0,75	1,50	14,00	21,25	62,50
Tiktok	0	117	52	95	71	65	0,00	29,25	13,00	23,75	17,75	16,25
Youtube	0	24	84	87	98	107	0,00	6,00	21,00	21,75	24,50	26,75
Instagram	346	39	15	0	0	0	86,50	9,75	3,75	0,00	0,00	0,00
Zalo	0	9	25	53	76	237	0,00	2,25	6,25	13,25	19,00	59,25

Tools	Statistics of number of uses						Percentage of use					
	Do not use	01 time	From 2-5 times	From 6-10 times	From 11-15 times	Over 15 times	Do not use	01 time	From 2-5 times	From 6-10 times	From 11-15 times	Over 15 times
4.Website	283	26	52	39	0	0	70,75	6,50	13,00	9,75	0,00	0,00
5.Blog marketing	377	16	7	0	0	0	94,25	4,00	1,75	0,00	0,00	0,00

(Source: Survey)

The results of the table above show that the frequency of use by young farmers is quite diverse, with many different levels of use. In which the highest usage (over 15 times) per year is facebook (accounting for 62.50%), zalo (59.25%), youtube (26.75%), tiktok (16.25%). The frequency ranges from 11-15 times per year with: youtube (24.5%), facebook (21.25%), zalo (19.0%), tiktok (17.75%). The frequency ranges from 6-10 times per year with: tiktok (23.75%), youtube (21.75%), facebook (14.0%), zalo (13.25%), website (9.75%). Most of the tools are not used annually: email marketing (88.75%), search engine marketing - SEM (95.5%), personal blog (94.25%), Instagram (86.5%) and Website (70.75%). This result shows that young farmers use social media sporadically, mainly according to the seasonality of the product, selling experience according to the habit of "coming back to schedule", so the effectiveness and advantages of these social media have not been promoted. Most of the young farmers have a familiar capital market (acquaintances, customers who have bought and bought repeatedly according to the season), selling agricultural products in the style of "selling as soon as they are sold out" so they do not intend to use social media regularly and continuously. Some young farmers are still worried about related costs, so they are quite hesitant in the process of choosing and using tools.

3.4. Current status of budget scale for using social assistance tools in agricultural product consumption in the Northeast Region, Vietnam

The results of budget assessment for using social assistance tools in agricultural product consumption each year in the Northeast Region are shown as follows:

Unit: %

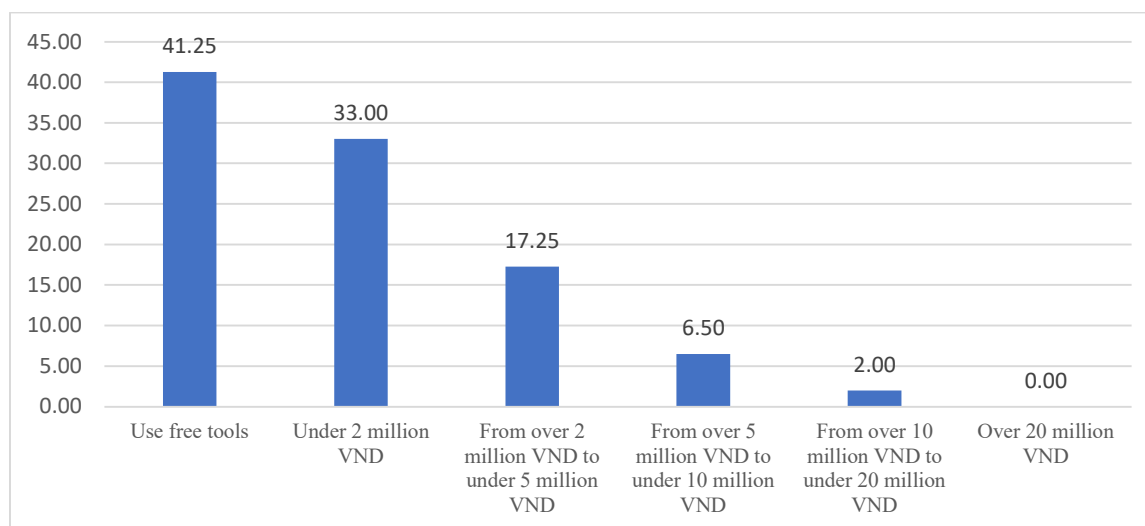


Figure 2: Results of the assessment of the budget for social media tools in agricultural product consumption each year

(Source: Survey)

