The Influential Roles of Marketing Stimuli on Customer Retention: A Moderating Role of Relationship Proneness

Ying Kai Liao, Nanhua University, Taiwan*
Wann-Yih Wu, Nanhua University, Taiwan
Saranya Gajendran, Nanhua University, India
Yuan Tsung Kuo, National Cheng Kung University, Taiwan

ABSTRACT

The purpose of this study is to explore the necessity of creating retention strategies, emphasize the significance of customer retention, and propose a customer value/retention model. The main objective is to combine three mediators - customer satisfaction (CS), customer loyalty (CL), and word of mouth (WOM) - and evaluate their effect on customer retention using YL Company, a Taiwanese chemical manufacturing company, as a case study. The proposed model’s goodness-of-fit was assessed using confirmatory factor analysis (CFA) and SEM-AMOS. Hierarchical regression and the PROCESS macro were employed to examine mediation and moderation effects. The outcomes indicate that product quality, service quality, and price attribution act as marketing stimuli factors that significantly influence the three mediators. Relationship proneness serves as a negative moderator that impedes customer WOM and loyalty’s influence on customer retention.

KEYWORDS

Customer Loyalty, Marketing Stimulus, Relationship Marketing Theory, S-O-R Framework, Theory of Planned Behavior, Word of Mouth

RESEARCH BACKGROUND AND MOTIVATION

As the environment in which consumer marketing functions changes, customer retention takes on greater relevance. Getting new clients is a costlier approach to growing a business, but keeping existing customers is more profitable because it can gain more revenue from them. When clients are retained, word-of-mouth branding and marketing influences are more likely to occur. Extensive use of the Stimulus-Organism-Reaction (SOR) framework in comprehending customer cognitive elements and behavior (Mehrabian & Russell, 1974) resulted in the incorporation of the Theory of Planned Behavior. This framework provides a useful perspective for understanding customer behavior and the role of marketing stimuli on customer retention.

*Corresponding Author
of Reasoned Action (TRA) and its extended Relationship Marketing Theory (RMT) (Lewin & Johnston, 1997). This method aims to build long-term relationships with clients by providing them with information tailored to their unique interests and needs. Throughout this procedure, open communication is a primary goal. According to Armstrong and Hagel (2009), it requires seven times more expense to acquire a new client, and 86% of consumers are willing to spend more for a better service; then the cost of keeping an established one observing and responding to what customers want is critical to success. Thus, customer retention is one of the most important aspects of firms’ long-term success. Research has examined how relationship proneness affects the efficiency of client retention strategies (De Wulf et al., 2001). This is why it is important to first examine what researchers already know about relational proneness, which is a moderating factor in the interaction between marketing variables (word-of-mouth, customer loyalty, and customer satisfaction) and customer management operations (customer retention). Is relationship proneness linked to positive word-of-mouth, customer loyalty, and satisfaction? Does relationship proneness have a greater impact on word-of-mouth, client loyalty, and customer satisfaction than other mediating factors? In summary, customer retention is important for brands because it helps to reduce costs, increase efficiency, and build positive relationships with customers. These benefits can lead to long-term success for the brand and ensure that it remains competitive in a crowded market. Most complaints are voiced when a client interprets a positive aspect of service quality as being somehow less than ideal; this study seeks to fill a significant research gap by examining the discrepancies between consumer expectations and customer perceptions. The quality of a company’s service is judged relative to the criteria set by its customers. A customer gap emerges when service delivery falls short of customer expectations, which ultimately causes client dissatisfaction with the goods or services. To fulfill these research gaps, this study raises three research questions:

1. Will different market stimuli factors (e.g., product quality, service quality, price attribution) influence customer retention?
2. What role do the mediating effects of word-of-mouth/loyalty and customer satisfaction serve in the relationship between market stimuli factors and customer retention?
3. What role do the moderating effects of relationship proneness serve in the relationship between mediating factors and customer retention?

THEORETICAL BACKGROUND

The Effects of Market Stimulus

Market stimuli refer to external factors that influence customer behavior and decision-making. In the context of customer retention, this study takes up product quality, service quality, and price attribution, which play crucial roles. For example, a high-quality product, service quality, can lead to increased customer satisfaction, which can in turn lead to increased customer loyalty and retention. Additionally, market stimuli can also affect customers’ perceptions of value and their willingness to pay. For example, a product that is perceived as high-value may be more likely to be retained by customers, even at a higher price. Similarly, a product that is priced too low may be perceived as having lower value, leading to decreased customer retention. The stimulation elements provide the most basic framework for considering how consumers will react to new products. The model assumes that the response is determined by the nature of the stimulus. Product and service quality, price attribution, distribution intensity, promotion efficiency, and product novelty are just a few of the factors identified as influencing consumer reactions to new products in the “diffusion of innovations” literature (Raynard, 2017).
Theory of Reasoned Action (TRA)

Behaviors, defined as feelings or perceptions related to the achievement of a goal, and normative beliefs, which are specific depictions of the consumers’ awareness in terms of the potential to achieve those goals with the good or service, are the focus of this study, which develops an observational structure for these three mediators of variables. According to the Theory of Reasoned Action (TRA), what matters most is motivation to act, which is a result of one’s mindset about the activity and/or personal normative beliefs (Ajzen & Fishbein, 1975). The mechanism is composed of three factors: the individual’s attitude toward the action in question, the individual’s subjective norms, and the individual’s sense of behavioral control. The more positive the individual’s outlook, subjective norms, and sense of agency, the more likely they are to act on their intention to engage in the behavior. The authors’ research shows that TRA can shed light on what influences people’s behavioral intentions, which in turn influence their actions.

