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An Empirical Study of Customer Value, Customer Trust and Customer Loyalty Based on E-Commerce

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Abstract

In today's business world, computers are connected to the broadband wide area network (WAN), allowing businesses to integrate industrial value chains and provide customers with various value-added services. Consequently, the virtual community of a public service network can be created and marketing channels in e-generation can be established to provide customers with relevant information or commodities and services through the use of high-speed transmission systems and interactive delivery. However, if e-commerce operators are not fully aware of the characteristics of e-generation consumers, if website operators lack the necessary competitive edge, or if the Internet-based transaction mechanism is not secure, consumers may not be attracted to or continue their interest in online shopping. In the Internet world of e-commerce, it is difficult to fully grasp the changes in customer demands along with the gradual opening of information on the web. To be profitable, it is more important to obtain the value created by loyal customers for businesses in addition to a wide range of online visitors. By integrating the analyses of e-commerce with 244 questionnaires and validating the data with statistical analysis methods, this study provides e-commerce business owners with suggestions on marketing strategies and proposes future directions for subsequent research based on the research findings.

Keywords: Customer value; Customer trust; Customer loyalty; E-Commerce

Intoduction

Since the 1990s, the rapid development and advancement of information technology has led to the surge of the Internet. The rise of the Internet has strongly impacted the original business model of many enterprises, and has also enabled the Internet to be applied to the business model of e-commerce. For business owners, establishing a website for product sales or service provisions does not require a considerable investment in fixed assets, which can drastically reduce the cost of business operations. On the other hand, consumers enjoy greater convenience and can be more selective when conducting transactions online. Based on this corresponding relationship between business owners and consumers, the business model of e-commerce can flourish.

Nevertheless, due to increasingly developed and mature e-commerce activities, diverse types of Internet stores are being launched, offering a dazzling array of commodities, attracting more consumers to participate in e-commerce activities on the Internet. In light of this, to attract consumers to conduct transactions, the operator of a website must understand the needs of target consumer groups and achieve customer recognition through products, services, and other various channels. Subsequently, the website operator can obtain loyal customers. Therefore, it is the ultimate goal of website operators to achieve sustainable development by obtaining consumer loyalty and taking advantage of the opportunities for repeat consumption.

Literature Review

The rise of the Internet has considerably impacted business. In particular, businesses and customers can conduct transactions in a virtual network, forming a new business environment for e-commerce transactions. In e-commerce, business transactions are conducted mainly through telecommunications and the Internet, and include not only the purchase and sale of commodities, but also various activities conducted by enterprises to achieve their goals. From the perspective of information, e-commerce delivers data, products, and services through the use of telecommunications, the Internet, or other media tools; from the perspective of the business process, e-commerce is a technology that automates business transactions and operating procedures through the Internet; and, from a service prospective, e-commerce is an approach that can reduce the transaction costs between businesses and consumers, improve the quality of goods, and accelerate the speed of delivery.

The Internet has removed the limits of geographic development, and has become the future development trend for Business to Business (B2B) and Business to Consumer (B2C). When customers save transaction time and costs through the Internet, e-commerce provides them with higher added value. Therefore, compared with other channels, the Internet has, in addition to saving transaction time and costs, has broken down the geographical barriers of businesses. Furthermore, e-commerce is a one-to-one marketing mode designed to provide personalized services and offer various commodities tailored to customer demands so as to increase their added value. There are six main levels at which businesses use the Internet: e-mails, group discussions, database search, software and support, file transfer, and research publishing.

There are two major differences between Internet and traditional marketing, namely the interactivity and proactivity of Internet marketing. These features enable consumers to interact with e-commerce companies by viewing, comparing, searching, asking

questions, and even requesting tailored commodities. Generally, the characteristics of Internet marketing include interactivity, no geographical limits, no time limits, proactive consumers, saved costs, specific consumer markets segmented by regions, hyperlink functions, convenient and high-speed functions, and multimedia forms.

