

Exploring the Information-Sharing Intention on Social Networking Sites

Shu-Mei Tseng^{a,*}

^a Professor, Department of Hospitality Management, I-Shou University Kaohsiung City, Taiwan

ABSTRACT

This study aimed to examine the factors of information-sharing intention on social networking sites (SNSs) by integrating the perspectives of the institution-based trust, social presence, and theory of reasoned action (TRA). An empirical survey was conducted and 364 valid respondents were collected from Facebook (FB) users in Taiwan. These data were analyzed against the research model using the partial least squares (PLS) structural equation modeling. The findings revealed that situational normality and structural assurance have a positive influence on user trust in SNSs which in turn increased their information-sharing attitudes. Furthermore, the subjective norms, user information-sharing attitudes and social presence of the SNSs were shown to have a positive influence on user information sharing intention. Finally, this study provided several important theoretical and practical implications to understand factors affecting information-sharing intention on SNSs.

Keywords: Social Networking Sites, Theory of Reasoned Action, Trust, Social Presence, Information-sharing Intention

1. Introduction

A growing number of people are using social media, especially social networking sites (SNSs) (i.e., Facebook, Instagram, LinkedIn, Line, and Twitter) to communicate and share various kinds of information with their coworkers, friends, and family members. People are participating on SNSs to share their personal information with other members or receive social support related to resolve problems they encounter in their daily lives. SNSs are also

one way that users share their personal opinions and experiences on products and services (Chen et al., 2021; Wang et al., 2019). Such user-generated content not only enables people to make better-informed purchase decisions while also offering opportunities to companies, helping them in gaining ample information to support business analytics, determine usage patterns and customer preferences (Hu et al., 2021; Shareef et al., 2018). In other words, SNSs had become the leading and biggest sources of consumer data due to the popularity of posting about

*Corresponding Author. E-mail: y97576@isu.edu.tw

products or services (Lin and Wang, 2020). These data can be transformed into valuable information and actionable knowledge for businesses to improve their financial profits by using information mining techniques (Xu et al., 2017). Understanding the factors that affect the information sharing intention on SNSs, and then involve more people in sharing information are therefore essential in helping enterprises' marketing aims and strategy (Alalwan et al., 2017).

Many studies on the intention to share information in the literature address a broad range of issues (Chang et al., 2015; Lin and Wang, 2020). The antecedents of information-sharing intention had been investigated by integrating the social factors (sense of belonging and seeking reputations) (Kusumastuti et al., 2022), from the perspective of social role theory (Lin and Wang, 2020), and by integrating technology capability and logistics integration commitment (Idris and Mohezar, 2019), the risk information seeking and processing model (Kuttschreuter and Hilverda, 2019), and from the motivation theories (Wang et al., 2019). However, little attention has been paid to users' information-sharing intention toward SNSs. With the growth of information availability via the SNSs, it makes sense that researchers are trying to grasp why people share personal information online (Koohikamali et al., 2015). Therefore, understanding factors affecting users' information-sharing intention toward SNSs is both meaningful and important.

Furthermore, people might behave differently across various scenarios. For example, some people may be actively seeking for customer reviews, peer advice, or even recommendations of their peers when they plan on certain purchasing decisions (Zheng et al., 2013). Some people may be unfamiliar with the SNSs which exposes them to risks and benefits

of adoption. Thus, they will consider whether or not to participate in social activities taking place on SNSs (Gibreel et al., 2018). By analyzing the relevant theoretical literature in the field of SNSs, this study found that the Theory of Reasoned Action (TRA) was widely used as a scientific behavioral theory to study user perceptions and behavioral intentions (Kurtz et al., 2021). Consequently, this study draws upon the TRA and a conceptual model was developed to assess the factors affecting users' information-sharing intention toward SNSs.

Prior research had identified trust as the most important factor contributing to participation in and maintenance of social exchange relationships (Cheng et al., 2019; Newman et al., 2014). In other words, trust is one of the most significant antecedents that promotes users' acceptance and subsequent usage of SNSs for the purpose of information-sharing. Moreover, Hajli et al. (2017) stated that the sense of social presence (the sense of warmth and sociability within SNSs) of social commerce platforms may increase users' purchase intentions. Therefore, TRA, trust and social presence constructs were employed in this study to examine how they are related to information-sharing intention in SNSs context and these factors will have important implications for theoretical development of SNSs provider guidelines (Wang et al., 2019).

The remainder of the paper were organized as follows: In Section 2, the review of the existing literature was provided, based on which an incorporated conceptual model and the research hypotheses were proposed. In Section 3, the research methodology was described. In Section 4, the results of empirical tests were provided and in Section 5, the discussion of the theoretical implications and practical implications, as well as the research limitations and suggestions for future research were provided. Finally,

Section 6 concludes by summarizing the findings.

II. Theoretical Foundation and Research Hypotheses

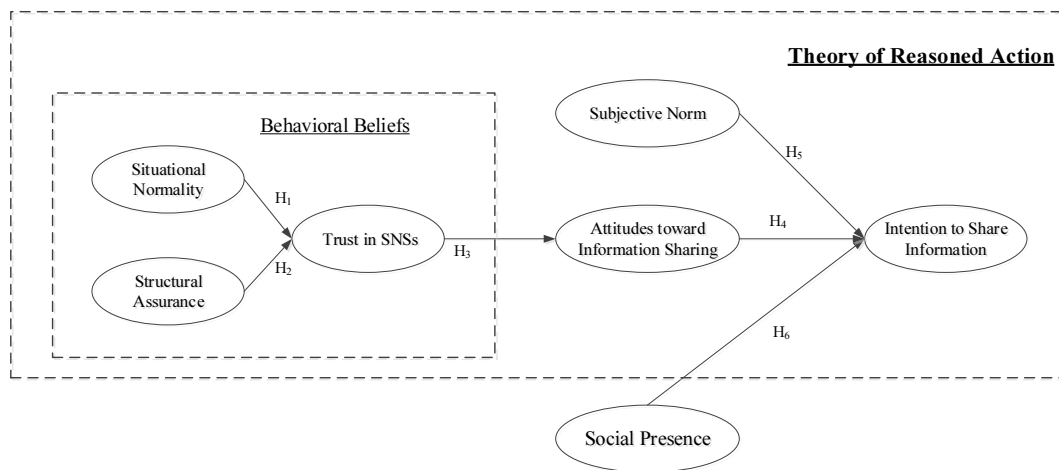
TRA was proposed by Fishbein and Ajzen (1975). It is based on the proposition that people's behavior is determined by their intention to perform that behavior (Cudjoe et al., 2020; Jang and Cho 2022). Behavioral intention is affected by an individual's attitude toward a behavior and subjective norms (social norms) related to engaging in a particular behavior. Attitude comprises a set of beliefs about a certain object or an act, and it reflects the degree to which one has a positive or negative evaluation of a certain outcome (Tseng et al., 2022). Belief refers to the subjective probability that a behavior will produce a certain outcome. Subjective norms are referred as the perceived social pressure from coworkers, friends and family members which affects their decision on performing in a certain action (Cheung and To, 2017; Koohikamali et al., 2015). Lin and Wang (2020) indicated that the TRA has been used by IS researchers through its application to technology adoption and the results have suggested that an individual's intention toward technology adoption is determined by that individual's attitude and subjective norms (Venkatesh and Morris, 2000).

