# The Impacts of Brand Trust, Customer Satisfaction, and Brand Loyalty on Word-of-Mouth

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Abstract - The study mainly investigates the relationships among brand trust, customer satisfaction, brand loyalty, and word-of-mouth. Nowadays, the automotive industry is facing the competitive environment. Whether the industry can enhance brand trust, increase customer satisfaction, and then improve brand loyalty and word-of-mouth, which is the key issue of this study. Toyota was selected as the object of this study. 375 questionnaires were provided and 258 valid replies were received. This study uses the structural equation model to empirically explore the relationships among brand trust, customer satisfaction, brand loyalty, and word-of-mouth. The results indicate the best model is causal chain, that is, brand trust must affect brand lovalty through customer satisfaction initially, and then impact word-of-mouth through brand lovalty.

Keywords - Brand loyalty, brand trust, customer satisfaction, structural equation modeling, word-of-mouth

#### I. INTRODUCTION

Brand management has very important influence on the success of enterprises today, and the automotive industry is no exception. Customer satisfaction is also an important indicator of business management in recent years. In today's competitive environment, for the auto industry, how to build and maintain customer loyalty, and increase customer retention, has become important for marketing strategies. Therefore, how to improve product and service quality, increase customer satisfaction, and further get customer identity (that is, loyal customers), build good brand image and reputation, is the key issue of this study.

In the over-supply automotive market, this study intends to adopt Toyota as the sampling object, trying to understand the relationships among brand trust, customer satisfaction, brand loyalty, and word-of-mouth. The important contribution of this study includes: (1) clarifies the relationships among brand trust, customer satisfaction, brand loyalty, and word-of-mouth, and the fully mediated roles of customer satisfaction and brand loyalty; (2) clearly shows what factors will affect word-of-mouth, and provides direction for marketing strategies.

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## II. LITERATURE REVIEW AND HYPOTHESES

## A. Brand Trust and Word-of-Mouth

Besides customers and enterprises' commitment to each other, customer trust will affect the spontaneous behavior of customers [1]. If companies build mutual trust and customer relationships, companies can increase customer commitment, and will get better word-of-mouth [2]. Thus, this study establishes the following hypothesis: H1: Brand trust has a significant positive impact on word-of-mouth.

#### B. Customer Satisfaction and Word-of-Mouth

Reference [3] pointed out that the high level of customer satisfaction will result in favorable word-of-mouth, leading to an increasing market share. Reference [4, 5, 6] also thought that customer satisfaction would affect word-of-mouth. Thus, this study makes the following hypothesis:

*H2*: Customer satisfaction has a significant positive impact on word of mouth.

## C. Brand Trust and Customer Satisfaction

When customers have confidence in a particular brand, this brand will leave a good impression in the minds of customers. Customers will believe this brand is a trusted brand and have better satisfaction [7]. Reference [8] thought that when customers like a specific brand, the brand will generate further satisfaction, and customers will buy again. In the basic model of customer loyalty, [9] pointed out that trust has a positive impact on satisfaction. Therefore, this study proposes the following hypothesis: *H3*: Brand trust has a significant positive impact on customer satisfaction.

# D. Brand Trust and Brand Loyalty

Reference [10] described the concept of brand trust and brand feeling, and found brand trust has a significant positive effect on behavioral loyalty and attitudinal loyalty. When customers have confidence in the brand, it will increase product preferences, future purchases, and then bring brand loyalty [11]. Therefore, this study proposes the following hypothesis:

*H4*: Brand trust has a significant positive effect on brand loyalty.

## E. Customer Satisfaction and Brand Loyalty

Reference [12] found that satisfied customers will naturally increase loyalty. That is, customer satisfaction will positively affect customer loyalty. Reference [13] believed that customer satisfaction will positively affect customer loyalty, repurchase, and result in customers' recommending to others. When customer satisfaction is higher, customers will have lower brand switching behavior, that is, customers will continue to buy the original product or service of the brand [14]. Reference [6] also confirmed that customer satisfaction has a positive effect on brand loyalty. Therefore, this study proposes the following hypothesis:

*H5*: Customer satisfaction has a significant positive effect on brand loyalty.