Despite these advantages, difficulties exist in Internet marketing. Currently, the difficulties in front of e-commerce are the main problems, such as security considerations, development in payment systems, low speed of Internet connections, lack of attraction to online shopping, the need for wider access space, and information overload [1]. Moreover, there are many reasons for businesses being unwilling to invest in and conduct Internet marketing, such as their product features not being fit for online marketing, difficulty in determining the relative interests of products, low compatibility of products, high risk of investment in products, and high technical risks of the products. The key success factors in managing e-commerce mainly include targeting the right customers, taking care of customers, enabling customers to access operating procedures, providing a comprehensive level of services to maintain customer relationships, enabling self-service functions for customers, assisting customers with their work-related issues, delivering customized services, and managing communities.

Regarding security in e-commerce, as it is not necessary for consumers to directly contact stores when shopping online, e-commerce has the characteristic of anonymity. Therefore, the level of individuals' psychological safety in e-commerce is higher compared with other channels [2]. Further, the online form of communication, unlike traditional media, is similar to interpersonal communication. Consumers become proactive rather than reactive, and may become information makers instead of traditional information receivers. In addition, the "communities" created by the Internet can meet the needs of consumers for communication, information, psychology, and entertainment. The main reasons why online shopping attracts consumers include convenience, better product information from websites, low price, enhanced product variations, rapid search of products, prompt price comparisons, online discussions, and unique shopping experiences. In addition, another major reason is that the shortcomings of traditional shopping malls can be reduced, such as parking, traffic, and bothersome salespeople. The major factors for preventing users from online shopping include the fear of being deceived, privacy rights, transaction security, and traditional habits. Furthermore, it is impossible for online shopping to have the same effects of social interactions and entertainment as traditional shopping. Moreover, consumers might encounter setbacks when visiting the websites or shopping online. For example, using new technologies or interactive interfaces may be an obstacle for some consumers [3].

The relationship between psychological identification with online communities and values

The rise of the Internet has led to the formation of network-based virtual communities. Some members have a strong psychological identification with online communities, and from which they may gain a sense of belonging and satisfaction. Jones, Hesterly, and Borgatti [4] found that the social mechanism of the Internet is often superior to other forms of management, including controlled access, overall culture, collective punishments, and credibility. Further, the notion that psychological identification is intensified by website communities is the same as the concept of overall culture in the social mechanisms of network management as indicated by Jones et al. [4]. The stronger the centripetal force of website communities, the greater the website value for customers. Underwood, Bond, and Baer [5], in their studies

on the sport industry, described that customers' social identification with their teams might be strengthened by group experiences, history or traditions, physical equipment, and rituals. Hence, if customers have stronger psychological identifications with the website communities, the website will have greater value for the customers. Therefore, the following hypothesis was inferred:

Hypothesis 1: Stronger customers' psychological identification with the website community will increase the customers' perceived value of the website.

The relationship between convenience and value

How e-commerce can attract consumers depends on its ability to save time and costs for consumers and allow consumers to view, compare, search, and ask questions. In addition, there are convenient and rapid functions, such as hyperlinks, that provide customers with higher added value without geographical or time limits. Hence, the more convenient services the website offers, the greater value it will have for customers. Therefore, the following hypothesis was inferred:

Hypothesis 2: The greater convenience of services provided by a website will increase the customers' perceived value of the website.

The relationship between novelty and value

Amit and Zott [6] described that the competition on the Internet emphasizes not only convenience and speed, but also novelty in contents, as crucial to competitive advantage and important for the Internet to create customer value. Hence, when there is a higher degree of novelty in the content offered by a website, there will be greater value for customers. Therefore, the following hypothesis was inferred:

Hypothesis 3: A higher degree of novelty in the content provided by a website will increase the customers' perceived value of the website.