Due to the fact that the TRA provides an important fundamental conceptual model by which to systematically explore salient factors posited to affect information-sharing decisions on SNSs, it is appropriate for use as the primary theoretical basis for this study. Furthermore, in order to improve the explanatory power of specific issues, many studies had applied specific factors to displace the general beliefs expressed in the TRA (Raines, 2013; Srivastava

and Chandra, 2018; Venkatesh and Morris, 2000). Srivastava and Chandra (2018) stated that trust is a crucial belief that generates positive attitudes, which in turn affect emergent use intentions. Institution-based trust is the belief that an individual's perceptions of an institutional environment such as the Internet will increase the probability of achieving a successful outcome. Specific structural characteristics (e.g., safety and security) are present in the Internet (McKnight et al., 1998). Two subconstructs of institution-based trust are defined as situational normality and structural assurance (McKnight et al., 2002). This study thus integrates trust and antecedent of trust (the institution-based trust: situational normality and structural assurance) into TRA and examined the factors of influencing attitudes toward information sharing. In addition, social presence is a key concept on social platforms since intimacy and immediacy enhance the perceptions of warmth on social media platforms which is able to create a more accessible, comfortable environment among communicators (Hajli et al., 2017). Thus, social presence is also considered as a factor contributing to information sharing on SNSs in the present study. <Figure 1> shows the research model used in this study and hypothesis development elaborated in this section.

2.1. Institutional-Based Trust and Trust

According to the TRA, beliefs lead to attitudes which in turn leads to behavioral intentions. (Venkatesh and Morris, 2000; Venkatesh et al., 2000; Venkatesh et al., 2003). Trust is a personal belief and psychological condition in which people hold positive expectations and are willing to be vulnerable (Tseng and Lee, 2016). Gefen et al. (2003) divided trust into five categories such as knowledge-based,



<Figure 1> Research Model

personality-based, cognition-based, calculative-based and institution-based trust. Familiarity with the vendor, which is based on experiences and everything else relevant to a particular event is the foundation of knowledge-based trust. The possibility of a person that will trust others is known as personality-based trust. Instead of focusing on interpersonal encounters, cognitive-based trust assesses how people develop trust based on their initial impressions. Calculative-based trust is predicated on a rational assessment of the costs and benefits of the other party's activities as well as whether they are cooperative or dishonest. Institution-based trust is a sense of confidence brought on by the existence of safety nets or other impartial structures in specific circumstances.

According to the institution-based trust, structures can ensure trustworthy behavior of users and protect the users from negative consequences (Hsu et al., 2007). Institution-based trust as a personal perception of a web-page-based online environments such as safety and security will increase the probability of achieving a successful outcome (McKnight et al., 1998). This study is thus using the institution-based trust as an antecedent of trust in SNSs. McKnight

et al. (2002) divided the institution-based trust into situational normality and structural assurance.

Situational normality refers to a personal belief that the online environment is in proper procedure, normal and favorable conducive to success (Mao et al., 2020). Li et al. (2008) explored initial trust formation with organizational information systems (OIS) and indicated that if individuals are comfortable interacting with OIS in general, then they are more likely to build positive initial trusting beliefs towards the OIS. It means that situational normality can significantly influence initial trusting beliefs. Srivastava and Chandra (2018) stated that when the situation of the virtual world seems to be safe, favorable and normal, individuals will tend to believe that the virtual world are order and that it can be trusted. In the context of SNSs, the interacting members are the other SNSs users, and thus, individuals will develop perceptions of situational normality and trust in SNSs. (Lu et al., 2016; Park, 2020). Therefore, the following hypothesis is proposed:

H1: Situational normality has a positive influence on user trust in SNSs.

Structural assurance refers to a personal belief that the presence of protective structures such as safety nets, guarantees, regulations, promises or operational procedures will promote successful dealings with other members (Mao et al., 2020). McKnight et al. (2002) stated that structural assurance plays a crucial role in enhancing individual trusting beliefs regarding uncertain technological situations. In other words, when the third-party information of the SNSs in the form of safety nets, guarantees, regulations and other procedures are instrumental in providing to users, they will tend to believe that the SNSs is reliable and fostering them trust in SNSs, as well as developing the perceptions of structural assurance and engage in SNSs (Lu et al., 2016; Park, 2020). Therefore, the following hypothesis is proposed:

H2: Structural assurance has a positive influence on user trust in SNSs.

2.2. Trust and Attitudes

Gvili and Levy (2016) stated that credibility and trustworthiness influenced attitudes toward electronic word of mouth communication. Cheung and To (2017) posited that users' propensity to trust affects their trust in in-app advertising which in turn affects their attitudes toward in-app advertisements. Park et al. (2021) indicated that trust in online reviews plays an important role that affects the attitude of users when online reviews enhance their level of trust in the source of reviews. Shen et al. (2022) stated that when tourists deem dependable and trustworthy of visit destinations that they will reduce risk perceptions and have positively influences travel attitude. In this study, it was assumed that individuals are positively influenced by their trust in SNSs in terms of their attitudes toward information-sharing.

Hence, the following hypothesis is proposed:

H3: Trust in SNSs positively influences attitudes toward information-sharing.

2.3. Attitudes and Intention

Prior studies have reported that attitude has a positive effect on behavioral intention (Dwivedi et al., 2017; He and Wei, 2009; Hilverda et al., 2017; Hsu and Lin, 2008; Kuttschreuter and Hilverda, 2019). Individuals will have a positive evaluation of their beliefs and attitude towards a given behavior results from that belief. This causes development into the intention to realize that belief in the form of behavior (Kurtz et al., 2021; Raines, 2013). Lin and Wang (2020) stated that attitude towards information-sharing can be viewed as the result of beliefs related to potential outcomes, and it will affect individual's information-sharing intention. Souza et al. (2022) argued that citizens' attitudes towards open government will influence their intention to use open government data in Brazil. Open government is an innovation based on the concept of e-government. However, it pays more attention to informatization. Hence, this study assumed that a more positive attitude towards information-sharing causes an individual to be more inclined to share information and the following hypothesis is proposed:

H4: Attitudes toward information-sharing positively influence information-sharing intention.

2.4. Subjective Norm and Intention

Yoon and Kim (2017) explored the factors affecting social scientists' data reuse behavior and they found that the subjective norms related to data reuse pos-

itively influence a social scientist's attitude toward data reuse. Minton et al. (2018) investigated the motivations for engaging (or not engaging) in sustainable consumption and they stated that pragmatism is how consumers make sense of their present situation and face the future. Pragmatism is directly related to subjective norms and they will influence attitudes leading to sustainable behavior. Liu et al. (2019) examined the influences of descriptive subjective norm-based messages on eating intentions and they found that the effects of the subjective norm message on eating intentions was mediated by individual attitudes. According to the TRA, individual' behavioral intention is highly motivated by subjective norms (Fishbein and Ajzen, 1975; Shareef et al., 2018). Lin and Wang (2020) indicated that an individual's intention toward technology adoption is determined by that individual's attitude and subjective norms (Venkatesh and Morris, 2000). Furthermore, previous studies have demonstrated that subjective norms may influence a person's intention which in turn affects their behavior (Li and Du, 2012; Tseng et al., 2022; Youn et al., 2021). To summarize, if an individual's spouse, relatives, colleagues or friends share information on SNSs, it is likely that these individuals will be influenced by the actions of their peers. In this study, it is assumed that individuals will be positively influenced by subjective norms in terms of their intentions related to information sharing. Hence, the following hypotheses are proposed:

H5: Subjective norms positively influence information-sharing intention.

2.5. Social Presence and Intention

The social presence theory was proposed by Short et al. (1976). It was defined as "the degree to which

a medium allows a user to establish a personal connection with other users." Furthermore, different interactional tools available on SNSs facilitate the sense of social presence such as emoticons, pictures, the like button, reviews and comments, which enhance users' perception of social support and relationship quality (Liang et al., 2011; Lu et al., 2016). Lin and Wang (2020) stated that social presence is considered an important factor that will influence users' willingness to share information on social platforms. In addition, interpersonal and synchronous communications occur more often than communications that are mediated and asynchronous (Kaplan and Haenlein, 2010).

