

# Innovations in Agricultural E-Commerce: Analyzing Purchase Decisions and the Role of Consumer Credibility

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E-commerce has become a revolutionary innovation in transforming the marketing of agricultural products, creating broader market access while enhancing distribution efficiency. Digital technology enables agricultural products, which previously relied on traditional distribution chains, to be sold directly to consumers through online platforms. This study analyzes the factors influencing the purchasing decisions of agricultural products on e-commerce, with a case study focused on the Shopee platform. Using a quantitative approach, data were collected from 176 respondents in Kendari. The collected data provide in-depth insights into consumer behavior and the factors driving their purchasing decisions. This study evaluates the impact of three key variables advertising attractiveness, the effectiveness of influencer-based marketing, and the significance of customer reviews on consumer purchasing decisions. These findings are expected to offer strategic contributions to agribusiness players and e-commerce platform managers in enhancing the competitiveness of agricultural product marketing. One of the key findings is that credibility plays a very significant role in influencing purchasing decisions. The results show that credibility, whether from advertisements, influencers, or customer reviews, has a greater impact on building consumer trust and strengthening their loyalty to the products offered. Furthermore, credibility is shown to serve as a significant mediating variable in the relationship between marketing factors and purchasing decisions. Credibility mediates the relationship between advertising attractiveness and purchasing decisions, influencer marketing and purchasing decisions, and online customer reviews and purchasing decisions. This suggests that marketing elements such as creative advertising, collaborations with influencers, and active management of customer reviews not only serve to attract attention but also build consumer trust, which ultimately drives stronger purchasing decisions.

**Keywords:** Agricultural, E-Commerce, credibility, customer reviews, advertising attractiveness, purchase decisions.

## INTRODUCTION

The development of digital technology has brought fundamental changes to various aspects of life, including consumer behavior (Yakut, 2022; Linkiewicz and Bartosik-Purgat, 2022). E-commerce has emerged as a significant innovation, enabling consumers to access products and services more easily, efficiently, and without geographical limitations (Roszko-Wójtowicz *et al.*, 2024). In Indonesia, platforms like Shopee have become one of the primary avenues for online shopping, including agricultural products. With features such as user reviews and influencer-driven promotions, e-commerce simplifies consumer access to agricultural goods that were previously sold mainly through traditional markets (Ridko, 2024).

However, this digital shift presents not only opportunities but also new challenges. Consumer purchasing decisions on e-commerce platforms are now influenced by a broader range of complex factors compared to conventional shopping methods (Yang *et al.*, 2022; Gulfraz *et al.*, 2022). Consumers consider not just price and quality but also elements like the appeal of advertisements, trust in influencers promoting products, and other users' reviews. Therefore, understanding how these factors impact consumer purchasing behavior is crucial for optimizing marketing strategies in agricultural e-commerce (Schwering *et al.*, 2022).

Advertising attractiveness is a key element that can shape consumer perceptions of a product or brand (Nehm and Tantawi, 2015). Visually and emotionally appealing advertisements can increase consumer interest, create a desire to buy, and reinforce the credibility of the message conveyed

(Mogaji and Danbury, 2017). In the context of agricultural products, advertising attractiveness can highlight values such as freshness, sustainability, and support for local farmers. Moreover, with the increasing use of social media as a marketing tool, well-crafted advertisements are becoming more critical to achieving significant impact in a competitive digital environment (Zhao et al., 2019).

**Influencer marketing:** Influencer marketing has also proven to be an effective strategy for influencing consumer purchasing decisions, particularly in e-commerce. Influencers with loyal follower bases can build more personal and authentic connections with consumers compared to traditional advertisements (Okonkwo and Namkoisse, 2023; Jun and Yi, 2020). In the agricultural sector, recommendations or product reviews from credible influencers can enhance consumer trust, reduce doubts, and boost the desire to buy (Chen et al., 2024; Leite and Baptista, 2022).

