

Applying the Elaboration Likelihood Model to Investigate Customer Behavioral Intention: The Case of Agarwood on Social Media Platforms

Hui-Ling Huang

Department of Business Administration
Chang Jung Christian University, Tainan City, Taiwan
ling@mail.cjcu.edu.tw

Yue-Yang Chen

Department of Digital Media Design
Tzu-Hui Institute of Technology, Taiwan, Pingtung, Taiwan
Department of Business Administration, I-Shou University, Taiwan, Kaohsiung, Taiwan
ray@isu.edu.tw

Yu-Jyun Huang

Marketing specialists
W&W Trading and Consulting, UK
trista.rmp@gmail.com

Nhat Nam Luong

Graduate Program in the Department of Business Administration
I-Shou University, Kaohsiung City, Taiwan
chenray602@gmail.com

Abstract

Internet consumption has grown more essential in today's digital age owing to its ubiquitous impact on numerous parts of people's lives, including their purchasing activities. Introducing social media platforms has increased this influence by giving users additional routes for knowledge, communication, and brand involvement. Understanding the importance of internet use is critical for understanding the function of social media in altering consumer behavioral intentions. The Internet has changed the way people learn about goods and services. The choice of social media as the primary subject of this study is motivated by its ubiquitous impact on consumer behavior and its ability to affect customer behavioral intention, namely, buy intention and willingness to pay more. In addition, the elaboration likelihood model (ELM) was chosen as the theoretical framework for this research because of its relevance and application in understanding the influence of social media on consumer behavioral intentions, particularly in the setting of internet use. The ELM offers a complete framework for analyzing the interaction between social media, consumer attitudes, and behavioral intentions. Therefore, this study aims to adapt and apply the ELM to investigate the customer behavioral intention towards agarwood on social media platforms. By applying the ELM to social media and the agarwood context, this study aims to explore the dual processing routes (central and peripheral) through which Vietnamese customers form behavioral intentions towards agarwood products. This study's findings contribute to both theoretical and practical fields. Theoretically, it expands the application of the ELM to the context of social media and

provides insights into the factors that influence Vietnamese customers' behavioral intentions towards agarwood. Practically, the results offer valuable implications for businesses operating in the agarwood industry, enabling them to tailor their marketing strategies and communication efforts on social media platforms to engage and influence Vietnamese customers effectively.

Keywords

Social media, Customer behavioral intention, Elaboration Likelihood Model (ELM), Agarwood, and Dual processing routes.

1. Introduction

1.1 Research Background

Internet consumption has grown more essential in today's digital age owing to its ubiquitous impact on numerous parts of people's lives, including their purchasing activities. Introducing social media platforms has increased this influence by giving users additional routes for knowledge, communication, and brand involvement. Understanding the importance of internet use is critical for understanding the function of social media in altering consumer behavioral intentions. The internet has changed the way people learn about goods and services. It provides a wide range of online resources to prospective clients, including corporate websites, online reviews, and social media platforms, giving extensive and readily available information. According to research, consumers increasingly depend on internet sources to find product information, evaluate alternatives, and make educated purchasing choices (Camilleri 2021; Fernandes et al. 2022). Social media platforms, in particular, have developed as crucial avenues for consumers seeking suggestions, reading reviews, and participating in product and brand conversations (Araujo et al. 2020). Moreover, social media encourages brand-consumer communication and connection, allowing businesses to build brand loyalty and connections with their target audiences. Brands may use social media to communicate with customers directly, answer inquiries, and respond to real-time comments (Buhalis and Sinarta 2019). This two-way communication fosters customized connection, boosting customer satisfaction and loyalty (Buhalis and Sinarta 2019).

The ELM was chosen as the theoretical framework for this research because of its relevance and application in understanding the influence of social media on consumer behavioral intentions, particularly in the setting of internet use. The ELM offers a complete framework for analyzing the interaction between social media, consumer attitudes, and behavioral intentions (Petty and Cacioppo 1986). To begin, the ELM addresses the two processing paths people use to analyze persuasive messages: the core and peripheral routes. The central route entails deliberate and methodical information processing in which people carefully study and assess the substance of persuasive communications. Conversely, the peripheral method relies on heuristic cues and surface characteristics to form attitudes and make decisions. By including these two routes, the ELM explains how individuals receive social media content and how it impacts their attitudes and subsequent behavioral intentions (Petty and Cacioppo 1986). Second, the ELM acknowledges the significance of individual differences and motivation regarding how information is processed. This study suggests that an individual's drive and capacity for elaborate thought significantly influence their processing pathway when exposed to persuasive messages. Motivated and intelligent people are more likely to take a moderate stance, carefully considering both sides of an issue before making up their minds based on what they read on social media. However, those lacking motivation or mental capacity are more prone to depend on these auxiliary indicators (Petty and Cacioppo 1986). In internet use, the ELM offers a vital framework for understanding how consumers deal with information overload and make judgments about their behavioral intentions while using social media sites. Customers' attitudes and consequent behavioral intents, including purchase intention and willingness to pay more, may be studied concerning social media material like user-generated reviews, marketing messaging, and influencer viewpoints. Moreover, the ELM has been effectively used in various fields and settings, such as advertising, e-commerce, and social media research (Li and Karahanna 2015; Teng et al. 2014). Applying the ELM to social media and consumer behavioral intention, this research adds to the current body of information. It also helps us get a clearer picture of the factors that influence the choices made by digital consumers.

Agarwood, or "oud" or "agar," is a highly valued aromatic resin derived from the *Aquilaria* tree species. It holds significant cultural and traditional value in many Asian countries, including Vietnam, where it has been used for centuries in religious rituals and traditional medicine practices (López-Sampson and Page, 2018; Persoon and van Beek 2008). The global market for agarwood products has experienced substantial growth, contributing to the economies of agarwood-producing countries (Adhikari et al. 2021; Yin et al. 2016). Research on customer behavioral intention towards agarwood on social media platforms, particularly within the Vietnamese context, is limited. Such

research is essential to grasping social media's impact on customer behavior and offering valuable insights for agarwood industry businesses. Research on agarwood is significant due to its cultural, economic, and social media implications. Firstly, agarwood's deep-rooted cultural significance in Vietnam makes it an intriguing subject for investigation. Understanding how cultural factors influence customer behavioral intention towards agarwood on social media platforms provides valuable insights into the intersection of tradition and digital consumption. Secondly, the economic importance of agarwood cannot be overlooked. The growth of the agarwood industry and its impact on the economies of agarwood-producing countries highlight the need to explore customer behavior and intentions towards agarwood products, particularly among Vietnamese customers who are active users of social media platforms (Luong and Ho 2023).

