

Effects of User Perception Factors on Social Network Website Loyalty

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Abstract

The popularity of social networking websites has been a focus of research in various disciplines to examine its social impact from different vantage points. This study used Facebook, a leading social networking platform, as the target to explore the direct and indirect user perception factors contributing to user website loyalty. We assessed how the fun factor, suggested by O'Reilly as one of the major defining characteristics of Web 2.0, directly affected social presence, perceived privacy risk, self-disclosure, and website. We also investigated the indirect impacts of social presence, perceived privacy risk, and self-disclosure to establish a chain of effects leading to website loyalty. A web-enabled questionnaire survey collected the perception of Facebook users in Taiwan. After assessing the appropriateness of research data with Common Method Variance analysis, reliability analysis, and validity analysis, the study examined the cause-effect relationships between the research constructs with the structural equations modeling software AMOS. The analysis validated four dimensions of the theoretical model: (1) the positive direct effect of enjoyment on social presence as well as website loyalty, and indirect effect of enjoyment on perceived privacy risk and self-disclosure through social presence, (2) the negative impact of social presence on perceived privacy risk and positive impact of social presence on self-disclosure, (3) the negative impact of perceived privacy risk on self-disclosure, and (4) positive impact of self-disclosure on website loyalty. The article concludes with theoretical implications of our findings and lessons learned for practicing managers.

Key Phrases: Website Loyalty, Social Media, Enjoyment, Social Presence, Self-Disclosure, Privacy Risk Perception

Introduction

Website loyalty is an issue of great concern to many business decision-makers operating in the Web-centric world. A well-managed company website engages online visitors in a meaningful and productive manner. The challenges imposed by the COVID pandemic have further made the value of Web-enabled, online interaction capabilities more evident than ever before as an essential source of competitive advantage (Balasubramanian et al., 2022).

The rapid growth of social networking service adoption and the profound impacts on significant aspects of human society have prompted researchers in various disciplines to examine the phenomenon from different vantage points, both as the target and the study instrument. At least two significant developments in e-business are working jointly to justify social media management's central role in business operations: social commerce and website-centric business operations. Social commerce relies on frequent interactions with customers by incorporating social networking in a company's e-commerce website to create business value for the company and customers. The company website serves as a convenient instrument for customer relationship management throughout the product's life cycle. Website loyalty, if appropriately managed, may lead to brand loyalty to many businesses.

Websites are increasingly becoming viable alternatives to physical places for social interactions and business activities. Information flowing through Web 2.0 websites now has an intricate impact on virtually all human society aspects (O'Reilly, 2007). Unconstrained by fundamental physical dimensions of time and space, these interactive websites have repeatedly demonstrated the ability to challenge the status quo of such important human activities as customer relationship management and politics. About 3.96 billion people worldwide are already using social media in 2021 (Dean, 2021). Since the trend is likely to continue, the impacts are deep and wide in transforming business operations.

Why do so many people gravitate toward websites in general and social media websites in particular? What are the user perception factors that contribute to the success of social networking services? It would just be a fad and may quickly fade away if it is not much more than a mere random phenomenon. However, these social networking services will continue to profoundly influence the physical world if there are sustainable reasons that systematically justify users' usage behaviors in using social networking services. In search of a framework for assessing website loyalty in general and social networking websites in particular from user points of view, this multidisciplinary study reviews literature in information systems, educational psychology, computer-mediated communication, and digital marketing for guidance to identify the factors that may have a significant effect on users' website loyalty.

Since Facebook is the leading choice of social networking platform with more than 2.7 billion monthly active users worldwide (Statista, 2021), this study collects data from Facebook users to evaluate their causal relationships between the research variables. Besides exploring how website loyalty is affected by four antecedents (enjoyment, social presence, perceived privacy risk, and self-disclosure), we also validate the relationships among these antecedents of website loyalty.

In the next section, we briefly introduce the five research constructs this study addresses and discuss how they are logically related to website loyalty and each other. These relationships are the research hypotheses that serve as the building blocks of our research framework. We then describe the method of data collection and data analysis. After presenting the findings and results of hypotheses testing in the subsequent section, the article concludes with theoretical implications and suggests lessons for practicing managers.

Enjoyment

The notion of enjoyment has received much attention in numerous fields as a factor in understanding human behavior. In education and cognitive psychology, a common thought of these inquiries is that the "fun factor" is crucial for retaining learners' attention for an extended time in their work or play activities. For example, an educational psychologist, Lieberman (1977), believed that playfulness is closely related to young children's imagination and creativity. When linked to adult behavior, combinatorial play and associative play appeared to be significant ingredients of creative thoughts. To validate this hypothesis, Barnett (1990, 1991) conducted a series of controlled experiments to delineate the nature of playfulness as a personality trait and the correlation with individual attributes and personality traits.

Information system research primarily views playfulness as a user perception of fun in using an information system. This view essentially shifts the focus from people or technology as separate entities to people-technology interactions to extend the technology acceptance model by including the interactive user interface (Moon & Kim, 2001). In O'Reilly's paper (2007), the first initiative that defines Web 2.0, harnessing collective intelligence, constitutes a crucial capability of the platforms that facilitate the new wave of computing. It is evident that a constant flow of ideas resulting from active user participation, fueled by the fun factor, is required to generate valuable user-supplied content.