**Online customer reviews:** Online customer reviews serve as an essential source of information for consumer purchasing decisions (Rachmiani et al., 2024; Cheung et al., 2014). Positive reviews can increase confidence in product quality and motivate purchases, while negative reviews help consumers assess risks before buying (Rachmiani, Oktadinna, and Fauzan 2024). In the context of agricultural e-commerce, reviews often cover aspects like freshness, delivery time, and overall experience, which are key considerations for consumers

**Table 1. Percentage of E-Commerce businesses by number of employees, category, and gender in Indonesia, 2022.**

Number of Workers	Man	Woman
1–4 people	54,23	45,77
5–19 people	68,79	31,21
20–99 people	76,64	23,36
100 people and more	95,67	4,33
Category		
Agriculture, Forestry, and Fisheries	91,24	8,76
Processing Industry	53,46	46,54
Wholesale and Retail Trade; Repair and Car and Motorcycle Maintenance	53,85	46,15
Transportation and Warehousing	96,04	3,96
Accommodation Provision and Provision of Food and Beverage	47,30	52,70
Information and Communication	60,64	39,36
Professional, Scientific, and Technical Activities	72,77	27,23
Rental and Leasing Activities	78,41	21,59
Education	35,77	64,23
Human Health Activities and Social Activities	39,70	60,30
Arts, Entertainment and Recreation	79,82	20,18
Other Services	51,86	48,14

Central Bureau of Statistics (2023)

E-commerce business data in Indonesia for 2022 reveals distribution patterns based on workforce size and industry categories. Small businesses with 1–4 employees demonstrate a more balanced workforce involvement, while larger enterprises with 100 or more employees tend to be dominated by broader operational scales. In the Agriculture, Forestry, and Fisheries sector, where 91.24% of the workforce is male, significant challenges arise in optimizing e-commerce platforms. This sector often encounters barriers such as limited access to digital technology and supply chain inefficiencies that still rely on traditional methods. Other categories, such as Wholesale and Retail Trade and Manufacturing, show a more balanced workforce distribution, reflecting the successful integration of some sectors into the e-commerce market. Conversely, sectors like Education and Health are more service-oriented, with unique workforce distribution patterns reflecting their specific industrial needs. Overall, these data highlight varying e-commerce business distribution patterns based on sector and business size, with key challenges in operational efficiency and market penetration differing across categories.

Many smallholder farmers, particularly in developing countries, face difficulties in accessing digital tools and technologies due to limited infrastructure, internet connectivity, and technical skills. This exacerbates the gap between large, technologically advanced farms and smallholder farms that lag behind (Ali et al., 2024; Can, 2023; Klerkx et al., 2019). Farmers, especially those accustomed to traditional farming practices, may resist adopting digital technologies due to distrust or ignorance. Overcoming these psychological and cultural barriers requires education, trust-building, and demonstration of tangible benefits (Henchion et al., 2022; Fragomeli et al., 2024; Jones-Garcia and Touboullic, 2022).

Although many previous studies have identified the significant impact of advertising attractiveness, influencer marketing, and customer reviews on purchasing decisions, this research goes further by integrating these three factors into a single holistic theoretical framework. Earlier research on visual elements in advertising has shown that visual appeal can enhance attention and memory, yet its influence on the credibility of information has not been sufficiently explored (Belch and Belch, 2018).

Furaji et al. (2013) reported a positive influence of advertising on purchasing decisions, although found different results. On the other hand, in the context of influencer marketing, while influencer marketing has been proven to impact purchasing decisions (Johansen and Guldvik, 2017), its long-term effect on brand credibility and customer loyalty remains limited (Djafarova and Rushworth, 2017). Additionally, research on customer reviews reveals ambiguity about how the characteristics of the review author, such as expertise and reputation, influence the credibility of the reviews (Baek et



al., 2012), as well as the effect of integrating reviews with social media on their credibility, which has been minimally explored. Research conducted by Bhandari and Rodgers (2020) and Thomas et al. (2019) report differing results regarding the impact of online reviews on purchasing decisions. By integrating these three elements advertising, influencer marketing, and customer reviews this study aims to further explore the interactions among these factors and the role of credibility as a mediator, thereby providing a more comprehensive understanding of their influence on purchasing decisions in the context of agricultural e-commerce.

The study focuses on consumers in Kendari, Southeast Sulawesi, who purchase agricultural products through the Shopee platform. Kendari, as a developing city in eastern Indonesia, holds significant potential for e-commerce adoption. Consumers in this city increasingly utilize platforms like Shopee to access agricultural products, such as fresh harvests, livestock products, and farming tools.

