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Potential of digital marketing and determinants of the 5A marketing strategy: a case in Thailand

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Abstract: This study investigated the digital marketing potential of the Cage-Free Fish Farmers Association Network (the Network) and examined how the 5A marketing strategy, together with demographic factors, influences consumer behaviour towards agricultural products sold through online channels. Using a multiple-case study design, qualitative data were collected through focus groups consisting of 9 farm owners and semi-structured interviews with 240 consumers who had purchased products from the Network. According to the findings, the Network exhibited a moderate level of digital marketing capability. Several factors significantly influenced purchase value. Positive determinants included personal income ($[MonthlyIncome]$) and engagement with customer reviews ($[X_{3(3)}]$), which enhanced trust and purchase intention. Conversely, negative effects were observed from recognition of the Network's products via integrated online and offline channels ($[X_{1(2)}]$), interpersonal recommendations ($[X_{1(1)}]$), and efforts to develop customer relations, progressing from CRM to CEM and ultimately CE ($[X_{5(4)}]$), suggesting that excessive or poorly coordinated channel integration may reduce customer responsiveness. Overall, the results highlight that both consumer demographics and the targeted application of the 5A framework are critical in shaping purchasing behaviour. Strategic, coordinated marketing efforts aligned with consumer preferences and channel effectiveness are essential for maximising purchase value in online agricultural markets.

Keywords: 5A marketing strategy; digital marketing; Farmers Association Network; Kanchanaburi Province.

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1 Introduction

In the contemporary landscape, the intensification of global economic challenges and rapid technological advancements has considerably increased competitive pressures across various industries. Digital technology has become an integral element of both economic and social systems. The widespread use of the Internet for accessing real-time information and instant communication has profoundly influenced consumer behaviour, particularly through the increasing trend of online purchasing (Wetchapitak et al., 2021). Digital marketing has experienced substantial growth, emerging as a vital instrument for marketers to promote products and services, and consequently driving sales (Bhosale et al., 2020). The evolution of digital marketing throughout the 1990s and 2000s has fundamentally reshaped how brands and businesses leverage technology for marketing purposes (Lavanya and Radhikamani, 2021). Central to this transformation is the 5A marketing strategy, which represents a paradigm shift towards a more consumer-centric model in the digital marketing domain (Chaffey and Ellis-Chadwick, 2022). Digitalisation has transformed the way information and resources are accessed, allowing individuals across the globe to obtain data and news instantaneously, regardless of geographical location (Brynjolfsson and McAfee, 2014).

Thailand's 13th National Economic and Social Development Plan (2023–2027) presents key strategies to propel the digital economy. The primary goal is to promote the adoption of digital technologies to boost company revenues by enhancing the value of

products, thereby improving their market competitiveness (Battaglia et al., 2014). Another critical strategy emphasises supporting entrepreneurs in transforming their businesses into digital enterprises. This includes promoting e-commerce in the agricultural sector, establishing product standards, creating online platforms, and helping small and medium-sized enterprises (SMEs) and community-based businesses (Office of the National Economic and Social Development Council, 2016).

Thailand's agricultural market is characterised by a fragmented structure dominated by smallholder farmers, imperfect competition, and complex supply chains that constrain producers' bargaining power and income stability. These structural limitations are compounded by broader economic, social, and environmental challenges, including rising production costs, labour shortages, climate-related risks, and unequal access to digital resources (Yuan and Sun, 2024). Within this context, the national policy emphasis on digital transformation underscores the strategic importance of digital marketing and e-commerce as mechanisms for improving market access, enhancing value creation, and strengthening producer–consumer linkages. This study, therefore, contributes to the literature by highlighting how the application of strategic digital marketing frameworks can help agricultural entrepreneurs address structural constraints, improve competitiveness, and pursue more sustainable, value-added business models within Thailand's evolving agri-food economy.

Launched in 2014, the Young Smart Farmer (YSF) programme was developed to address the declining involvement of youth in agriculture, in direct response to the ageing farming population in Thailand. Managed by the Department of Agricultural Extension (DOAE), the programme aims to engage younger generations in agricultural innovation (Manalili and Capiña, 2023). In 2019, the Cage-Free Fish Farmers Association Network (the Network) was established in Kanchanaburi Province and officially registered with the DOAE. The Network consists of nine farms, representing a new generation of young, smart farmers who are committed to the Thai government's policy of producing safe food and a diverse range of agricultural products. These farmers adhere to various production systems and standards, such as the Participatory Guarantee Systems (PGS), as outlined by the International Federation of Organic Agriculture Movements (IFOAM, 2008), Good Agricultural Practices (GAP) (Thai agricultural standards for food crops, as defined by the Food and Agricultural Organization of the United Nations (FAO, 2016), and Organic Thailand standards, as defined by Department of Agriculture (DOA, 2003).

Additionally, the Network has received comprehensive training from the DOA to align with Thailand's Agriculture 4.0 vision. Beyond compliance with production standards, these farmers are actively involved in learning, idea-sharing, co-planning, and collaboration – all aimed at strengthening the agricultural sector, fostering self-reliance, and building a robust network. This initiative connects individuals, organisations, and agencies in alignment with the SME Entrepreneurial Marketing Orientation Conceptualised Model proposed by Jones and Rowley (2011). However, despite these efforts, the Network's members have not yet fully embraced digital marketing, whereas businesses in other countries have been leveraging e-marketing since the 1990s (Fader and Winer, 2012). The current study aims to: 1) assess the potential of digital marketing for the Cage-Free Fish Farmers Association Network; and 2) examine consumer attitudes towards the 5A marketing strategy, including the impact of demographic factors and how the 5A strategy influences customer responses to agricultural products from the Kanchanaburi-based network via online channels. This aligns with Thailand's 13th

National Economic and Social Development Plan (2023–2027), particularly in the area of digital technology education for agricultural applications aimed at improving the quality of life of farmers.

The current study extends existing theoretical frameworks by offering a more nuanced understanding of marketing strategies within the agricultural sector. Through an in-depth examination of the Network, it presents an innovative analysis of how 5A marketing strategies and demographic variables influence consumer responses to agricultural products via online channels. This approach contributes a novel perspective to the existing literature by integrating marketing theory with the specific context of community-based agricultural enterprises. Through its focus on a defined geographical area and network, the study provides a comprehensive case analysis, illustrating how general marketing principles can be effectively applied and adapted to localised settings.