## F. Brand Loyalty and Word-of-Mouth

Loyal customers will appear positive word-of-mouth [15]. Reference [16] also proposed that loyal customers will provide open recommendation and word-of-mouth to other customers. Therefore, this study proposes the following hypothesis:

*H6*: Brand loyalty has a significant positive impact on word-of-mouth.

Integrating literature review, this study draws the research map as shown in Fig. 1. From Fig. 1, it is clear to see not only the relationships among brand trust, customer satisfaction, brand loyalty, and word-of-mouth, but also other extending variables, such as customer perceived value, brand awareness, and purchase intention. Having these in mind, this study develops the research framework and hypotheses, and then verifies them.

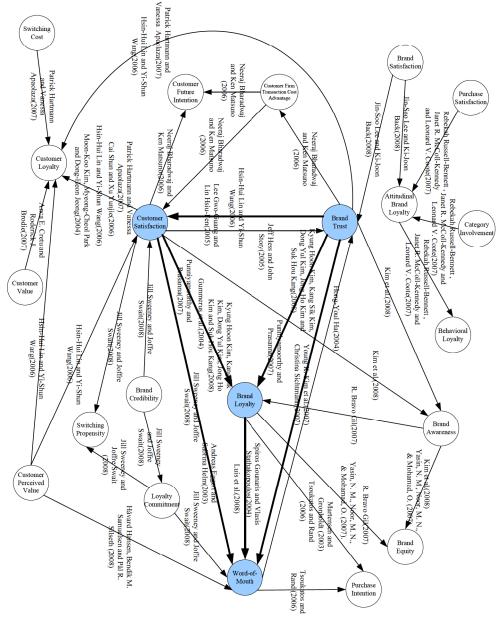


Fig. 1. Research map

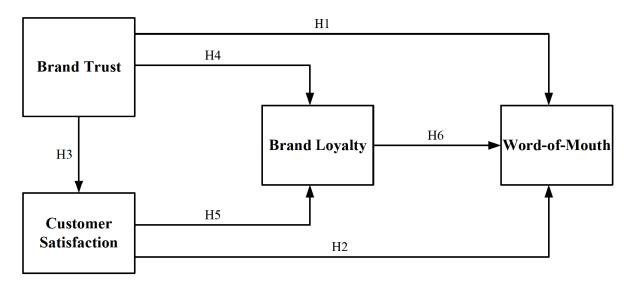


Fig. 2. Research framework

#### III. METHODOLOGY

#### A. Research Framework

The purposes of this study are to investigate the relationships among brand trust, customer satisfaction, brand loyalty, and word-of-mouth. Based on literature, this study builds up the research framework as shown in Fig. 2.

#### B. Measures

This study used [17] scale revised from [18, 19] as a measured criteria of brand trust, and took [18] as the operational definition.

Besides, this study used [20] scale as a measured criteria of customer satisfaction, and took [21] as an operational definition.

This study used [22] scale as a measured criteria of brand loyalty, and took [23] as the operational definition.

Regarding word-of-mouth, this study used [24] scale revised from [25, 26, 27] as a measured criteria, and took [28, 27] as the operational definition.

All items were measured on 5-point Likert-type scales, with anchors of 1=strongly disagree and 5=strongly agree.

# C. Sampling

In this study, Toyota was selected as the object. Thus, this study takes Toyota drivers for the study sample. Finally, 375 questionnaires were provided and 258 valid replies were received.

## IV. RESULTS

This study modifies the initial model because of incomplete model fits based on modification indices (MI) values. Lower item standard solution value means lower explanation of variables, and over MI means mixed identification of items. Finally, this study deletes one item of customer satisfaction, and 4 items of brand loyalty in order to achieve good model fits.

Thus, the measurement model of this study has good model fits, such as GFI, NNFI > 0.9 [29], and CFI > 0.95 [30]; SRMR < 0.08, between 0.017 and 0.036 [29]. RMSEA is between 0.063 and 0.080 [31, 32]. Normed Chi-Square is between 2.01 and 2.65 [33].