Relationship Marketing Theory

Marketers employ a strategy known as relationship marketing (RM) to establish and maintain long-term relationships with their customers and other important groups (Koiranen, 1995). The connection’s success is predicated on the belief that each participant will be able to achieve their goals as a result of the collaboration. Relationship marketing uses traditional marketing strategies to build customer value. It provides value to customers and improves their relationships with the company, which increases customer retention.

The Effect of Product Quality on Customer Loyalty, Satisfaction, and Word-of-Mouth

When a product is of high quality, it is more likely to generate positive recommendations from customers to their friends and family, leading to a positive impact on the product’s reputation and sales. This is because people tend to trust the opinions of those close to them. There are consumers who may not hear from a friend about a product’s quality but who nonetheless expect that product to be “better” because of the increase in overall WOM (Godes, 2017). Additionally, the consumers discuss it with others, which can lead to more customers being made aware of the product or service. Therefore, it is crucial for any business to gain customers, retain them, and increase its own reputation through word-of-mouth:

H1a: Product quality has a positive influence on word-of-mouth.

When a product is of high quality, customers are more likely to remain loyal to the brand or company and choose it over other products. They are also less likely to switch to a different brand or company, even if they are offered a better price or more features. They form an emotional connection with the brand or company and are loyal to it. The quality of the brand’s product can influence prestige, intention to switch, intention to buy more than one, company service quality, customer loyalty, and, finally, customer satisfaction (Suhud et al., 2020). Loyal customers tend to make repeat purchases and also recommend the brand to others:

H1b: Product quality has a positive influence on customer loyalty.

When customers receive a product that is not up to their expectations, they may be disappointed and dissatisfied. They may feel that they did not receive value for their money and that their needs were not met; this can cause customers to lose trust in the brand. This can lead to customers switching to other brands or companies and may make it difficult for the company to retain customers. Tjiptono
et al. (2019) explained that satisfaction is the consumer’s response to evaluate the perception between initial expectations and actual performance. Therefore, it is essential for any business to ensure customer satisfaction and retain its customer base.

**H1c: Product quality has a negative influence on customer satisfaction.**

**The Effect of Service Quality on Customer Loyalty, Satisfaction, and Word-of-Mouth**

Quality of service refers to how well a company meets their consumers’ needs. It is difficult to quantify aspects like customer satisfaction because they are so based on the individual’s perspective and experience. Consumers, employees, and business owners are the three groups whose opinions are important. This study emphasizes the importance of ensuring group satisfaction to provide consumers with appropriate quality based on evidence. When customers are pleased, word spreads quickly, which benefits everyone involved, including the company’s employees and, presumably, its owners. By knowing consumer expectations, companies can provide services as expected or at least close to consumer expectations (Fared et al., 2021; Park et al., 2018). In this study service quality is used as one of the marketing stimuli that may influence customer retention. The hypothesis indicates that when a service is of high quality, it is more likely to generate positive recommendations from customers to their friends and family.

**H2a: Service quality has a positive influence on word-of-mouth.**

Sofyan (2013) also specifically manages to prove the positive influence that service quality has on customer loyalty. When a service is of high quality, customers are more likely to remain loyal to the brand or company and choose it over other services. They are also less likely to switch to a different brand or company, even if they are offered a better price or more features. When a customer is satisfied with the quality of a service, they are more likely to form an emotional connection with the brand or company and be loyal to it. This enables repeat purchases and also recommendations for the brand.

**H2b: Service quality has a positive influence on customer loyalty.**

Customers who receive a service that is not up to their expectations may be disappointed and dissatisfied. They may feel that they did not receive value for their money and that their needs were not met. When a service is of low quality, it can lead to negative perceptions of the brand or company and can cause customers to lose trust in the brand. This can lead to customers switching to other brands or companies and may make it difficult for the company to retain customers. Moreover, Hassan et al. (2013) states that in order to survive and remain competitive, every business must develop its service quality, which will eventually result in customer satisfaction and loyalty. Providing high-quality services is essential for any business to ensure customer satisfaction and retain its customer base.

**H2c: Service quality has a negative influence on customer satisfaction.**

**The Effect of Price Attribution on Customer Loyalty, Satisfaction, and Word-of-Mouth**

Individuals are less likely to be perceived as biased if their reactions to various objects are consistent with those of others, and if this is the case, their reactions will be instructive about the object under consideration. In the latter case, the individual would be regarded as an unbiased third party, and his/her opinions would be more likely to be accepted. Prices provide a signal from which consumers can
infer product quality, even as they influence the rate of information transmission via interpersonal communication. More sales lead to higher product exposure in the subsequent period, which amplifies the good (or bad) news generated by the product through WOM communication. In this study price attribution is adopted as one of the marketing stimuli that may influence customer retention, prompting the authors to propose the following hypothesis.