This study aims to adapt and apply the ELM to investigate the customer behavioral intention towards agarwood on social media platforms, focusing specifically on Vietnamese customers. The ELM is a well-established theoretical framework that examines the persuasive communication process and the factors influencing attitude change and behavior (Petty and Cacioppo 1986). By adapting the ELM to social media and the agarwood context, this study aims to explore the dual processing routes (central and peripheral) through which Vietnamese customers form behavioral intentions towards agarwood products. This study employed quantitative methods to investigate the connection between perceived product quality, brand awareness, perceived product knowledge, other members' endorsement, value similarity, attitude toward agarwood products, purchase intention, and willingness to pay more in Vietnamese e-commerce in the context of agarwood products. The research objectives are to:

- (1) Investigate the relationship between social media and consumer behavior for agarwood consumption among Vietnamese customers.
- (2) Examine the influence of social media interactions on attitudes towards agarwood products among Vietnamese customers.
- (3) Explore the role of the ELM in Vietnamese customers' understanding of information processing and decision-making regarding agarwood on social media platforms.

2. Theoretical Background

2.1 Agarwood Products

Agarwood products have garnered significant attention in the global market due to their unique and luxurious qualities. Agarwood products are associated with cultural heritage, spirituality, and exclusivity, making them highly desirable among consumers seeking distinctive and premium offerings (Chen and Rao 2022). The global demand for agarwood products, including agarwood chips, essential oils, and incense sticks, continues to rise, creating opportunities for businesses operating in the agarwood industry to cater to the preferences and aspirations of Vietnamese customers. In Vietnam, agarwood products are unique in traditional medicine and religious practices, reflecting the country's cultural significance. Agarwood has been used for centuries in Vietnamese traditional medicine for its perceived therapeutic properties, including its potential as an anti-inflammatory, analgesic, and sedative agent (Adhikari et al. 2021; Toan et al. 2023). The demand for agarwood products in Vietnam extends beyond traditional uses, as consumers appreciate the unique sensory experience and emotional connections associated with these products (Du et al. 2022; Toan et al. 2023). The market for agarwood products in Vietnam has witnessed growth and diversification, with various offerings catering to different consumer preferences. Understanding the characteristics and appeal of agarwood products is crucial for studying customer behavioral intention on social media platforms, as it provides insights into the factors that drive Vietnamese customers' interest, engagement, and purchasing decisions.

2.2 Elaboration Likelihood Model (ELM)

The ELM provides a theoretical framework to understand and predict the factors influencing individuals' attitudes and behaviors in response to persuasive messages. Developed by Petty and Cacioppo (1986), the ELM has been widely applied to explore consumer behavior, including attitudes toward brands, advertising effectiveness, and purchase intentions. In the context of social media platforms, the ELM can provide insights into how Vietnamese customers process and respond to persuasive messages related to agarwood. The ELM research has highlighted the importance of message content, source credibility, and individual characteristics in influencing consumers' elaboration and subsequent attitudes and behaviors (Petty and Cacioppo 1986). By adopting the ELM to investigate customer behavioral intention toward agarwood on social media platforms, this research aims to uncover the underlying cognitive processes and factors that shape Vietnamese customers' perceptions, attitudes, and intentions toward

agarwood products, ultimately providing valuable insights for marketers and businesses in effectively engaging with this target audience.

2.3 Hypothesis development

2.3.1. Central route – product-related triggers: perceived product quality, information quality, service quality, and attitude.

In the ELM, the central route represents a systematic and thoughtful processing of information, where individuals carefully evaluate the arguments and evidence presented (El Hedhli and Zourrig 2023; Moradi and Zihagh 2022). This section focuses on product-related triggers within the central route, specifically perceived product quality, information quality, service quality, and their relationship with attitude toward agarwood product value.

Perceived product quality refers to customers' subjective evaluation of the overall excellence or superiority of the products on social media platforms (Vazquez 2021). When customers perceive products as high in quality, they are more likely to develop a favorable attitude toward the value of these products (Liao et al. 2020). This hypothesis is supported by previous research highlighting perceived product quality's crucial role in shaping customers' attitudes and purchase intentions (Akroush et al. 2019; Charton-Vachet et al. 2020; Suttikun and Meeprom 2021). The previous study argues that perceived product quality affects customers' overall satisfaction and attitude toward a product, as quality is seen as an important determinant of value (Suttikun and Meeprom 2021). Similarly, perceived product quality positively influences customers' attitudes toward the value of a product, leading to increased purchase intentions (Akroush et al. 2019; Charton-Vachet et al. 2020). Therefore, the following hypothesis is proposed:

Hypothesis 1: Perceived product quality positively affects attitude toward agarwood product value.

Information quality refers to the accuracy, relevance, and credibility of the information regarding products on social media platforms (Cooley and Parks-Yancy 2019; Dedeoglu 2019). When customers perceive the information about products to be of high quality, it is expected to positively influence their attitude toward the value of these products (Cheung and To 2019; Park and Lin 2020). This hypothesis is supported by previous research emphasizing the importance of information quality in shaping customers' attitudes and purchase intentions (Kang and Namkung, 2019; Kasilingam 2020; Wang and Teo 2020). Previous studies argue that perceived information quality significantly affects customers' attitudes and intentions to use a particular technology or product (Kang and Namkung 2019; Kasilingam 2020). Furthermore, information quality positively influences users' perceived value of online information, which subsequently affects their attitudes and intentions (Wang and Teo 2020). These studies provide theoretical and empirical support for the hypothesis that information quality positively affects customers' attitudes toward agarwood product value among Vietnamese customers on social media platforms. Thus, the following hypothesis is proposed:

Hypothesis 2: Information quality positively affects attitude toward agarwood product value.