The integration of digital marketing strategies has emerged as a critical driver of consumer engagement and business competitiveness in emerging markets such as Thailand. Recent studies indicate that the widespread adoption of digital technologies and online platforms has reshaped consumer behaviour, creating opportunities for firms to leverage targeted campaigns, social media interactions, and e-commerce solutions to overcome market constraints (Matta et al., 2025). Consumer-centric frameworks, particularly the 5A model, provide a structured approach to understanding the customer journey and tailoring marketing interventions across the stages of awareness, consideration, purchase, and advocacy. Furthermore, the strategic deployment of digital tools not only enhances market penetration but also improves operational efficiency, trust-building, and sustained consumer engagement. Collectively, these insights underscore the necessity for firms in emerging economies to align digital marketing initiatives with evolving consumer expectations, thereby fostering competitive advantage, brand loyalty, and long-term business sustainability.

2 Data and methods

This research employed participatory action research methodology, which consisted of two key phases: 1) Planning, which involved focus group discussions, and 2) data collection, which focused on the gathering of information from consumers.

2.1 Study area

The Cage-Free Fish Farmers Association Network consists of nine-member farms, as detailed in Table 1. These farms are classified as community enterprises located in the Lower Central Region 1, encompassing the provinces of Nakhon Pathom, Ratchaburi, Kanchanaburi, and Suphan Buri (Office of the Permanent Secretary for Interior, 2008).

Table 1 Locations of the Cage-Free Fish Farmers Association Network members (total $n = 9$)

<i>No.</i>	<i>Farm name</i>	<i>Farm products</i>	<i>Farm location</i>
1	Baanhugkan Farm	Ornamental plants (e.g., anthurium, monstera, cactus) and integrated farming of salad vegetables	Mueang Kanchanaburi District
2	Thanwalai Farm	Jasmine rice, lime orchards, and integrated farming	Huai Krachao District
3	Jeensae Garden Farm	Pomelo and pomelo blossom honey	Thong Pha Phum District
4	Suan Pa Nin Farm	Kaffir lime leaves for export, papaya, lime, and Siam Queen red corn	Nong Prue District
5	Tum Por Dee mini farm	Chuenchit herbal juice, pesticide-free vegetables, Rice berry rice, Pathum Thani jasmine rice (both raw and processed rice products)	Tha Maka District
6	Rai Nai In Farm	Fresh dates	Bo Phloi District
7	Oppa Farm	Melons, lettuce, tomatoes, corn, cucumbers, and culinary herbs	Tha Muang District
8	SFF Organics Farm	Eggs, broiler chickens (Esan Pearl, Thapthong Kasetsart), cucumbers, butternut squash, yard long beans, bok choy, kale, bananas, and coconuts	Phanom Thuan District
9	Blue's backyard	Organic vegetables, including various types of lettuce	Mueang Kanchanaburi District

Source: Computed from field survey data, 2022.

2.2 Population and sample size

The population for this study consisted of two groups: (1) farmers who were members of the Cage-Free Fish Farmers Association Network in Kanchanaburi Province, totalling 15 individuals, and (2) consumers who purchased products from this Network, numbering 600 individuals.

The study sample comprised two groups: (1) farm owners or their representatives, who were members of the Network and actively involved in farm management, totalling nine individuals, and (2) consumers who purchased agricultural products from this Network, distributed across Kanchanaburi Province. The sample size for consumers was calculated using Yamane's (1967) formula, with a 95% confidence level and a population proportion (p) of 0.5, as shown in equation (1):

$$n = \frac{N}{1 + N(e^2)} \quad (1)$$

where:

n is sample size

N is population size

e is allowable error ($e = 5\%$).

Based on these calculations, the required sample size for consumers purchasing agricultural products from the Network was 240 individuals. This sampling approach is

consistent with established methodologies in agricultural and consumer research (Agarwal et al., 2022). Sample selection was guided by the following inclusion criteria: (1) individuals of any gender; (2) aged between 20 and 60 years; and (3) consumers who had purchased agricultural products from the Network via online channels. The study was reviewed and approved by the Kasetsart University Research Ethics Committee (COA No. COA65/004).

Focusing on a single geographical region with a relatively small purposive sample may introduce selection bias, as regional characteristics and localised consumer behaviours may not reflect those of the broader population (Memon et al., 2025). Consequently, while the findings provide valuable insights into consumer behaviour within the Network, they should be generalised with caution. Future research could improve representativeness and external validity by employing probability-based sampling, expanding geographical coverage, and increasing the sample size.

2.3 Data collection

Data were collected through focus group discussions with nine farm owners – members of the Network – and through a semi-structured questionnaire completed by customers who had previously purchased agricultural products from the Network. The questionnaire consisted of three sections: the first focused on customers' demographic characteristics and purchasing behaviour, the second examined the 5A marketing strategy and its influence on customer responses via online channels, and the third solicited specific feedback and open-ended comments from the customers.

Using a six-point Likert scale (e.g., 1 = strongly disagree to 6 = strongly agree), the respondents were asked to rate their level of agreement with statements concerning the importance of each element of the 5A marketing strategy in influencing customers' responses to agricultural products. This method allowed respondents to express the extent of their agreement with statements, providing data on the effectiveness of the rebranding in influencing their views and behaviours towards the products, divided into six levels based on an interval width of 0.83 as follows: (1) a mean score of 5.16–6.00 was interpreted as “highest”; (2) a mean score of 4.33–5.15 as “high”; (3) a mean score of 3.50–4.32 as “moderate”; (4) a mean score of 2.67–3.49 as “relatively low”; (5) a mean score of 1.84–2.66 as “low”; and (6) a mean score of 1.00–1.83 as “lowest”.

2.4 Data analysis

This study adopted a mixed-methods approach, integrating both qualitative and quantitative analyses. The effectiveness of the Network's digital marketing efforts was investigated using focus group discussions, whereas the factors influencing the 5A marketing strategy were analysed using quantitative techniques.

Stepwise multiple regression analysis was conducted to identify the key determinants of customer responses to agricultural products within the Network. This analysis incorporated variables derived from the 5A marketing strategy as well as relevant demographic factors. The resulting model is presented in equation (2):

$$Y_i = b_0 + b_1X_1 + b_2X_2 + b_kX_k + e \quad (2)$$

where:

- Y_i is Dependent variable (Monthly purchasing value of agricultural products ordered by customers via online channels, denoted as **PurchaseValue**)

- $b_0, b_1, b_2, \dots b_k$ are Regression coefficients
- $X_1, X_2, \dots X_K$ are Independent variables (Respondents' demographic factors and 17 variables related to the 5A marketing strategy)
- e is Error term, representing the difference between the estimated value of Y and actual observed value
- i is Index representing the individual observations, where $i = 1, \dots, n$.

Stepwise multiple regression is a statistical technique used to identify the most significant predictor variables that explain the variations in a dependent variable.