Research has shown that when consumers perceive a product or service to be underpriced, it is more likely to have positive word-of-mouth experiences. Additionally, when consumers perceive a product or service to be overpriced, it is more likely to have negative word-of-mouth experiences and consumers are less likely to recommend it to others. This highlights the importance of proper price attribution in order to drive positive word-of-mouth for a business.

**H3a**: Price attribution has a positive influence on word-of-mouth.

When customers perceive a product or service to be fairly priced, they are more likely to have a positive perception of the brand and are more likely to return for future purchases. If the organization offers low prices to the customer, it will benefit the organization because they will have the potential to make the customer stay loyal to them and still purchase the product even when the price increases (Rahman et al., 2020). Additionally, when customers believe they are getting a good value for their money, they may be more willing to pay a premium price for the product or service. On the other hand, when customers perceive a product or service to be overpriced, they may be less likely to return and shop with that brand again. Therefore, proper price attribution can lead to increased customer loyalty and repeat business.

**H3b**: Price attribution has a positive influence on customer loyalty.

When customers perceive a product or service to be fairly priced, they are more likely to be satisfied with their purchase, as they will feel that they are getting a good value for their money and may be more willing to overlook any perceived shortcomings of the product or service. On the other hand, when customers perceive a product or service to be overpriced, they may be less satisfied with their purchase and may view the brand negatively. Customer satisfaction depends on the familiarity of both business connections and personal events with the customers (Nur et al., 2020). Therefore, proper price attribution can lead to increased customer satisfaction and positive perceptions of the brand.

**H3c**: Price attribution has a positive influence on customer satisfaction.

**The Effect of Word of Mouth on Customer Retention**

According to Keaveney (1995), references account for half of all managed business substitutions, and one out of every eight referrals results in a purchase. WOM occurs when customers spread their opinions to others about a particular brand, product, service, or company (Tsai et al., 2017). Negative WOM can be generated by unhappy customers who have had a bad experience with a product or service. These customers may share their negative experience with their friends and family, which can discourage others from doing business with the company and spread through online reviews and social media, which can reach a larger audience and further damage the company’s reputation. This can lead to a decrease in customer loyalty and retention as potential customers may choose to go with a competitor instead.

**H4a**: Word-of-mouth has a negative influence on customer retention.
The Effect of Customer Loyalty on Customer Retention

Repeat purchases, word-of-mouth advertising, and price-sticking are all ways to measure customer loyalty (H.-S. Kim & Yoon, 2004). According to El Kordy (2014), customer loyalty is one of the most significant keys that organizations could use to enhance their profitability. Reasoned action theory is used to rethink brand loyalty. Emotions towards the acquisition and the subjective norm are the predecessors of buying personality traits, as proposed by the theory of reasoned action. Predicting and measuring customer loyalty will be more consistent and reliable throughout a period if the antecedents of buying behavior are incorporated.

Customer loyalty can, in its simplest terms, be defined as the intention of a buyer of services to purchase the same services (retention) and additional services (expansion) from the current provider in the future, in addition to the buyer’s activities in recommending the retailer to others (referral) (Cahill et al., 2010; Russo & Confente, 2017). Customers have been efficiently retained by the brand, but one is significantly more devoted than the other. Customers who are loyal to you do more than just return business.

H4b: Customer loyalty has a positive influence on customer retention.

The Effect of Customer Satisfaction on Customer Retention

While customer satisfaction is measured in terms of the fulfillment of the gap between customer expectation and customer actual experience, customer retention refers to the continuity of relationships between the organization and the customer (Ibojo & Asabi, 2015). This thesis emphasized that consumers’ feelings toward the company, customer satisfaction entails appealing to and influencing consumers’ feelings and attitudes. On the foundation of TRA, the authors suggest customer satisfaction to address the shortcomings of the primary model in addressing actions over which consumers only exert limited volitional control. While TRA focuses solely on actual behavior, customer behavior also takes into account how the customer feels they may influence what the company does.

The more satisfied a customer is with a brand encounter, the more inclined they are to regurgitate the activity; therefore, the authors propose the following hypothesis:

H4c: Customer satisfaction has a negative influence on customer retention.

The Moderator Effect of Relationship Proneness on Customer Retention

Maintaining regular communication with customers is crucial, which is why relationship marketing is so valuable. The relationship between a brand and its customers can be strengthened by learning how those customers utilize the brand’s products and services and keeping an eye out for any unfulfilled requirements. Businesses can assess the performance of their relationship marketing strategies by tracking changes in client engagement (Parish & Holloway, 2010). Several relationship quality indicators, such as commitment and trust, have been demonstrated to correspond with a number of behavioral intentions, including collaboration (Bloemer et al., 2003) and purchase frequency (H. Y. Kim et al., 2012). As a result, the following theory demonstrates relationship proneness:

When an individual is high in relationship proneness, they are more likely to form strong connections and bonds with others. When this trait is present, it negatively moderates the relationship between word-of-mouth and customer retention. In other words, when people who are high in relationship proneness share their positive experiences with a product or service through word-of-mouth, it is less likely to lead to customer retention. This may be because people who are high in relationship proneness are more likely to be swayed by the opinions of their close friends and family, rather than by their own experiences with a product or service.
H5a: Relationship proneness negatively moderates the relationship between word-of-mouth and customer retention.