Prior researchers have indicated that social presence affects attitudes toward online environments. For example, social presence impacts attitude toward e-commerce through perceived enjoyment, trust and usefulness (Hassanein and Head, 2005). Perceptions of social presence positively influence attitudes toward online advertisements (Campbell et al., 2010). Social presence plays an important role in the formation of attitudes toward information sharing on social networking sites (Lin and Wang, 2020). Choi (2016) investigated the factors influencing users' continuance intention on SNSs and they found that smartphone-based SNSs continuance intention is determined by social presence. Kaushik et al. (2018) stated that the degree of social presence perceived by users of websites positively affects their behavioral intention toward using such websites. Munnukka et al. (2022) further stated that the more strong social presence causes the more positive social outcomes, greater attraction and persuasion, higher communication quality and enhanced overall satisfaction. To summarize, an increase in positive attitudes toward information-sharing would be established if individuals perceive that SNSs promotes the develop-

ment of warm, close personal relationships which would enhance information-sharing intention (Animesh et al., 2011; Lin and Wang, 2020). Therefore, the following hypotheses are proposed:

H6: Social presence positively influences information-sharing intention.

III. Research Methodology

3.1. Sample and Data Collection Procedure

Facebook was chosen for this study both because it is one of the most popular SNSs in Taiwan and also because it has a great impact on online user behavior and prospective commercial values. Companies now increasingly using Facebook as their primary platform to engage with their customers and promote their products. The online behaviors of Facebook users may have significant implications for the use of SNSs in industries. Hence, Facebook can provide insights into best practices,

servicing as an appropriate framework for exploring information-sharing intention in the context of SNSs.

Data were collected through the distribution of an online web questionnaire via both Facebook and e-mail, using an online survey in Taiwan. The target respondents were users who have had experience with SNSs and have shared information about someone they met online. All of the participants were Facebook users and purposive sampling was used in the present study in order to ensure that the respondents had a high level of willingness to take part. The questionnaires were sent to the respondents on July 16, 2021, and 364 valid questionnaires were returned by July 23, 2021. In the sample, 37.1% were male, and 62.9% were female; 76.1 % respondents were over 30 years old; 77.8% were college and university degree holders; 58.2% were single; 42.0% were work on service industry, and 85.2% of the respondents reported that they use FB experience more than 5 Years. <Table 1> shows the sample characteristics which describes data on the respondents' gender, age, education level, marital sta-

<Table 1> The Sample Characteristics of the Respondents

(n= 364)

Percentage of Respondents			Percentage of Respondents			
Gender	Male	37.1	Occupation	Student	5.8	
	Female	62.9		Government Sector	7.1	
Age	≤ 29 years old	23.9		Service Industry	42.0	
	30-39 years old	45.6		Manufacturing Industry	22.8	
	≥ 40years old	30.5		Financial Industry	6.6	
Education Level	High School and Below	11.5		High Tech Industry	6.9	
	College	14.9		Other	8.8	
	University	62.9		Years of using Facebook (FB) experience	< 1 year	0.8
	Master's Degree and Above	10.7			≥ 1 year and < 3 years	2.5
Marital Status	Single	58.2			≥ 3 years and < 5 years	11.5
	Married	41.8	≥5 years		85.2	

<Table 2> Definitions of the Principle Constructs.

Constructs	Definitions	References
Situational Normality	The extent to which an online environment is favorable for successful dealings with other interacting members on SNSs.	McKnight et al. (1998); McKnight et al. (2002); Srivastava and Chandra (2018)
Structural Assurance	The extent to which an individual relies on existing structures, such as guarantees, regulations, safety nets, promises, and operational procedures on SNSs.	McKnight et al. (1998); McKnight et al. (2002); Srivastava and Chandra (2018)
Trust in SNS	Beliefs in the perceptions of competence, benevolence, and integrity on the part of SNSs.	Gefen (2000); Pavlou and Gefen (2004); Srivastava and Chandra (2018)
Subjective Norms	The extent of individual perceptions that influential persons who are important to him/her should or should not share information on SNSs.	Ajzen, 1988; Fishbein and Ajzen, 1975
Social Presence	The extent to which an individual feels the sociality and humanity of the SNSs and the SNSs are able to establish an individual connection with a user.	Gefen and Straub (2004); Kaushik et al. (2018); Wang et al. (2019)
Information-sharing Attitude	The extent to which an individual has a positive or negative evaluation of his/her information-sharing behavior on SNSs.	Fishbein and Ajzen (1975)
Information-Sharing Intention	The extent to which an individual relative degree of willingness to share information on SNSs.	Fishbein and Ajzen (1975); Hilverda et al. (2017)

tus, occupation and year of using Facebook (FB) experience.

3.2. Measurements

The definitions of the principal constructs are provided in <Table 2>. Established scales were adapted from prior literature and then modified to fit the SNSs context in this study. The items used to measure situational normality and structural assurance were adapted from the studies of Gefen (2000), McKnight et al. (2002), Srivastava and Chandra (2018). The items used to measure trust in SNSs were developed based on Hajli et al. (2017), Lu et al. (2016), and Srivastava and Chandra (2018). The items used to measure subjective norm were adapted from the studies of Koohikamali et al. (2015), Cheung

and To (2017) and Mishra et al. (2014). The items used to measure social presence were adapted from the studies of Lin and Wang (2020), Spence and Helmreich (1980). The items used to measure attitude toward information-sharing were adapted from the studies of Koohikamali et al. (2015), Cheung and To (2017), Lin and Wang (2020). The measures of intention to share information were adapted from the studies of Cheung and To (2017), Lin et al. (2017), and Lin and Wang (2020). All of the scales were surveyed using the seven-point Likert-type scale ranging from 1 (completely disagree) to 7 (completely agree). The finalized items for each construct are listed in <Table 3>. A pilot test was administered to validate the instrument before collecting the data formally. Minor wording discrepancies were discussed and resolved.

<Table 3> Measurement Items for Principal Constructs

Constructs	Titles
Situational Normality	SNT1. I think SNSs members understand other members they are sharing with. SNT2. I think members in SNSs make promises that are reliable. SNT3. I think members in SNSs have good intentions towards me. SNT4. When I Share information or participate other activities on SNSs, i feel good about how things are going.
Structural Assurance	SAT1. I think SNSs have enough safeguards to make me feel comfortable using it. SAT2. I make certain that legal and technological structures on SNSs can adequately protect me. SAT3. I feel confident that encryption and technological advances on SNSs make it safe for me to use it. SAT4. Overall, SNSs are a robust and safe environment for information sharing.
Trust in SNSs	TR1. I think that SNSs are reliable. TR2. I think that SNSs are trustworthy. TR3. I think that SNSs are believable. TR4. Based on my experience with SNSs, I know they care about users. TR5. I believe SNSs.
Subjective Norm	SN1. Most of the people who are important to me think i should engage in sharing information on SNSs. SN2. Most of the people who have influence to me think i should engage in sharing information on SNSs. SN3. A large percentage of my friends are engaging in sharing information on social networking sites. SN4. I engage in sharing information on SNSs because my close friends do. SN5. I engage in sharing information on SNSs because my colleagues do. SN6. I engage in sharing information on SNSs because my family members do.
Attitude	ATT1. It is a good idea to share information on SNSs. ATT2. I think that sharing information on SNSs is wise. ATT3. I think that sharing information on SNSs is fun. ATT4. I think that sharing information on SNSs is pleasant. ATT5. I think that sharing information on SNSs is meaningful. ATT6. I like sharing information on SNSs.
Social Presence	SP1. I feel a sense of human contact when using SNSs for sharing information. SP2. I feel a sense of personalness when using SNSs for sharing information. SP3. I feel a sense of human warmth when using SNSs for sharing information. SP4. I feel a sense of sociability when using SNSs for sharing information. SP5. I feel a sense of human sensitivity when using SNSs for sharing information.
Information-sharing Intention	IN1. I plan to continue sharing information on SNSs in the future. IN2. I will likely to continue sharing information on SNSs in the future. IN3. I may continue sharing information on SNSs in the future. IN4. I will always try to share information on SNSs in the future. IN5. I often think about sharing information on SNSs. IN6. I will very likely to spend more time to share information on SNSs in the future. IN7. I will very likely to seek more chances to share information on SNSs in the future.