This method systematically adds or removes variables based on specific selection criteria, such as p-values, the Akaike Information Criterion (AIC), or the Bayesian Information Criterion (BIC), and is particularly useful when dealing with a large number of potential predictors. It is an effective tool for handling datasets with many independent variables. Additionally, in situations where it is unclear which variables significantly impact the outcome, this method facilitates a systematic approach to identifying and evaluating the most important predictors (Papazafeiropoulos, 2024).

2.5 Reliability analysis

A reliability assessment of the questionnaire data was carried out prior to conducting further analysis. The instrument's reliability was evaluated in terms of data stability and internal consistency, with the latter measured using Cronbach's alpha coefficient. Generally, a coefficient value greater than 0.70 is considered indicative of acceptable internal consistency, suggesting that the instrument would produce reliable results (Henson, 2001).

The questionnaire used in this study obtained a Cronbach's alpha of 0.935, indicating a high level of reliability and confirming that the instrument met established methodological standards, thereby justifying the continuation of the analysis.

2.6 Validity analysis

The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy, as presented in Table 2, exceeded 0.80, suggesting that the dataset was highly suitable for factor analysis. Furthermore, Bartlett's test of sphericity yielded a significance value of 0.000 (below the 1% threshold), indicating that there were significant correlations among the variables in the dataset (Kaiser, 1974). Therefore, multiple regression was employed as a subsequent step in this study to generate new variables.

Table 2 KMO and Bartlett's test statistics

<i>KMO and Bartlett's Test</i>		
KMO measure of sampling suitability		0.815
Bartlett's test of sphericity	Approximate chi-square	2,079.633
	Degrees of freedom	231
	Significance	0.000***

Note: *** significance at level 0.01.

2.7 Study hypotheses

The hypotheses of this research were: I) The Network exhibits a high level of digital marketing effectiveness; and II) customers' responses to agricultural products from the Network through online channels are significantly influenced by the respondents' demographic characteristics and 5A marketing strategy.

3 Results and discussions

3.1 Digital marketing potential

Hypothesis I testing: The assessment of digital marketing potential through focus group discussions constituted a form of participatory action research, which plays a vital role in promoting inclusive community development. This process generates a range of benefits, one of which is the enhancement of strategic planning for community-based small enterprises – an essential mechanism for fostering sustainable grassroots economic development (Hutanuwatr and Hutanuwatr, 2000).

Assessment of the digital marketing potential for the Network was based on seven key dimensions outlined by the Community Enterprise Promotion Division's criteria (2017). These dimensions consisted of: 1) leadership and management within community enterprises; 2) production and operational planning for community enterprises; 3) market management and product or service management; 4) financial management; 5) knowledge and information management; 6) member and community management; and 7) external relations and operational outcomes. These criteria are designed to assess the potential of community enterprises or community enterprise networks registered with the DOAE.

Based on the criteria established by the Community Enterprise Promotion Division (2017), the assessment revealed that the Network had a moderate level of digital marketing capability, contrary to hypothesis I. This assessment underscores the Network's strengths in areas such as leadership and management, member and community management, and external relations, as well as operational outcomes (Table 3). Supported by strong leadership and extensive agricultural knowledge. However, challenges remained in operational planning, production consistency, financial resources, and structured engagement in digital marketing, limiting the Network's ability to fully capitalise on market opportunities. Strategic interventions – including systematic farm inspections, capacity-building programmes, the adoption of advanced production technologies, and integration of digital marketing strategies – are essential for strengthening operational efficiency and customer engagement (Cao et al., 2025). Collaborative initiatives, such as shared marketing campaigns, pooled distribution networks, and targeted training workshops, can mitigate structural and economic constraints while leveraging the Network's existing strengths in member expertise and community participation. By aligning operational oversight with effective digital marketing practices, the Network can enhance market competitiveness, stabilise consumer demand, and promote sustainable growth, ultimately maximising the economic and social benefits for its members as well as the broader agricultural community.

The results aligned with the findings of Jensantikul (2018) and Katepan and Srisuantang (2022), who suggested that community enterprises in the Lower Central

Region of Thailand prioritise improving access to financial resources and strengthening their marketing strategies, particularly by leveraging electronic media channels to enhance their competitive edge.

Table 3 Analysis of digital marketing potential of the Cage-Free Fish Farmers Association Network (total $n = 9$)

<i>Assessment criterion</i>	<i>Assessment results</i>
1 Leadership and management within community enterprises	- The leader of the Network is a visionary, possessing the qualities of a strategic thinker, planner, and marketer. Such leaders have the ability to inspire members to collaborate effectively, coordinating efforts and engaging with customers in an efficient manner. - The Network is a well-organised entity characterised by strong leadership and effective group management. It actively promotes collaboration and participation among its members in goal-setting, strategic direction determination, and the execution of group activities, ensuring that members play a vital role in the Network's development.
2 Production/operational planning for community enterprises	- Each farm within the Network is equipped with a sufficient supply of locally sourced raw materials, which helps to reduce production costs. Additionally, the Network distinguishes its products by ensuring the sale of high-quality goods that meet recognised standards, such as GAP and organic certifications, to align with market demand. - The Network is a diverse and knowledge-rich community, enabling its members to collaboratively develop strategies and manage responses to natural disasters and emerging contagious diseases. - A key weakness observed across most farms within the Network is the inconsistency in production, which hampers their ability to generate sufficient quantities of goods to meet domestic consumer demand.
3 Market management/product or service management	- The Network employs sales personnel who provide accurate and comprehensive information, thereby enhancing consumer confidence in the products and services. This approach has contributed to an increase in sales through online channels. Additionally, the Network has established a support system to facilitate the dissemination of information to each member farm and effectively utilises a variety of online marketing platforms, including Facebook, Instagram, and YouTube. - The marketing challenges faced by members of the Network are largely attributable to the current economic conditions, negatively impacting consumer purchasing power, and consequently, reducing the income of individual farms within the Network.
4 Financial management	- The Network has a limited reserve fund for each member farm, which is insufficient to meet the financial needs of individual farms within the Network. - A major financial challenge is the relatively high interest rates imposed by lending institutions, which require collateral, severely limiting the Network's ability to invest in production, marketing, and the acquisition of new machinery.

Table 3 Analysis of digital marketing potential of the Cage-Free Fish Farmers Association Network (total $n = 9$) (continued)

<i>Assessment criterion</i>	<i>Assessment results</i>
5 Knowledge and information management	- The Network faces challenges in maintaining consistent content creation and experiences relatively slow customer response times, resulting in sales falling short of the targeted goals. Additionally, there are issues relating to knowledge management, including ensuring continuous production to meet consumer demand and developing effective marketing strategies to stabilise the customer base under the “V-Get Safe Agricultural Products” brand.
6 Member and community management	- Members of the Network have acquired production knowledge and skills through both knowledge transfer from leaders and hands-on experience obtained during field study visits. - The Network distributes annual dividends to its members, allocating a portion of the profits to community-benefit activities, such as New Year celebrations and Children’s Day events held within the village.
7 External relations/operational outcomes	- Members of the Network regularly participate in training through both online sessions and on-site workshops. Furthermore, the Network promotes collaboration among community enterprises.