The relationship between transaction security and trust

Due to issues that exist in the Internet environment, such as the definition of property rights, the trustworthiness of electronic money, cybercrime, secure payment, and the lack of explicit rules, transaction security makes e-commerce difficult to develop and promote. The information related to online transactions can be easily stolen, and it is both convenient and easy to collect information on the Internet. Hence, the privacy of consumers' personal data warrants attention. Internet users are concerned about their privacy rights. Consumers are unwilling to shop online partly because they fear infringement on their rights of privacy. In the early stages of Internet construction, the transaction rules and security issues of the Internet were not considered. However, along with the increase in commercial applications, issues, such as the ownership of exclusive property rights and transaction security, emerged [7]. Given that information related to Internet transactions can be easily stolen, the security of online transactions is not satisfactory for consumers, leaving them with an impression of distrust. However, businesses are attempting to solve these problems. For example, secure electronic transactions (SET), encryption technologies, and setting up third-party certification bodies can all make Internet transactions more secure. Hence, when the security of transactions on a website improves, customers' level of trust in the website will as well. Therefore, the following hypothesis was inferred:

Hypothesis 4: Higher transaction security of a website will increase the level of trust customers have in the website.

The relationship between relationship stability and trust

Jones et al. [4] detailed that the social mechanism of network

management provides a comparative advantage superior to other forms of management. It includes controlled access, overall culture, collective punishments, and credibility. When the relationship stability between websites and customers is stronger, the overall culture and credibility in social mechanisms is strengthened, thereby lowering customers' sense of moral crisis and increasing their level of trust. Therefore, the following hypothesis was inferred:

Hypothesis 5: More stable relationships between a website and customers will increase the level of trust customers have in the website.

The relationship between value and loyalty

Customer value refers to the difference in value between utility and quality or benefits and costs for customers when buying products or using services. However, some scholars define customer value as the level of preferences customers develop after their evaluation of product attributes [8]. Further, customer-delivered value refers to the difference in value between the total customer value and total customer cost, while total customer value refers to an aggregation of interests that customers expect to gain from particular products or services. Creating customer value and offering it to customers will increase the overall value of the organization. The customer value in this context means considering what customers want from their perspective, and it is certain that customer value can be obtained from buying and using products. Based on the three classifications of technology (long-linked, intensive, mediating) by Stabell and Fjeldstad [9] expanded the value chain framework by Porter [10] to become three types of value form models on corporate levels: "value chain," "value shop," and "value network." Increased customer value is crucial for maintaining customer loyalty [11,12]. In the 21st century, e-commerce plays one of the most important roles in value creation. The first country to develop the e-commerce industry was the United States, followed by EU countries and Japan [6]. Hence, the higher the customers' perceived value of a website, the higher their loyalty to the website will be. Therefore, the following hypothesis was inferred:

Hypothesis 6: Higher customers' perceived value of a website will increase their loyalty to the website.

The relationship between trust and value

There are a number of various definitions regarding trust. Some define trust as "a kind of confidence in others' good intentions" [13], while others argue that trust means the expectation that the other party is willing to accept "vulnerability" for their actions, regardless of their abilities to supervise or control their actions [14]. Generally, a widely accepted definition of trust is "a psychological state of willingness to accept vulnerability, developed by a positive expectation based on the intentions and behaviors of others" [15]. "Trust" is based on the principle of being voluntary, and is related to shared values. When behaviors cannot be anticipated or strangers join interactions, "trust" is required because predictable things, such as a sense of identity or the power of sanctions, do not exist [16]. Increasing customers' level of trust can improve the interactivity and reduce the uncertainty of transactions, thereby increasing the cognitive value of customers [15,17]. Therefore, the following hypothesis was inferred:

Hypothesis 7: The higher level of trust customers place in a website will increase the customers' perceived value of the website.

The relationship between trust and loyalty

According to related studies, customer loyalty may increase due to word-of-mouth effects and repeat purchases, which improves customers' level of trust [18,19]. In addition, customers may have a higher degree of loyalty to trustworthy service providers [20]. Hence, when customers place a higher level of trust in a website, their loyalty to the website will increase. Therefore, the following hypothesis was inferred:

Hypothesis 8: The higher level of trust customers have for a website will increase their loyalty to the website.