IV. Results

4.1. Measurement Model

This study analyzed the research model using both SPSS and SmartPLS. First, this study applied exploratory factor analysis (EFA) to derive the underlying dimensions of situational normality, structural assurance, trust in SNSs, subjective norm, social presence, attitudes toward information sharing and intention to share information. Following from the EFA, this study uses confirmatory factor analysis (CFA) and structural equation modeling (SEM) to test the research model that illustrated the antecedents of intention to share information. Implementation of the statistical approach is enabled by the partial least squares (PLS) structural equation modeling technique for data analysis. PLS aims to estimate parameters by minimizing the residual variances of all the dependent variables involved and it is less stringent with regard to distributional assumptions, measurement scale type and sample size requirement (Fornell and Cha, 1994; Chin, 1998).

The EFA was employed and questionnaire items which had not reached the standard for factor selection were deleted. The cut off factor loading for discarded items was 0.70, while items with cross-loadings above 0.3 were also discarded (Hair et al., 2017). According to the results of factor analysis, SIN4 was eliminated from further analysis for situational normality, STA1 for structural assurance and SN3 for the subjective norm. The obtained value of Standardized Root Mean Square Residual (SRMR) is 0.038, below the recommended threshold of 0.08 (Hair et al., 2017; Lee et al., 2022), indicating an acceptable model fit. In addition, the properties of the seven proposed research constructs were tested with structural equation modeling (SEM). A null

model was initially specified for the first-order latent variables in which no structural relationships were included. To assess the reliability of the measures, the Cronbach's alpha (CA), composite scale reliability (CR) and average variance extracted (AVE) were calculated. <Table 4> shows that all the Cronbach's alphas and CR exceed 0.882 (Nunnally and Bernstein, 1994) while the AVE of all measures exceeds the cut-off value of 0.712 (Chin, 1998). Moreover, <Table 5> shows that the square root of the AVE exceeds the intercorrelations of the construct with the other constructs in the model, thus showing good discriminant validity (Fornell and Larcker, 1981). Additional support for discriminant validity comes from an inspection of the cross-loadings which were not substantial in magnitude compared with the loadings (Fornell and Cha, 1994; Chin, 1998). As shown in <Table 4> and <Table 5>, the internal consistency reliability, indicator reliability, convergent validity and discriminant validity were all good for the measurement scales in this study (Urbach and Ahlemann, 2010).

4.2. Structural Model

The structural model employed to examine the relationships among a set of dependent and independent constructs. A bootstrapping analysis with 5,000 samples and the original 364 cases was performed to examine the significance of the path coefficients. The value and level of significance of each path coefficient and R^2 of each endogenous construct are presented in <Figure 2>. The t-value and significance for each path coefficient is shown in <Figure 2>. Situational normality ($\beta = 0.428$, $t = 5.604$, $p < 0.001$) and structural assurance ($\beta = 0.499$, $t = 6.636$, $p < 0.001$) were found to positively influence trust in SNSs. Approximately 72.9% of the

<Table 4> Psychometric Properties in the Null Model for First-order Constructs

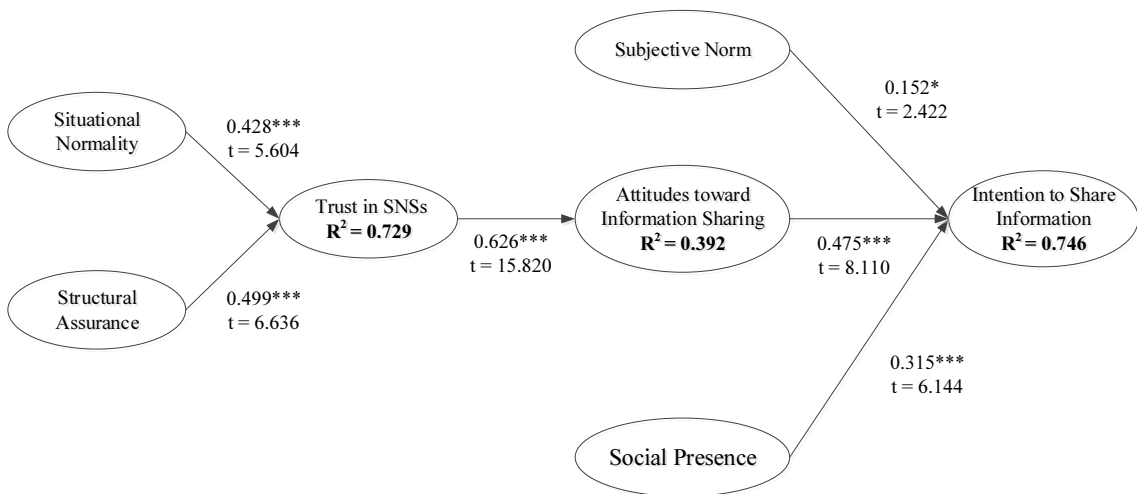
(n = 364)

Constructs	Items	Loading	CA	CR	AVE
Situational Normality	SIN1	0.886	0.882	0.927	0.809
	SIN2	0.914			
	SIN3	0.898			
Structural Assurance	STA2	0.928	0.924	0.952	0.869
	STA3	0.946			
	STA4	0.923			
Trust in SNSs	TR1	0.918	0.950	0.962	0.835
	TR2	0.918			
	TR3	0.933			
	TR4	0.883			
	TR5	0.915			
Subjective Norms	SN1	0.840	0.899	0.925	0.712
	SN2	0.878			
	SN4	0.840			
	SN5	0.828			
	SN6	0.832			
Social Presence	SSP1	0.877	0.936	0.951	0.797
	SSP2	0.904			
	SSP3	0.893			
	SSP4	0.909			
	SSP5	0.880			
Information-Sharing Attitude	ATT1	0.897	0.930	0.947	0.782
	ATT2	0.865			
	ATT3	0.888			
	ATT4	0.892			
	ATT5	0.882			
Information-Sharing Intention	IN1	0.902	0.958	0.965	0.800
	IN2	0.897			
	IN3	0.918			
	IN4	0.915			
	IN5	0.912			
	IN6	0.842			
	IN7	0.871			

<Table 5> Mean, S.D., and Intercorrelations of the Latent Variables for First-order Constructs

Constructs	Mean	S.D.	Situational Normality	Structural Assurance	Trust in SNSs	Subjective Norms	Social Presence	Attitude	Intention
Situational Normality	4.951	1.080	.899						
Structural Assurance	4.821	1.201	.696	.932					
Trust in SNSs	4.839	1.158	.775	.797	.914				
Subjective Norms	4.827	1.077	.606	.641	.645	.844			
Social Presence	5.055	1.050	.753	.729	.700	.685	.893		
Attitude	5.185	1.009	.615	.662	.626	.754	.748	.885	
Intention	5.061	1.114	.644	.656	.675	.726	.775	.825	.894

Note: † Square root of the AVE on the diagonal.



Note: *** denote path coefficients significant at the $p < 0.001$ level.
 * denote path coefficients significant at the $p < 0.05$ level.