Source: Computed from field survey data, 2022

Therefore, an analysis of digital marketing strategies was conducted to provide a framework for future implementation, enabling the Network to further develop and enhance its digital marketing capabilities moving forward.

3.2 Characteristics of consumers

Following data collection from consumers, a summary of the respondents’ characteristics was compiled, as presented in Table 4. Among the respondents, 55.83% were male, which was contrary to the studies by Jitpairroj and Tiangsoongnern (2024) and Wetchapitak et al. (2021), who reported a majority of female respondents.

In terms of age distribution, the majority (43.75%) of respondents in this present study were between 21 and 30 years old, followed by 38.33% aged 31–40, and 9.58% aged 41–50. These results contrasted with the findings of Wetchapitak et al. (2021), who indicated that most respondents belonged to Generation X (45–60 years old).

Regarding educational attainment, 56.67% of the respondents reported having completed 16 years of formal education, while 19.58% had completed between 12 and 14 years. These results were similar to those of Jitpairroj and Tiangsoongnern (2024); and Wetchapitak et al. (2021), who reported that the majority of their respondents held a bachelor’s degree.

In terms of occupation, 34.17% of respondents identified as private business owners, 20.83% as government employees, 17.08% as freelancers or independent contractors, 14.58% as employees in private companies, and 6.67% as employees of state enterprises. Contrary to the findings of Juntavong et al. (2018), who reported that the majority of their respondents were employed in private companies.

Regarding monthly income, 48.33% earned less than THB 15,000, 39.17% earned between THB 15,001 and 25,000, 11.67% earned between THB 25,001 and 35,000, and only 0.83% earned more than THB 35,001. These results were contrary to the findings of

Juntavong et al. (2018), who indicated that most respondents in their study had an average monthly income of between THB 30,001 and 50,000.

An analysis of monthly expenditure on agricultural products purchased through the Network's online channels revealed that 45.42% of respondents spent between THB 1,501 and 3,500, 28.75% spent between THB 500 and 1,500, 17.50% spent between THB 3,501 and 7,000, 5.00% spent between THB 7,001 and 10,000, while 3.33% spent more than THB 10,001.

Table 4 Demographic characteristics of respondents (total $n = 240$)

<i>Variable label</i>	<i>Characteristic</i>	<i>Frequency</i>	<i>%</i>	<i>Mean</i>	<i>Std.</i>
Gender (Dummy: Male = 1, Female = 0)	Male	134	55.83	n.a.	n.a.
	Female	106	44.17		
Age of customers (years)	≤ 20	7	2.92	n.a.	n.a.
	21–30	105	43.75		
	31–40	92	38.33		
	41–50	23	9.58		
	51–60	11	4.58		
	≥ 61	2	0.83		
Formal schooling (years)	12 (<i>Secondary School</i>)	39	16.25	15.11	1.70
	14 (<i>Vocational/ High vocational certificate</i>)	47	19.58		
	16 (<i>Bachelor's degree</i>)	136	56.67		
	18 (<i>Postgraduate</i>)	18	7.50		
Occupation	Private business ownership	82	34.17	n.a.	n.a.
	Government employees	50	20.83		
	Private company employees	35	14.58		
	State enterprise employee	16	6.67		
	Freelance/Independent contractor	41	17.08		
	Collegian	11	4.58		
	Student	5	2.08		
Personal Income (THB/month)	$\leq 15,000.00$	116	48.33	18,916.92	5,100.97
	15,001.00–25,000.00	94	39.17		
	25,001.00–35,000.00	28	11.67		
	$\geq 35,001.00$	2	0.83		
Purchasing value via online channels (THB/month)	500.00–1,500.00	69	28.75	2,584.48	2,383.48
	1,501.00–3,500.00	109	45.42		
	3,501.00–7,000.00	42	17.50		
	7,001.00–10,000.00	12	5.00		
	$\geq 10,001.00$	8	3.33		

Note: USD 1 = THB 36.31 (as of November 2022).

Source: Computed from field survey data, 2022

3.3 Importance of the 5A marketing strategy for the Network's members

Table 5 presents the priority listing of the 17 independent variables within the 5A marketing strategy. These variables were categorised into the following groups: three variables from the Aware group, four from the Appeal group, three from the Ask group, three from the Act group, and four from the Advocate group, as proposed by Kotler et al. (2021).

Among customers who purchased agricultural products from the Network through online channels, the ratings for the 5A marketing strategy factors ranged from 4.33 to 5.15, reflecting a high level of perceived importance.

Table 5 Importance of 17 variables in the 5A marketing strategy affecting customer responses to agricultural products from the Network via online channels (total $n = 240$)

<i>5A Variable Label</i>	<i>Mean</i>	<i>Std.</i>	<i>Rate</i>
X1: Aware	4.57	0.04	High
<i>X1(1):</i> Recognition of the Network's products through recommendations from friends or family.	4.61	0.58	High
<i>X1(2):</i> The recognition of the Network's products through the integrated use of online and offline media channels to sell and market their products.	4.48	0.66	High
<i>X1(3):</i> Recognition of the Network's products due to farmers' and distributors' innovative technologies for maximum production efficiency, aimed at reducing pollution.	4.63	0.60	High
X2: Appeal	4.62	0.04	High
<i>X2(1):</i> The novelty, high quality, and variety of agricultural products are attractive factors when ordering online.	4.65	0.57	High
<i>X2(2):</i> The agricultural product standards certified by reliable organisations in the country are an attractive factor when ordering online.	4.55	0.65	High
<i>X2(3):</i> Guaranteeing the quality of the agricultural products from farmers and distributors is an attractive factor when ordering online.	4.66	0.57	High
<i>X2(4):</i> Having selling prices and promotions suitable for the type and quality of the agricultural products are attractive factor when ordering online.	4.62	0.62	High
X3: Ask	4.59	0.02	High
<i>X3(1):</i> Using communication media tools among farmers and distributors in organising press conferences and providing agricultural products for free trials are factors that drive online orders or inquiries.	4.67	0.60	High
<i>X3(2):</i> Having salespeople who provide accurate and complete information is a factor that drives online orders.	4.51	0.59	High
<i>X3(3):</i> Reading customer reviews is a factor that drives online orders or inquiries.	4.58	0.62	High

Table 5 Importance of 17 variables in the 5A marketing strategy affecting customer responses to agricultural products from the Network via online channels (total $n = 240$) (continued)