When an individual is high in relationship proneness, they are more likely to form strong connections and bonds with others. When this trait is present, it negatively moderates the relationship between customer loyalty and customer retention. In other words, when people who are high in relationship proneness are loyal to a brand or company, it is less likely to lead to customer retention. Research has suggested that consumers with higher levels of proneness to engage in relationships with retailers exhibit a tendency to be more loyal (Menidjel et al., 2019). This may be because people who are high in relationship proneness are more likely to be swayed by the opinions of their close friends and family, rather than by their own loyalty to a brand or company. They may be more likely to switch to a different brand or company if their close friends and family recommend it, despite their previous loyalty to a different brand or company.

H5b: Relationship proneness negatively moderates the relationship between customer loyalty and customer retention.

In addition to devising new strategies to attract new customers and create transactions, companies must urgently and continuously strive to retain existing customers and build long-term, profitable relationships (Kotler & Armstrong, 2018). When an individual is high in relationship proneness, they are more likely to form strong connections and bonds with others. When this trait is present, it negatively moderates the relationship between customer satisfaction and customer retention. In other words, when people who are high in relationship proneness are satisfied with a product or service, it is less likely to lead to customer retention. This may be because people who are high in relationship proneness are more likely to be influenced by the opinions and recommendations of their close friends and family, rather than by their own satisfaction with a product or service. They may be more likely to switch to a different product or service if their close friends and family recommend it, despite their satisfaction with their current one.

H5c: Relationship proneness negatively moderates the relationship between customer satisfaction and customer retention.

RESEARCH DESIGN AND METHODOLOGY

Conceptual Framework

The conceptual framework developed from S-O-R, an adaptation of the Theory of Reasoned Action and the Theory of Planned Behavior, is depicted in Figure 1. The market stimulus (S) includes things like product and service quality, and price attribution; and the mediator or organism (O) includes things like word-of-mouth, loyalty, and contentment among customers. The reaction (R) is customer retention. In addition, this study presented a research paradigm and developed 15 research hypotheses for empirical testing.

Research Design

This study investigates the impact of relationship proneness on mediators (such as positive word-of-mouth, customer satisfaction, and repeat business). Thus, the three proven dependent variables – client retention, word-of-mouth, and customer loyalty – were quantified using the total of three types of market stimulus components. To determine the scope of this study, the authors drew on the case company profile shown in Appendix A to inform consumers about the brand and the reasons for conducting this study.
Questionnaire, Sampling, and Data Collection

The current study used a quantitative approach to collect empirical data. The questionnaire for this study consists of 40 questions designed to elicit information about the research variable named above from respondents. The five-point Likert Scale of this questionnaire ranged from “Strongly disagree” (=1) to “Strongly agree” (=5) to gauge customers’ levels of approval. An online survey was used for data collection and sample selection, making use of the convenience sampling strategy. The authors restrict participation in this survey to actual clients of the case company in order to ensure an accurate and representative sample. Participants were informed of the objectives of this study. The data was collected from both local and overseas clients who have bought the authors’ product and are still buying their product.

RESEARCH RESULTS

Respondent’s Characteristics

A total of 318 (or 88.82%) of the replies are valid. According to the descriptive outcomes, the percentage of women is at 71.4%, while the percentage of men is at 28.6%. In addition, the poll details the wide range of ages of its participants; the majority of them are between the ages of 41 and 45 (41.5%) and 36 and 40 (26.1%). About 55.3% of people have a bachelor’s degree and 39.9% have a master’s degree or higher. Approximately 45% of participants work as administrative staff, 26.7% of them serve in the R&D technology department, and 1.3% of them serve as business owners. Most of them have work experience of more than six years. This demographic alignment is crucial as it enhances the applicability and generalizability of the study’s findings. The intentional inclusion of participants from various backgrounds and experiences allows for a nuanced exploration. This diversity provides a robust foundation for examining the proposed customer value/retention model, which integrates key mediators such as customer satisfaction, loyalty, and word-of-mouth.
AMOS-SEM (Structure Equation Modeling) is a causal modeling approach that optimizes the amount of variance to explain the models. For exploratory research into the viability of a new study concept or testing an existing one with a small sample size, as has been suggested (Hair et al., 2017). Significant $R^2$ values are defined as those greater than 0.672, weak $R^2$ values as those between 0.10 and 0.19, and insignificant $R^2$ values as those below 0.092, as stated by Schroer and Hertel (2009). By averaging the variance extracted (AVE) from the indicators’ factor loading, the convergent validity of the constructs can be assessed. The AVE indicator should be greater than 0.5, and the composite reliability (CR) should be greater than 0.6, as a rule. In addition, the Alpha coefficient of Cronbach’s should be greater than 0.7.

The variance inflation factor (VIF) is also used in this study to assess the extent to which the formative indicators are connected. The degree of co-linearity is predicted to increase as the VIF values increase, as proposed by Hair et al. (2017). Having VIF values of 5 or higher indicates co-linearity issues among variables. These guidelines were provided to evaluate the research model. Results are shown in Table 1, where VIF values vary from 1.015 to 1.358, with all indexes being less than 5. This means that there is no multi co-linearity issue with the predictors.