Through this literature review and practical observations, this study analyzed the factors influencing, and the relationships between, the customer value, trust, and loyalty of e-commerce websites. The proposed research framework is shown in Figure 1.

Research Methods and Measurements

Measurements of research variables

The questionnaire design of this study was revised based on relevant literature. All items were measured on a Likert Five-point Scale, where 1 represents "strongly disagree" and 5 represents "strongly agree". The measurements of variables in each dimension are explained in Table 1.

Sources of data

The research objects in this study are users with trading experience on e-commerce websites. Questionnaires were issued through random
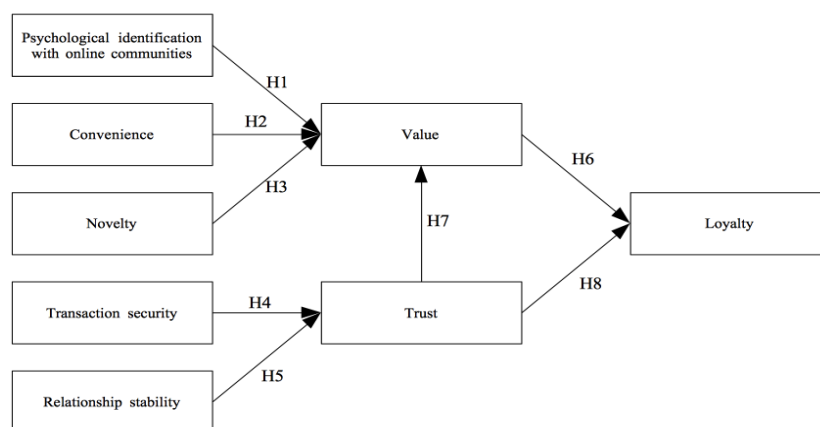

Figure 1: Research framework.

Research dimensions	Measured variables in dimensions
Psychological identification with online communities	• You frequently visit or browse this website when surfing the Web. • You have a pleasant experience shopping on this website. • As a member of the website, you feel greatly satisfied. • You take delight in sharing your experience and joy from this website with others. • At the mention of an e-commerce website, this is the website that first comes to your mind.
Convenience	• This website provides customers with the most timely shopping-related information. • This website has the most convenient steps and procedures for shopping. • This website offers the most convenient and secure payment methods. • Customers can rapidly and simply complete online transactions on this website. • This website provides customers with effective communication channels (e.g., telephone or email) or indexing functions to enable them to troubleshoot problems quickly.
Novelty	• The products, services, or transaction mechanisms offered by this website are unique. • The products, services, or transaction mechanisms offered by this website are difficult for other websites to imitate. • This website often changes or innovates its products, services, or transaction mechanisms.
Transaction security	• The personal data and transaction-related information on this website will not be leaked. • You trust the security mechanism of this website. • You are assured about the payment methods on this website. • This website is not easily invaded by computer hackers. • The transaction security of this website is guaranteed. • Others are unable to know your personal-related data from this website. • This website keeps the personal data of its customers in strict confidence.
Relationship stability	• When surfing the Internet, you visit this website first. • You feel that the reputation of this website is trustworthy. • As long as this website maintains its existing services, you will not switch to other websites. • You will recommend this website to your relatives and friends.
Value	• You believe that the products or services offered on this website are good quality. • The products or services offered by this website meet your expectations • The products/services offered by this website are your best choices • The value brought to you by this website is higher than other e-commerce websites. • Shopping on this website is a pleasant experience.
Trust	• You believe that this website is fairly reliable. • You believe that this website is trustworthy over the long-term. • You believe that this website is honest and tells no lies. • You believe that this website considers the interests of its customers. • You believe that this website enjoys a good reputation and credibility.
Loyalty	• Your time spent on this website accounts for a greater proportion of your total time online • On this website, you enjoy visiting other websites of similar types. • Unless recommended by friends, you would not consider taking the initiative to visit or browse other similar websites. • You visit this website first when shopping online.