The hedonic aspect of user-system interaction is a research variable in many research projects. Jih & Lee (2004), for example, explored how cellular phone users' lifestyles related to their shopping motivators. Enjoyment was a significant element of the lifestyle variable. Fiore, et al. (2005) evaluated website design approaches and experimentally examined the effects of image interactivity and responses on an online store's hedonic value. Heijden (2004) also proposed that "the value of a hedonic system is a function of the degree to which the user experiences fun when using the system (p. 696)." This study revealed the significant role of perceived enjoyment in determining users' intention to use the technology. The notion that enjoyment should be a substantial factor in the technology adoption model is supported by Wang & Scheepers (2012) in a unified research model consolidating hedonic theory, flow theory, and technology acceptance model. These research efforts attempt to delineate the interplays of the variables associated with web-based system users' usage behaviors.

Enjoyment also has received much attention in empirical research addressing social media usage. Moon & Kim (2001) re-evaluated the technology acceptance model in the Web context and discovered that perceptions of playfulness significantly influenced user attitudes toward using the Web. Scheepers et al. (2014) surveyed Indonesian college students to determine significant theoretical constructs contributing to community sense. Along with information seeking and two sociological factors (sustaining strong ties and extending weak ties), hedonic behavior appeared to impact community sense. They also found that the influence of playfulness seemed to be depending on the context of system use. In a survey conducted to address political and civic concerns of Facebook users in Texas, Park, et al. (2009) found that entertainment gratification did not significantly influence the use of Facebook. In the context of online shopping, Wiese (2021) identified the enjoyment and usefulness of Facebook users in South Africa as the most important predictors of shopping on Facebook.

As businesses compete to win over and retain customer attention through developing better relationships with new and existing customers, building enjoyment into the web user experience appears to be a design imperative of strategic significance. We postulate that enjoyment directly impacts website loyalty and indirectly impacts other factors such as social presence, perceived privacy risk, and self-disclosure. The following four hypotheses represent these relationships.

- H1: Enjoyment positively affects social presence.
- H2: Enjoyment negatively affects privacy risk perception.
- H3: Enjoyment positively affects self-disclosure.
- H4: Enjoyment positively affects website loyalty.

Social Presence

Short, et al. (1976) first investigated the notion of social presence from a social psychology perspective. They conducted a series of lab experiments to compare various communication media and confirmed that it is appropriate to view social presence as a subjective characteristic of a communication medium. Users perceive different levels of social presence with different media. Researchers in various academic fields have since further examined the concept of social presence to develop it into a more robust theory. Most of the follow-up works appeared in computer-mediated communication (C.M.C.) and online education literature. Information systems studies also addressed social presence in the research designs, either as an independent variable or a dependent variable (e.g., Han, et al., 2015; Cyr, et al., 2007).

The emphasis of C.M.C. is on building a broader theory of social presence than initially proposed. Biocca, Harms & Burgoon (2003) reviewed and critically commented on existing views and offered a set of criteria and scope conditions to serve as the foundation for a more robust theory and measure of social presence. Research in this direction aims to enhance social presence in a networked world. A notable example is that one should not simply view social presence as a stable property of the medium but as a dynamic aspect of individuals' subjective feelings interacting with the mediated others. Remesal & Colomina's learning presence (2013) integrates social presence in their inquiry of learners' interactions via network technologies.

Social presence in various contexts is an independent variable in education research, such as collaborative works and community. According to Oztok et al. (2015), the mainstream thinking of social presence research in education has gone through three phases over time. At first, the focus was mainly on the media properties commonly held in social psychology. Then the focus shifted to more on the people and less on the media in the second phase.

In the third phase, the focus was on interactive activities and online learning community development. Currently, online education researchers primarily regard social presence as "the degree to which individuals represent themselves and perceive others in mediated environments" (Oztok, 2015. p. 20). Consistent with the C.M.C. research, research in online education holds that individuals dynamically reconstruct their sense of social presence when they engage with others within a mediated context (Kehrwald, 2010). These findings are particularly relevant when remote communication plays a central role in adapting to the lockdown forced by the Covid-19 pandemic.

Several research projects in information systems and marketing employ social presence in the research model to evaluate its impact on the variables that are significant in the context of website-mediated activities such as e-service and online shopping. An early study conducted by Fulk et al. (1987) defined social presence as how a communication medium used to process business transactions allows users to experience the other parties involved in the transaction as being psychologically present. Several empirical studies examined the effect of social presence on constructs associated with brand loyalty. For example, Hassanein and Head (2006) found that higher user perceptions of social presence on websites contributed to higher levels of trust placed in the vendor. Based on these and other research, Cyr, et al. (2007) found that social presence positively contributed to three important success measures of e-service: trust, e-loyalty, and perceived usefulness.

This study formulates three hypotheses to research how social presence relates to user experience variables such as privacy risk perception, self-disclosure, and website loyalty.