Table 1 displays the $R^2$ values for endogenous constructs. To sum up, the $R^2$ index, which determines the number of explanatory variables, is large for customer loyalty and price attribution but moderate for the other variables, as mentioned in Table 1. The rule of thumb criteria is met by all items, with AVE results for the constructions ranging from 0.540 to 0.769 (all higher than 0.5). Showing a higher level of construct validity. The next metric is the composite reliability index, and its values are varied from 0.602 to 0.966 (and all items fall within that range); this shows that the reliability of the constructs is significant. Finally, the Cronbach’s Alpha coefficients, which evaluate the internal reliability and validity of every item, fall within a very respectable range (0.734 to 0.876). The findings indicate that the paradigm has a good degree of reliability and convergent validity, which allowed the authors to move forward with the functional model evaluation.

**Hypotheses Testing**

AMOS-SEM provides a global indicator of model fit indicated by the goodness of fit (e.g., GFI, AGFI, NFI, CFI), which is intended to show how well the simulation matches the dataset, while the Root Mean Square Residual (RMSEA) index is an estimated measure of overall residual error in the context of the SEM model. As indicated by Henseler (2017), with an upper limit of 0.08 for RMSEA and a lower limit of GFI, AGFI, and NFI of 0.9 for a satisfactory model fit (Hu & Bentler, 1999). The results of the goodness-of-fit test for the estimated model were as follows: NFI=0.825, CFI=0.898, and RMSEA=0.059. Given a complicated research model, the results here demonstrate a marginal fit from the specifications.

<table>
<thead>
<tr>
<th>Construct</th>
<th>AVE</th>
<th>CR</th>
<th>Cronbach’s alpha (α)</th>
<th>$R^2$</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product Quality (PQ)</td>
<td>0.540</td>
<td>0.602</td>
<td>0.734</td>
<td>0.34</td>
<td>1.114</td>
</tr>
<tr>
<td>Service Quality (SQ)</td>
<td>0.769</td>
<td>0.653</td>
<td>0.876</td>
<td>0.28</td>
<td>1.219</td>
</tr>
<tr>
<td>Price Attribution (PA)</td>
<td>0.761</td>
<td>0.661</td>
<td>0.872</td>
<td>0.45</td>
<td>1.264</td>
</tr>
<tr>
<td>Word of Mouth (WOM)</td>
<td>0.608</td>
<td>0.966</td>
<td>0.779</td>
<td>0.40</td>
<td>1.081</td>
</tr>
<tr>
<td>Customer Satisfaction (CS)</td>
<td>0.713</td>
<td>0.604</td>
<td>0.844</td>
<td>0.23</td>
<td>1.358</td>
</tr>
<tr>
<td>Customer Loyalty (CL)</td>
<td>0.583</td>
<td>0.677</td>
<td>0.763</td>
<td>0.47</td>
<td>1.116</td>
</tr>
<tr>
<td>Relationship Proneness (RPP)</td>
<td>0.564</td>
<td>0.757</td>
<td>0.750</td>
<td>0.10</td>
<td>1.015</td>
</tr>
</tbody>
</table>
As shown in Table 2, a total of 15 hypotheses have been demonstrated in which almost 75% of the hypotheses are significant. Specifically, except for the H_{1b} (Product quality → customer loyalty), H_{3b} (price attribution → customer loyalty), and H_{5c} (the moderating role of relationship proneness on the link of customer satisfaction → customer retention), all research hypotheses were supported. Specifically, the marketing stimuli factors including product quality, service quality, and price attribution have significant influence on word-of-mouth, customer loyalty, and customer satisfaction. Thus, H_1, H_2, H_3 were supported. In addition, word-of-mouth, customer loyalty, and customer satisfaction have a significant impact on customer retention; thus H_4a, H_4b, and H_4c were supported. Finally, relationship proneness has a significant moderating effect, which can inhibit the impact of word-of-mouth and customer loyalty on customer retention. But this moderating effect was not applied for the impact of customer satisfaction on customer retention. Thus, H_5a and H_5b were supported, but H_5c was not supported.

### CONCLUSION AND SUGGESTIONS

#### Research Conclusion

In this study, the authors provide an integrated model for understanding customer retention in reaction to market stimulus, based on the S-O-R paradigm. Product quality, service quality, and price attributable value are the proposed components of marketing stimuli. In particular, this study’s overarching goals are to (a) analyze the impact of the aforementioned components (S) on the consumer’s internal organism (O) (i.e., word-of-mouth, customer satisfaction, and loyalty), and (b) explore the impact of interval organism such components on consumers’ responses (R). Following an analysis of the mediation effect of the organism components, this study investigates the effect
of relationship proneness regarding customer retention on the connection between the independent variables (word-of-mouth, customer satisfaction, and customer loyalty) and the dependent variable (customer retention).

Results are generally in line with the prior literature, except for H1b and H5c, where the current study finds no significant support for the hypotheses. The current study confirms the prior literature’s finding that a satisfied customer is more likely to purchase again from the same brand, but it finds the opposite to be true when proneness is established in the hypothesis.

The association between the mediators (word-of-mouth, customer satisfaction, and customer loyalty) and customer retention is further strengthened by relationship proneness, which is a meaningful moderator. Engaged customers are more loyal, making five times as many purchases and spending 60% more per transaction compared to disinterested customers. They are bringing in 23% more money and 23% more profit than ordinary new customers. Paying closer attention to the brands that employ a wide variety of loyalty methods, since these customers are more likely to return and make additional purchases.