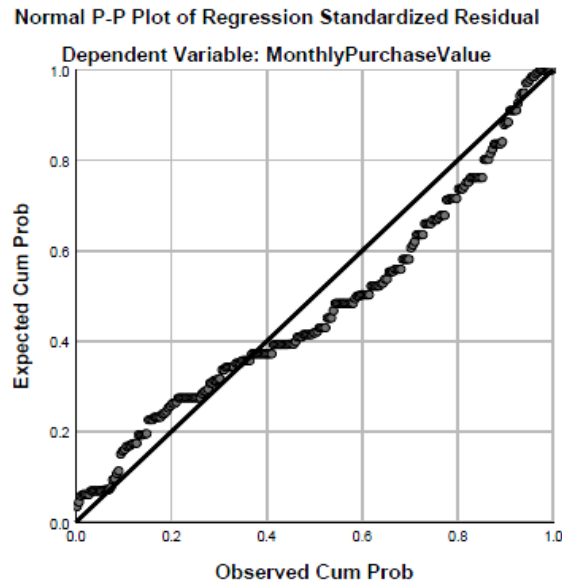
5A Variable Label	Mean	Std.	Rate
X4: Act	4.64	0.04	High
X4(1): The availability of agricultural products that meet social needs, such as those popular in each season, drives online purchase decisions.	4.58	0.59	High
X4(2): A guarantee in the case where an agricultural product is damaged by farmers or distributors is a factor that influences the decision to buy online.	4.65	0.52	High
X4(3): Special promotions for new customers influence the decision to buy online.	4.68	0.52	High
X5: Advocate	4.67	0.02	High
X5(1): The Network's products meet quality standards. There is a guarantee that the products will not be damaged by farmers or distributors, delivery will be prompt, and customers' opinions about online ordering will be heard.	4.60	0.52	High
X5(2): The Network's products meet quality standards, resulting in word-of-mouth referrals and recommendations to friends and family for online ordering.	4.68	0.56	High
X5(3): The Network's products meet quality standards, resulting in posts and reviews on social media platforms, such as Facebook and Instagram.	4.72	0.51	High
X5(4): Farmers and distributors develop customer relations via online and offline media, transitioning from customer relationship management (CRM) to customer experience management (CEM), and ultimately to customer engagement (CE).	4.69	0.51	High

As shown in Table 5, the majority of the 17 independent variables related to the 5A marketing strategy were perceived by respondents as having a high level of perceived importance. This finding was consistent with the studies by Jitpairroj and Tiangsoongnern (2024) and Juntavong et al. (2018), who reported that overall customer behaviour in the online context, as measured by the 5A model, was at a high level.

3.4 Assumption test

Prior to conducting the multiple regression analysis, a normality test was performed to examine whether the residuals were normally distributed. In this study, all data points were found to closely follow the diagonal line (Figure 1), confirming that the residuals satisfied the normality assumption.

Figure 1 Results of the normality test



3.5 Relationship between customer responses to agricultural products from the Network, demographic factors, and 17 variables from components of the 5A marketing strategy

Hypothesis Testing II, using stepwise multiple regression analysis as presented in Table 6, examined the relationship between digital marketing responses – measured according to the 17 independent variables derived from the 5A marketing model and 5 demographic variables – and customers’ monthly online purchasing value of agricultural products.

The results revealed a statistically significant relationship at the 0.01 level, indicating that these variables influence the purchase value.

Table 6 Relationship between digital market responses and customers’ monthly online purchasing value of agricultural products, based on 22 independent variables derived from the 5A marketing strategy (17 variables) and demographic factors (5 variables)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	256,757,608.20	5	51,351,521.64	60.914	.000***
	Residual	1,100,990,707.97	234	4,705,088.50		
	Total	1,357,748,316.17	239			

Notes: Dependent Variable = **PurchaseValue**.
*** significance at level 0.01, two-tailed.

The coefficient of determination (R^2) was 0.6890, indicating that the independent variables collectively accounted for 68.90% of the variance in customer responses to the Network. Additionally, multicollinearity diagnostics confirmed the appropriateness of the model, with variance inflation factor (VIF) values not exceeding 4 or 5, and tolerance

values above 0.2. The Durbin-Watson (DW) statistics were 1.785, suggesting no evidence of autocorrelation in the residuals (Hair et al., 2019) (Table 7).

Table 7 Stepwise multiple regression analysis of customer responses to agricultural products from the Network via online channels

Variable	Unstandardised B	Std. Error	Beta (β)	t	P-Value	Collinearity Statistics		
						Tolerance	VIF	Eigen Value
Constant term	3,946.496	1,737.698		2.271	0.024**			5.899
MonthlyIncome	0.158	0.028	0.338	5.695	0.000***	0.981	1.019	0.059
X ₁₍₂₎	-707.469	234.186	-0.196	-3.021	0.003**	0.826	1.210	0.017
X ₃₍₃₎	1,032.112	272.430	0.267	3.789	0.000***	0.699	1.430	0.011
X ₁₍₁₎	-620.541	254.795	-0.150	-2.435	0.016**	0.915	1.093	0.009
X ₅₍₄₎	-650.152	303.022	-0.140	-2.146	0.033**	0.811	1.233	0.005
Multiple R ² = 0.689					SEE = 2,169.122			
Adjusted R ² = 0.672					Durbin-Watson = 1.785			

Notes: Dependent variable = *PurchaseValue*.

** significance at level 0.05, *** significance at level 0.01 respectively.

Source: Computed from field survey data, 2022

In summary, two out of the five independent variables in the regression model – *MonthlyIncome* ($t = 5.695$) and *X₃₍₃₎* (reading customer reviews drives online orders or inquiries) ($t = 3.789$) – were statistically significant at the 1% level.

Based on the results presented in Table 7, linear regression analysis was conducted using monthly income, Aware, Ask, and Advocate as independent variables, with purchase value serving as the dependent variable. Consequently, the final multiple regression equation (3) was as follows:

$$Y_i = 3,946.50 + 0.16 \text{ MonthlyIncome} - 707.47 X_{1(2)} + 1,032.11 X_{3(3)} - 620.54 X_{1(1)} - 650.15 X_{5(4)} \quad (3)$$

(2.271**)
(5.695***)
(-3.021**)
(3.789***)
(-2.435**)
(-2.146**)

The coefficient for personal income [MonthlyIncome] showed a positive sign at the 1% significance level, indicating that an increase in personal income would lead to a THB 0.16 increase in customer response. Respondents with varying income levels demonstrated different purchasing behaviour towards agricultural products, which was consistent with the findings of Wetchapitak et al. (2021). Therefore, the Network's members should consider pricing strategies that align with the value perceived by consumers while maintaining affordability, to stimulate higher consumer purchase intent.