Service quality refers to customers' perceptions of the overall excellence and effectiveness of the services associated with products, such as customer support, delivery, and after-sales service (Çelik 2021; Shokouhyar et al. 2020). When customers perceive the service quality to be high, it is expected to positively influence their attitude toward the value of products (Ahmad and Zhang 2020). This hypothesis is supported by previous research highlighting the significance of service quality in shaping customers' attitudes and intentions (Parasuraman et al. 1985; Tran and Le 2020). The previous study introduced the SERVQUAL model, emphasizing the role of service quality in influencing customers' attitudes and behaviors (Parasuraman et al. 1985). Furthermore, service quality significantly affects customers' perceived value, subsequently influencing their attitudes and intentions (Tran and Le 2020). These studies provide theoretical and empirical support for the hypothesis that service quality positively affects customers' attitudes toward agarwood product value among Vietnamese customers on social media platforms. Thus, the following hypothesis is proposed:

Hypothesis 3: Service quality positively affects attitude toward agarwood product value.

2.3.2. Peripheral route – affect-related triggers: perceived product knowledge, other members' endorsement, value similarity, and attitude.

In the ELM, the peripheral route represents a heuristic and less deliberate processing of information, where individuals rely on cues and shortcuts to form their attitudes (Lins and Sunyaev 2023; Wang et al. 2020). This section focuses on affect-related triggers within the peripheral route, specifically perceived product knowledge, other members' endorsement, value similarity, and their relationship with attitude toward agarwood product value.

Perceived product knowledge refers to customers' subjective assessment of their understanding and familiarity with products (Eberhardt et al. 2021; Xin and Seo 2020). When customers perceive themselves to have high levels of product knowledge, it is expected to positively influence their attitude toward the value of products. This hypothesis is supported by previous research emphasizing the role of product knowledge in shaping customers' attitudes and purchase intentions (Sun and Wang 2020; Yuan et al. 2022; Zanger et al. 2022). The previous studies argue that product knowledge positively influences customers' evaluations and perceptions of product value, as knowledgeable customers are more likely to appreciate the benefits and features of a product (Yuan et al. 2022; Zanger et al. 2022). Similarly, product knowledge significantly affects customers' attitudes and intentions to purchase a product (Sun and Wang 2020). These studies provide theoretical and empirical support for the hypothesis that perceived product knowledge positively affects customers' attitudes toward agarwood product value among Vietnamese customers on social media platforms. Thus, the following hypothesis is proposed:

Hypothesis 4: Perceived product knowledge positively affects attitude toward agarwood product value.

Other members' endorsement refers to the positive recommendations, reviews, or endorsements provided by fellow customers or social media influencers regarding products on social media platforms (Lee and Eastin 2021; Vrontis et al. 2021). When customers observe and perceive favorable endorsements from other members, it is expected to positively influence their attitude toward the value of products (Osei-Frimpong et al. 2019). Similarly, social influence, including recommendations and endorsements from others, plays a significant role in shaping customers' attitudes and purchase decisions (Moraes et al. 2019). These studies provide theoretical and empirical support for the hypothesis that other members' endorsement positively affects customers' attitudes toward agarwood product value among Vietnamese customers on social media platforms. Thus, the following hypothesis is proposed:

Hypothesis 5: Other members' endorsement positively affects attitude toward agarwood product value.

Value similarity refers to the alignment between customers' values and those represented by products (Aljukhadar et al. 2020; Zhang et al. 2020). When customers perceive a high level of similarity between their values and the values embodied in by-products, it is expected to positively influence their attitude toward the value of these products (Boeuf 2019; Michel et al. 2022). The previous studies argue that consumer values significantly influence their evaluations of product attributes and overall product value (Biscaia et al. 2023). Furthermore, value congruence between individuals and products positively influences customers' attitudes and intentions (Michel et al. 2022; You and Hon 2021). These studies provide theoretical and empirical support for the hypothesis that value similarity positively affects customers' attitudes toward agarwood product value among Vietnamese customers on social media platforms. Thus, the following hypothesis is proposed:

Hypothesis 6: Value similarity positively affects attitude toward agarwood product value.

2.3.3 Attitude and Customer Behavioral Intention

Attitude toward product value refers to customers' overall evaluation and perception of the value of offered products, including their benefits, quality, and worth (Yuan et al. 2020; Zhang et al. 2020). When customers hold a positive attitude toward the value of agarwood products, it is expected to positively influence their intention to purchase (Asti et al. 2021). The previous study proposed the theory of planned behavior, which suggests that attitude significantly influences individuals' intentions to engage in a particular behavior, such as purchasing a product (Ajzen 1991). Similarly, the theory of reasoned action (Hill et al. 1977) highlights the importance of attitude in predicting behavioral intentions. These studies provide theoretical and empirical support for the hypothesis that attitude toward agarwood product value positively affects customers' purchase intention among Vietnamese customers on social media platforms. Thus, the following hypothesis is proposed:

Hypothesis 7: Attitude toward agarwood product value positively affects purchase intention.

On the other hand, when customers hold a positive attitude toward the value of products, it is expected to positively influence their willingness to pay a higher price for these products (Berger 2019). This hypothesis is supported by previous research emphasizing the role of attitude in shaping customers' price perceptions and willingness to pay more (Ali and Ali 2020; Diallo et al. 2021; Zhang et al. 2020). Previous studies found that customers' perceptions of product value significantly influence their price perceptions, indicating that a positive attitude toward product value may lead to a higher willingness to pay (Ali and Ali 2020; Zhang et al. 2020). Additionally, attitude toward product quality

positively affects customers' price perceptions and willingness to pay more (Diallo et al. 2021; Zhang et al. 2020). Thus, the following hypothesis is proposed:

Hypothesis 8: Attitude toward agarwood product value positively affects willingness to pay more.

2.4 The Research Model

The proposed model examining the relationship between variables was presented in Figure 1.