H5: Social presence negatively affects privacy risk perception.

H6: Social presence positively affects self-disclosure.

H7: Social presence positively affects website loyalty.

Privacy Risk Perception

Most popular social networking platforms serve the global community. Contents posted by a user account usually are accessible to the general public by default. Without any extra effort on the user's part to characterize the content as private, the information usually is available to and accessible by the general public, abusers or misusers included. Moreover, public and personal information is usually physically stored in the service provider's servers cloud. Social media service providers can implement policies and algorithms to identify and mitigate potential privacy violations (Beigi & Liu, 2018). Because of the complex and dynamic nature of user-generated content and privacy violation patterns, social media users can still not assume that their favorite social networking platform is without risk. Ethical issues regarding unauthorized access to users' sensitive information have been discussed at all levels – individual, organizational, and societal. Users often learn from their own experiences and public reports about the privacy risk and may become cautious about disclosing their personal information. Tsay-Vogel et al. (2018) found that heavy users of Facebook tended to be more conscious than light users about privacy risks. In other words, the negative relationship between privacy concerns and self-disclosure weakened over time, indicating that education/training is an effective strategy for protecting users' information privacy. The following two hypotheses express the negative impact of users' privacy risk perception on their self-disclosure behavior and website loyalty.

H8: Privacy risk perception negatively affects self-closure.

H9: Privacy risk perception negatively affects website loyalty.

Self-Disclosure

Social media provides a convenient platform for subscribers worldwide to connect. Users post rich content that characterizes life, belief, social or political causes or spread the posts they receive from other users. Self-disclosure is a significant aspect of social media content that enables researchers to investigate human behavior and validate theories from various perspectives. A study conducted in Australia by Henderson & Gilding (2004) interviewed internet users to hyperpersonal communication consequences based on Sztompkas' theoretical framework, suggesting four primary online trust sources: reputation, performance, pre-commitment, and structural factors. The findings confirmed that users were willing to reveal themselves to earn trust and strengthen relationships with others, even with privacy risks. In a study conducted to examine the stress-buffering effect of self-disclosure on Facebook users' perceived social support and mental health among college students in Hong Kong, Zhang (2017) found that honest disclosure may reveal their flaws and make one less trusted by their friends. More research will reconcile these conflicting conclusions.

Well-studied theories exist that address the impact of message exposure on message recipients. Cultivation theory (Mosharafa, E. 2015) postulates that heavy exposure to common message themes delivered on a communication media such as television results in common social reality perceptions among the message recipients. According to a study conducted by Park et al. (2011), social media users share personal information in the hope of nurturing intimate relationships. Drawing from the incremental exchange theory (Levinger & Snoek, 1972) and the social exchange theory (Altman & Taylor, 1973), this study found that intimacy is attributable to self-disclosure amount and positivity, but not necessarily self-disclosure honesty and intent. These inconsistent research findings suggest the complex contextual nature of self-disclosure in social media usage. Our study hypothesized that self-disclosure is both a dependent and independent variable to explore the role of self-disclosure in social media users' website loyalty, as outlined in the following hypothesis statements.

H3: Enjoyment positively affects self-disclosure.

H6: Social presence positively affects self-disclosure.

H8: Privacy risk perception negatively affects self-closure.

H10: Self-disclosure negatively affects website loyalty.

Website Loyalty

Visitors to a website essentially are customers of the service/information provider. Typically, numerous websites in any sector exist and compete for user attention. Website loyalty refers to customer loyalty to a website for online shopping, information acquisition or exchange, learning, or social networking. Often viewed as a significant performance indicator in the Internet-enabled business, website loyalty has received much attention in various research contexts. Both internal and external factors can affect website loyalty. Internally, for example, an engaging website is easy to use. Other factors, such as website interactivity, also are significant. A questionnaire survey conducted by Jih et al. (2010) confirmed the positive effect of website interactivity on online shoppers' website loyalty. The study employed confirmatory factor analysis and structural equation modeling to reveal a cause-effect relationship between website interactivity and loyalty. Social presence is another example characteristic of a website as a communication medium. Research conducted by Cyr et al. (2007) investigated the role of social presence in establishing shoppers' Loyalty to the website and found a significant role in online shoppers' Loyalty to the e-commerce website. Chen et al. (2017) also found that, among other factors, social capital significantly contributed to buyers' Loyalty to a consumer-to-consumer platform. Since social capital is partially a function of a website's network effect, it may be associated with something external to the website.