The coefficient for recognising the Network's products through the integrated use of online and offline media channels to sell and market their products [X₁₍₂₎] showed a negative sign. This result indicated that recognition of the Network's products through these integrated channels would decrease customer response by THB 707.47, because the integrated use of both online and offline media channels for marketing and sales would result in higher operational costs. These findings aligned with those of Buckley and Feldman (2024), who noted that service integration influences the physical, relational, and affective dimensions of the customer experience, while the integration of information access primarily affects the physical and sensorial aspects. Therefore, the Network's

members should adopt a blended marketing approach that enables producers and sellers to promote and distribute their products through both online and offline media in a strategic and targeted manner. Such an approach should avoid excessive or indiscriminate use of channels and instead focus on effectively meeting the specific needs and preferences of customers. Channel integration does not automatically enhance customer response or purchase value. Higher operational costs, potential message redundancy, and inconsistencies across channels can reduce clarity, engagement, and trust, particularly in agricultural markets with narrow profit margins (Linh et al., 2025). Additionally, consumer preferences vary, with some favouring exclusively online or offline channels, meaning that a uniform integration strategy may not resonate with all segments. These findings suggest that the effectiveness of integrated channels depends on strategic, targeted, and coordinated implementation. A blended marketing approach that aligns channel selection with consumer needs, product characteristics, and resource constraints can mitigate negative effects and maximise the overall impact of marketing efforts.

The coefficient for reading customer reviews driving online orders or inquiries [$X_{3(3)}$] showed a positive sign at the 1% significance level, indicating that customer reviews would increase customer response by THB 1,032.11. This result was consistent with the findings of Zhu et al. (2020), who indicated that both the perceived quality of information and social presence embedded within online reviews exerted a positive influence on consumer trust. Furthermore, satisfaction derived from online reviews greatly impacts purchase intention, with trust serving as a mediating variable between the two stimuli (perceived information quality and social presence) and consumer satisfaction. Notably, in the current study, the perceived information quality of positive online reviews exhibited a stronger influence on trust, satisfaction, and purchase intention compared to other types of reviews. Therefore, the Network's members should increase the volume of product reviews to enhance customer purchase motivation.

The coefficient for recognising the Network's products through recommendations from friends or family [$X_{1(1)}$] demonstrated a negative sign, indicating that recognition of the Network's products through recommendations from friends or family would decrease customers' response by THB 620.54. Often, friends and family are regarded as key components of traditional media, particularly in societies characterised by short-term orientation and low uncertainty avoidance, where human-sourced information is especially influential. Consequently, negative word-of-mouth from these sources can diminish the credibility of the Network and potentially reduce consumer purchase intentions. This observation was consistent with the findings of Palalic et al. (2021), who indicated that, to mitigate the negative effects of word-of-mouth from friends and family, the Network's members should actively manage interpersonal communication by ensuring product quality, providing transparent information, and promptly addressing consumer concerns. Encouraging positive testimonials and community engagement can further enhance credibility and trust, ultimately strengthening the Network's reputation and increasing consumer purchase intentions.

The coefficient for the development of customer relations by farmers and distributors via online and offline media, transitioning from customer relationship management (CRM) to customer experience management (CEM), and ultimately to customer engagement (CE) [$X_{5(4)}$] showed a negative sign. This result indicated that these efforts would decrease customers' response by THB 650.15. Given that the products from each member farm within the Network are certified by recognised

standards such as PGS, GAP, and Organic Thailand, initiatives aimed at strengthening customer relationships through both online and offline channels, as part of CRM, have led to increased agricultural production costs. Consequently, farmers are compelled to raise their product prices to ensure economic sustainability. Although producers have adopted CRM strategies via both digital and traditional media to enhance CEM and foster deeper CE, these price adjustments have contributed to a reduction in consumers' purchasing intentions. This phenomenon aligned with the observation made by Montaña and Kasprzyk (2008), who emphasised that intention was a key predictor of actual purchasing behaviour. In addition, it has been suggested that elevated operating costs may result in a diminished emphasis on product value, as resources are disproportionately allocated to operational expenditure rather than value enhancement. In summary, the Network's members should balance customer relationship and experience initiatives with cost management by improving operational efficiency, leveraging digital platforms, and emphasising value-added product differentiation. Collaborative strategies, such as shared marketing or pooled distribution, can further reduce expenses while maintaining quality. These approaches would enable the Network to strengthen customer engagement, preserve competitiveness, and enhance purchasing intentions without compromising economic sustainability (Suwanmaneepong et al., 2024).

4 Conclusion and recommendations

This case study in Thailand's Kanchanaburi Province has provided insights into how to estimate the potential of digital marketing and the determinants of the 5A marketing strategy.

The findings revealed that the Cage-Free Fish Farmers Association Network had a moderate level of digital marketing capability. Thus, it is recommended that the DOAE enhance its support by implementing more thorough and systematic random inspections across individual farms. These inspections should cover the overall farm infrastructure, housing systems, cultivation areas, and surrounding production environment. Such measures are critical to ensure that the Network maintains consistent and adequate production to meet domestic consumer demand. Furthermore, the DOAE should regularly initiate and facilitate capacity-building programmes for Network members, with particular focus on adopting advanced production technologies and effectively integrating digital marketing strategies. A major challenge facing the Network is its historical lack of engagement in structured, collaborative online marketing, which has hindered its ability to fully leverage digital platforms. Addressing this issue is vital for strengthening the Network's market presence and ensuring its long-term sustainability. However, the Network is characterised by its strength and resilience, underpinned by a diverse foundation of agricultural knowledge across various fields.

Several variables associated with the 5A marketing strategy – alongside respondents' demographic characteristics and their behaviours related to purchasing agricultural products through online channels – significantly influence purchase value. Key determinants consist of personal income (*[MonthlyIncome]*); recognition of the Network's products through their integrated use of online and offline media channels to sell and market their products (*[X₁₍₂₎]*); reading customer reviews, which drives online orders or inquiries (*[X₃₍₃₎]*); recognition of the Network's products through recommendations from friends or family (*[X₁₍₁₎]*); and farmers and distributors

developing customer relations using both online and offline media. These efforts evolve into customer relationship management (CRM), then customer experience management (CEM), and finally customer engagement (CE) ($X_{5(4)}$). Demographic characteristics, particularly personal income, along with key components of the 5A marketing framework, jointly influence consumer behaviour and purchase value in online agricultural markets. Higher income enhances purchasing power and risk tolerance, leading to a greater willingness to pay for agricultural products perceived as higher quality and more trustworthy. Within the 5A framework, the Aware stage strengthens brand recognition through integrated online and offline communication, thereby reducing uncertainty and supporting progression along the customer path. The Ask stage facilitates informed decision-making, as consumers rely on reviews and interpersonal recommendations to reduce perceived risk and build trust. Finally, the Advocate stage highlights the role of relationship-driven strategies, whereby sustained engagement across multiple touchpoints fosters trust, loyalty, and higher purchase value over time (Linh et al., 2025). Collectively, these factors explain how demographic and marketing variables interact to shape purchasing behaviour in the specific context of online agricultural product markets.