The reliabilities (Cronbach's  $\alpha$ ) for all measures are above the recommended limits 0.7 (0.704 $\sim$ 0.891), which indicate high reliabilities [34].

All of the measurement *t*-values are between 5.27 and 17.49 (all larger than 1.96), which show good convergent validity in brand trust, customer satisfaction, brand loyalty, and word-of-mouth.

In this study, the discriminant validity shows good fit indices. All  $\Delta\chi^2$  are larger than 3.84, which are between 4.68 and 11.88. This shows a good discriminant validity of the measurement model [33].

In this study, the theoretical model is as shown in Fig. 3. In the relationships among brand trust, customer satisfaction, brand loyalty, and word-of-mouth, *t*-values are all significant. Fig. 3 presents the overall model fits and the results of path analysis which indicate an adequate fit:  $\chi 2=278.44$ , p=0.00000, and RMSEA=0.095. The significant standard solution of each path is -0.15, 0.46, 0.90, -0.05, 0.79, and 0.42 respectively.

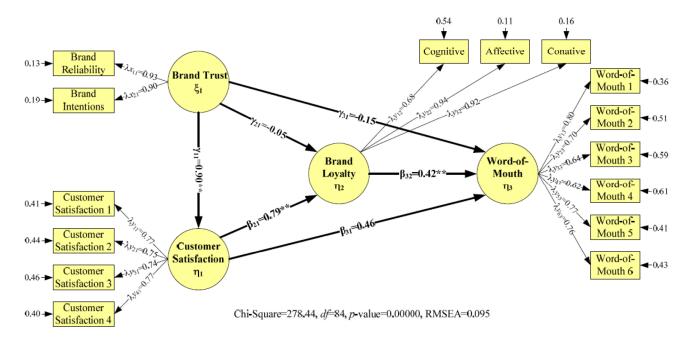


Fig. 3. Theoretical model

## V. DISCUSSION

In this study, through empirical analysis of the data, it makes the relationships among brand trust, customer satisfaction, brand loyalty, and word-of-mouth more clear and explicit.

The analysis results of data show that brand trust has a positive impact on customer satisfaction. It is the same as the empirical study of [35, 36]. In view of this, building customer trust in the brand is very important. Companies can convince customers that the promise of its value of the brand can be achieved (trust in the product itself). On the other hand, companies can enhance customers' emotional security for the brand (trust in the service of the brand). When customers' needs are being met, it will further enhance customer satisfaction.

The result from this study finds that customer satisfaction has a positive impact on brand loyalty. This result is the same as some scholars [6, 35, 37]. Therefore, this study suggests that firms can improve satisfaction of service to increase customer loyalty. Also, companies can engage in public or outdoor activities to improve customer satisfaction with the overall image of the company, and then improve customer loyalty.

The analysis results of data show that brand loyalty has a positive impact on word-of-mouth. That is to say when brand loyalty is higher, the more willing to form a positive word-of-mouth spread. It is the same as the empirical study of [38, 16]. Therefore, this study suggests that manufacturers can enhance brand loyalty through product satisfaction of customers. Customers may be willing to recommend to other people, and then the word-of-mouth effect will bring more purchasing power.

#### VI. CONCLUSION

In summary, this study finds that the relationships among brand trust, customer satisfaction, brand loyalty, and word-of-mouth are gradually progressive, so-called causal chain. The results indicate the best model is causal chain, that is, brand trust must affect brand loyalty through customer satisfaction initially, and then impact word-of-mouth through brand loyalty.

There are some limitations of this study. First, this study collects data at the same time, so it can't do cross-time comparison. Future research can explore the cross-time survey. Second, this study only drives Toyota owners for the analysis. Future research can further investigate the relationships for different brands or other products. Finally, because limited by sampling, this study can't sampling according to the proportion of the sample. Thus, the representativeness of the sample may lead to biased results. It is therefore recommended for future studies using stratified sampling approach to increase the representativeness of the sample.

Future research may address a number of brands, through mediation and competing models to compare, and enhance the universal application of research results.

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