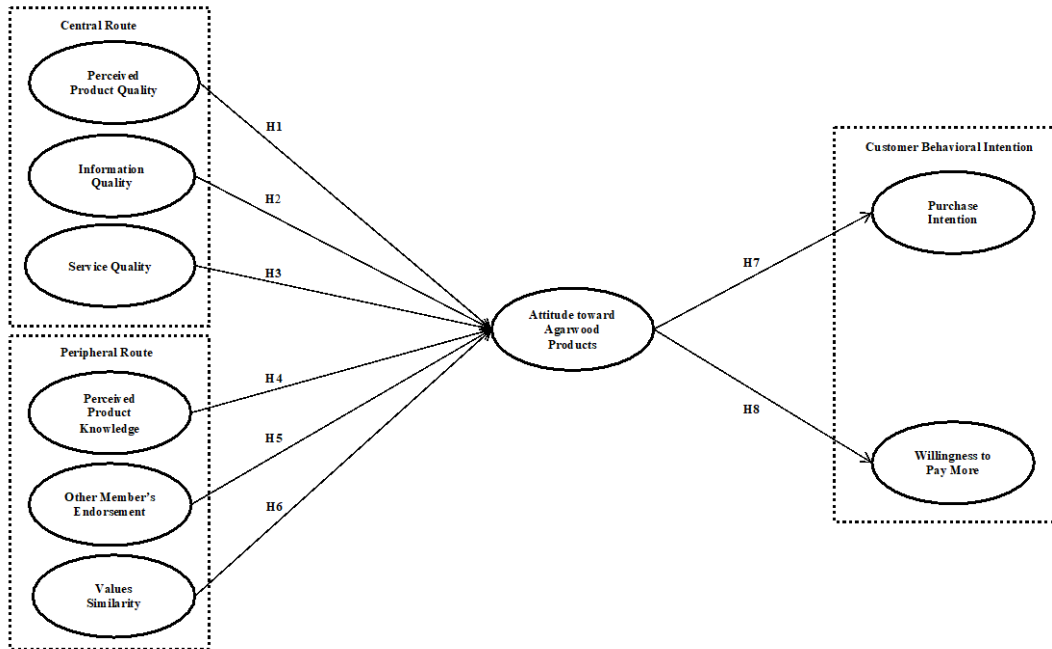


Figure 1. The Research Model

3. Methodology

3.1 Research Design

Stern et al. (1992) defined a research design as a plan that specifies a method for reaching a research objective and testing hypotheses, in addition to providing the specifications for the research procedure. The procedure by which the research is to be carried out is to achieve the research objective and test the hypotheses. Using quantitative research techniques as the main methodology allowed this study to produce credible and reliable numbers from a large sample size (Hyde 2000). Primary data from responses to questionnaires was used to analyze.

The initial questionnaire is in the English version. Furthermore, to serve the best interests of the research, this study required both English and Vietnamese versions. Therefore, the questionnaire was translated and back-translated before being distributed to the participants. Because the instruments used in this research are written in English and developed in foreign countries, not Vietnam, the back-translation method is undertaken to increase the validity and reliability of the instrument. This procedure has become the most reported method for evaluating a translation's appropriateness.

3.2. Sampling Data

The population is defined as a whole group about which some information needs to be obtained, according to Banerjee and Chaudhury (2010). Accordingly, the target population of this study consists of all Vietnamese customers. The sampling method used in this research is convenience sampling. The questionnaire was designed on Google Docs and then distributed to the sample through social media platforms (such as Facebook, YouTube, Shopee, Instagram, and TikTok).

3.3. Measurements

The content of the survey is classified as follows. The first section was a cover letter clarifying the study's purpose and the questionnaire in detail. In the following parts, the dimensioning method is selected for all the concepts (perceived product quality, information quality, service quality, perceived product knowledge, other members' endorsement, value similarity, attitude, purchase intention, and willingness to pay more) on a 5-point Likert scale. The last set of questions contained criteria such as age, monthly income, gender, education, occupation, and information sources related to Vietnamese customers. The measurement items for each construct are all developed from previous studies.

After coding all data, the data was examined using statistical tools such as SPSS and SmartPLS, which were used to explore the data with frequency, percentage, descriptive analysis, reliability test, and causal effects. The Smart PLS 4.0 was used to find which factors have the most substantial effect on the others by running SEM (Structural equation modeling) and showing the PLS-SEM (Partial least squares structural equation modeling). After finishing all the steps, the bootstrapping method was used to estimate quantities about a population (5000) by averaging estimates from these multiple small data samples. Finally, the primary statistical data analysis was inferential statistics to test the hypotheses and descriptive statistics to describe the respondents' characteristics.

4. Data Analysis and Results

4.1. Descriptive Analysis

The variable "Gender" has two responses: Male (184, 54.28%) and Female (155, 45.72%). The variable "Age (year)" has four responses: 18-29 (123, 36.28%), 30-40 (133, 39.23%), 41-50 (56, 16.52%), and Over 50 (27, 7.96%). The variable "Marital status" has two responses: Single (257, 75.81%) and Married (82, 24.19%). The variable "Monthly income" has four responses: Under 7,000,000VND (68, 20.06%), 7,000,001-14,000,000VND (187, 55.16%), 14,000,0001-21,000,000 VND (46, 13.57%), and Over 21,000,000 VND (38, 11.21%). The variable "Education" has three responses: High school (7, 2.06%), Undergraduate (264, 77.88%), and Postgraduate (68, 20.06%). The variable "Occupation" has four responses: Government employee (39, 11.50%), Private sector employee (166, 48.97%), Self-employed (71, 20.94%), and Business owner (63, 18.58%).

4.2 Measurement Model Assessment

The results showed that all observed variables in the model demonstrated significance, as confirmed by SmartPLS analysis. All VIF (inner and outer) values are under 3 (Hair et al. 2019), and neither the observable variables nor latent constructs in this study experience significant multicollinearity, allowing for a more reliable interpretation of the regression results. This is a positive sign, indicating that the model is well specified. In addition, the outer loading factor exceeded the recommended threshold of 0.6 (Hair et al. 2010). The SQ1 was removed due to outer loading under 0.6. Additionally, the model exhibited good reliability and convergent validity. All scales achieved Cronbach's alpha and composite reliability values above 0.7, and the average variance extracted (AVE) surpassed the minimum standard of 0.5 (Bagozzi and Yi 1988). However, the OME's Cronbach's alpha value of 0.600 is still accepted (Ursachi et al. 2015). Furthermore, discriminant validity was also established, as the square root of AVE exceeded the correlations between latent variables.