The proposed model contains five independent variables, three of which – product awareness (Aware), information seeking and inquiry (Ask), and word-of-mouth advocacy (Advocate) – emerge as key predictors of consumer purchasing behaviour. Typically, the consumer journey begins with the conscious recognition of a need, followed by active information seeking, often through digital channels such as online product reviews from multiple sources. Among these influencing factors, personal recommendations and word-of-mouth communication – particularly those derived from direct experience within the consumer's social network – are regarded as highly credible and persuasive. These findings align with the work of Juntavong et al. (2018), who identified that Aware, Ask, and Advocate are critical components of the customer path that substantially impact purchasing decisions. The Aware stage corresponds to problem recognition and initial exposure, thereby establishing the cognitive foundation for subsequent decisions. The Appeal stage reflects attitude formation and early evaluation, wherein positive perceptions and emotional responses strengthen purchase intention. The Ask stage parallels the information search process, as consumers seek both internal and external information to reduce perceived risk and uncertainty. The Act stage represents the purchase decision and actual buying behaviour, in which evaluations are translated into action. Finally, the Advocate stage extends traditional decision-making models by incorporating post-purchase evaluation, word-of-mouth communication, and brand advocacy (Palalic et al., 2021). Overall, the 5A framework not only maps systematically onto established consumer decision-making theory but also expands it to capture post-purchase engagement in contemporary, digitally connected markets. This alignment confirms that the conceptual framework applied in this study is theoretically robust and well-suited to explaining modern consumer purchasing behaviour. Consequently, members of the Network should strategically prioritise the provision of decision-support information, persuasive marketing messages, and authentic customer reviews. Emphasising these elements can stimulate immediate consumer engagement, which may be observed through measurable indicators such as likes and comments on platforms such as Facebook and Instagram. In today's digital environment, these social media platforms function as influential mechanisms for shaping consumer behaviour. In addition, this approach contributes to strengthening the Network's digital marketing

capabilities, thereby enhancing overall strategic effectiveness. In conclusion, this study demonstrates that the 5A framework offers a comprehensive and practically relevant approach to enhancing digital marketing effectiveness in the Thai business context. By systematically addressing each stage of the consumer journey – ranging from initial awareness and attitude formation to information search, purchase action, and post-purchase advocacy – firms can better align their marketing strategies with contemporary consumer behaviour in digitally connected markets. The findings highlight the importance of integrating targeted communication, credible information provision, seamless purchasing processes, and sustained post-purchase engagement to strengthen customer relationships (Linh et al., 2025). Ultimately, the strategic application of the 5A framework enables businesses in Thailand to transition from short-term, transaction-focused marketing to a more sustainable, relationship-driven approach that supports long-term customer loyalty and competitive advantage.

The current study offers an important contribution through its distinctive research focus, methodologically rigorous analysis, contextually grounded insights, and practical implications, all of which underscore its academic originality. These qualities not only strengthen the persuasiveness of its arguments but also advance scholarly understanding of online marketing strategies within the domain of community-based agriculture. This study addresses a relatively underexplored area by filling a critical gap in the existing literature and provides valuable insights for both academic enquiry and real-world application. Nevertheless, certain limitations should be acknowledged to guide future research. First, this study's geographically bounded scope and its emphasis on practical relevance may limit the generalisability of the findings, particularly in capturing the evolving and dynamic nature of customer experience over time. Future research should address this limitation by considering the adoption of longitudinal designs, as customer experience is shaped by continuous and multifaceted interactions across diverse touchpoints. Second, broadening the analytical framework to include additional attributes of purchasing channels – such as personalisation, flexibility, and transparency – within an omnichannel context would offer a more comprehensive and nuanced understanding of consumer behaviour in an increasingly complex retail environment.

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Declarations

All authors declare that they have no conflicts of interest.

References

- Agarwal, N., Sharma, R. and Kumar, R. (2022) 'Impact of along-track altimeter sea surface height anomaly assimilation on surface and sub-surface currents in the Bay of Bengal', *Ocean Modelling*, Vol. 169, No. 101931, pp.1–12. <https://doi.org/10.1016/j.ocemod.2021.101931>.
- Battaglia, D., Schimith, C.D., Marciano, M.A., Bittencourt, S.A.M., Diesel, L., Borchardt, M. and Pereira, G.M. (2014) 'Creating value through services and relationships: the perception of purchasing companies', *Procedia CIRP*, Vol. 16, pp.26–31. <https://doi.org/10.1016/j.procir.2014.01.004>.
- Bhosale, V.S., Raverkar, D.P. and Mahaldar, S. (2020) 'A study on digital marketing and its impacts', *International Journal of Advanced and Innovative Research*, Vol. 7, Nos. 1/6, pp.20–23.
- Brynjolfsson, E. and McAfee, A. (2014) *The Second Machine Age: Work, Progress, and Prosperity in a Time of Brilliant Technologies*, W.W. Norton & Company.
- Buckley, J.A.B. and Feldman, P.S.M. (2024) 'Effects of channel integration on the omnichannel customer experience', *Cogent Business & Management*, Vol. 11, No. 11, pp.1–20. <https://doi.org/10.1080/23311975.2024.2364841>.
- Chaffey, D. and Ellis-Chadwick, F. (2022) *Digital marketing*, 8th ed., Pearson.
- Cao, A., Guo, L. and Li, H. (2025) 'Understanding farmer cooperatives' intention to adopt digital technology: mediating effect of perceived ease of use and moderating effects of internet usage and training', *International Journal of Agricultural Sustainability*, Vol. 23, No. 1, pp.2464523. <https://doi.org/10.1080/14735903.2025.2464523>.
- Community Enterprise Promotion Division. (2017) *Community Enterprise Information System*. Available online at: <https://smce.doae.go.th/> (accessed on 17 April 2025).
- Department of Agriculture: DOA (2003) *Thai agricultural standard TAS 9000-2003: Organic agriculture part 1: The production, processing, labelling and marketing of organic agriculture*. Available online at: <https://www.fao.org/faolex/results/details/en/c/LEX-FAOC201755/>.
- Fader, P.S. and Winer, R.S. (2012) 'Introduction to the special issue on the emergence and impact of user-generated content', *Marketing Science*, Vol. 31, No. 3, pp.369–371. <https://doi.org/10.1287/mksc.1120.0715>.
- Food and Agriculture Organization of the United Nations: FAO (2016) *A scheme and training manual on good agricultural practices (GAP) for fruits and vegetables* (Vol. 2: Training manual), FAO Regional Office for Asia and the Pacific. Government Report.
- Henson, R.K. (2001) 'Understanding internal consistency reliability estimates: a conceptual primer on coefficient alpha', *Measurement and Evaluation in Counseling and Development*, Vol. 34, No. 3, pp.177–189. <https://doi.org/10.1080/07481756.2002.12069034>.
- Hair, J.F., Black, W.C., Babin, B.J. and Anderson, R.E. (2019) *Multivariate Data Analysis*, 8th ed., Cengage Learning EMEA.
- Hutanuwatr, N. and Hutanuwatr, N. (2000) *SWOT: Strategic Planning for Community-Based Enterprises*, 3rd ed., Local Development Foundation (LDF).
- International Federation of Organic Agriculture Movements: IFOAM (2008) *Participatory Guarantee Systems (PGS)*. Available online at: <https://www.ifoam.bio/our-work/how/standards-certification/participatory-guarantee-systems>.
- Jensantikul, N. (2018) 'The development of community enterprise in Lower Central Provinces Region 1 to enhance its competitiveness in the ASEAN Community', *Political Science and Public Administration Journal*, Vol. 10, No. 1, pp.95–120.
- Jitpairoj, P. and Tiangsoongnern, L. (2024) 'Effects of 5A marketing strategy and online influencers credibility on green products purchasing behaviour via online channel of Generation Y consumers in Bangkok', *BU Academic Review*, Vol. 23, No. 2, pp.97–120.