<Figure 2> PLS Structural Model

variance in the trust in SNSs was accounted by the situational normality and structural assurance ($R^2 = 0.729$). Thus, H1 and H2 were supported. Trust in SNSs ($\beta = 0.626$, $t = 15.820$, $p < 0.001$) was found to positively influence attitudes toward Information-sharing. Approximately 39.2% of the variance in the information-sharing attitudes was ac-

counted for by the trust in SNSs ($R^2 = 0.392$). Thus, H3 was supported. Subjective norm ($\beta = 0.152$, $t = 2.422$, $p < 0.05$), information-sharing attitude ($\beta = 0.475$, $t = 8.110$, $p < 0.001$) and social presence ($\beta = 0.315$, $t = 6.144$, $p < 0.001$) were found to positively influence information-sharing intention. Approximately 74.6% of the variance in the in-

formation-sharing intention was accounted for by subjective norm, information-sharing attitude and social presence the trust in SNSs in the model ($R^2 = 0.746$). Thus, H4 - H6 were supported. The findings thus supported all the hypotheses.

V. Discussion and Conclusions

People are increasingly sharing a variety of information on SNSs with friends, family and work colleagues. The success of SNSs are largely dependent on sustainable user participation. This study was thus proposing a new model to explore the factors of influencing information sharing intention. A detailed analysis of the factors that affecting information-sharing intention on SNSs will have important implications for both academicians and practitioners. The discussions, theoretical implications, practical implications, and limitations and future research will conclude as follows.

5.1. Discussions

According to the results of the structural model used to predict user trust in SNSs (see <Figure 2>), situational normality and structural assurance, the β values for predicting user trust in SNSs were 0.428 and 0.499, respectively. Both variables showed positive significant influences on user trust in SNSs. This implies that if the situational normality and structural assurance on SNSs are superior, user trust in SNSs will be significantly enhanced. The R^2 was 0.729, thus, explaining the variability of the model in the response data which was considered to be substantial (Chin, 1998). Consequently, the research results supported hypotheses H₁ and H₂, indicating that the degree of situational normality and structural

assurance will have positive effect on user trust in SNSs. This result echoes McKnight et al. (1998), McKnight et al. (2002) and Srivastava and Chandra (2018) findings suggesting that improving situational normality and structural assurance will help increase user trust.

According to the results of the structural model (see <Figure 2>), the β values of user trust in SNSs for predicting user attitudes toward information-sharing was 0.626 and it was shown that user trust in SNSs had a significant positive influence on user attitudes toward information-sharing. This implies that if user trust in SNSs is higher, user information sharing attitudes will be significantly and positively enhanced. The R^2 was found to be 0.392, proving that the variability in the response data was considered average (Chin, 1998). The results thus supported hypothesis H₃, indicating that the degree of user trust in SNSs will has positive effect on user attitudes toward information-sharing. The findings of this study concur with Shen et al. (2022) which means that people with high trust in SNSs tend to show positive attitudes toward information-sharing.

According to the results of the structural model (see <Figure 2>), subjective norms, information-sharing attitude and social presence, the β values for predicting user information-sharing intention on SNSs were 0.152, 0.475, and 0.315, respectively. These variables showed positive significant influences on user information-sharing intention on SNSs. This means that the higher degree of subjective norms, information-sharing attitude and social presence can significantly enhance user information-sharing intention. The R^2 was 0.746, showing that the model is able to explain the variability in the response data was considered substantial (Chin, 1998). Consequently, the research results supported hypotheses H₄, H₅ and H₆, indicating that the degree of subjective norms,

information-sharing attitude and social presence which would have positive effects on user information-sharing intention on SNSs. The findings of this study were consistent with Liu et al. (2022).

5.2. Theoretical Implications

Information sharing is a popular topic in academic and practical research. Thus, obtaining a better understanding of how to encourage online information sharing on SNSs will provide valuable insights for both academics and practitioners. However, a review of previous literature on information and knowledge management revealed that most researchers have focused on the antecedents affecting sharing of information in different contexts (Chen, 2013; Christofides et al., 2009; Koohikamali et al., 2015). Few studies integrated the TRA framework with the institution-based trust (situational normality and structural assurance), trust and social presence to explore the factors that influence intention toward sharing information on SNSs. This study thus fills this gap by integrating these literatures into the SNSs context to systematically examine the factors affecting users' information-sharing intention toward SNSs.

Furthermore, TRA has been widely employed in prior studies primarily to examine user attitudes and behavioral intention in using information systems (Chang et al., 2015; Souza et al., 2022; Tseng et al., 2022; Zamani-Miandashti et al., 2013). This study contributed to scholarly understanding by extending the TRA to the context of SNSs. This study incorporated the TRA framework with the institution-based trust (situational normality and structural assurance) and social presence in the context of SNSs. Grounded in the institution-based trust, trust and TRA, this study theoretically explains the factors that affecting information-sharing attitudes

toward SNSs. Although trust has previously been utilized to predict attitudes (Cheung and To, 2017; Park et al., 2021; Shen et al., 2022), this study applies it in the SNSs context, proposing that trust is, via the institution-based trust (the antecedent of trusts), an effective predictor of positive attitudes toward information-sharing. Waung et al. (2021) also confirmed that trust is a vital factor in understanding attitudes and behavioral intention. Therefore, the role of trust becomes particularly important when users utilize SNSs for information-sharing because SNSs have a number of uncertainties that have to be mitigated to provide reassurance to users. In addition, this study integrates social presence to examine the factors of influencing information-sharing intention, providing greater comprehensiveness and stronger criteria validity.

This study aimed to provide a detailed analysis of the factors that affects information-sharing intention on SNSs. The results showed that constructs of information-sharing attitudes, subjective norm and social presence determine behavioral intention. These findings coincide with the literature that the TRA model considers these constructs as potential predicting factors of behavioral intention to apply information system which implies that the application of such integrated model is appropriate (Chang et al., 2015; Souza et al., 2022; Tseng et al., 2022; Zamani-Miandashti et al., 2013). Consequently, this study represents a valuable extension of existing knowledge on the factors of information-sharing intentions on SNSs, paving the way to further research in this domain.

5.3. Practical implications

The results of this study indicated strong support for the hypotheses of the proposed model. The find-

ings showed that situational normality and structural assurance of the SNSs have significantly positive effects on user trust. It means that situational normality and structural assurance as the key drivers of predicting trust in the SNSs context. This study further found that the β values for structural assurance is greater than situational normality. It means that structural assurance has the potential to significantly enhance user trust in SNSs more than situational normality. Thus, SNSs operators should strive to enhance structural assurance along with situational normality, as well as to increase user trust in SNSs, in particular, structural assurance. For example, regarding structural assurance, SNSs operators should enhance their existing structures, such as guarantees, regulations, safety nets, promises, and operational procedures to ensure that user engaged in SNSs make promises that are reliable and safe for users to use them. Moreover, the SNSs operators also should enhance the degree to which user feel that SNSs are favorable for dealings with other interacting members. Thereby increasing the level of user trust in SNSs will be higher (Gefen and Straub, 2000; Pavlou and Gefen, 2004).

The findings showed that user trust in SNSs significantly and positively influenced information sharing attitudes. This implies that if users deemed that the SNSs are dependable and trustworthy, then they are more likely to have positive attitude. Thus, SNSs operators should strive to enhance user trust in SNSs to further increase user information sharing attitudes. For example, SNS administrators should ensure that SNSs are reliable, that the technological aspects of SNSs are safe and up to date, the sites are robust, safe environments in which users can engage in information-sharing (Lin and Wang, 2020; McKnight et al., 2002; Srivastava and Chandra, 2018). Moreover, SNSs operators should devote themselves to enhance

the degree to which those engaged in information-sharing feel that SNSs are competent, benevolent, and honest. Then the level of user positive attitudes toward information-sharing will be enhanced. When user trust in SNSs is high, they will find sharing information on SNSs to be fun, meaningful and pleasant and will be more inclined to share information.