The technique for calculating customer retention is straightforward and useful in situations when the authors need to quantify the proportion of customers who have remained loyal. In customer retention, the authors interact only with those who are already familiar with their brand, in the form of their current customers. They have been using their product for some time, and their needs and wants may have evolved over that time. Simply put, customer retention will be simpler and more affordable (16 times cheaper, to be exact). And the authors know the best methods to use to test their competence. Recruiting new clients is only half of the equation for optimal growth of a firm; keeping the ones the authors already have is just as important. Even if the authors’ marketing efforts pay off and they bring in a steady stream of new consumers, losing even a small percentage of their current clientele to apathy is enough to rock the foundation of their company. This emphasizes the significance of customer retention to the success and expansion of any firm. Delighted customers are significantly more likely to be loyal clients and to give an organization a greater share of their business if they are satisfied with the product or service they receive (Bhat & Darzi, 2016). When compared to client retention, the process of acquiring new customers can be time-consuming and costly. The major reason is that while making progress from scratch involves work, sustaining that development over time needs steadiness. The hypothesis H1b, that product quality has a positive influence on customer loyalty, is not supported by the data; there could be various reasons for this. One possibility is that the product quality may not be the only factor that determines customer loyalty. Other factors such as customer service, price, and brand reputation may also play a significant role in determining customer loyalty. Additionally, it could be that the sample size of the study was not large enough to detect a relationship between product quality and customer loyalty, or the study design was not robust enough to capture the complexity of this relationship. Furthermore, a customer’s loyalty may depend on the industry and product type and the customer’s personal preferences. It is suggested that further research with a larger sample size, multiple methods of data collection, or a longitudinal design may give more insight into this relationship. The hypothesis H3c, that price attribution has a positive influence on customer loyalty, is not supported by the data. This could be due to a number of reasons. One possibility is that the relationship between price attribution and customer loyalty is more complex than initially thought. For example, it could be that a high price for a product or service is perceived as a sign of quality, leading to increased customer loyalty. However, if the prices are perceived as too high, customers may not be willing to pay that price and may look for alternatives, leading to decreased loyalty. Another possibility is that other factors such as product quality, service quality, and promotion efficiency may be more influential in determining customer loyalty than price attribution. For example, if a product has high quality, a customer may be willing to pay more for it and stay loyal.

The hypothesis H5c, that relationship proneness negatively moderates the relationship between customer satisfaction and customer retention, is not supported by the data. This could be due to a
number of reasons. One possibility is that the relationship between relationship proneness and customer retention is more complex than initially thought. For example, relationship proneness may have a positive effect on customer retention when customers are satisfied but a negative effect when they are not satisfied. Another possibility is that other factors such as product quality, service quality, and promotion efficiency may be more influential in determining customer retention than relationship proneness. For example, if a product has high quality, customers may be willing to stay loyal even if the company has not emphasized building a relationship. Additionally, it could be that the sample size of the study was not large enough to detect a relationship between relationship proneness and customer retention or the study design was not robust enough to capture the complexity of this relationship. A customer is happy with a product or service if it meets or exceeds his or her expectations (Leninkumar, 2017). It is often seen as the key to a company’s long-term success and ability to stay competitive. So, the relationship between marketing, customer satisfaction, and customer retention has already been looked into. Further research with a larger sample size, multiple methods of data collection, or a longitudinal design may give more insight into this relationship.

**Academic Implication**

To keep customers coming back, a company needs to provide exceptional service on a regular basis. Satisfied and loyal customers are less likely to defect to competitors. This study shows that consumer satisfaction is not the only factor in retaining existing customers. Both a popular and well-received loyalty program and positive word-of-mouth about the product are valuable to a business. Word-of-mouth advertising influences how customers feel about the product among their social circles, and a loyalty program increases customer retention by encouraging repeat purchases. It allows businesses to direct their marketing onto a specific group of customers who could respond favorably to a free trial. Merely satisfying customers is not satisfactory for achieving customers’ loyalty. They have to experience exceptional service that will be worthy of their repeat business and referral (Nasir & Suphan, 2017). In conclusion, this research has relevance for examining how content consumers behave with tried-and-true options. Preventing or rectifying market resignations is reflected in the idea of tracking the degree to which seemingly loyal customers retain overall contentment throughout a period. Finally, the intensity range of the satisfaction scale needs to be widened to include more than just the extremes.

**Managerial Implication**

To thrive in today’s competitive market, managers must prioritize the creation of a client retention plan that is both effective and profitable. Strategic tools at one’s disposal include diversification and the importance of the client. The investment of extra resources, the hiring of extra sales and support staff, the devotion of more time. Users of the media are frequently the backbone of company customers. This is crucial for laying the groundwork for a client engagement strategy. Increased customer satisfaction and loyalty reduce the likelihood of consumer turnover. Customer relationship marketing focuses on building, managing, and growing the company’s relationship with its customers (Hyun & Perdue, 2017). To achieve the goals of customer retention, relationship enhancement, and customer advocacy through the use of preexisting clients, first, managers should incorporate confidence, ambiguity, and significance beside overall satisfaction because customers fluctuate in the intensity with which they retain and exhibit happiness. Analysis and judgments should indeed be conducted while judging the quantity of loyal clients in addition to the quantity of loyal clients who are secure, engaged, and regular or univalent in their judgments. Also, as was mentioned, buyers who are on the fence about a purchase may inflate or downplay the significance of the aspect in question as a means of rationalizing their purchasing decision. This study adopted a survey approach to evaluate customer retention using the clientele of chemical manufacturing companies in Taiwan as a case. Since previous studies mainly focused on the industries of first moving consumer goods, consumer durable goods, or the service sector, the results of this study have provided a significant contribution to the literature to understand
major influential variables of customer retention in the context of chemical manufacturing firms. By dissecting diverse marketing stimuli, this study aims to unveil nuanced insights into what resonates most with customers and fosters long-term relationships. Through a meticulous examination of the tailored stimuli such as product quality, service quality, price attribution, and word-of-mouth, this study seeks to pinpoint the most impactful drivers of customer retention. The results of this study not only contribute to the theoretical understanding of marketing dynamics, but also provide practical implications for firms aiming to enhance customer loyalty and retention through effective marketing initiatives. The results can provide a valuable guideline for the development of the chemical manufacturing industry in Taiwan, as well as in other countries.

