
The Influence of Social Media Use on The Business Behavior of Millennial Oil Palm Farmers in Jambi Province

Rendra*¹, Suandi², Rosyani³, Junaidi⁴

^{1,2,3}Departmet of Agribusiness, Faculty of Agriculture, University of Jambi, Indonesia

⁴Department of Development Economics, Faculty of Economic and Business, University of Jambi, Indonesia

ABSTRACT

This study aims to determine the level of social media use, the form of business behavior and analyze the influence of social media use on the business behavior of millennial oil palm farmers in Jambi Province, with millennial farmer respondents in farmer cooperatives that have ISPO (Indonesian Sustainability Palm Oil) certificates in Jambi Province, namely the Karya Mukti (plasma) cooperative in Muara Bungo district and the Mutiara Bumi cooperative (self-help) in Batanghari district. This study uses a quantitative approach with simple linear regression model analysis on Structural Equation Modeling-Partial Least Squares (SEM-PLS). The results showed that the level of social media use in the research site as a whole looked good, except only for the relatively moderate indicators of facilitating conditions. For business behavior, it can be seen that the majority of millennial oil palm farmers already use Facebook, Instagram, and TikTok and make good use of these platforms on innovation and independent indicators to obtain information on new cultivation techniques, market trends, and opportunities for diversification of palm oil derivative products and independently access directly to the market and buyer network without intermediaries. Meanwhile, the indicators of risk, determination and responsiveness are still relatively moderate. The test results found that the use of social media had a positive and significant effect on business behavior with a regression coefficient value of 0.904 (positive value) and a P value of social media use of $0.000 < 0.05$ (significant) with a contribution of the influence of social media use on business behavior of 39.9 percent. This study emphasizes the importance of supporting the productive use of social media, especially facility conditions to improve business behavior for millennial farmers in the oil palm plantation sector in Jambi Province.

Keywords: Social media use, Business behavior, Millennial farmers, Oil palm.

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Corresponding Author:
Rendra

1. INTRODUCTION

The development of digital technology has brought significant changes in various aspects of life, including in the agricultural sector. One of the tangible manifestations of this transformation is the increasing use of social media by the younger generation of farmers, especially millennial oil palm farmers in Jambi Province. Social media not only functions as a means of communication and entertainment, but also as a strategic medium to access market information, share business experiences, expand business networks, and increase entrepreneurial capacity. In this context, the use of social media has the potential to shape business behavior that is more adaptive, innovative, and sustainability-oriented.

To understand how the use of social media can affect farmers' business behavior, the Unified Theory of Acceptance and Use of Technology (UTAUT2) theory developed by Venkatesh et al. (2012) becomes a relevant framework. This theory explains that the intention and behavior of individuals in using technology are influenced by four main factors, namely performance expectations, business expectations, social influences, and facilitating conditions.

In the context of millennial oil palm farmers, performance expectations are reflected in the belief that social media can increase business effectiveness, such as expanding market access or accelerating product promotion. Business expectations are related to the ease of use of digital platforms, which determine the extent to which farmers are willing to adapt to new technologies. Social influence arises from the encouragement of the surrounding environment, such as fellow farmers, extension workers, or the

Rendra et al, The Influence of Social Media Use on The Business Behavior of Millennial Oil Palm Farmers in Jambi Province

digital agribusiness community, which drives the adoption of social media as a business tool. Meanwhile, the conditions that facilitate illustrate the availability of supporting infrastructure, such as internet networks, digital devices, as well as government and agricultural institutional support.

Through UTAUT2's perspective, it can be explained that social media adoption is not just a technological phenomenon, but also part of the process of forming more rational and innovation-based business behavior. Farmers who actively use social media tend to show business behavior that is more responsive to market opportunities, dares to take risks, is independent, and innovative, as described by Fallo (2023). Therefore, understanding the relationship between social media use and farmers' business behavior is important to support the formation of a sustainable modern agricultural ecosystem in Jambi Province.

Oil palm plantation management that the government is in an effort to ensure sustainable management, increase competitiveness, meet compliance standards, reduce greenhouse gas emissions, improve social and environmental welfare around plantations and ensure business legality, so farmers (planters) and oil palm plantation companies have been required to have ISPO (Indonesian Sustainability Palm Oils) certificates in accordance with Presidential Regulation No. 44 of 2020.

Meanwhile, in Jambi Province, oil palm plantations are the main mainstay commodity compared to rubber, deep coconut and coffee plantations. According to BPS (Central Statistics Agency) of Jambi Province (2023), the area of oil palm plantations in Jambi Province in 2023 will reach 1,098,990 ha spread across 9 districts out of 11 existing districts/cities. Furthermore, according to PPID (Information and Documentation Management Center) of Jambi Province (2022), there are 637,947 ha of smallholder plantations (269,482 households), 26,599 ha of large state companies and 433,143 ha of large private companies (50,546 households).