The findings revealed that the subjective norms, user attitudes toward information sharing and social presence are three effective means by which to alter information sharing intention. This study further found that the β value of information sharing attitudes (0.475) was greater than that for subjective norms (0.152) and social presence (0.315). That is, information sharing attitudes is the most significant antecedents of information sharing intention, followed by social presence and subjective norms. This implies that attitudes toward information-sharing can effectively enhance information-sharing intention to a greater degree than social presence and subjective norms. Thus, this study suggested that SNSs administrators should strive to facilitate user positive attitudes toward information sharing to increase user intention to share information. Moreover, SNSs providers should facilitate social presence and create a friendly environment that will make users feel there is a sense of human warmth, sociability and sensitivity when they are using SNSs for the purpose of sharing information (Lin and Wang, 2020; Spence and Helmreich, 1980). In addition, SNSs operators should engage in a holistic approach in daily operation and develop strategies to reduce barriers to perceived behavior in users. Thus, enabling enhances to facilitate the sense of social presence on SNSs and then lead to greater user intention to share information (Singh et al., 2021; Xu et al., 2021). Finally, the SNSs operators should encourage and cultivate effective

culture to make users to engage in sharing information on SNSs (Cheung and To, 2017; Koohikamali et al., 2015). People commit more information-sharing behaviors if they believe that such behaviors are judge to be acceptable by their peers (Hardies, 2019).

5.4. Limitations and Future Research

The research model was tested using survey data collected from 364 samples. The sample size may have been too small, thus limiting the power of the statistical analyses. Future research that applies a larger sample size is needed to revalidate the research model. In this current study, Facebook users were recruited as the research sample. The target respondents were users who had experience with SNSs and had shared information about someone they met online. Hence, the results must be treated with

caution in terms of generalizability to other user populations on SNSs such as Line, Twitter, and Instagram. Finally, the dominant share of the survey data was from Taiwan. Therefore, SNSs providers are cautioned when applying the suggestions to other countries. Additional studies are called for, especially in countries that are culturally different from Taiwan. Furthermore, the results of the quantitative test verified the factors affecting information-sharing intention on SNSs. This could be verified further using a qualitative study.

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<References>

- [1] Ajzen, I. (1985). From intentions to actions: A theory of planned behavior. In J. Kuhl and J. Beckmann (eds.), *Action Control: From Cognition to Behavior* (pp. 11-39). Berlin, Heidelberg: Springer Berlin Heidelberg.
- [2] Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179-211. [https://doi.org/10.1016/0749-5978\(91\)90020-T](https://doi.org/10.1016/0749-5978(91)90020-T)
- [3] Alalwan, A. A., Rana, N. P., Dwivedi, Y. K., and Algharabat, R. (2017). Social media in marketing: A review and analysis of the existing literature. *Telematics and Informatics*, 34(7), 1177-1190. <https://doi.org/10.1016/j.tele.2017.05.008>
- [4] Animesh, A., Pinsonneault, A., Yang, S., and Oh, W. (2011). An odyssey into virtual worlds: Exploring the impacts of technological and spatial environments on intention to purchase virtual products. *MIS Quarterly*, 35(3), 789-810.
- [5] Campbell, D. E., Wright, R. T., and Clay, P. F. (2010). Deconstructing and operationalizing interactivity: An online advertising perspective. *Journal of Information Technology Theory and Application*, 14(4), 29-53.
- [6] Chang, C. C., Hung, S. W., Cheng, M. J., and Wu, C. Y. (2015). Exploring the intention to continue using social networking sites: The case of Facebook. *Technological Forecasting and Social Change*, 95, 48-56. <https://doi.org/10.1016/j.techfore.2014.03.012>
- [7] Chen, J. V., Nguyen, T., and Jaroenwattananon, J. (2021). What drives user engagement behavior in a corporate SNS account: The role of Instagram features. *Journal of Electronic Commerce Research*, 22(3), 199-227.
- [8] Chen, R. (2013). Living a private life in public social

- networks: An exploration of member self-disclosure. *Decision Support Systems*, 55(3), 661-668. <https://doi.org/10.1016/j.dss.2012.12.003>
- [9] Cheng, X., Gu, Y., and Shen, J. (2019). An integrated view of particularized trust in social commerce: An empirical investigation. *International Journal of Information Management*, 45, 1-12. <https://doi.org/10.1016/j.ijinfomgt.2018.10.014>
- [10] Cheung, M. F. Y., and To, W. M. (2017). The influence of the propensity to trust on mobile users' attitudes toward in-app advertisements: An extension of the theory of planned behavior. *Computers in Human Behavior*, 76, 102-111. <https://doi.org/10.1016/j.chb.2017.07.011>
- [11] Chin, W. W. (1998). The Partial Least Squares Approach to Structural Equation Modeling. In G. A. Marcoulides (ed.), *Modern Methods for Business Research*. New Jersey: Lawrence Erlbaum Associates.
- [12] Choi, S. (2016). The flipside of ubiquitous connectivity enabled by smartphone-based social networking service: Social presence and privacy concern. *Computers in Human Behavior*, 65, 325-333. <https://doi.org/10.1016/j.chb.2016.08.039>
- [13] Christofides, E., Muise, A., and Desmarais, S. (2009). Information disclosure and control on facebook: Are they two sides of the same coin or two different processes? *CyberPsychology & Behavior*, 12(3), 341-345. <https://doi.org/10.1089/cpb.2008.0226>
- [14] Cudjoe, D., Yuan, Q., and Han, M. S. (2020). An assessment of the influence of awareness of benefits and perceived difficulties on waste sorting intention in Beijing. *Journal of Cleaner Production*, 272. <https://doi.org/10.1016/j.jclepro.2020.123084>
- [15] Dwivedi, Y. K., Rana, N. P., Jeyaraj, A., Clement, M., and Williams, M. D. (2017). Reexamining the unified theory of acceptance and use of technology (UTAUT): Towards a revised theoretical model. *Information Systems Frontiers*, 1-16. <https://doi.org/10.1007/s10796-017-9774-y>
- [16] Fishbein, M., and Ajzen, I. (1975). *Belief, Attitude, Intention and Behavior: An Introduction to Theory and Research*. MA: Addison-Wesley.
- [17] Gefen, D. (2000). E-Commerce: The role of familiarity and trust. *Omega*, 28(6), 725-737. [https://doi.org/10.1016/S0305-0483\(00\)00021-9](https://doi.org/10.1016/S0305-0483(00)00021-9)
- [18] Gefen, D., Karahanna, E., and Straub, D. W. (2003). Trust and TAM in online shopping: An integrated model. *MIS Quarterly*, 27(1), 51-90.
- [19] Gefen, D., and Straub, D. W. (2000). The relative importance of perceived ease of use in IS adoption: A study of e-commerce adoption. *Journal of the Association of Information Systems*, 1(8), 1-30. <https://doi.org/10.17705/1jais.00008>
- [20] Gibreel, O., AlOtaibi, D. A., and Altmann, J. (2018). Social commerce development in emerging markets. *Electronic Commerce Research and Applications*, 27, 152-162. <https://doi.org/10.1016/j.elerap.2017.12.008>
- [21] Gvili, Y., and Levy, S. (2016). Antecedents of attitudes toward eWOM communication: Differences across channels. *Internet Research*, 26(5), 1030-1051. <https://doi.org/10.1108/IntR-08-2014-0201>
- [22] Hair, J., Hollingsworth, C. L., Randolph, A. B., and Chong, A. Y. L. (2017). An updated and expanded assessment of PLS-SEM in information systems research. *Industrial Management & Data Systems*, 117(3), 442-458. <https://doi.org/10.1108/IMDS-04-2016-0130>
- [23] Hair, J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M., and Thiele, K. O. (2017). Mirror, mirror on the wall: A comparative evaluation of composite-based structural equation modeling methods. *Journal of the Academy of Marketing Science*, 45(5), 616-632. <https://doi.org/10.1007/s11747-017-0517-x>
- [24] Hajli, N., Sims, J., Zadeh, A. H., and Richard, M. O. (2017). A social commerce investigation of the role of trust in a social networking site on purchase intentions. *Journal of Business Research*, 71, 133-141. <https://doi.org/10.1016/j.jbusres.2016.10.004>
- [25] Hardies, K. (2019). Personality, social norms, and sexual harassment in the workplace. *Personality and Individual Differences*, 151.
- [26] Hassanein, K., and Head, M. (2005). The impact of infusing social presence in the web interface: An investigation across product types. *International*