Table 1: Measurements of research dimensions.

sampling, mainly in the form of postal letters and e-mails. A total of 600 questionnaires were issued and 256 were returned. Excluding 12 invalid questionnaires, there were a total of 244 valid questionnaires. Therefore, the valid response rate was 40.6%.

Research Findings and Analyses

Data analysis of research variables

Reliability analysis: The development of the questionnaires used in this study was operationalized based on previous research, and researchers screened and confirmed the questionnaire items. In addition, this study adopted confirmatory factor analysis as a method for measuring the measured variable quality of the research variables and the condition of fit between the concentrated dimensions. The composite reliability of latent variables is comprised of the reliabilities of all measured variables. To investigate the internal consistency of variables, a higher value of reliability indicates a higher consistency between variables. A value above 0.6 is suggested by Fornell and

Larcker [21]. As shown in Table 2, the reliability value of each variable in this study falls in the range of 0.754~0.951, all higher than the recommended value, indicating that the reliability of the research variables is within the acceptable range. The reliability analysis of each latent variable in this study is shown in Table 2.

Analysis of the structural model: Through confirmatory factor analysis, the benchmark model of this study had positive internal consistency (composite reliability), indicating that the measured variables in each type have reliability and validity. Next, according to the research framework, a structural model was established based on the measurement models for each of the above-mentioned latent variables. Structural equation modeling (SEM) was used to validate the model fit of the theories. The statistical amount χ^2 is often used as one of the observation indices, but the value of χ^2 is easily influenced by the size of the sample. To remove the interference of SEM, the issue of sample size should be considered [22]. Generally, when the value of χ^2 and the ratio of the degree of freedom (DOF) are used to measure model fit,

rigorous studies require that the level should not exceed 3 [23]. The SEM analyses includes fitness analysis of the research model as well as the explanatory power of the overall research model. In addition, other important related statistical indices should be taken into account. In this study, seven indices were selected for conducting an overall evaluation of model fit. As shown in Table 3, among the auxiliary indices, only the adjusted goodness of fit index (AGFI) was lower than the ideal suggested value (0.7). Hair, et al. [24] believe that the goodness of fit index (GFI) and AGFI values are better if close to 1, but there is no single and absolute standard value in determining the goodness of fit between observational data and models. Nevertheless, Baumgartner and Homburg [25] used SEM to analyze 184 documents of study in the fields of marketing and consumers between 1977 and 1994 and found the ratio of documents in which AGFI were lower than the suggested value was 48%, still within the acceptable range. Therefore, there is a good level of fit in the models and observational data of this study.

Empirical findings: The path relationship between each variable was estimated using SEM. The path value was estimated by using the standardized coefficient. Of the eight hypotheses for validating the research model, a total of five reached the significance level of α=0.01, and one hypothesis reached the significance level of α=0.05. Two hypotheses, H1 and H2, were determined invalid. The path analysis coefficients of the structural model are as follows: psychological identification with online communities → value (γ_{21}=0.34); convenience → value (γ_{22}=0.01); novelty → value (γ_{23}=0.05); transaction security → trust (γ_{34}=0.39); relationship stability → trust γ_{35}=0.50; value → loyalty (β_{12}=0.37); trust → value (β_{23}=0.59); and, trust → loyalty (β_{13}=0.22). Relevant empirical data indicated that only H2 and H3 were not supported, while all other hypotheses were all supported.

Further, the explanatory powers of the variances for the three latent dependent variables (value, trust, and loyalty) all reached above 0.5, indicating that the proposed model is valid and acceptable. The model's empirical results are shown in Figure 2.