Jambi Province as one of the central areas of palm oil production in Indonesia has great potential in the development of digital-based agricultural entrepreneurship. The presence of millennial farmers who are adaptive to technology is a new force in encouraging the transformation of the palm oil sector towards more modern, efficient, and sustainable management. However, the level of use of social media in the context of agricultural business is not fully optimal, especially in terms of how its use can affect the business behavior of millennial oil palm farmers in making business decisions, managing risks, innovating, and building economic networks.

According to Fallo (2023), business behavior can be identified through five main indicators, namely innovation, courage to take risks, tenacity (determination), responsiveness (responsiveness), and independence (independence). These indicators reflect how individuals carry out their business activities dynamically and are oriented towards economic value creation. In the context of millennial farmers, these business behaviors can be formed and developed through interactions facilitated by social media. For example, through platforms such as Facebook, Instagram, or TikTok, farmers can acquire innovative ideas, expand their networks, and strengthen trust with their business partners.

This condition is relevant to the challenges of farmer regeneration in Jambi Province, where the involvement of the younger generation in the agricultural sector still faces obstacles in the form of access to information, limited market networks, and low interest in conventional agriculture. The strategic use of social media is expected to encourage changes in business behavior that are more innovative and competitive, as well as support the realization of sustainable entrepreneurship among millennial oil palm farmers.

Therefore, this study is important to analyze the influence of social media use on the business behavior of millennial oil palm farmers in Jambi Province, in order to provide an empirical picture of the role of digital technology in strengthening the entrepreneurial capacity of the younger generation in the agricultural sector. The results of the research are expected to be the basis for the development of digitalization-based farmer empowerment policies and strategies towards modern and sustainable agriculture.

II. METHODS

This research was conducted in two districts, namely Bungo and Batanghari Regencies. The respondents of this study are millennial farmers who already have ISPO certificates (Indonesian Sustainability Palm Oil) certificates in Jambi Province, namely the Karya Mukti (plasma) cooperative in Muara Bungo district and the Mutiara Bumi cooperative (self-help) in Batanghari district. This study uses a quantitative approach with simple linear regression model analysis on Structural Equation Modeling-Partial Least Squares (SEM-PLS). Data were sourced from both primary and secondary origins. Primary data were obtained through structured questionnaires, direct interviews, in-depth interviews, and Focus Group Discussions (FGDs). Secondary data were collected from official government reports, academic journals, and other relevant documentation. Data collection via questionnaires was conducted systematically from a purposively selected sample of respondents.

III. RESULTS AND DISCUSSION

1. Social Media Use Rate

At the research location, it is known that millennial farmers have used various social media, including the following:

Table 1. Types of social media used by millennial oil palm farmers at research sites, 2025.

No	Types of Social Media	Sum (people)	Percentage (%)
1	Whatshapp	39	100,00
2	Facebook	39	100,00
3	Instagram	16	41,03
4	Tiktok	17	43,59
5	Youtube	16	41,03
Total		39	100,00

Source: Processed results of research data, 2025.

The use of social media is measured from four indicators in the UTAUT2 theory, and the following data are obtained:

Table 2. Social media usage rate of millennial oil palm farmers at research sites, 2025.

Social Media Use Rate	Performance expectancy (%)	Effort expectancy (%)	Social influence (%)	Facilitating conditions (%)
Good	84,62	87,18	84,62	56,41
Fair	15,38	12,82	15,38	25,64
Poor	0,00	0,00	0,00	17,95

Source: Results of research data processing, 2025.

Empirical data shows that most farmers have used social media to show good categories. However, in the Facilitating conditions indicator, it can be seen that the use of social media is still not good enough, this is because there are still facilities that do not support the use of social media, including unstable internet network access, relatively expensive internet quota purchase costs and the still unavailability of wifi facilities for public facilities.

2. Forms of Business Behavior

Business behavior in the research area was measured using the Fallo concept with five indicators, namely innovation, risk, responsiveness, determination and independence. The results are as follows:

1. Innovation Dimension

As many as 53.85% of respondents showed a good level of innovation in their business behavior. Farmers who actively use social media such as Facebook, Instagram, and TikTok use these platforms to obtain information on new cultivation techniques, market trends, and opportunities for diversification of palm oil derivative products. This is in line with the findings of Fallo (2023) and Rahmawati (2021) who emphasized that social media encourages knowledge sharing and creative imitation in entrepreneurial practices in the agricultural sector.

2. Risk Taking Dimension

Most farmers are in the medium category (41.03%) in the risk indicators. This means that social media contributes to increasing farmers' courage to try new methods, but there is still caution in adopting untested innovations. This result is in line with Putnam (1993) who explained that risk-taking in farming communities often relies on social trust and network support built through online interactions.