- Journal of Electronic Commerce*, 10(2), 31-55. <https://doi.org/10.2753/JEC1086-4415100202>
- [27] He, W., and Wei, K. K. (2009). What drives continued knowledge sharing? An investigation of knowledge-contribution and -seeking beliefs. *Decision Support Systems*, 46(4), 826-838.
- [28] Hilverda, F., Kuttuschreuter, M., and Giebels, E. (2017). Social media mediated interaction with peers, experts and anonymous authors: Conversation partner and message framing effects on risk perception and sense-making of organic food. *Food Quality and Preference*, 56(Part A), 107-118. <https://doi.org/10.1016/j.foodqual.2016.09.003>
- [29] Hsu, C. L., and Lin, J. C. C. (2008). Acceptance of blog usage: The roles of technology acceptance, social influence and knowledge sharing motivation. *Information & Management*, 45(1), 65-74. <https://doi.org/10.1016/j.im.2007.11.001>
- [30] Hsu, M. H., Ju, T. L., Yen, C. H., and Chang, C. M. (2007). Knowledge sharing behavior in virtual communities: The relationship between trust, self-efficacy, and outcome expectations. *International Journal of Human-Computer Studies*, 65(2), 153-169. <https://doi.org/10.1016/j.ijhcs.2006.09.003>
- [31] Hu, T. E., Luo, X. R., Dai, H., and Zhang, X. (2021). Developing a value assessment framework of habitual social media use: A grounded theory approach. *Journal of Electronic Commerce Research*, 22(2), 128-154.
- [32] Idris, S., and Mohezar, S. (2019). Sustaining businesses in a global turbulent environment: The role of information sharing. *Management & Accounting Review*, 18(1), 25-40. <https://doi.org/10.24191/mar.v18i1.763>
- [33] Kaplan, A. M., and Haenlein, M. (2010). Users of the world, unite! The challenges and opportunities of social media. *Business Horizons*, 53(1), 59-68. <https://doi.org/10.1016/j.bushor.2009.09.003>
- [34] Kaushik, K., Kumar Jain, N., and Kumar Singh, A. (2018). Antecedents and outcomes of information privacy concerns: Role of subjective norm and social presence. *Electronic Commerce Research and Applications*, 32, 57-68. <https://doi.org/10.1016/j.elerap.2018.11.003>
- [35] Koohikamali, M., Gerhart, N., and Mousavizadeh, M. (2015). Location disclosure on LB-SNAs: The role of incentives on sharing behavior. *Decision Support Systems*, 71, 78-87. <https://doi.org/10.1016/j.dss.2015.01.008>
- [36] Kurtz, O. T., Wirtz, B. W., and Langer, P. F. (2021). An empirical analysis of location-based mobile advertising—determinants, success factors, and moderating effects. *Journal of Interactive Marketing*, 54, 69-85. <https://doi.org/10.1016/j.intmar.2020.08.001>
- [37] Kusumastuti, R. D., Nurmala, N., Rouli, J., and Herdiansyah, H. (2022). Analyzing the factors that influence the seeking and sharing of information on the smart city digital platform: Empirical evidence from Indonesia. *Technology in Society*, 68, 101876. <https://doi.org/10.1016/j.techsoc.2022.101876>
- [38] Kuttuschreuter, M., and Hilverda, F. (2019). “Listen, did you hear...?” A structural equation model explaining online information sharing on the risks of nanotechnology in food. *Food Quality and Preference*, 76, 118-132. <https://doi.org/10.1016/j.foodqual.2019.03.011>
- [39] Lee, J. H., Joo, D., Lee, C. K., Parkt, Y. N., and Kwon, Y. J. (2022). The role of residents’ sustainable intelligence in agricultural heritage site management: Insights from PLS-SEM and Fs/QCA. *Journal of Hospitality and Tourism Management*, 52, 65-74. <https://doi.org/10.1016/j.jhtm.2022.06.004>
- [40] Li, K., and Du, T. C. (2012). Building a targeted mobile advertising system for locationbased services. *Decision Support Systems*, 54(1), 1-8. <https://doi.org/10.1016/j.dss.2012.02.002>
- [41] Li, X., Hess, T.J., and Valacich, J. S. (2008). Why do we trust new technology? A study of initial trust formation with organizational information systems. *The Journal of Strategic Information Systems*, 17, 39-71. <https://doi.org/10.1016/j.jsis.2008.01.001>
- [42] Liang, T. P., Ho, Y. T., Li, Y. W., and Turban, E. (2011). What drives social commerce: The role of

- social support and relationship quality. *International Journal of Electronic Commerce*, 16(2), 69-90. <https://doi.org/10.2753/JEC1086-4415160204>
- [43] Lin, X., Featherman, M., and Sarker, S. (2017). Understanding factors affecting users' social networking site continuance: A gender difference perspective. *Information & Management*, 54(3), 383-395. <https://doi.org/10.1016/j.im.2016.09.004>
- [44] Lin, X., and Wang, X. (2020). Examining gender differences in people's information-sharing decisions on social networking sites. *International Journal of Information Management*, 50, 45-56. <https://doi.org/10.1016/j.ijinfomgt.2019.05.004>
- [45] Liu, J., Thomas, J. M., and Higgs, S. (2019). The relationship between social identity, descriptive social norms and eating intentions and behaviors. *Journal of Experimental Social Psychology*, 82, 217-230. <https://doi.org/10.1016/j.jesp.2019.02.002>
- [46] Liu, P., Segovia, M., Tse, E. C. Y., and Nayga, R. M. (2022). Become an environmentally responsible customer by choosing low-carbon footprint products at restaurants: Integrating the elaboration likelihood model (ELM) and the theory of planned behavior (TPB). *Journal of Hospitality and Tourism Management*, 52, 346-355.
- [47] Lu, B., Fan, W., and Zhou, M. (2016). Social presence, trust, and social commerce purchase intention: An empirical research. *Computers in Human Behavior*, 56, 225-237. <https://doi.org/10.1016/j.chb.2015.11.057>
- [48] Lu, B., Zeng, Q., and Fan, W. (2016). Examining macro-sources of institution-based trust in social commerce marketplaces: An empirical study. *Electronic Commerce Research and Applications*, 20, 116-131. <https://doi.org/10.1016/j.elerap.2016.10.004>
- [49] Mao, Z., Jones, M. F., Li, M., Wei, W., and Lyu, J. (2020). Sleeping in a stranger's home: A trust formation model for Airbnb. *Journal of Hospitality and Tourism Management*, 42, 67-76. <https://doi.org/10.1016/j.jhtm.2019.11.012>
- [50] McKnight, D. H., Choudhury, V., and Kacmar, C. (2002). Developing and validating trust measures for e-commerce: An integrative typology. *Information Systems Research*, 13(3), 334-359. <https://doi.org/10.1287/isre.13.3.334.81>
- [51] McKnight, D. H., Cummings, L. L., and Chervany, N. L. (1998). Initial trust formation in new organizational relationships. *Academy of Management Review*, 23(3), 473-490. <https://doi.org/10.2307/259290>
- [52] Minton, E. A., Spielmann, N., Kahle, L. R., and Kim, C.-H. (2018). The subjective norms of sustainable consumption: A cross-cultural exploration. *Journal of Business Research*, 82, 400-408. <https://doi.org/10.1016/j.jbusres.2016.12.031>
- [53] Mishra, D., Akman, I., and Mishra, A. (2014). Theory of reasoned action application for green information technology acceptance. *Computers in Human Behavior*, 36, 29-40. <https://doi.org/10.1016/j.chb.2014.03.030>
- [54] Munnukka, J., Talvitie-Lamberg, K., and Maity, D. (2022). Anthropomorphism and social presence in Human - Virtual service assistant interactions: The role of dialog length and attitudes. *Computers in Human Behavior*, 135. <https://doi.org/10.1016/j.chb.2022.107343>
- [55] Newman, A., Kiazad, K., Miao, Q., and Cooper, B. (2014). Examining the cognitive and affective trust-based mechanisms underlying the relationship between ethical leadership and organizational citizenship: A case of the head leading the heart. *Journal of Business Ethics*, 123(1), 113-123. <https://doi.org/10.1007/s10551-013-1803-2>
- [56] Park, C. W., Sutherland, I., and Lee, S. K. (2021). Effects of online reviews, trust, and picture-superiority on intention to purchase restaurant services. *Journal of Hospitality and Tourism Management*, 47, 228-236. <https://doi.org/10.1016/j.jhtm.2021.03.007>
- [57] Park, S. (2020). Multifaceted trust in tourism service robots. *Annals of Tourism Research*, 81, 102888. <https://doi.org/10.1016/j.annals.2020.102888>
- [58] Pavlou, P. A., and Gefen, D. (2004). Building effective online marketplaces with institution-based trust. *Information Systems Research*, 15(1), 37-59.