Marketing research had emphasized customer loyalty's strategic value for the overall business performance even before the Internet era. For online marketing, website loyalty often represents customer loyalty. Customer loyalty is valuable, for it can lead to repeat purchasing. However, as Jacoby & Kyner (1973) pointed out, although loyal customers tend to purchase repetitively, those who buy repetitively do not necessarily do so out of their brand loyalty, such as what might happen in the scenario of lacking an alternative offering. Customer loyalty usually results from satisfaction with the product or service received from the seller. This phenomenon is applicable in both physical economy and Internet-enabled online commerce. In light of the importance of customer loyalty to a firm's success, researchers have continued to examine the nature of and factors affecting customer loyalty. Early views of brand loyalty almost exclusively emphasized the customer behavior of repeat purchases over some time (Brown, 1952; Cunningham, 1956; Lipstein, 1959; Kuehn, 1962; Newman & Werbel, 1973; Reynolds & Darden, 1974; Monroe & Guiltinan, 1975). Some research contended that customer loyalty and repeat purchase are not equal (e.g., Dick & Basu, 1994). This latter view suggests that, when examining the impact of customer loyalty on the company's marketing performance, one must make a distinction between behavioral and attitudinal aspects of the concept (Chaudhuri and Holbrook, 2001; Jacoby and Kyner, 1973; Lim and Razzaque, 1997; Dick and Basu, 1994). However, most research still views customer loyalty as a customer's intention to purchase to measure convenience.

An example is online shopping, in which customers may visit websites to gather information but purchase offline. For this reason, Cyr et al. (2007) defined e-loyalty as "perceived loyalty toward an online service provider, as opposed to loyal behavior, such as repeat visits/purchase (p. 45)." For our study of the social network website, we adopted this general concept of customer loyalty as the intention of repeated visits.

After reviewing the related literature, we consolidated these five variables and constructed a theoretical model to highlight the five constructs' relationships. As summarized below, the theoretical model was then statistically validated by testing the research hypotheses.

- H1: Enjoyment positively affects social presence.
- H2: Enjoyment negatively affects privacy risk perception.
- H3: Enjoyment positively affects self-disclosure.
- H4: Enjoyment positively affects website loyalty.
- H5: Social presence negatively affects privacy risk perception.
- H6: Social presence positively affects self-disclosure.
- H7: Social presence positively affects website loyalty.
- H8: Privacy risk perception negatively affects self-closure.
- H9: Privacy risk perception negatively affects website loyalty.
- H10: Self-disclosure negatively affects website loyalty.

In this study, the variable enjoyment measures the perceived degree to which website users enjoy using the website. Social presence refers to the degree to which a communication medium used to process a business transaction or engage in online communications allows users to experience the other parties involved in the trade as psychologically present. Perceived privacy risk represents the level of user stressfulness caused by the perceived possibility of the information privacy breach. Self-disclosure is "the act of revealing personal information to others" (Jourard, 1971, p. 2). And, website loyalty is users' loyalty to a website for online shopping, information acquisition or exchange, learning, or social interactions.

Figure 1 graphically depicts the research variables and their hypothesized relationships.