Validation of mediating effects: This study proposed a competitive model to validate the mediating effects of "value" and "trust" to test the mediating effects of relationship quality. The mediating variables were verified by referring to the methods of Baron and Kenny [26]. However, the SEM by Williams, Edwards, and Vandenberg [27] was adopted to validate the mediating models, which was presented respectively by three competitive models and must meet the following four conditions: (1) independent variables (three ways of relationship connection) must have a significant relationship with the mediating variables; (2) independent variables (three ways of relationship connection) must have significant relationships with the dependent variable (loyalty); (3) mediating variables must have significant relationships with a dependent variable (loyalty); and, (4) independent variables and mediating variables must simultaneously have a significant relationship with dependent variables, and the effects of the independent variables must be weaker than the second kind of effects. From the competitive model of the four sets of conditions, as shown in Figure 3, the first set of conditions, the comparative values of convenience and novelty, did not have significant relationships, and the other relationship paths met requirements. Furthermore, convenience, novelty, and loyalty did not have significant relationships under the second set of conditions, but the competitive model completely met the requirements by the third set of conditions. Under the fourth set of conditions, the psychological identification with online communities, convenience, novelty, transaction security, value, and trust did not have significant impacts,
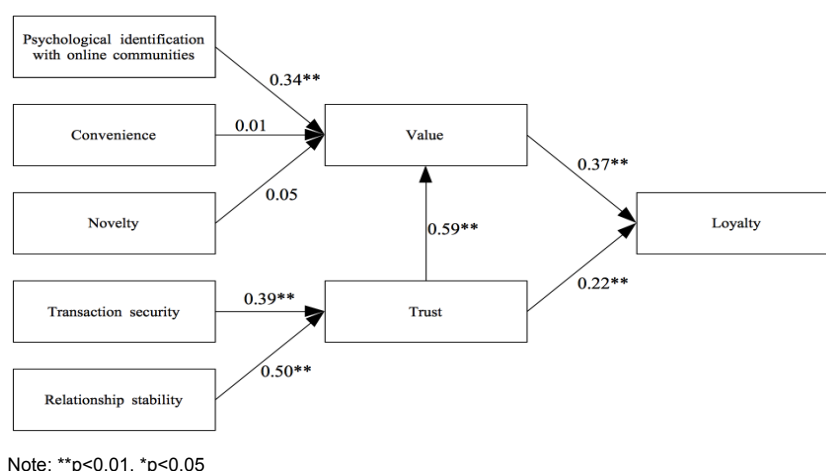
Research variables	Variables	Composite Reliability (CR)	Variances extracted	Cronbach α
Psychological identification with online communities	5	0.754	0.383	0.717
Convenience	5	0.863	0.557	0.858
Novelty	3	0.820	0.606	0.706
Transaction security	7	0.951	0.736	0.951
Relationship stability	4	0.761	0.445	0.765
Value	5	0.874	0.580	0.876
Trust	5	0.897	0.636	0.898
Loyalty	4	0.756	0.445	0.743

Table 2: Reliability and validity analysis of each measured variable.

Fit indices	Suggested level	Results
χ^2	The smaller, the better	1618.03 (p=0.000)
DOF	<3	2.501 (df=647)
GFI	>0.9	0.91
AGFI	>0.9	0.94
RMSEA	<0.08	0.079
NFI	>0.9	0.92
NNFI	>0.9	0.98
CFI	>0.9	0.98