- [59] Raines, C. (2013). In-App mobile advertising: Investigating consumer attitudes towards pull-based mobile advertising amongst young adults in the UK. *Journal of Promotional Communications*, 1(1), 125-148.
- [60] Shareef, M. A., Mukerji, B., Alryalat, M. A. A., Wright, A., and Dwivedi, Y. K. (2018). Advertisements on Facebook: Identifying the persuasive elements in the development of positive attitudes in consumers. *Journal of Retailing and Consumer Services*, 43, 258-268. <https://doi.org/10.1016/j.jretconser.2018.04.006>
- [61] Shen, Y., Jo, W., and Joppe, M. (2022). Role of country image, subjective knowledge, and destination trust on travel attitude and intention during a pandemic. *Journal of Hospitality and Tourism Management*, 52, 275-284. <https://doi.org/10.1016/j.jhtm.2022.07.003>
- [62] Short, J., Williams, E., and Christie, B. (1976). *The Social Psychology of Telecommunications*. London: John Wiley and Sons.
- [63] Singh, S., Olson, E. D., and Tsai, C. H. (2021). Use of service robots in an event setting: Understanding the role of social presence, eeriness, and identity threat. *Journal of Hospitality and Tourism Management*, 49, 528-537. <https://doi.org/10.1016/j.jhtm.2021.10.014>
- [64] Souza, A. A. C. d., d'Angelo, M. J., and Lima Filho, R. N. (2022). Effects of predictors of citizens' attitudes and intention to use open government data and government 2.0. *Government Information Quarterly*, 39(2), 101663. <https://doi.org/10.1016/j.giq.2021.101663>
- [65] Spence, J. T., and Helmreich, R. (1980). Masculine instrumentality and feminine expressiveness: Their relationships with sex role attitudes and behaviors. *Psychology of Women Quarterly*, 5(2), 147-163. <https://doi.org/10.1111/j.1471-6402.1980.tb00951.x>
- [66] Srivastava, S. C., and Chandra, S. (2018). Social presence in virtual world collaboration: An uncertainty reduction perspective using a mixed methods approach. *MIS Quarterly*, 42(3), 779-803.
- [67] Tseng, S. M., and Lee, M. C. (2016). A study on information disclosure, trust, reducing search cost, and online group-buying intention. *Journal of Enterprise Information Management*, 29(6), 903-918. <https://doi.org/10.1108/JEIM-07-2015-0063>
- [68] Tseng, T. H., Wang, Y. M., Lin, H. H., Lin, S. J., Wang, Y. S., and Tsai, T. H. (2022). Relationships between locus of control, theory of planned behavior, and cyber entrepreneurial intention: The moderating role of cyber entrepreneurship education. *The International Journal of Management Education*, 20(3), 100682. <https://doi.org/10.1016/j.ijme.2022.100682>
- [69] Venkatesh, V., and Morris, M. G. (2000). Why don't men ever stop to ask for directions? Gender, social influence, and their role in technology acceptance and usage behavior. *MIS Quarterly*, 24(1), 115-139.
- [70] Venkatesh, V., Morris, M. G., and Ackerman, P. L. (2000). A longitudinal field investigation of gender differences in individual technology adoption decision-making processes. *Organizational Behavior and Human Decision Processes*, 83(1), 33-60. <https://doi.org/10.1006/obhd.2000.2896>
- [71] Venkatesh, V., Morris, M. G., Davis, G. B., and Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly*, 27(3), 425-478.
- [72] Wang, X., Lin, X., and Spencer, M. K. (2019). Exploring the effects of extrinsic motivation on consumer behaviors in social commerce: Revealing consumers' perceptions of social commerce benefits. *International Journal of Information Management*, 45, 163-175. <https://doi.org/10.1016/j.ijinfomgt.2018.11.010>
- [73] Waung, M., McAuslan, P., and Lakshmanan, S. (2021). Trust and intention to use autonomous vehicles: Manufacturer focus and passenger control. *Transportation Research Part F: Traffic Psychology and Behaviour*, 80, 328-340. <https://doi.org/10.1016/j.trf.2021.05.004>
- [74] Xu, X., Huang, D., and Shang, X. (2021). Social presence or physical presence? Determinants of purchasing behaviour in tourism live-streamed shopping. *Tourism Management Perspectives*, 40, 100917. <https://doi.org/10.1016/j.tmp.2021.100917>

-
- [75] Xu, X., Wang, X., Li, Y., and Haghghi, M. (2017). Business intelligence in online customer textual reviews: Understanding consumer perceptions and influential factors. *International Journal of Information Management*, 37(6), 673-683. <https://doi.org/10.1016/j.ijinfomgt.2017.06.004>
- [76] Yoon, A., and Kim, Y. (2017). Social scientists' data reuse behaviors: Exploring the roles of attitudinal beliefs, attitudes, norms, and data repositories. *Library & Information Science Research*, 39(3), 224-233. <https://doi.org/10.1016/j.lisr.2017.07.008>
- [77] Youn, H., Xu, J., and Kim, J. H. (2021). Consumers' perceptions, attitudes and behavioral intentions regarding the symbolic consumption of auspiciously named foods. *International Journal of Hospitality Management*, 98, 103024. <https://doi.org/10.1016/j.ijhm.2021.103024>
- [78] Zamani-Miandashti, N., Memarbashi, P., and Khalighzadeh, P. (2013). The prediction of Internet utilization behavior of undergraduate agricultural students: An application of the theory of planned behavior. *The International Information & Library Review*, 45(3-4), 114-126. <https://doi.org/10.1016/j.iilr.2013.10.003>
- [79] Zheng, X., Zhu, S., and Lin, Z. (2013). Capturing the essence of word-of-mouth for social commerce: Assessing the quality of online e-commerce reviews by a semi-supervised approach. *Decision Support Systems*, 56, 211-222. <https://doi.org/10.1016/j.dss.2013.06.002>

◆ About the Authors ◆



Shu-Mei Tseng

Shu-Mei Tseng is a professor in the department of hospitality management at I-Shou University, Taiwan. She received her Ph.D. in the Department of Industrial and Information Management at National Cheng Kung University, Taiwan. Her works have been published in *International Journal of Information Management*, *International Journal of Production Economics*, *Journal of Knowledge Management*, *Journal of Retailing and Consumer Services*, *Expert Systems with Applications*, *Journal of Enterprise Information Management*, *Industrial Management and Data Systems*, *International Journal of Quality and Service Sciences*, and *Management Research News*. Her current research interests include knowledge management, information technology management, customer relationship management, and service quality.

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