

## Customer Satisfaction and Loyalty in the Construction Material

### Supply Business in Thailand

## ความพึงพอใจ และความภักดีของลูกค้าในธุรกิจค้าปลีกวัสดุก่อสร้าง ในประเทศไทย

Dr. Kamjira Limsiritong<sup>1</sup>

### ABSTRACT

The research objective is to identify the relationship between customer satisfaction and service loyalty. 261 convenience samplings from the three selected companies in Thailand completed their responses which gained a huge response rate at 87%. Then, data analysis is performed by using a computer by statistical analysis programs.

The research finding is customer satisfaction is positively related to loyalty. The finding from this research will allow the Thai managers to re-explore their services strategy development, specifically in the context of extending customer satisfaction and thereby loyalty. This service strategy development can help in gaining customer satisfaction and loyalty, which is crucial in obtaining and sustaining competitive advantage in an increasingly competitive market place especially in the construction material supply business.

### บทคัดย่อ

วัตถุประสงค์การวิจัยครั้งนี้ เพื่อศึกษาถึงความสัมพันธ์ระหว่างความพึงพอใจและความภักดีของลูกค้า ซึ่งผู้วิจัยได้เก็บรวบรวมกลุ่มตัวอย่างแบบตามสะดวกจำนวน 261 ตัวอย่างจาก 3 บริษัทในประเทศไทยที่ถูกเลือกโดยได้อัตราการตอบกลับสูงถึง 87% หลังจากนั้นนำมาทำการประมวลผลโดยใช้ โปรแกรมสำเร็จรูปเพื่อการวิเคราะห์ทางสถิติ

ผลการวิจัยพบว่า ความพึงพอใจของลูกค้ามีความสัมพันธ์เชิงบวกต่อความภักดี จากการค้นพบในงานวิจัยนี้จะมีส่วนทำให้ผู้บริหารชาวไทยปรับปรุงการพัฒนากิจกรรมการบริการ โดยเฉพาะในด้านความพึงพอใจของลูกค้ากับความภักดีของลูกค้า ซึ่งการพัฒนากิจกรรมการบริการจะทำให้ได้รับความพึงพอใจจากลูกค้า และ ความภักดีของลูกค้าซึ่งเป็นการเพิ่มการได้เปรียบทางการแข่งขันในธุรกิจค้าปลีกวัสดุก่อสร้างในปัจจุบัน

<sup>1</sup> Lecturer, MBA and IMBA program, The Graduate School of Business, Siam University, Petkasem Road, Phasicharoen District, Bangkok 10160

## INTRODUCTION

In the past, the focus of research investigating loyalty was on tangible goods (Cunningham, 1956; Day, 1969; Kostecki, 1994 cited in Maloney, 2002). However, there are limited studies that examine service loyalty; for example, Gremler and Brown (1996) extend the loyalty concept to service loyalty by considering intangible products or services. Maloney (2002) argued that obtaining repeated customer purchase is the foundation for businesses.

This study essentially attempts to understand whether customer satisfaction impacts to loyalty in Thailand specifically the construction material supply business. Moreover, there is a lack of research examining loyalty particularly in Thailand. Furthermore in the general marketing literature, the role of customer satisfaction in the loyalty has had limited attention.

## CUSTOMER SATISFACTION

Customer satisfaction is divided into two levels; a transaction-specific assessment and an overall assessment. The transaction-specific assessment is the first level which is based on the attitude level and defines customer satisfaction or emotional reaction (Oliver, 1980, 1981). In contrast, the overall assessment is the second level which is based on the customers' experiences and all encounters with the particular company (Taylor and Baker, 1994). Customer satisfaction is a response or an experience which is related to consumption of services. Each service provides some opportunities to reinforce their commitment to quality or consumer satisfaction. Therefore, overall service satisfaction can be seen as consumer's satisfaction or dissatisfaction based on their experiences in that particular company.

Lovelock, et al., (2001, p. 100-101) describe satisfaction as a consumer's "post purchase evaluation of the overall service experience (process and outcome). It is an affective state in which the consumer's needs, desires and expectations during the course of the service experience have been met or exceeded". Customer satisfaction is an important topic area for this research because of its relationship with customer perceptions, evaluation of performance, value and ultimately outcome behaviors.