Table 3: Analyses of fitness in the comprehensive research model.
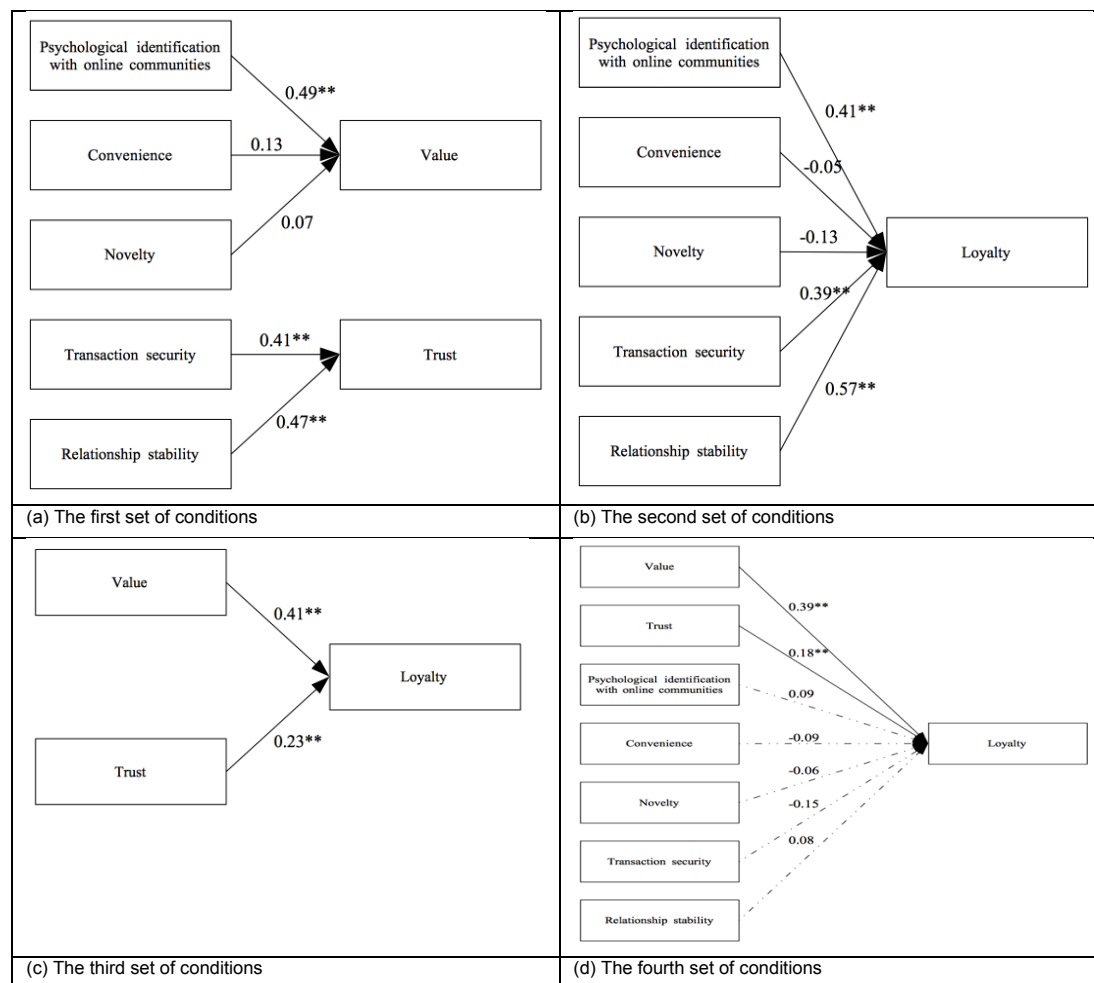

Note: **p<0.01, *p<0.05

Figure 2: The mediating structural model of customer value, trust, and loyalty.

Note: **p<0.01, *p<0.05

Figure 3: The model of customer value, trust, and loyalty.

while only relationship stability had a significantly positive impact on loyalty. Hence, the statistical level of the psychological identification with social communities versus the dependent variables changed from being significant to being insignificant, and the coefficient of the relationship stability versus the dependent variables declined, indicating that "value" and "trust" have full mediating effects.

Conclusions and Suggestions

Conclusions

Along with the dot-com bubble, the globalization of competition and blurred national boundaries in the Internet world, the advancement of science and technology has caused problems in management. In today's business world, computers are connected to the broadband WAN, allowing businesses to integrate industrial value chains and provide customers with various value-added services. Consequently, the virtual community of a public service network can be created and marketing channels in e-generation can be established to provide customers with relevant information or commodities and services through the use of high-speed transmission systems and interactive delivery. However, if e-commerce operators are not fully aware of the characteristics of e-generation consumers, if website operators lack

the necessary competitive edge, or if the Internet-based transaction mechanism is not secure, consumers may not be attracted to or continue their interest in online shopping. In the Internet world of e-commerce, it is difficult to fully grasp the changes in customer demands along with the gradual opening of information on the web. To be profitable, it is more important to obtain the value created by loyal customers for businesses in addition to a wide range of online visitors.