3. Dimensions of Determination and Perseverance

As many as 33.33% of respondents were in the good category and 33.33% were moderate. This shows that social media serves as a motivational tool for millennial farmers to maintain entrepreneurial determination, especially through inspirational content and success stories of other farmers. These findings reinforce the research of Saparuddin & Yuliani (2022) which confirms that exposure to the digital community increases entrepreneurial resilience.

4. Dimensions of Responsiveness to Change

As many as 41.03% of respondents have a good level of responsiveness to market dynamics. Millennial farmers who use social media have proven to be faster in responding to price changes, market demand, and sustainable consumption trends. According to Haugh (2007), responsiveness is an important part of sustainable business behavior that is adaptive to environmental changes.

5. Dimension of Independence

As many as 51.28% of respondents showed good independence. Social media supports this independence by providing direct access to markets and networks of buyers without intermediaries. Farmers can market their crops directly, manage price negotiations, and develop digital-based product brands. This is in line with the findings of Adnan et al. (2020) that digital entrepreneurship among farmers strengthens autonomy and competitiveness.

3. The Influence of Social Media Use on the Business Behavior of Millennial Oil Palm Farmers Test Results

The measurement results using a simple linear regression model on SMART-PLS are as follows:

Classic Assumption Test :

1. Uji Linieritas

Summary Coefficients

	Unstandardized coefficients	Standardized coefficients	SE	T value	P value	2.5 %	97.5 %
PMS	0.904	0.631	0.183	4.953	0.000	0.535	1.274
Intercept	-0.529	0.000	0.812	0.652	0.518	-2.173	1.114

From the data, it is known that the P value of Social Media Use is $0.000 < 0.05$, which means that Social Media Use has a significant influence on Business Behavior.

2. Coefficient of Determination (R^2)

R Square

	PB
R-square	0.399
R-square adjusted	0.382
Durbin-Watson test	1.318

From the data, it is known that the R-square value is 0.399, which means that the contribution of the influence of Social Media Use on Business Behavior is 39.9 percent.

3. Heteroscedasticity Test

Breusch-Pagan Test

	Test-Statistic	df	P value
Breusch-Pagan Test	3.420	1	0.064

From the data, it is known that the p value is $0.064 > 0.05$, which means that the assumption of the heteroscedasticity test has been fulfilled or has passed.

**Recapitulation of Simple Linear Regression Results using the regression model in SMARTPLS
Grapichal Output :**

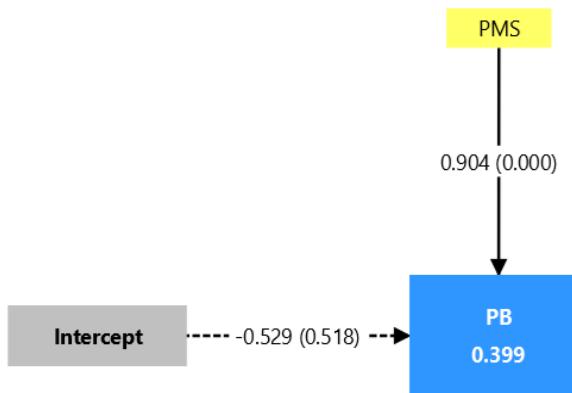


Figure 1. SEMPLS Simple Linear Regression Model

It is known that the regression coefficient value obtained is 0.904 (positive value), which means that if the value of Social Media Use increases, the value of Business Behavior also increases.

The results of the study show that the use of social media has a positive and significant influence on the business behavior of millennial oil palm farmers in the study area. This is reflected in the improvement of farmers' abilities in terms of innovation, risk taking, resilience, response to opportunities, and business independence.

Overall, the results of the study indicate that the use of social media plays a role as a business behavior enhancer of millennial oil palm farmers, both in terms of cognitive (knowledge and innovation), affective (determination and motivation), and conative

Rendra et al, The Influence of Social Media Use on The Business Behavior of Millennial Oil Palm Farmers in Jambi Province

(independence and adaptive response). Social media is an enabler for the transformation of business behavior from traditional to digital, as well as expanding social capital between farmers through information exchange and collaboration.

Thus, the higher the intensity and quality of social media use, the better the business behavior shown by farmers. This shows the relevance to the theory of the Technology Acceptance Model (Davis, 1989) and Social Capital Theory (Putnam, 1993), that digital communication technologies strengthen social networks and accelerate the adoption of innovative behaviors in agricultural entrepreneurship.

V. CONCLUSION

The use of social media significantly strengthens the business behavior of millennial oil palm farmers in Jambi Province, especially in increasing innovation, market response, and business independence. Intensive digital interaction forms a sustainable entrepreneurship ecosystem based on knowledge, collaboration, and social trust between farmers.

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