4.3. PLS-SEM Analysis

After all testing, an impact assessment was conducted using the Bootstrapping 5000 samples tool to determine statistical significance. Table 1 presents a statistical analysis of hypotheses/paths related to the relationships between different variables in a tourism context. A p-value of less than 0.05 is generally considered statistically significant, indicating that the relationship between the variables is not likely due to chance. Based on the results in the table, it can be concluded that perceived product quality significantly impacts attitude toward agarwood products (H1: $\beta=0.169$, $t=2.485$, $p=0.013$); thus, hypothesis 1a is supported. Information quality positively impacts attitude toward agarwood products (H2: $\beta=0.198$, $t=3.081$, $p=0.002$); thus, hypothesis 2 is supported. Service quality does not affect attitude toward agarwood products (H3: $\beta=-0.134$, $t=1.495$, $p=0.135$); thus, hypothesis 3 is not supported. Perceived product knowledge positively impacts attitude toward agarwood products (H4: $\beta=0.207$, $t=2.856$, $p=0.004$); thus, hypothesis 4 is supported. Other members' endorsement positively affects attitudes toward agarwood products (H5: $\beta=0.190$, $t=3.063$, $p=0.002$); thus, hypothesis 5 is not supported. Values similarity positively impacts attitude toward agarwood products (H6: $\beta=0.141$, $t=2.051$, $p=0.040$); thus, hypothesis 5 is not supported. Furthermore, attitude toward agarwood products has a significant positive relationship with both purchase intention (H7: $\beta=0.385$, $t=5.921$, $p<0.001$) and revisit intention (H8: $\beta=0.455$, $t=8.289$, $p<0.001$); thus, hypotheses 7 and 8 are supported (Table 1)..

Table 1. PLS-SEM results

Hypotheses/Path coefficients		O	M	STDEV	T	P	F ²
H1	Perceived Product Quality -> Attitude toward Agarwood Products	0.169	0.170	0.068	2.485	0.013*	0.025
H2	Information Quality -> Attitude toward Agarwood Products	0.198	0.202	0.064	3.081	0.002**	0.029
H3	Service Quality -> Attitude toward Agarwood Products	-0.134	-0.089	0.090	1.495	0.135	0.016
H4	Perceived Product Knowledge -> Attitude toward Agarwood Products	0.207	0.204	0.072	2.856	0.004**	0.047
H5	Other Members' Endorsement -> Attitude toward Agarwood Products	0.190	0.161	0.062	3.063	0.002**	0.033
H6	Values Similarity -> Attitude toward Agarwood Products	0.141	0.143	0.069	2.051	0.040*	0.015
H7	Attitude toward Agarwood Products -> Purchase Intention	0.385	0.387	0.065	5.921	0.000**	0.174
H8	Attitude toward Agarwood Products -> Willingness to Pay More	0.455	0.457	0.055	8.289	0.000**	0.261
Notes: "O: Original sample path coefficients; M: Sample mean of path coefficient; STDEV: Standard deviation; T: T statistics; P: P values; F ² : effect size; *: p<0.05; **p<0.01"							

5. Conclusion and Recommendation

This study aimed to apply the ELM to investigate customer behavioral intention toward agarwood on social media platforms for Vietnamese customers. The results revealed several significant relationships between the variables, which have important theoretical implications for understanding customer behavior and decision-making processes. This section discusses the theoretical implications of the supported hypotheses and the implications of the unsupported hypotheses.

The findings of this study, which applied the ELM to investigate Vietnamese customers' behavioral intention toward agarwood on social media platforms, hold important practical implications for businesses operating in the agarwood industry. The supported hypotheses offer actionable insights to inform marketing strategies and tactics to enhance customer attitudes, purchase intentions, and willingness to pay more for agarwood products. This section discusses the practical implications of the supported hypotheses, accompanied by specific examples and relevant citations. First, the results supported H1, which stated that perceived product quality positively affects attitude toward agarwood product value. This finding highlights the importance of emphasizing and promoting the quality aspects of agarwood products to enhance customer attitudes. Businesses should focus on communicating and demonstrating the superior quality of their agarwood products through various means, such as high-resolution product images, detailed product descriptions, and certifications from reputable sources. For example, companies can showcase the meticulous craftsmanship involved in producing agarwood products, highlight the sustainable sourcing of raw materials, and present testimonials from satisfied customers who have experienced the superior quality of the products (Akroush et al. 2019; Charton-Vachet et al. 2020). By consistently emphasizing product quality, businesses can foster positive attitudes among Vietnamese customers toward the value of agarwood products. Similarly, H2, which proposed that information quality positively affects attitudes toward agarwood product value, was supported. To leverage this finding, businesses should prioritize providing accurate, comprehensive, and trustworthy information about agarwood products on social media platforms. This includes sharing information about the origin, extraction methods, fragrance profiles, and potential health benefits of agarwood. For instance, companies can create informative videos or blog posts that educate customers about the different types of agarwood and their unique characteristics (Cooley and Parks-Yancy 2019; Dedeoglu 2019). By ensuring high-quality information, businesses can enhance customer attitudes toward the value of agarwood products.

One practical implication for businesses is prioritizing customer-centricity and ensuring a seamless customer experience throughout the customer journey. This includes prompt and helpful responses to customer inquiries,

efficient order processing and delivery, and adequate after-sales support. By providing exceptional customer service, businesses can enhance overall customer satisfaction and build positive brand associations, which may indirectly contribute to customer attitudes toward agarwood product value. For example, businesses can implement live chat or messaging functionalities on social media platforms to enable real-time customer support. This allows customers to quickly and conveniently seek assistance or clarification regarding agarwood products, which can positively impact their overall experience. Additionally, personalized follow-up messages or emails after a purchase can demonstrate a commitment to customer satisfaction and reinforce positive brand perceptions (Ahmad and Zhang 2020).

Furthermore, businesses can invest in training their customer service representatives to ensure they possess the necessary knowledge and skills to address customer inquiries and provide expert guidance. Well-informed and courteous customer service representatives can positively influence customer perceptions of the brand and contribute to a positive overall experience (Parasuraman et al. 1985). While service quality may not directly impact on customer attitudes toward agarwood product value, businesses should view it as an essential aspect of the overall customer experience. By prioritizing customer-centricity, providing exceptional customer service, and ensuring a seamless customer journey, businesses can enhance overall customer satisfaction and indirectly influence customer attitudes toward the value of agarwood products.

Moreover, H4, H5, and H6, all supported, indicate the significance of perceived product knowledge, other members' endorsement, and value similarity in shaping customer attitudes toward agarwood product value. Businesses can leverage these factors by fostering community and facilitating knowledge-sharing among customers. For instance, they can create dedicated social media groups or forums where customers can discuss their experiences, share tips, and provide recommendations regarding agarwood products. Additionally, businesses can collaborate with influencers or industry experts who can endorse their products and provide credible recommendations to their followers (Eberhardt et al., 2021; Xin and Seo, 2020). By facilitating knowledge exchange and leveraging social influence, businesses can strengthen customer attitudes toward the value of agarwood products.