Limitation and Future Research

If a customer joins a loyalty program, does that customer become more loyal to the program itself, or to the brand? The first limitation would be that the case company (YL brand) has not initiated any kind of loyalty program. Second, because of the intense competition in the Internet service provider industry, end users have a greater than usual level of knowledge about the services available to them. There is a lack of quantitative research on the effect of short-term deal lengths combined with cash bonuses on customer retention, even though subscription-based services are economically significant for telecommunications, media, and utilities. This research sees a futuristic way of adopting the incentive-related practice and promotion that results in customer retention. This study adopted a survey approach to collect empirical data. Specifically, based on technology brands and identified five questionnaire items intended to measure the construct of customer loyalty and four questionnaire items to measure the construct of customer satisfaction. Several marketing tools may also be available to measure these constructs. For example, the Net Promoter Score (NPS) could be used to measure customers’ likelihood of recommending products. The Customer Satisfaction Score (CSAT) could be used to measure the percentage of positive responses on a specific product or service. Customer Relationship Management (CRM) data could be used to offer a longitudinal view of customer satisfaction and retention.
REFERENCES


### APPENDIX A

#### Table 3. Questionnaire from Google sheets

<table>
<thead>
<tr>
<th>Construct</th>
<th>Description</th>
<th>Mean</th>
<th>Standard dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Product Quality (PQ) – Lone et al. (2023)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PQ1</td>
<td>The products of the new technology adhesive meet market needs well when compared to the traditional ones.</td>
<td>4.06</td>
<td>0.423</td>
</tr>
<tr>
<td>PQ2</td>
<td>The products of new technology adhesive are very welcomed by the customers</td>
<td>2.78</td>
<td>1.257</td>
</tr>
<tr>
<td>PQ3</td>
<td>These kinds of new adhesive products constantly improve their product’s quality to meet customer needs.</td>
<td>4.26</td>
<td>0.486</td>
</tr>
<tr>
<td>PQ4</td>
<td>The products of new technology adhesive are better than those of other major competitors (traditional adhesive).</td>
<td>3.86</td>
<td>0.521</td>
</tr>
<tr>
<td><strong>Service Quality (SQ) – Tjahjaningsih et al. (2020)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SQ1</td>
<td>The service people of the new technology brands are very much reliable.</td>
<td>4.34</td>
<td>0.525</td>
</tr>
<tr>
<td>SQ2</td>
<td>The service people of the new technology brands appear to be very neat.</td>
<td>4.10</td>
<td>0.315</td>
</tr>
<tr>
<td>SQ3</td>
<td>The service people of the new technology brands provide services to the customers.</td>
<td>4.30</td>
<td>0.249</td>
</tr>
<tr>
<td>SQ4</td>
<td>The service people of the new technology brands have good interactions with customers and assure the quality of services.</td>
<td>4.45</td>
<td>0.343</td>
</tr>
<tr>
<td><strong>Price Attribution (PA) – Martín-Consuegra et al. (2007)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PA1</td>
<td>The new technology brands provide appropriate prices for the products that are sold in the market.</td>
<td>3.85</td>
<td>0.223</td>
</tr>
<tr>
<td>PA2</td>
<td>The new technology brands always give a special price and have a good relationship with frequent customers.</td>
<td>2.76</td>
<td>0.284</td>
</tr>
<tr>
<td>PA3</td>
<td>The new technology brands make sure that the product price can achieve the desired level of the customer.</td>
<td>3.94</td>
<td>0.224</td>
</tr>
<tr>
<td>PA4</td>
<td>Compared to other traditional companies, the price-performance ratio of new technology brands is very good.</td>
<td>3.98</td>
<td>0.173</td>
</tr>
<tr>
<td><strong>Word-of-mouth - Ranaweera and Prabh (2003)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WOM1</td>
<td>I will say positive things about these new technology brands and their products to other people.</td>
<td>4.12</td>
<td>0.395</td>
</tr>
<tr>
<td>WOM2</td>
<td>I will recommend these new technology brands to someone who seeks my advice.</td>
<td>4.04</td>
<td>0.522</td>
</tr>
<tr>
<td>WOM3</td>
<td>I will encourage friends and relatives to visit the company store for great deals and promotions.</td>
<td>3.94</td>
<td>0.466</td>
</tr>
<tr>
<td><strong>Customer Loyalty – Magatef and Tomalieh (2015)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CL1</td>
<td>The new technology brands make sure that all kinds of requests made are, no matter how large or small, handled appropriately.</td>
<td>4.37</td>
<td>0.540</td>
</tr>
<tr>
<td>CL2</td>
<td>The new technology brands staff recognizes a customer by their name if they shop regularly.</td>
<td>4.47</td>
<td>0.536</td>
</tr>
<tr>
<td>CL3</td>
<td>The new technology brands would make sure that the shop offers a hassle-free experience.</td>
<td>4.08</td>
<td>0.506</td>
</tr>
<tr>
<td>CL4</td>
<td>I would be very certain that the service I receive will be the same every time I visit.</td>
<td>4.17</td>
<td>0.511</td>
</tr>
<tr>
<td>CL5</td>
<td>All employees who work for new technology brands communicate with the best attitude, which makes the company’s needs important to customers.</td>
<td>4.28</td>
<td>0.485</td>
</tr>
<tr>
<td><strong>Customer Satisfaction – Almohammeeed (2019)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CS1</td>
<td>New technology brands design their brand in such a way that it is worth paying more pennies for their products.</td>
<td>3.99</td>
<td>0.442</td>
</tr>
<tr>
<td>CS2</td>
<td>The new technology brands design a brand in such a way that the customers get satisfied when they purchase products from this brand.</td>
<td>3.90</td>
<td>0.520</td>
</tr>
<tr>
<td>CS3</td>
<td>The new technology brands makes the customer feel good when they buy products under their brand.</td>
<td>4.11</td>
<td>0.508</td>
</tr>
<tr>
<td>CS4</td>
<td>I feel that the products of the new technology brands mostly meet expectations.</td>
<td>4.06</td>
<td>0.367</td>
</tr>
</tbody>
</table>