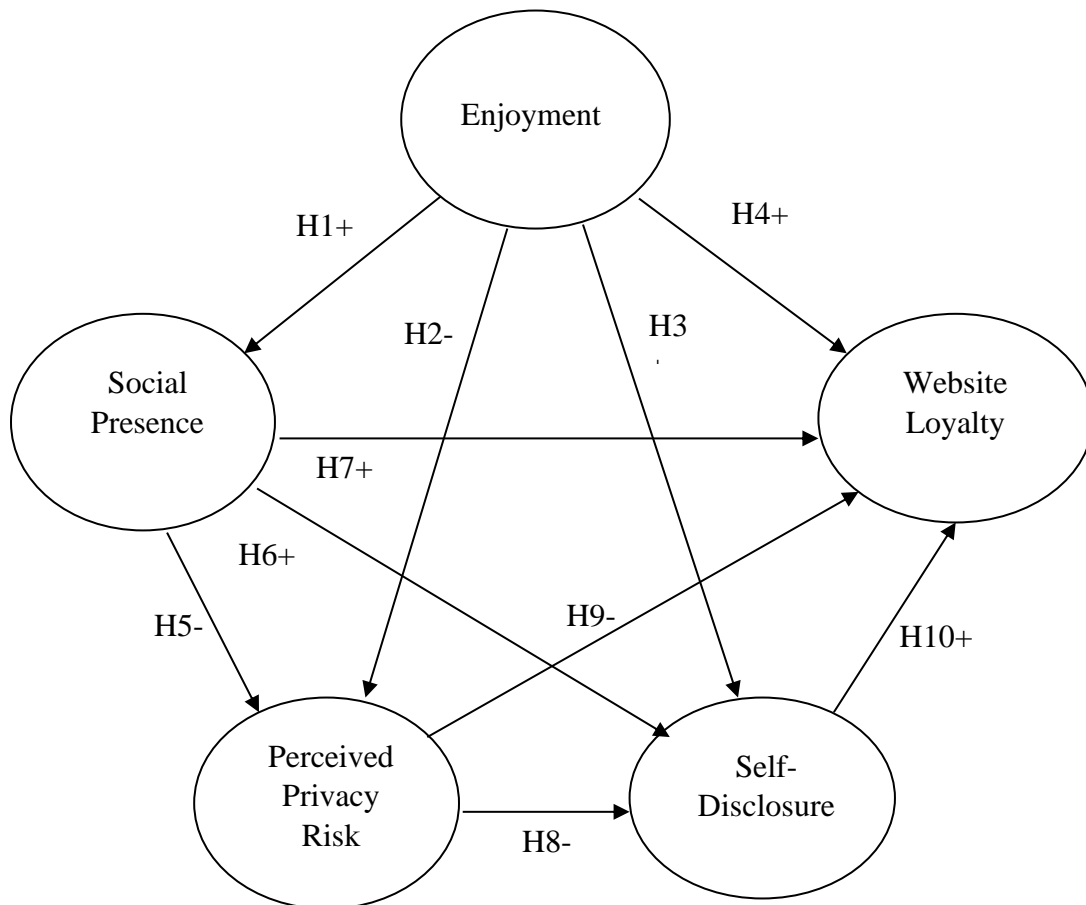


Figure 1: Research Model

Research Method

We surveyed Facebook users in Taiwan to collect their responses to questions designed to measure each research variable and test the theoretical model with structural equation modeling (a combination of factor analysis and multiple regression analysis). Asian countries and regions embrace the Internet as an essential economic and technological development strategy. As of June 2019, with 55 % of the world population in Asia, about 50.7% of the population had access to the Internet. Social networking service ranks high in the Internet services usage list. Facebook is the leading social networking website among Asian Internet users (Internet World Stats, 2019). In Taiwan, the percentage of social media users is around 98%, more than all other social media users.

Non-response bias may result when users fill out and return the questionnaire at different times. In this research, data collection spanned a period of nine-month. We split the data into distinct categories to see if a significant difference in demographical data (gender, age, occupation, and educational level) existed between those who responded before and after the mid-point date. We ran a Pearson χ^2 test for each demographical item and found no significant difference at the significance level of 1% (Table 1). We accept the assumption that non-response bias does not exist because of the data collection stretching over a range of 270 days (Armstrong & Overton, 2977).

Table 1: χ^2 Test for non-response bias

	Pearson χ^2 Test	Degree of Freedom	P-Value
Gender	0.885	1	0.347
Age	6.496	5	0.261
Occupation	5.044	4	0.283
Education	8.677	4	0.070

In the survey research, the spurious variance may arise when the different responders have different interpretations of the same questions represented by the common-method-variance (CMV) value. We pre-tested the questionnaire, modified the wordings to ensure clarity of the questions, and employed Harman's Test to help keep the CMV to the minimum.

A total of 313 completed questionnaires were returned and deemed effective in considerations of completeness and consistency. This sample consists of 48.6% of males, 51.4% of females; ages below 15 (2.6%), ages between 16 and 20 (25.2%), ages between 21 and 25 (42.2%), ages between 26 and 30 (18.2%), ages between 31 and 35 (9.9%), between 36 and 40 (1.9%). Responders identified themselves as a student (59.7%), business people (16.9%), or others (23.3%). Most responders have education level of college (81.5%), high school (10.5%), post-graduate (4.2%), and elementary school (1.9%). Regarding time spent on Facebook, 39.6% have used Facebook for more than one year, 29.4% 6 months to one year, and 22.4% more than 2 years. In the number of hours per day, 39% reported 1 to 3 hours, 3-6 hours (33.9%), more than 6 hours (17.3%), or less than 1 hour (9.9%).

Reliability and Validity Analyses

We evaluated the five research variables' discriminant validity and convergent validity in the theoretical model: Enjoyment, Social Presence, Privacy Risk Perception, Self-Disclosure, and Website Loyalty. Each research variable consists of three to five questions. According to Hair et al. (1998), each measurement question's squared multiple correlation coefficient (S.M.C.) value must be greater than 0.5 to be a valid measurement item. Fornell & Lacker suggest the average variance extracted (AVE) of a research dimension (variable) should be more than 0.5. The AVE values represent convergent validity and how the question items measure the same research construct. The discriminant validity of the data collection instrument is evaluated by comparing the average variance extracted from each of the two research variables with the correlation coefficient between these two variables. The two variables' discriminant validity is acceptable when their correlation coefficient is not greater than their individual average variance extracted values. Tables 2 and 3 show that the data collection instrument has satisfactory overall validity.

A standard measure of the instrument reliability is the Cronbach α value, and the acceptable level for field survey research is higher than 0.7 for questionnaire surveys. The Cronbach α value of each of the measurement constructs in this model is more than 0.85. The instrument, therefore, has satisfactory reliability.

Table 2: Reliability and Convergent Validity of Research Constructs

Research Constructs	Question Items	Standardized Coefficients	Cronbach's α	S.M. C.	Average Variance Extracted	Composite Reliability
Social Presence	This website is personable.	0.807	0.836	0.652	0.659	0.851
	This website is friendly.	0.908		0.824		
	I do not feel distanced with this website.	0.707		0.499		
Enjoyment	I found the information of this website interesting.	0.782	0.935	0.611	0.750	0.937
	I feel playful in using this website.	0.899		0.808		
	This website is entertaining.	0.927		0.860		
	This website is plenty of fun.	0.901		0.811		
	I enjoy my experience using this website.	0.813		0.660		
Perceived Privacy Risk	I have a concern about the inappropriate disclosure of my personal information.	0.857	0.930	0.734	0.775	0.932
	I believe personal privacy is at risk on this website.	0.914		0.835		
	I am anxious that someone may breach my privacy from this website.	0.924		0.853		
	I feel stressed about the possible leakage of personal privacy by this website.	0.823		0.678		
Self-Disclosure	I share information about my personal habits.	0.829	0.888	0.688	0.728	0.889
	I share my deep feelings.	0.895		0.801		
	I share important information about myself.	0.834		0.696		
Website Loyalty	I will continue to use this website.	0.826	0.929	0.682	0.821	0.932
	I recommend this website to my relatives and friends.	0.960		0.921		
	I compliment this website to others.	0.926		0.857		