The disconfirmation of expectation model is the most dominant model in customer satisfaction research. The model shows that satisfaction is related to the pre-purchase expectations (a factor of previous experience, involvement, marketing and competitors) and perceived performance of the service. Where expectation exceeds performance, the consumer suffers disconfirmation resulting in dissatisfaction. Where performance matches or exceeds expectation, customer satisfaction or delight can be expected. Patterson (2000; cited in Lovelock et al., 2001) show a direct link between performance and satisfaction for a high involvement purchase decision, with customer emphasis placed on post purchase evaluation. This finding has important implications for management when improving performance, indicating that attention to post purchase evaluation of consumers is the most important area to improve satisfaction.

## LOYALTY

Gremler and Brown (1996) used the loyalty concept in the context of intangible products and argue that there are three components that are importance in defining loyalty; purchase, cognition and attitude. Attitude means change in buyers' behaviour in terms of fulfilling their needs or wants (Limsiritong and Reongprasertvit, 2001). Hence, the expression of loyalty can be seen in terms of consumer repeat purchasing behaviour from a service provider (Gremler and Brown, 1996).

Even though, the belief of these authors that customers' repeating purchase behavior may guarantee loyalty or predict customer intention, Maloney (2002) argued that receiving customer repurchase is the ultimate fact for business. The key fundamental to study consumer behavior is why they repeat purchasing product. The probability of customer repurchasing caused from both satisfaction and switching barrier was suggested by Fornell (1992), and supported by Keaveney (1995). He investigated several reasons of customer's switching reason such as services failures or price, etc. As switching barriers are considered as a priority of customer repurchase behavior, or the intention to repurchase good or service, the impression of performance and satisfaction is very important. (Bateson and Hoffman, 1999) It related to customer satisfaction or dissatisfaction which lead to deny or repurchase the product again, therefore loyalty is very essential for repurchasing decision of customers (Maloney, 2002).

## CUSTOMER SATISFACTION AND SERVICE LOYALTY

Though Higgings (1997) objects that the demonstration on the ability of customer satisfaction score to predict such loyalty is inadequate. The recognition of customer loyalty as the ultimate measurement of customer satisfaction is increasing. Fornell (1992) point that the customer satisfaction is in direct effect of customer loyalty, if the satisfaction is high, it increase loyalty for the firm which can lessen chance in losing customers to its competitor. In the same direction, Anderson and Fornell (1994) indicate that loyalty is determined to a large extent by customer satisfaction. Moreover, Anderson and Fornell (1994) emphasize that the failure of the firms to demonstrate the linkage of customer satisfaction and economic performance, may leave behind the focus of customer satisfaction measurement.

In a conceptual paper on loyalty of Dick and Basu (1994), states that most researchers have focused only on the issue related to the measurement of loyalty, while its concept widely applies to a variety of contexts from consumer packaging product to industrial to retail store, Dick and Basu (1994) then introduce an idea of relative attitude in order to provide further understand on theoretical grounding to the loyalty construct.

Dick and Basu (1994) explain the loyalty in the mean of more favorable attitudes towards a brand and repeat support, the low relative attitude with low repurchase implies lack of loyalty, while low relative attitude with high repurchase show the unreliable loyalty. These then indicate the

satisfaction as the priority of relative attitude as customers will only hold favorable attitude towards brand when comparing with others because of satisfaction.

## RESEARCH OBJECTIVE AND HYPOTHESIS

The research objective is *to identify the relationship between customer satisfaction and loyalty.*

In service industries, customer satisfaction and loyalty are influenced by the quality of interactions between customers and the personnel involved in the contact services (Kotler, 1999). Lovelock, Patterson and Walker (2001) chronicle satisfaction as a buyer's post acquire appraisal of the all-inclusive service experience (formula and result). Patterson (2000; cited in Lovelock et al., 2001) showed a direct link between performance and satisfaction for a high involvement purchase decision, with customer emphasis placed on post purchase evaluation. It is essentially argued in this study that the levels of customer satisfaction, founded on the experiences of the customers with the firm, will results in higher levels of loyalty. In other words, as consumers are confident of the company's ability to meet their requirements reliably and efficiently (i.e., satisfaction), they would prefer to buy services from the company (loyalty) and it avoids switching costs for the consumer. Thus; hypothesis is *Customer satisfaction is positively related to loyalty.*

## METHODOLOGY

A quantitative research was conducted for this study. The questionnaire was firstly developed in English. Then, the questionnaire was translated into Thai. To prevent miscommunication, the questionnaires were interpreted into the local language (Ramachandran, 1991). The 30 pre- tested questionnaires were tested to make sure that this instrument was suitable for the objective and the hypothesis. Then, the self-administered mail surveys were sent for obtaining data as the primary mechanism.