Furthermore, the supported hypotheses of H7 and H8 underscore the importance of attitude toward agarwood product value in driving purchase intentions and willingness to pay more. To leverage these findings, businesses should focus on developing marketing campaigns that emphasize the unique value propositions of agarwood products and connect them to customers' aspirations and desires. For example, they can highlight agarwood's exclusivity, rarity, and luxury, positioning it as a symbol of status and sophistication. Additionally, companies can offer personalized discounts or rewards to customers who demonstrate a positive attitude toward the value of agarwood products, thereby incentivizing purchase intentions and willingness to pay more (Ali and Ali 2020; Diallo et al. 2021; Zhang et al. 2020). By aligning marketing efforts with the value perceptions of Vietnamese customers, businesses can increase their competitiveness in the agarwood market.

References

- Adhikari, S. R., Pokhrel, K. and Baral, S. D., Economic value of agarwood and its cultivation prospects. *International Journal of Applied Sciences and Biotechnology*, vol. 9, no. 1, pp. 23–31, 2021.
- Ahmad, W. and Zhang, Q., Green purchase intention: Effects of electronic service quality and customer green psychology. *Journal of Cleaner Production*, vol. 267, pp. 1–17, 2020.
- Ajzen, I., The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, vol. 50, no. 2, pp. 179–211, 1991.
- Akroush, M. N., Zuriekat, M. I., Al Jabali, H. I. and Asfour, N. A., Determinants of purchasing intentions of energy-efficient products: The roles of energy awareness and perceived benefits. *International Journal of Energy Sector Management*, vol. 13, no. 1, pp. 128–148, 2019.
- Alhamad, I. A. and Singh, H. P., Predicting key factors impacting online hotel ratings using data mining approach: A case study of Makkah of Saudi Arabia. *International Transaction Journal of Engineering*, vol. 12, no. 2, pp. 1–12, 2021.
- Ali, T. and Ali, J., Factors affecting the consumers' willingness to pay for health and wellness food products. *Journal of Agriculture and Food Research*, vol. 2, 100076, 2020.
- Aljukhadar, M., Bériault Poirier, A. and Senecal, S., Imagery makes social media captivating! Aesthetic value in a consumer-as-value-maximizer framework. *Journal of Research in Interactive Marketing*, vol. 14, no. 3, pp. 285–303, 2020.
- Araujo, T., Copulsky, J. R., Hayes, J. L., Kim, S. J. and Srivastava, J., From purchasing exposure to fostering engagement: Brand–consumer experiences in the emerging computational advertising landscape. *Journal of*

- Advertising*, vol. 49, no. 4, pp. 428–445, 2020.
- Asti, W. P., Handayani, P. W. and Azzahro, F., Influence of trust, perceived value, and attitude on customers' repurchase intention for e-grocery. *Journal of Food Products Marketing*, vol. 27, no. 3, pp. 157–171, 2021.
- Bagozzi, R. and Yi, Y., On the evaluation of structure equation models. *Journal of the Academy of Marketing Science*, vol. 16, pp. 74–94, 1988.
- Banerjee, A. and Chaudhury, S., Statistics without tears: Populations and samples. *Industrial Psychiatry Journal*, vol. 19, pp. 60–65, 2010.
- Berger, J., Signaling can increase consumers' willingness to pay for green products. Theoretical model and experimental evidence. *Journal of Consumer Behaviour*, vol. 18, no. 3, pp. 233–246, 2019.
- Biscaia, R., Yoshida, M. and Kim, Y., Service quality and its effects on consumer outcomes: a meta-analytic review in spectator sport. In *European Sport Management Quarterly*, vol. 23, no. 3, pp. 897–921, 2023.
- Boeuf, B., The impact of mortality anxiety on attitude toward product innovation. *Journal of Business Research*, vol. 104, pp. 44–60, 2019.
- Buhalis, D. and Sinarta, Y., Real-time co-creation and nowness service: lessons from tourism and hospitality. *Journal of Travel and Tourism Marketing*, vol. 36, no. 5, pp. 563–582, 2019.
- Camilleri, A. R., Who doesn't read online consumer reviews, and why? *Personality and Individual Differences*, vol. 179, 110954, 2021.
- Çelik, K., The effect of e-service quality and after-sales e-service quality on e-satisfaction. *Business Algarni Management Studies: An International Journal*, vol. 9, no. 3, pp. 1137–1155, 2021.
- Charton-Vachet, F., Lombart, C. and Louis, D., Impact of attitude towards a region on purchase intention of regional products: the mediating effects of perceived value and preference. *International Journal of Retail and Distribution Management*, vol. 48, no. 7, pp. 707–725, 2020.
- Chen, C. Der, Zhao, Q. and Wang, J. L., How livestreaming increases product sales: role of trust transfer and elaboration likelihood model. *Behaviour and Information Technology*, vol. 41, no. 3, pp. 558–573, 2022.
- Chen, S.-T. and Rao, Y. K., An overview of agarwood, phytochemical constituents, pharmacological activities, and analyses. *Traditional Medicine*, vol. 3, no. 1, pp. 1–71, 2022.
- Cheung, M. F. Y. and To, W. M., An extended model of value-attitude-behavior to explain Chinese consumers' green purchase behavior. *Journal of Retailing and Consumer Services*, vol. 50, pp. 145–153, 2019.
- Cooley, D. and Parks-Yancy, R., The effect of social media on perceived information credibility and decision making. *Journal of Internet Commerce*, vol. 18, no. 3, pp. 249–269, 2019.
- Dedeoğlu, B. B., Are information quality and source credibility really important for shared content on social media?: The moderating role of gender. *International Journal of Contemporary Hospitality Management*, vol. 31, no. 1, pp. 513–534, 2019.
- Diallo, M. F., Ben Dahmane Mouelhi, N., Gadekar, M. and Schill, M., CSR actions, brand value, and willingness to pay a premium price for luxury brands: does long-term orientation matter? *Journal of Business Ethics*, vol. 169, no. 2, pp. 241–260, 2021.
- Du, T. Y., Dao, C. J., Mapook, A., Stephenson, S. L., Elgorban, A. M., Al-Rejaie, S., Suwannarach, N., Karunarathna, S. C. and Tibpromma, S., Diversity and biosynthetic activities of agarwood associated fungi. *Diversity*, vol. 14, no. 3, 211, 2022.
- Eberhardt, T., Hubert, M., Lischka, H. M., Hubert, M. and Lin, Z., The role of subjective knowledge and perceived trustworthiness in fair trade consumption for fashion and food products. *Journal of Consumer Marketing*, vol. 38, no. 1, pp. 58–68, 2021.
- El Hedhli, K. and Zourrig, H., Dual routes or a one-way to persuasion? The elaboration likelihood model versus the unimodel. *Journal of Marketing Communications*, vol. 29, no. 5, pp. 433–454, 2023.
- Erkan, I. and Evans, C., The influence of eWOM in social media on consumers' purchase intentions: An extended approach to information adoption. *Computers in Human Behavior*, vol. 61, pp. 47–55, 2016.
- Fan, X., Chai, Z., Deng, N. and Dong, X., Adoption of augmented reality in online retailing and consumers' product attitude: A cognitive perspective. *Journal of Retailing and Consumer Services*, vol. 53, 101986, 2020.
- Fernandes, S., Panda, R., Venkatesh, V. G., Swar, B. N. and Shi, Y., Measuring the impact of online reviews on consumer purchase decisions – A scale development study. *Journal of Retailing and Consumer Services*, vol. 68, 103066, 2022.
- Hair, J. F., Black, W., Babin, B. and Anderson, R., *Multivariate data analysis* (7th ed.). Pearson, New York, 2010.
- Hair, J. F., Risher, J. J., Sarstedt, M. and Ringle, C. M., When to use and how to report the results of PLS-SEM. *European Business Review*, vol. 31, no. 1, pp. 2–24, 2019.
- Hill, R. J., Fishbein, M. and Ajzen, I., Belief, attitude, intention and behavior: An introduction to theory and research. *Contemporary Sociology*, vol. 6, no. 2, 244, 1977.