Table 3: Discriminant Validity Assessment of Research Constructs

Constructs	Social Presence	Enjoyment	Perceived Privacy Risk	Self-Disclosure	Website Loyalty
Social Presence	0.659				
Enjoyment	0.349	0.750			
Perceived Privacy Risk	-0.058	-0.024	0.775		
Self-Disclosure	0.091	0.022	-0.067	0.728	
Website Loyalty	0.237	0.398	-0.006	0.098	0.821

Note: The diagonal shows Average Variance Extracted, and the other values are Correlation Coefficient Squared

Data Analysis and Findings

Table 4 summarizes, for each research variable, the average value, standard deviation, and the correlation coefficients between the two variables. Enjoyment, website loyalty, and social presence have averaged higher than 3. In contrast, average self-disclosure and privacy risk perception are smaller than 3, indicating that Facebook users in Taiwan are relatively loyal to Facebook and generally find Facebook enjoyable as a social networking platform. They also are satisfied with their experience level of social presence. However, the relatively low average privacy risk perception (2.612) and average self-disclosure value (2.766) suggest users remain conservative regarding disclosing sensitive, especially personal information. They do not seem to feel nervous about the lack of privacy protection.

Nine correlation coefficients are obtained for the five variables to show statistical correlation relationships between variables. Enjoyment positively correlates with social presence, self-disclosure, and website loyalty but negatively correlates with privacy risk perception. Social presence correlates positively with self-disclosure and website loyalty and negatively correlates with privacy risk perception. Privacy risk perception relates negatively to both self-disclosure and website loyalty. The correlation coefficient between self-disclosure and website loyalty is significantly positive. This expected shows users are more willing to disclose personal information if they trust the website.

Table 4: Constructs Correlation, Means, and Standard Deviations

Constructs	Enjoyment	Social Presence	Perceived Privacy Risk	Self-Disclosure	Website Loyalty	Mean	Standard Deviation
Enjoyment	1					3.773	0.841
Social Presence	0.591 (**)	1				3.346	0.819
Perceived Privacy Risk	-0.156 (**)	-0.241 (**)	1			2.612	0.948
Self-Disclosure	0.149 (**)	0.302 (**)	-0.262 (**)	1		2.766	0.816
Website Loyalty	0.624 (**)	0.487 (**)	-0.080	0.313 (**)	1	3.510	0.809

** : $p < 0.01$

We used the analysis of moment structures (AMOS) software, an SPSS added module, to perform a structural equation modeling test to determine the goodness-of-fit of the theoretical model. The analysis examined a total of ten cause-effect paths. Table 5 contains the standardized structural coefficients, the corresponding t-values, and five indices (G.F.I., AGFI, NFI, CFI, and RMSEA) that collectively determine the "fit" of the model. Given the variety of the research variables as well as the subjective nature of the responses, less than strict criteria were adopted to evaluation of model fit: GFI = 0.909, AGFI = 0.876, NFI = 0.942, CFI = 0.967, and RMSEA = 0.062). Since the model passes all five individual goodness-of-fit tests, it is reasonable to conclude that the theoretical model overall has a good fit in expressing the research variables' causal relationships.

As shown in Table 5, enjoyment has a significant and positive effect on social presence with a standardized structural coefficient of 0.626 and a t-value of 9.120. Hypothesis H1 is accepted. Enjoyment has a positive, significant effect on website loyalty, with a standardized structural coefficient of 0.536 and a t-value of 7.732. Hypothesis H4 is accepted. The effects of enjoyment on privacy risk perception and self-disclosure are rejected because of the insignificant standardized structural coefficients. Hypothesis H6 states that social presence positively affects self-disclosure. The hypothesis passes the significance test with a standardized structural coefficient of 0.360 and a t-value of 4.195. Hypothesis H8 states that privacy risk perception negatively affects self-disclosure and is accepted with a standardized structural coefficient of -0.197 and t-value of -3.257. Hypothesis 10 is also accepted: self-disclosure positively affects website loyalty (standardized structural coefficient = 0.244, t-value = 4.588). Hypotheses H2 (enjoyment \rightarrow privacy risk perception), H3 (Enjoyment \rightarrow Self-disclosure), H7 (Social Presence \rightarrow Website Loyalty), and H9 (Perceived Privacy Risk \rightarrow Website Loyalty) are rejected. All hypotheses testing has a significance level of 1%.