**Table 2. The number of individual agricultural holder by subsector and gender in Kendari municipality (people), 2023.**

Subsector	Male	Female
Agricultural Sector	7414	1842
Food Crop	1651	559
Paddy	250	44
Secondary Food Crops	1407	516
Horticulture	1809	656
Estate Crop	1456	463
Livestock	2533	665
Fishery	1931	108
Aquaculture	331	22
Capture Fishery	1637	86
Forestry	1100	215
Agricultural Services	50	2

Statistics Indonesia of Kendari City (2023)

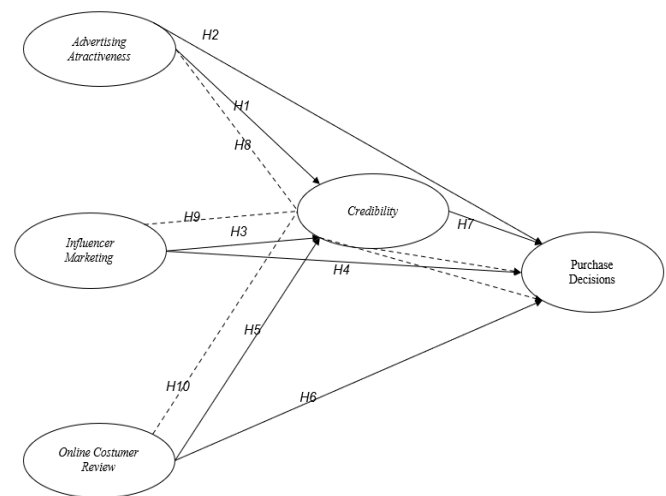
Kendari, the capital of Southeast Sulawesi Province, is known not only for the beauty of Kendari Bay and its local crafts but also for its significant agricultural sector, which plays a crucial role in supporting the regional economy. Workforce data in Indonesia's agricultural sector shows a total of 9,256 workers distributed across various subsectors. The largest subsector is Livestock, with 3,198 workers, followed by Horticulture with 2,465 workers, and Fisheries with 2,039 workers. Additionally, subsectors like Secondary Food Crops and Forestry, with 1,923 and 1,315 workers respectively, also make significant contributions to the agricultural sector. Meanwhile, the Agricultural Services subsector is the smallest, employing only 52 people. This distribution reflects the diversity of agricultural subsectors focused on crop production, livestock, and fisheries, which are also the primary livelihoods of the Kendari community.

However, challenges remain in building consumer trust in Kendari regarding agricultural products on e-commerce platforms. Uncertainties about product freshness, quality, and authenticity continue to be major obstacles. This study will explore how advertising attractiveness, influencer marketing, and online reviews influence the purchasing decisions of Kendari consumers on Shopee, as well as the challenges they face in optimizing their e-commerce experience.

This study has two main objectives to analyze how advertising attractiveness, influencer marketing, and online customer reviews influence consumer purchasing decisions for agricultural products on e-commerce platforms. The research focuses on evaluating the appeal of advertisements, the effectiveness of influencer-based marketing, and the significance of customer reviews in shaping purchasing decisions. To identify the role and challenges of e-commerce in optimizing the value chain of agricultural products from producers to end consumers. The study will explore how e-commerce platforms can improve product distribution efficiency, expand market access, and strengthen relationships between producers and consumers, as well as investigate the key barriers to success. By achieving these objectives, this study aims to provide both theoretical and practical contributions. Theoretically, it will expand understanding of consumer behavior in agricultural e-commerce. Practically, it will offer strategic recommendations for industry players to enhance consumer trust and loyalty in this sector.

**MATERIALS AND METHODS**

This study employs a quantitative method to analyze the relationships between variables influencing consumer purchasing decisions for agricultural products on e-commerce platforms (Liu and Kao, 2022; Guo et al., 2022), particularly Shopee.



**Figure 1. Conceptual framework.**



Data were collected through questionnaires distributed to 176 respondents from Kendari who had purchased agricultural products. The study evaluates the appeal of advertisements, the effectiveness of influencer-based marketing, and the significance of customer reviews in shaping consumer purchasing decisions. It also explores the role of e-commerce platforms in improving distribution efficiency and strengthening relationships between producers and consumers through digital marketing strategies. The conceptual framework of the study is given in Fig.1.

The hypotheses formulated in this study are as follows:

- H1: Advertising attractiveness has a significant effect on credibility.
- H2: Advertising attractiveness has a significant effect on purchasing decisions.
- H3: Influencer marketing has a significant effect on credibility.
- H4: Influencer marketing has a significant effect on purchasing decisions.
- H5: Online customer reviews have a significant effect on credibility.
- H6: Online customer reviews have a significant effect on purchasing decisions.
- H7: Credibility has a significant effect on purchasing decisions.
- H8: Credibility mediates the effect of advertising attractiveness on purchasing decisions.
- H9: Credibility mediates the effect of influencer marketing on purchasing decisions.
- H10: Credibility mediates the effect of online customer reviews on purchasing decisions.