Most young farmers are taking advantage of free tools (facebook, zalo, ...) accounting for 41.25% for articles, messages, ... 33.0% of farmers accept to pay a fee of less than 2 million VND (cooperatives, agricultural enterprises pay domain maintenance fees on the website), 17.25% accept to pay from 2 to less than 5 million VND (cooperatives, agricultural enterprises pay domain maintenance fees on the website but change in additional features, some farmers use many coordinated tools such as both email marketing and website); 6.5% accept to pay fees from over 5 million to under 10 million VND (cooperatives and agricultural enterprises pay fees to maintain the domain on the website but change the additional features, update and secure technology; some farmers use many coordinated tools such as email marketing combined with the website; or link the website with the e-commerce platform,...) and only 2% accept to pay fees from over 10 million to under 20 million VND (cooperatives and agricultural enterprises pay fees to maintain the domain on the website but change the additional features, update and secure technology, integrate AI/chatbot/data analysis; link the website with the e-commerce platform; the website increases the need for user experience (UX/UI) and multi-platform interface; costs for SEM to reach the TOP...). No farmer spends over 20 million VND on social investment in agricultural product consumption. The main reasons for the limited spending on social media in agricultural product consumption are: Lack of confidence in investment efficiency; Lack of knowledge and skills in social media; Low income and high financial pressure; Lack of overall marketing plan; Reluctance to disclose personal and product information; Lack of technical support and local models.

3.5. Current status of using methods to determine budgets for social media in agricultural product consumption in the Northeast region, Vietnam

The survey results in the figure above show that the use of methods to determine budgets for social media tools in agricultural product consumption is quite diverse.

Unit: %

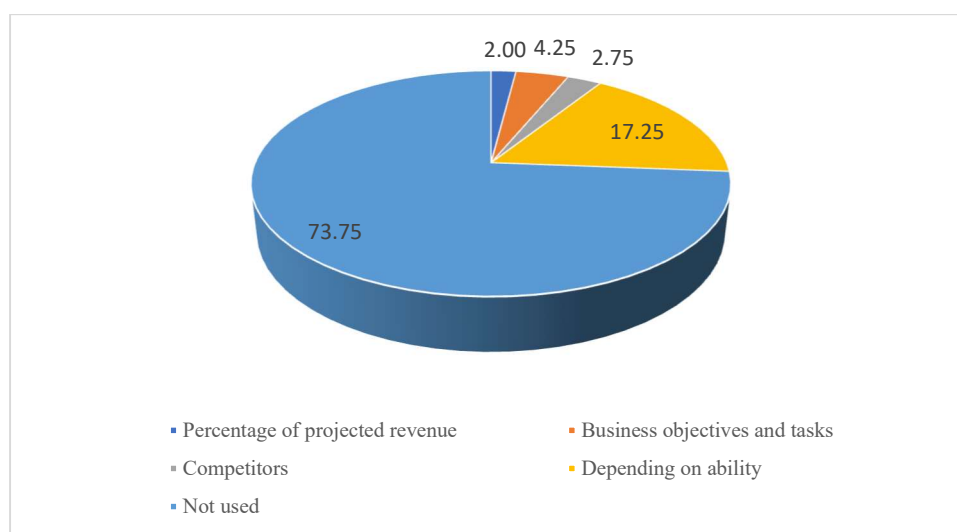


Figure 3: Evaluation results of budgeting methods for social media tools in agricultural product consumption in the Northeast region, Vietnam

(Source: Survey)

Most young farmers do not use budgeting methods for agricultural product consumption communication activities (accounting for 73.75%), young farmers mainly rely on financial capacity, knowledge, and the convenience of the tool to "self-balance" (accounting for 17.25%), some young farmers who participate in activities in the form of cooperatives or agricultural enterprises have used the method "based on business goals and tasks" (accounting for 4.25%) and the method "based on competitors" (accounting for 2.75%), the remaining method "based on expected revenue" (accounting for 2.0%). Although young farmers have

better technological capacity than previous generations, most of them have not received proper training in marketing. They often lack understanding of the process of building a communication plan, in which the budget determination step is an important factor to ensure investment efficiency and reasonable use of resources. The lack of experience and skills in determining the communication budget is a major barrier that prevents young farmers from implementing marketing systematically. This leads to low efficiency, wasted costs, or missed opportunities to compete in the digital market. Therefore, in the coming time, they need practical training programs, integrating communication finance skills to help this group improve their capacity to plan and invest in effective communication.

5. CONCLUSION

In the context of national digital transformation and agricultural modernization, the use of social media by young farmers to consume agricultural products has many practical meanings in terms of economy, society and sustainable development. On the other hand, social media acts as a "digital school" for young farmers to learn, exchange and update market trends. Through interacting with customers and analyzing interactive data, farmers can adjust their production and communication strategies to suit their tastes. This is an important step in improving business capacity and market thinking for the new generation of farmers. Finally, the active use of social media by young farmers to consume products also contributes to spreading the image of modern, green - clean - transparent agriculture, playing the role of a bridge between production and consumption in the digital economy. This is the foundation for developing a smart agricultural model and a sustainable agricultural consumption ecosystem in the future.

ACKNOWLEDGEMENTS:

This article is sponsored by the Thai Nguyen University of Economics and Business Administration with the topic “*Research on factors affecting the intention to use social media of young farmers in consuming agricultural products in the Northeast region, Vietnam in the context of digital transformation*”, code: DH2025-TN08-03.

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