Table 5: Results of Theoretical Model Validation

Causal Path	Hypothesis	Expected Result	Theoretical Model	
			Standardized Structural Coefficient	t-value
Enjoyment → Social Presence	H1	+	0.626	9.120***
Enjoyment → Perceived Privacy Risk	H2	-	-0.018	-0.230
Enjoyment → Self-disclosure	H3	+	-0.115	-1.460
Enjoyment → Website Loyalty	H4	+	0.536	7.732***
Social Presence → Perceived Privacy Risk	H5	-	-.224	-2.702***
Social Presence → Self-Disclosure	H6	+	0.360	4.195***
Social Presence → Website Loyalty	H7	+	0.118	1.723
Perceived Privacy Risk → Self-Disclosure	H8	-	-0.197	-3.257***
Perceived Privacy Risk → Website Loyalty	H9	-	-0.091	-1.885
Self-Disclosure → Website Loyalty	H10	+	0.244	4.588***
Fit Indices	Criteria	Model Value	Fitness	
GFI	> 0.8	0.909	Good	
AGFI	> 0.8	0.876	Good	
NFI	> 0.8	0.942	Good	
CFI	> 0.9	0.967	Good	
RMSEA	< 0.08	0.062	Good	

***: $p < 0.01$

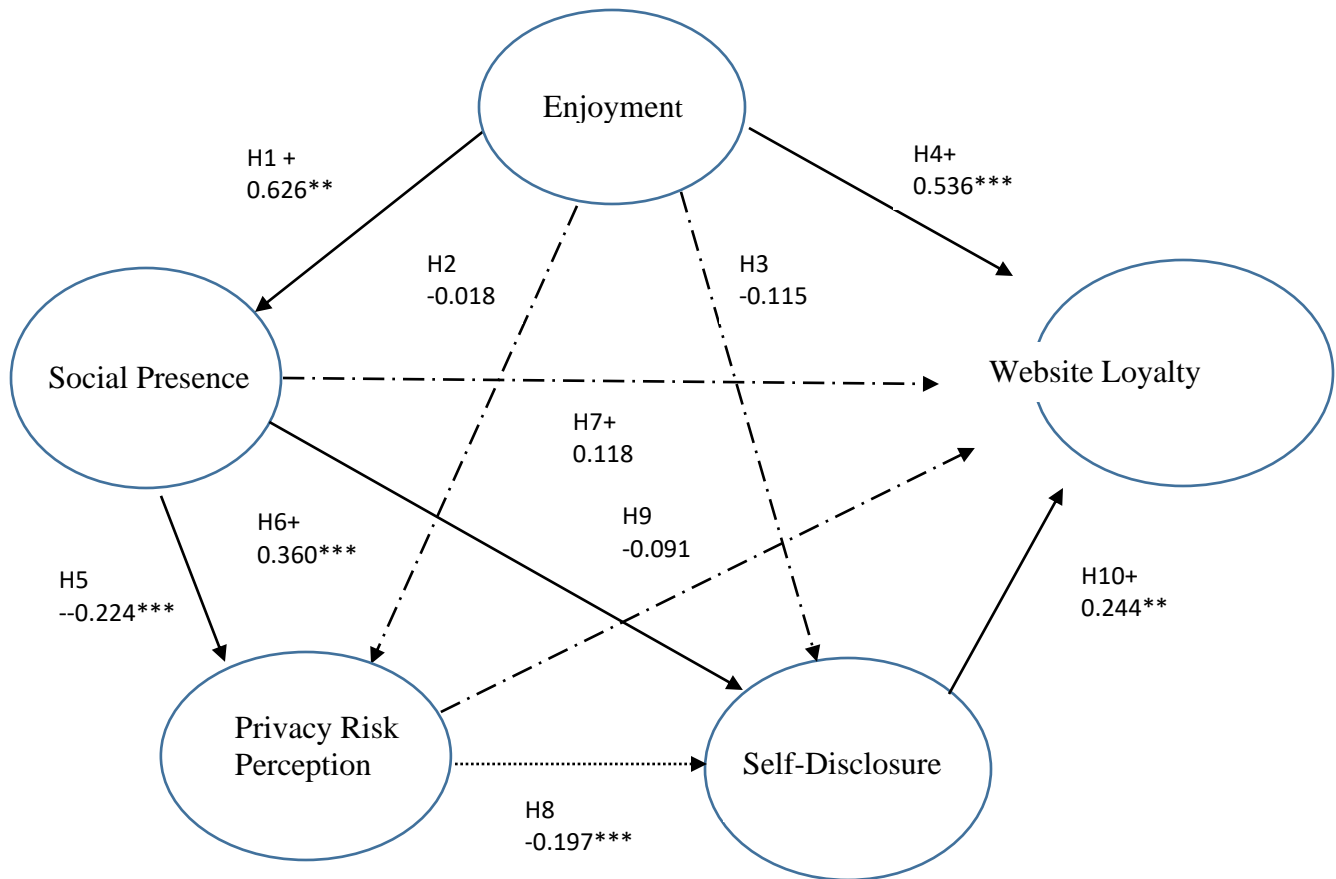


Figure 2: Result of Model Testing

Conclusions

Given the popularity among Internet users and the significant social impacts of social networking platforms, this study postulates a theoretical model to explore the role of enjoyment and other factors in general and social networking website loyalty in particular. In addition to the notion of enjoyment, the exploratory research model also encompasses self-disclosure, social presence, and privacy risk perception as significant factors contributing to website loyalty. Understanding user factors contributing to website loyalty is crucial in supporting social commerce activities as companies turn to online customer communities as a strategic vehicle of value creation. This study also represents an empirical validation for the Technology Adoption Model, a well-discussed conceptual framework in information systems and technology management for technology diffusion analysis. Based on the result of hypotheses testing using structural equation modeling analysis, this study found mixed results regarding the four independent variables' causal effect on website loyalty.