Data analysis was conducted using Structural Equation Modeling (SEM) with the assistance of AMOS software to comprehensively evaluate the relationships between variables. This method provides in-depth insights for addressing research questions and delivering strategic findings to advance digital marketing in the agricultural sector through e-commerce (Asriadi *et al.*, 2024).

The study also assesses how e-commerce platforms can enhance product distribution efficiency, expand market access, and strengthen producer-consumer relationships through a descriptive approach that combines respondent data with inferential analysis. The analysis results are expected to provide strategic insights for industry players to optimize digital marketing, improve operational efficiency, and strengthen consumer trust in agricultural products on e-commerce platforms.

## RESULTS

**Advertising attractiveness, influencer marketing, and online customer reviews influence consumer purchasing decisions for agricultural products on E-Commerce:** Before delving into the detailed results, it is essential to evaluate the validity

and reliability of the constructs used in the study. The measurement model was assessed using Structural Equation Modeling (SEM) with AMOS software, focusing on key indicators such as factor loadings, construct reliability, and average variance extracted (AVE). These metrics ensure that the observed items accurately represent their respective latent variables and that the constructs are both consistent and valid for explaining consumer behavior in e-commerce. The results are summarized in Table 3, which provides an overview of the variables, items, and their statistical measures.

**Table 3. Factors and validity results.**

Variables	Items	Loading Factor	Construct Reliability	Average variance extracted
Advertising attractiveness	AA1	0,846	0,935	0,707
	AA2	0,770		
	AA3	0,859		
	AA4	0,835		
	AA5	0,855		
	AA6	0,875		
Influencer marketing	IM1	0,891	0,92	0,793
	IM2	0,822		
	IM3	0,954		
Online customer reviews	OCR1	0,912	0,947	0,817
	OCR2	0,881		
	OCR3	0,912		
	OCR4	0,910		
Credibility	C1	0,740	0,862	0,662
	C2	0,971		
	C3	0,501		
	C4	0,863		
Purchase decisions	PD1	0,849	0,895	0,639
	PD2	0,898		
	PD3	0,814		
	PD4	0,874		
	PD5	0,491		

Findings on model fit test. The Chi-squared value in the evaluation of AMOS models is often directly stated as fit with some important notes, especially regarding the sensitivity of this value to sample size. One thing to consider is that the Chi-squared value is highly sensitive to the number of samples used in the analysis. When the sample size is large, as in this case with 176 samples, a high Chi-squared value does not necessarily indicate a model misfit. For instance, even with a Chi-squared value of 395.627 and a p-value of 0.000, this does not automatically suggest that the model is not fitting (Byrne, 2012). In the context of a large sample size, a large Chi-squared value is often practically irrelevant, as it tends to increase with the sample size. Therefore, researchers typically rely on other fit indices that are more stable and less influenced by sample size (Goodboy and Kline, 2017). Some commonly used indices to assess model fit more accurately





**Table 4. Direct effect.**

Path	Estimate	P	Results
Advertising Attractiveness → Credibility	0,352	0,000	Supported
Advertising Attractiveness → Purchase Decision	0,201	0,006	Supported
Influencer Marketing → Credibility	0,245	0,000	Supported
Influencer Marketing → Purchase Decision	0,163	0,020	Supported
Online Customer Reviews → Credibility	0,371	0,000	Supported
Online Customer Reviews → Purchase Decision	0,176	0,017	Supported
Credibility → Purchase Decision	0,380	0,000	Supported

include RMSEA (Root Mean Square Error of Approximation), CFI (Comparative Fit Index), and TLI (Tucker-Lewis Index). In this model evaluation, the RMSEA value of 0.074, CFI value of 0.941, and TLI value of 0.933 all indicate a good fit and suggest that this model is sufficiently adequate. Additionally, other indices such as the GFI (Goodness-of-Fit Index) with a value of 0.832 and AGFI (Adjusted Goodness-of-Fit Index) with a value of 0.790 show marginal fit, but still acceptable depending on the context and objectives of the analysis. The CMIN/DF ratio of 1.959 also falls within the expected range, supporting that the model fits well with the available data (Lomax, 2013).