In the past, Taiwan created an economic phenomenon through original equipment manufacturing (OEM) for quality assurance and product excellence. However, in the Internet world, the pursuit of functional value alone no longer fits the concept of e-commerce marketing. The positioning of websites is the goal to pursue. Various customer values based on website types should be offered to increase loyal customers on the Internet. In view of this, this study integrated the analysis of e-commerce with responses from 244 valid questionnaires, verified using the SEM analysis method, to provide e-commerce business owners with suggestions for marketing strategies and propose future directions for research.

Consumers' psychological identifications with online communities were compared with their values. When there was a stronger centripetal

force of customers toward a website, the website had greater value for the customers, and hence the customers could build consensus, establish brand loyalty, and subsequently increase their revisits to the website and purchases online (coefficient value is 0.34). The confirmed validity of H1 and the viewpoints of Jones et al. [4], and Underwood et al. [5] correspond. Based on the analyses of transaction security and online trust, if websites are able to provide more secure transaction mechanisms, the customers' sense of trust in the websites will increase (coefficient value is 0.39), in support of H4. Another important consideration is whether the process of money flow is secure during transactions. For example, whether secure coding technologies for digital currencies or SET are adopted as a mode of payment. More secure transaction processes will better assure the consumers. From the analyses of relationship stability and online trust, when the relationship between websites and customers is more stable, the sense of customer trust in websites will improve (coefficient value is 0.50), and subsequently influence the number of times customers revisit online stores. Therefore, H5 is also valid. There is a positive and significant relationship between the value of websites perceived by customers and customer loyalty to websites, meaning customers with higher perceived value of a website will trust the website more. Furthermore, there is a positive and significant relationship between customers' sense of trust in a website and their perceived value, indicating that improving customers' trust in a website is conducive to improving their perceived value of the website. Lastly, there is a positive and significant relationship between the sense of trust customers have in websites and their loyalty, meaning that improving a customer's sense of trust in a website will improve their loyalty to the website. Therefore, H6, H7, and H8 are valid.

The booming development of the Internet has promoted the business opportunities of e-commerce, attracting a considerable number of technological talents to establish Internet companies and invest in the borderless market and field of the Internet. The endless business opportunities of the Internet have opened up the virtual market for businesses. However, this does not mean that every investor can be successful. In the e-commerce market, although market share is important, the satisfaction of consumers is essential for the survival of e-commerce operators. Therefore, businesses operating websites should also carefully consider the factors influencing the decision-making of consumers to choose e-commerce shopping.

Implications for management

Offering interactive web services: It is often difficult to succeed in the early stages as a website operator. However, as they manage their daily operations steadily, their websites' credibility, reputation, and brand image can be established for consumers. If operators offer commodities at reasonable prices, and often make use of flexible tactics, such as 3D animations, multimedia displays, online games, entertainment activities, discounts for online shopping, and personalized service modes, they will attract a wide range of consumer groups, and subsequently consumers will increase their online purchase intentions.

Emphasizing the security of online transactions: Currently, the two payment methods consumers most frequently choose are credit cards and account transfers, and the transaction security of which receives public attention. In the future, in response to online cash flow, secure sockets layer (SSL) (a secure coding technology for digital currency), and SLL or SET will be widely used methods of transactions. Alternatively, new technologies, such as voices, images, or biometric features, may be used as identification methods to solve difficult

issues, such as stealing and forgery, which will also increase the online purchases and the types of products consumers buy. In addition, for maintaining the security and fairness of online transactions, government bodies should formulate relevant legislation, such as the protection of intellectual property rights and privacy, electronic authentication, electronic payments, and taxation from online transactions.

Improving the relationship between customers and websites: The loyalty of a customer to a website is considerably influenced by the "subjective norms" perceived by the customer. Therefore, consumers' purchase intentions can be stimulated if a shopping website offers virtual communities that enable consumers to recognize the awareness level of their perceived reference groups (e.g., net friends) when they discuss products in discussion forums. In other words, a website suggestion zone that enables users to share opinions about their purchases can impact consumers' continuous purchase behavior.

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