Within less than two decades, social networking websites have evolved from socialization tools for Internet users to seek out and connect to become business online community platforms with great potential to facilitate value-creating human interactions. Once a particular and separate website attracts users by appealing to their urge for connection (or reconnection), social networking is increasingly an essential feature of many business web presence. If operated properly, the social commerce component may become a significant driver as companies seek to leverage competitive forces and transform their competitive positions through customer-driven innovation (Porter & Heppelmann, 2014, 2015). This research shed some light on the factors contributing to the complex issue of social networking website loyalty, including the following highlights.

First, the enjoyability of a social networking website significantly strengthens users' sense of social presence and increases their website loyalty. However, enjoyment does not directly affect users' privacy risk perception. Neither does entertainment indirectly affect the extent of self-disclosure. However, social presence reduces privacy risk perception and encourages self-disclosure. Second, social presence does not directly contribute to website loyalty but indirectly through self-disclosure. Third, privacy risk perception does not directly impact website loyalty. Although perceived privacy risk negatively affects self-disclosure, self-disclosure positively affects website loyalty. Fourth, the indirect effect of enjoyment on website loyalty through social presence, and self-disclosure (0.055) is less than its direct effect (0.536). When the indirect impact of pleasure on website loyalty through social presence, privacy risk perception, and self-disclosure $0.626 \times (-0.224) \times (-0.091) \times 0.244 = 0.003$ is included, the direct effect is still much more significant. The complex nature of enjoyment's impact on website loyalty is an issue that warrants further investigation.

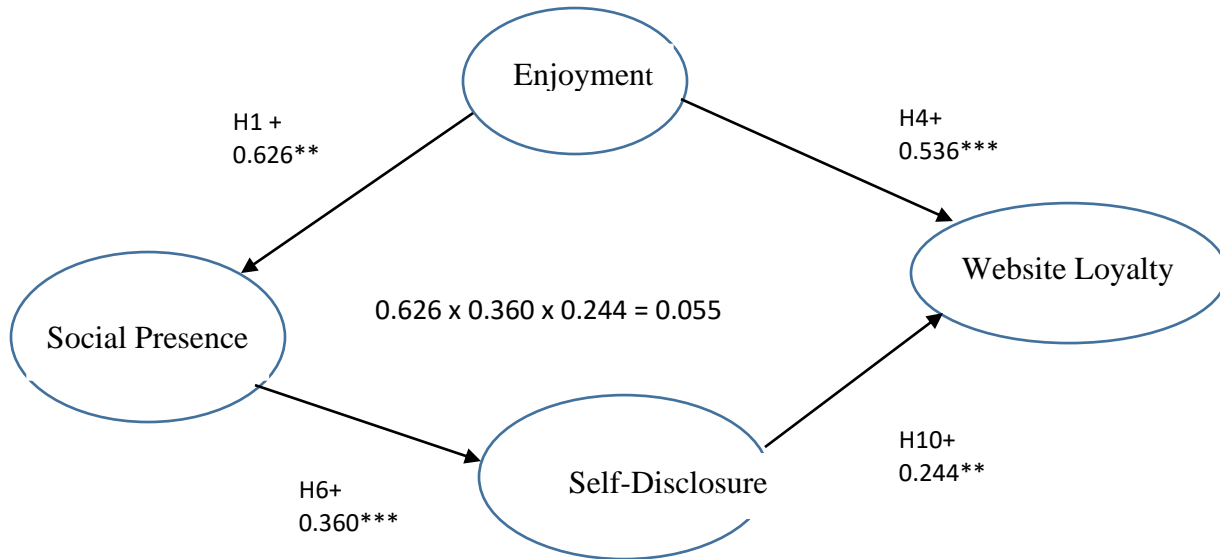


Figure 3: Direct and Indirect Effects of Enjoyment on Website

We suggest exploring the factors contributing to enjoyment regarding user-website interaction for future research. Other variables, such as user characteristics, may be considered to improve the model's explanatory power in addressing user website loyalty. A controlled lab experiment design may be employed to allow for more effective control of the research variables.

Readers must exercise due caution in interpreting and applying the research findings. While the data collected in Taiwan add cultural flavor to the model-building process, practicing managers must be mindful of the implications in different cultural contexts. The subjectivity of the user-provided data also limits the generalizability of the research findings. More empirical studies are necessary to establish the subtle effect of enjoyment on social networking websites.

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