**Hypotheses test results:** Based on the findings of this study, several factors significantly influence purchasing decisions for agricultural products on the Shopee e-commerce platform, particularly in Kendari.

The respondents in this study are consumers who have previously purchased agricultural products through Shopee, and the results provide valuable insights into the factors that build consumer trust and drive purchasing decisions. Advertising Attractiveness has a significant positive effect on product credibility, with an estimate of 0.352 and a p-value of 0.000. This indicates that the more visually appealing and well-designed an advertisement is, the higher the perceived credibility of the product or brand being advertised. In the highly competitive e-commerce environment, attractive advertisements play a crucial role in capturing consumer attention and enhancing trust in the products. Furthermore, advertising attractiveness also positively impacts purchasing decisions, with an estimate of 0.201 and a p-value of 0.006, showing that compelling ads effectively encourage consumers to purchase agricultural products.

Influencer Marketing is another important factor influencing product credibility. The study found that influencers who are trusted by their followers can significantly enhance the credibility of the products they promote, with an estimate of 0.245 and a p-value of 0.000. Consumers in Kendari tend to

trust recommendations from influencers they follow, which boosts trust in the agricultural products they endorse. This influence also extends to purchasing decisions, with an estimate of 0.163 and a p-value of 0.020, indicating that influencer recommendations motivate consumers to purchase the products they promote. Online Customer Reviews also play a crucial role in building product credibility on Shopee. The analysis shows that honest and detailed reviews significantly impact product credibility, with an estimate of 0.371 and a p-value of 0.000. On e-commerce platforms like Shopee, customer reviews have a strong influence, especially in the case of agricultural products where consumers need to trust the quality of the product they are purchasing. The quality of these reviews also affects purchasing decisions, with an estimate of 0.176 and a p-value of 0.017, demonstrating that positive reviews encourage consumers to make a purchase.

Finally, product credibility itself has a substantial impact on purchasing decisions. This study found that the higher the perceived credibility of a product, the more likely consumers are to choose it for purchase. With an estimate of 0.380 and a p-value of 0.000, product credibility is a key factor influencing consumer decisions when selecting agricultural products to buy. This study highlights the various factors that influence purchasing decisions for agricultural products on Shopee, focusing on consumers in Kendari who have purchased agricultural products. The findings provide relevant insights for e-commerce players and agricultural product marketers to design effective marketing strategies and build consumer trust on online platforms.

Advertising Attractiveness, Influencer Marketing, and Online Customer Reviews have been shown to positively impact purchase decisions through product credibility, with partial mediation effects. Advertising Attractiveness, with an estimate of 0.134, directly influences purchase decisions, while credibility strengthens this relationship. Customers exposed to visually appealing advertisements perceive an

**Table 5. Indirect effect.**

Path	Estimate	Results
Advertising Attractiveness → Credibility → Purchase Decision	0,134	Partial mediation
Influencer Marketing → Credibility → Purchase Decision	0,201	Partial mediation
Online Customer Review → Credibility → Purchase Decision	0,093	Partial mediation



increase in product credibility, which subsequently encourages them to make a purchase. Similarly, Influencer Marketing, with an estimate of 0.093, shows that the credibility established by influencers partially mediates the direct relationship between influencer recommendations and purchase decisions. Customers who trust influencers are more confident about purchasing the products they endorse. Lastly, Online Customer Reviews, with an estimate of 0.141, indicate that positive reviews not only enhance product credibility but also directly impact purchase decisions. Customers who read favorable reviews are more likely to trust the product's quality, leading them to finalize their purchase decisions.

**Identifying the role and challenges of E-commerce in optimizing the agricultural product value chain from producers to end consumers:** E-commerce has demonstrated a significant role in accelerating the distribution of agricultural products from producers to consumers. However, the adoption of e-commerce in the agricultural product value chain faces several challenges that need to be addressed. One of the main challenges is logistical constraints, particularly in maintaining the freshness of perishable agricultural products during shipping. Additionally, delays in delivery are also an issue, especially when logistical infrastructure is limited and more advanced agricultural transport technologies are still underdeveloped. To overcome these challenges, government initiatives to improve logistical infrastructure are essential. Developing more efficient and modern transportation systems, such as using cooling technologies in transporting agricultural products, can help ensure product freshness and improve delivery efficiency. The government could also focus on improving transportation and distribution networks that connect rural areas to central markets.