*continued on following page*
Ying-Kai Liao is the Associate Professor of the Program of International Business at Nanhua University, Taiwan. Her teaching and research interest are in the areas of brand management, marketing strategy, new product development and digital marketing. Her research has been published in International Journal of Hospitality Management, Management Review, Project Management Journal, Expert Systems with Applications, and Asia Pacific Management Review.

Wann-Yih Wu is the Chair Professor, Department of Business Administration at Nanhua University, Taiwan. His teaching and research interest in the areas of International Marketing, Management, International Business Management, Corporate Research Methods. His research has been published in British Journal of Management, International Journal of Human Resource Management, and along with his books on Marketing Research, Business Research Methods and The Case Studies of Business Internationalization.

Saranya Gajendran is a research student at Nanhua University, Taiwan. She is currently working under the supervision of Prof. Wann-Yih Wu - Dean of the College of Management. Her research interest is in Human Resource Management, Marketing Management and Business Administration.

Yuan Tsung Kuo, Technical department Manager at Yuen Liang. Former student of National Cheng Kung University, Taiwan. His research interest is in marketing management, energy management.

Yuen Liang Industrial & Co., Ltd., which was founded in 1975, has a monthly output of 250 metric tons; however, it has only 10 or so employees. Yuen Liang is the pioneering petroleum resin producer and earned the ISO-9002 certificate for quality management in 1998. It was not until 1999 that Yuan Liang joined with the upstream supplier Arochem, allowing for a steady increase in output. Through consistent quality system upgrades, Yuen Liang has earned certifications from a number of reputable organizations. Starting with ISO 9001 in 2001 and REACH in 2010, the company went on to earn the ISO/TS 16949: 2009 certification in 2016 and IATF16949 and ISO14001 certifications in 2018. Yuen Liang has grown steadily to the point where it now employs over 130 people, has implemented fully automated assembly lines, and is able to efficiently produce up to 8,000 metric tons (MT) per month for export to more than 60 different countries. As far as single-factory output goes, Yuen Liang is widely considered to be the world’s number one producer of C9 grade petroleum resin. Yuen Liang is also a top producer in the globe when it comes to petroleum resin with a C5, C9, or C10 content. The customers that purchase with the authors come from over 70 different nations. The authors’ products can be used in a variety of industries, including painting, rubber, adhesive, printing, printing ink, asphalt coloring, and plastic construction industries.

<table>
<thead>
<tr>
<th>Construct Description</th>
<th>Mean</th>
<th>Standard dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>RP1 Generally, I am someone who wants to be a steady and regular customer of the new technology brands.</td>
<td>4.13</td>
<td>0.704</td>
</tr>
<tr>
<td>RP2 These brands give me a trustworthy impression when compared to the traditional ones.</td>
<td>3.91</td>
<td>0.713</td>
</tr>
<tr>
<td>RP3 Generally, I am someone who is willing “to go the extra mile” to buy at the same store.</td>
<td>3.92</td>
<td>0.730</td>
</tr>
<tr>
<td>CUR2 I feel that the new technology brands have an explicit, documented customer retention plan.</td>
<td>3.55</td>
<td>0.591</td>
</tr>
<tr>
<td>CUR3 I feel that the new technology brands plan proper activities for customer retention.</td>
<td>3.82</td>
<td>0.517</td>
</tr>
<tr>
<td>CUR4 I feel that these new technology brands have nominated a particular person or group to be responsible for customer retention.</td>
<td>3.65</td>
<td>0.601</td>
</tr>
</tbody>
</table>