- Jones, R. and Rowley, J. (2011) 'Entrepreneurial marketing in small businesses: a conceptual exploration', *International Small Business Journal*, Vol. 29, No. 1, pp.25–36. <https://doi.org/10.1177/0266242610369743>.
- Juntavong, A., Sukpoka, J. and Pooripakdee, S. (2018) 'Influencing factors effect to purchasing decision in M-Commerce in womenomics' Generation Y', *Research Journal of Social Sciences*, Vol. 11, No. 3, pp.1–7. <https://doi.org/10.22587/rjss.2018.11.3.1>.
- Kaiser, H.F. (1974) 'An index of factorial simplicity', *Psychometrika*, Vol. 39, No. 1, pp.31–36. <https://doi.org/10.1007/BF02291575>.
- Katepan, P. and Srisuantang, S. (2022) 'Development guidelines for the digital marketing potential of the Freshfin Community Enterprise Network in Suphan Buri Province', *Journal of Humanities and Social Sciences Thonburi University*, Vol. 16, No. 3, pp.107–118.
- Kotler, P., Kartajaya, H. and Setiawan, I. (2021) *Marketing 5.0: Technology for Humanity*, John Wiley & Sons.
- Lavanya, A. and Radhikamani, A. (2021) 'A study on digital marketing and its impacts', *International Journal of Creative Research Thoughts*, Vol. 9, No. 5, pp.677–684.
- Linh, H., Salloum, C., Dana, L.-P. and Voak, A. (2025) 'Going organic: the power of health, safety, and social media on buying choices', *Journal of Foodservice Business Research*. <https://doi.org/10.1080/15378020.2025.2483036>.
- Manalili, N.M. and Capiña, X.G.B. (2023) *Young Smart Farmer (YSF) Programme: a case study in Thailand*. Available online at: <https://www.fao.org/family-farming/detail/en/c/1677701/> (accessed on 15 September 2025).
- Matta, R., Aziz, M.R. and Mahmoud, K. (2025) 'From likes to bookings: the influence of social media on marketing performance in travel agencies', *International Journal of Business and Emerging Markets*. <https://doi.org/10.1504/IJBEM.2025.10061198>.
- Memon, M., Thurasamy, R., Ting, H. and Cheah, J.W. (2025) 'Purposive sampling: a review and guidelines for quantitative research', *Journal of Applied Structural Equation Modeling*, Vol. 9, No. 1, pp.1–23. [https://doi.org/10.47263/JASEM.9\(1\)01](https://doi.org/10.47263/JASEM.9(1)01).
- Montaño, D.E. and Kasprzyk, D. (2008) 'Theory of reasoned action, theory of planned behaviour, and the integrated behavioural model', in Glanz, K., Rimer, B.K. and Viswanath, K. (eds): *Health Behaviour and Health Education: Theory, Research, and Practice*, 4th ed., Jossey-Bass, pp.67–96.
- Office of the National Economic and Social Development Council (2016) *The 12th National Economic and Social Development Plan for Years 2017–2021*, Government Report.
- Office of the Permanent Secretary for Interior (2008) *Guidelines for making provincial development plans and provincial groups*, Government Report.
- Papazafeiropoulos, G. (2024) 'Stepwise regression for increasing the predictive accuracy of artificial neural networks: Applications in benchmark and advanced problems', *Modelling*, Vol. 5, No. 1, pp.153–179. <https://doi.org/10.3390/modelling5010009>.
- Palalic, R.V., Gilani, S.M., Gërguri-Rashiti, S. and Dana, L.-P. (2021) 'Social media and consumer buying behaviour decision: what entrepreneurs should know?' *Management Decision*, Vol. 59, No. 6, pp.1249–1270. <https://doi.org/10.1108/MD-10-2019-1461>.
- Suwanmaneepong, S., Llonas, C., Kerdseriserm, C., Khernkhan, J., Sabaijai, P.E., Samanakupt, T., Kaewtaphan, P., Chourwong, P., Mankeb, P. and Dana, L.-P. (2024) 'Participatory value chain development. Insights from community-based enterprise in rural Thailand', *International Journal of Agricultural Sustainability*, Vol. 22, No. 1, pp.2371703. <https://doi.org/10.1080/14735903.2024.2371703>.
- Wetchapitak, K., Boonpalit, A. and Amphavat, K. (2021) '5A marketing strategy and customers decision to buy organic goods', *The Journal of Pacific Institute of Management Science (Humanities and Social Science)*, Vol. 7, No. 3, pp.282–290.

- Yamane, T. (1967) *Statistics: An Introductory Analysis*, 2nd ed., Harper & Row.
- Yuan, Y. and Sun, Y. (2024) 'Practices, challenges, and future of digital transformation in smallholder agriculture: insights from a literature review', *Agriculture*, Vol. 14, No. 12, pp.2193. <https://doi.org/10.3390/agriculture14122193>.
- Zhu, L., Li, H., Wang, F.-K., He, W. and Tian, Z. (2020) 'How online reviews affect purchase intention: a new model based on the stimulus-organism-response (S-O-R) framework', *Aslib Journal of Information Management*, Vol. 72, No. 4, pp.463–488. <https://doi.org/10.1108/AJIM-11-2019-0308>.