Furthermore, the challenge of digital literacy among farmers, especially small-scale farmers, is a significant barrier. Many agricultural producers struggle to effectively utilize e-commerce platforms due to a lack of knowledge about digital technologies. To address this, training and capacity-building programs for farmers are needed to help them use digital technologies more effectively. These programs could include training on using e-commerce platforms, managing digital inventories, and online marketing. Such training would help farmers expand their market reach and enhance the competitiveness of their products in the digital marketplace. Moreover, to tackle consumer trust issues, especially related to product quality and seller honesty, trust-based marketing strategies become crucial. One solution is to improve transparency in the customer review system and provide incentives for customers to write more honest and detailed reviews. Additionally, collaborating with trusted influencers can help build consumer trust in agricultural products sold through e-commerce platforms.

Although e-commerce holds great potential to optimize the agricultural product value chain through distribution efficiency, broader market access, and reduced operational

costs, these challenges must be addressed for e-commerce in the agricultural sector to grow more inclusively and sustainably. Efforts to improve logistical infrastructure, provide digital education for farmers, and implement trust-based marketing strategies are essential steps to help the agricultural e-commerce sector reach its full potential, benefiting both producers and consumers while supporting better food security.

## DISCUSSION

**Advertising attractiveness, influencer marketing, and online customer reviews influence consumer purchasing decisions for agricultural products on E-commerce platforms:** The results of this study demonstrate that advertising attractiveness has a positive and significant impact on credibility, emphasizing the importance of well-designed advertisements in shaping consumer perceptions. Ads perceived as attractive enhance the credibility of the brand or product by fostering trust and reliability among consumers. Key factors such as engaging content, uniqueness, accurate information, high-quality product presentation, and interactivity significantly contribute to how consumers perceive advertisements (Yin *et al.*, 2024). Businesses that focus on creating ads with compelling visuals, clear messaging, and interactive elements can effectively capture consumer interest, build credibility, and influence purchasing decisions (Lawrence *et al.*, 2013). These findings provide valuable insights for marketers aiming to enhance their advertising strategies, strengthen brand trust, and drive engagement in digital marketplaces. By leveraging these strategies, businesses can optimize their presence and maintain a competitive edge in the ever-evolving e-commerce environment.

The results also indicate that influencer marketing significantly impacts credibility on the Shopee platform. Influencers with a strong reputation and trust from their audience have been shown to enhance consumer trust in the products they promote. This aligns with the concept that consumers are more likely to trust products endorsed by familiar and credible individuals, particularly through social media. In this context, influencers act as ambassadors, bridging the gap between products and consumers and influencing perceptions of product quality and credibility. Influencers relevant to their target audience exert a greater impact on consumer trust and purchase decisions (AlFarraj *et al.*, 2021). The study further reveals that influencer marketing strongly and significantly impacts purchase decisions on Shopee. Consumers who perceive the influencers they follow as reputable and offering recommendations aligned with their needs are more confident and motivated to purchase the promoted products (Belanche *et al.*, 2021). Trust in influencers is a key determinant of whether consumers proceed with a purchase.



Additionally, the study finds that online customer reviews have a significant impact on product credibility on the Shopee platform. Customer reviews play a crucial role in shaping perceptions of a product's reliability and quality. The more positive and high-quality reviews provided, the higher the perceived credibility of the product among potential buyers. This finding supports the work of Customer reviews have a stronger impact on product credibility among younger consumers (Mumuni *et al.*, 2020). Furthermore, the study highlights that credibility is essential in influencing purchase decisions. The credibility of information, whether derived from product reviews, advertisements, or influencer recommendations, is a key factor in building consumer trust in products or services. When consumers view the information as trustworthy, they are more likely to make decisive actions, such as completing a purchase.

Credible and unbiased sources significantly influence consumer purchasing decisions. This study also identifies credibility as a significant mediator in the relationship between advertising attractiveness and purchase decisions (Kumar and Tripathi, 2022; Tran *et al.*, 2024). The findings demonstrate a positive relationship between advertising attractiveness and purchase decisions, strengthened by the credibility of the advertisement. Credibility as a Mediator in Influencer Marketing and Online Customer Reviews (Zaman *et al.*, 2023). This study demonstrates that credibility mediates the effect of influencer marketing on purchase decisions. The credibility of influencers defined by trustworthiness, reputation, and reliability is a crucial factor that bridges the relationship between influencer marketing and consumer purchase decisions on Shopee (Rahmatulloh and Putra, 2024). Consumers with higher education levels tend to be more critical in evaluating information provided by ads and online reviews. The study also reveals that credibility mediates the relationship between online customer reviews and purchase decisions. Key indicators of credibility, including trustworthiness, fairness, accuracy, and reliability, significantly influence consumer behavior (Lăzăroiu *et al.*, 2020). The findings indicate that higher credibility in online reviews increases the likelihood of consumers deciding to purchase the reviewed product.