- Hyde, K. F., Recognising deductive processes in qualitative research. *Qualitative Market Research: An International Journal*, vol. 3, no. 2, pp. 82–90, 2000.
- Islam, M. T., Hussin, S. R. and Yee, W. F., Factors influencing the information adoption from social media review platform: Extending information adoption model (IAM) with information diagnosticity. *Journal of Content, Community and Communication*, vol. 16, no. 8, pp. 4–25, 2022.
- Kang, J. W. and Namkung, Y., The information quality and source credibility matter in customers' evaluation toward food O2O commerce. *International Journal of Hospitality Management*, vol. 78, pp. 189–198, 2019.
- Kasilingam, D. L. (2020). Understanding the attitude and intention to use smartphone chatbots for shopping. *Technology in Society*, vol. 62, 101280.
- Lee, J. A. and Eastin, M. S., Perceived authenticity of social media influencers: scale development and validation. *Journal of Research in Interactive Marketing*, vol. 15, no. 4, pp. 822–841, 2021.
- Li, S. S. and Karahanna, E., Online recommendation systems in a B2C E-commerce context: A review and future directions. *Journal of the Association for Information Systems*, vol. 16, no. 2, pp. 72–107, 2015.
- Liang, T. P., Wu, S. P. J. and Huang, C. C., Why funders invest in crowdfunding projects: Role of trust from the dual-process perspective. *Information and Management*, vol. 56, no. 1, pp. 70–84, 2019.
- Liao, Y. K., Wu, W. Y. and Pham, T. T., Examining the moderating effects of green marketing and green psychological benefits on customers' green attitude, value and purchase intention. *Sustainability (Switzerland)*, vol. 12, no. 18, 7461, 2020. <https://doi.org/10.3390/SU12187461>
- Lim, K. H., Sia, C. L., Lee, M. K. O. and Benbasat, I., Do I trust you online, and if so, will I buy? An empirical study of two trust-building strategies. *Journal of Management Information Systems*, vol. 23, no. 2, pp. 233–266, 2006.
- Lins, S. and Sunyaev, A., Advancing the presentation of IS certifications: theory-driven guidelines for designing peripheral cues to increase users' trust perceptions. *Behaviour and Information Technology*, vol. 42, no. 13, pp. 2255–2278, 2023.
- López-Sampson, A. and Page, T., History of use and trade of agarwood. *Economic Botany*, vol. 72, no. 1, pp. 107–29, 2018.
- Luong, T.-B. and Ho, C.-H., The influence of food vloggers on social media users: A study from Vietnam. *Heliyon*, vol. 9, no. 7, e18259, 2023.
- Michel, G., Torelli, C. J., Fleck, N. and Hubert, B., Self-brand values congruity and incongruity: Their impacts on self-expansion and consumers' responses to brands. *Journal of Business Research*, vol. 142, pp. 301–316, 2022.
- Moradi, M. and Zihagh, F., A meta-analysis of the elaboration likelihood model in the electronic word of mouth literature. *International Journal of Consumer Studies*, vol. 46, no. 5, pp. 1900–1918, 2022. Moraes, M., Gountas, J., Gountas, S. and Sharma, P., Celebrity influences on consumer decision making: new insights and research directions. *Journal of Marketing Management*, vol. 35, no. 13–14, pp. 1159–1192, 2019.
- Osei-Frimpong, K., Donkor, G. and Owusu-Frimpong, N., The impact of celebrity endorsement on consumer purchase intention: An emerging market perspective. *Journal of Marketing Theory and Practice*, vol. 27, no. 1, pp. 103–121, 2019.
- Parasuraman, A. P., Zeithaml, V. and Berry, L., A conceptual model of service quality and its implications for future research. *The Journal of Marketing*, vol. 49, pp. 41–50, 1985.
- Park, H. J. and Lin, L. M., The effects of match-ups on the consumer attitudes toward internet celebrities and their live streaming contents in the context of product endorsement. *Journal of Retailing and Consumer Services*, vol. 52, 101934, 2020.
- Persoon, G. A. and van Beek, H. H., *Growing 'The Wood of The Gods': Agarwood Production in Southeast Asia*, pp. 245–262, 2008.
- Petty, R. E. and Cacioppo, J. T., The elaboration likelihood model of persuasion. *Advances in Experimental Social Psychology*, vol. 19, pp. 123–205, 1986.
- Shokouhyar, S., Shokoohyar, S. and Safari, S., Research on the influence of after-sales service quality factors on customer satisfaction. *Journal of Retailing and Consumer Services*, vol. 56, 102139, 2020.
- Stern, B. L., McDaniel, C. and Gates, R., Contemporary marketing research. *Journal of Marketing Research*, vol. 29, no. 3, 379, 1992.
- Suh, K. S. and Chang, S., User interfaces and consumer perceptions of online stores: The role of telepresence. *Behaviour and Information Technology*, vol. 25, no. 2, pp. 99–113, 2006.
- Sun, Ying and Wang, S., Understanding consumers' intentions to purchase green products in the social media marketing context. *Asia Pacific Journal of Marketing and Logistics*, vol. 32, no. 4, pp. 860–878, 2020.
- Sun, Yuan, Shao, X., Li, X., Guo, Y. and Nie, K., How live streaming influences purchase intentions in social commerce: An IT affordance perspective. *Electronic Commerce Research and Applications*, vol. 37, 100886, 2019.