**Identifying the roles and challenges of E-commerce in optimizing the value chain of agricultural products from producers to end consumers:** E-commerce has become a pivotal innovation in transforming the agricultural sector, particularly in shortening the value chain of agricultural products. By leveraging digital technology, farmers can access broader markets and reduce their reliance on traditional intermediaries (Morepje *et al.*, 2024). This leads to fairer product pricing, benefiting both farmers and consumers. Additionally, e-commerce introduces price transparency and transactional convenience, enhancing the competitiveness of agricultural products in both domestic and international markets.

**Challenges in E-commerce Implementation in Agriculture.** Despite its benefits, the adoption of e-commerce in the agricultural sector faces significant challenges. One of the primary issues is the perishable nature of agricultural products, such as fruits and vegetables, which require rapid logistics and adequate storage systems (Li and Zhang, 2024; Altarturi *et al.*, 2023). Low digital literacy among farmers also hinders the optimal utilization of this technology. Furthermore, infrastructure gaps in rural areas often result in uneven internet access, making it difficult for farmers to integrate into the digital ecosystem.

**Strategic Steps for E-commerce Success in Agriculture.** To ensure the success of e-commerce in the agricultural sector, strategic actions are needed from various stakeholders (Li *et al.*, 2023; Achmad *et al.*, 2024; Schwering *et al.*, 2022). The government must expedite the development of digital infrastructure in rural areas and implement policies that enhance value chain efficiency (Rao 2007). Businesses can contribute by offering user-friendly platforms and providing training for farmers on using digital technology effectively (Fabregas *et al.*, 2019; Agyekumhene *et al.*, 2020). With a holistic approach, e-commerce can not only improve value chain efficiency but also promote farmers' welfare and the sustainability of the agricultural sector.

**Limitations and suggestions:** This study has limitations, particularly in its focus solely on the Shopee platform, which may restrict the generalizability of the results to other e-commerce platforms. The research also focuses exclusively on Kendari without considering regional differences that could influence consumer behavior. Future studies are encouraged to include additional e-commerce platforms such as Tokopedia or Lazada, employ probability sampling methods for more accurate population representation, and conduct cross-regional or cross-country studies to identify cultural factors affecting consumer behavior. Additionally, future research could incorporate variables such as price, service quality, and sustainability to provide a more holistic perspective, as well as develop longitudinal studies to understand changes in consumer behavior over the long term.

**Conclusion:** This study successfully achieved its two main objectives. First, the analysis of the relationship between advertising attractiveness, influencer marketing, and online customer reviews on consumer purchasing decisions for agricultural products in e-commerce shows that all independent variables have a significant influence. Advertising attractiveness has been proven to enhance platform credibility and directly impact purchasing decisions. Influencer marketing plays a key role in building consumer trust, while online customer reviews significantly contribute to the formation of credibility and purchasing decisions. Additionally, credibility acts as a mediator in the effect of these three variables on purchasing decisions, emphasizing the importance of building consumer trust through relevant



digital marketing strategies. Second, this study identifies the role of e-commerce in optimizing the agricultural product value chain from producers to end consumers. E-commerce platforms have been shown to improve distribution efficiency, expand market access, and shorten the lengthy traditional distribution chain. However, the study also highlights several key challenges, such as logistical constraints, consumer distrust regarding product quality, and limited digital literacy among agricultural producers, particularly small-scale farmers. This research makes a theoretical contribution by strengthening the understanding of how advertising attractiveness, influencer marketing, and online customer reviews influence consumer purchasing decisions in e-commerce. Practically, this study provides strategic recommendations for e-commerce industry players and agricultural producers. Businesses can enhance the appeal of advertisements through attractive and informative designs, leverage trusted influencers to build stronger connections with consumers, and actively manage customer reviews to increase trust.

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**SDGs addressed:** No Poverty, Zero Hunger, Decent Work and Economic Growth and Industry, Innovation, and Infrastructure.

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