- Teng, S., Khong, K. W. and Goh, W. W., Conceptualizing persuasive messages using ELM in social media. *Journal of Internet Commerce*, vol. 13, no. 1, pp. 65–87, 2014.
- Toan, T. Q., Dinh, T. T. T., Tran, T. T., Hoang, T. B., Pham, Q. L., Nguyen, Q. C., Quy, N. N. and Nguyen, T. V., Chemical compositions of essential oil of agarwood (*aquilaria crassna*) harvested in Phu Quoc island, Vietnam. *Engineering Chemistry*, vol. 4, pp. 51–57, 2023.
- Tran, V. D. and Le, N. M. T., Impact of service quality and perceived value on customer satisfaction and behavioral intentions: Evidence from convenience stores in Vietnam. *Journal of Asian Finance, Economics and Business*, vol. 7, no. 9, pp. 517–526, 2020.
- Ursachi, G., Horodnic, I. A. and Zait, A., How reliable are measurement scales? External factors with indirect influence on reliability estimators. *Procedia Economics and Finance*, vol. 20, pp. 679–686, 2015.
- Vazquez, E. E., Effect of an e-retailer's product category and social media platform selection on perceived quality of e-retail products. *Electronic Markets*, 31, no. 1, pp. 139–157, 2021.
- Vrontis, D., Makrides, A., Christofi, M. and Thrassou, A., Social media influencer marketing: A systematic review, integrative framework and future research agenda. *International Journal of Consumer Studies*, vol. 45, no. 4, pp. 617–644, 2021.
- Wang, C. and Teo, T. S. H., Online service quality and perceived value in mobile government success: An empirical study of mobile police in China. *International Journal of Information Management*, vol. 52, 102076, 2020.
- Wang, L., Hu, H. H., Yan, J. and Mei, M. Q., Privacy calculus or heuristic cues? The dual process of privacy decision making on Chinese social media. *Journal of Enterprise Information Management*, vol. 33, no. 2, pp. 353–380, 2020.
- Wu, S. I. and Jang, J. Y., The impact of ISO certification on consumers' purchase intention. *Total Quality Management and Business Excellence*, vol. 25, no. 3–4, pp. 412–426, 2014.
- Xin, L. and Seo, S., The role of consumer ethnocentrism, country image, and subjective knowledge in predicting intention to purchase imported functional foods. *British Food Journal*, vol. 122, no. 2, pp. 448–464, 2020.
- Yin, Y., Jiao, L., Dong, M., Jiang, X. and Zhang, S., *Wood Resources, Identification, and Utilization of Agarwood in China*, pp. 21–38, 2016.
- You, L. and Hon, L. C. (2021). Testing the effects of reputation, value congruence and brand identity on word-of-mouth intentions. *Journal of Communication Management*, vol. 25, no. 2, pp. 160–181, 2021.
- Yuan, C., Wang, S. and Yu, X., The impact of food traceability system on consumer perceived value and purchase intention in China. *Industrial Management and Data Systems*, vol. 120, no. 4, pp. 810–824, 2020.
- Yuan, R., Liu, M. J. and Blut, M., What's in it for you? Examining the roles of consumption values and Thaler's acquisition–transaction utility theory in Chinese consumers' green purchase intentions. *European Journal of Marketing*, vol. 56, no. 4, pp. 1065–1107, 2022.
- Zanger, V., Meißner, M. and Rauschnabel, P. A., Beyond the gimmick: How affective responses drive brand attitudes and intentions in augmented reality marketing. *Psychology and Marketing*, vol. 39, no. 7, pp. 1285–1301, 2022.
- Zhang, H., Gupta, S., Sun, W. and Zou, Y., How social-media-enabled co-creation between customers and the firm drives business value? The perspective of organizational learning and social Capital. *Information and Management*, vol. 57, no. 3, 103200, 2020.
- Zhang, Y., Xiao, C. and Zhou, G., Willingness to pay a price premium for energy-saving appliances: Role of perceived value and energy efficiency labeling, *Journal of Cleaner Production*, vol. 242, 118555, 2020.
- Zhao, Q., Chen, C. Der and Wang, J. L., The effects of psychological ownership and TAM on social media loyalty: An integrated model. *Telematics and Informatics*, vol. 33, no. 4, pp. 959–972, 2016.

Biographies

Dr. Hui-Ling Huang is an Associate Professor at the Department of Business Administration at Chang Jung Christian University, Taiwan (R.O.C.). Her publications focus on consumer behavior, channel management, and knowledge management. She has published her research in Journals such as *Service Business*, *Journal of Knowledge Management*, and *Journal of Knowledge Economics*. Hui-Ling Huang can be contacted at ling@mail.cjcu.edu.tw

Dr. Yue-Yang Chen has been a professor at I-Shou University in Kaohsiung and Tzu-Hui Institute of Technology in Pingtung, Taiwan (R.O.C.), since 2021 and 2025. His research interests include IT/IS/IM strategy, knowledge management, online consumer behavior, and strategic alignment analysis. He has published his research in Journals such as *Enterprise Information Systems*, *Journal of Organizational Computing and Electronic Commerce*, *Journal of Computer Information Systems*, and *Journal of Knowledge Management*. He can be contacted at: ray@isu.edu.tw.

Yu-Jyun Huang received a master's degree in MSc Communication and Entrepreneurship from the University of Nottingham, UK. Currently, she is a marketing specialist at W & W Trading and Consulting, UK. She can be contacted at: trista.rmp@gmail.com

Senh-Quay Nim received an MBA from I-Shou University, Taiwan, and then returned to Vietnam for business. Currently, she is the owner of an online company in Vietnam. She can be contacted at: chenray605@gmail.com