It was deemed appropriate that a non-probability sampling techniques (convenience sampling) was used due to the nature of this research. So, the convenience sampling is any customers who interact with the three selected companies.

The names of the construction material suppliers were obtained from a randomly selected sample from a list of firms in the construction industry accessible from publicly available websites. Then the three companies would be contacted to request authorizations to access the customers.

The organizations' authorization is required at this stage. The researcher requested to provide information to the participants' organization about the study. The three organization aided in obtaining a random sample of about 300 respondents after getting approval from the three selected companies. A letter of consent was sent to the organizations to get permission to obtain approval from their customers. Attention was paid throughout to the privacy and confidentiality issues of these respondents.

300 questionnaires posted to the 3 selected construction material supply business companies. Each of the three selected companies was obtained 100 questionnaires. Totally, 261 customers from the three selected companies completed their responses which gained a huge response rate at 87%.

## DATA ANALYSIS AND DISCUSSION

Data analysis is performed by using statistical packages. Data analysis transforms the data into information that would support or disprove the hypotheses. Interval-scales, via Likert Scales are the primary means of collecting the data. Descriptive analysis such the frequency, mean and standard deviation will be performed to understand the primary data such as gender, age and educational background. The Partial Least squares analysis will be employed to examine the hypothesis. The test will be conducted to understand the relationships between customer satisfaction and loyalty.

Table 1 provides the frequency and percentage for the demographic information. The demographic statistics highlighted includes gender, age, education background, and annual income.

**Table 1: The Demographics' information of respondents**

Variables	Frequency	Percentage (%)
<b>Gender:</b>		
Male	132	50.6
Female	129	49.4
Total	261	100
<b>Age:</b>		
Missing	2	0.8
Under 20 years old	5	1.9
21-30 years old	73	28.0
31-40 years old	81	31.0
41-50 years old	66	25.3
51-60 years old	33	12.6
Above 60 years old	1	0.4
Total	261	100
<b>Education Background:</b>		
Missing	2	0.8
High school or under	21	8.0
TAFE	42	16.1
Undergraduate degree	144	55.2
Postgraduate or above	52	19.9
Total	261	100
<b>Annual Income:</b>		
Missing	3	1.1
Under 50,000 bahts	76	29.1
50,001- 100,000 bahts	29	11.1
100,001-150,000 bahts	33	12.7
Over 150,000 bahts	120	46.0
Total	261	100



From this table 1, 50.6% of the respondents are male and 49.4% are female 31% of respondents are aged between 31 and 40 years followed by 28% of respondents aged between 21 and 30 years, whilst only 0.4% are more than 60 years old. In the context of education background, most are university educated, including 55.2% have undergraduate degree, whilst at 8% have studied till high school or below. In term of income, 46% earn higher than 150,000 bahts annually, about 11.1% earn between 50,001 and 100,000 bahts, annually.

Zigmund (2003) defined satisfaction of customers as the customer's impression of the superiority of a firm's services. Similarly, Cheng (2006) endorsed that service quality is a key issues affecting customer satisfaction. Furthermore, customer satisfaction can predict customer repurchasing. After review prior survey based research (e.g. Bettmen, 1974 cited in Wang and Lo, 2004; Caruana, 2002; Swan and Oliver, 1985 cited in Wang and Lo, 2004; Burns, Graefe and Absher, 2003), this study applied the 4 items subjective scale of customer satisfaction of Caruana (2002) to report the satisfaction levels of customers. The respondents rated the satisfaction levels via the five point Likert scales. The anchors for the scales are; 1-very dissatisfied to 5-very satisfied. This scale of 4 items presented a composite reliability of 0.949 which was gained from the PLS. The four items include;

**Table 2: Measurement – Customer Satisfaction**

Item	Item Wording
Satisf1	How satisfied are you with the overall service?
Satisf2	Please rate your satisfaction with the time of delivery of services
Satisf3	Please rate your satisfaction with the company's customer service
Satisf4	Please rate your satisfaction with the Merchandise Options
deleted	Items deleted

Several studies have empirically developed a scale for service loyalty (e.g., Caruana, 2000; Disney, 1999; Gremler and Brown, 1996; Sivadas and Baker-Prewit, 2000). For example, Caruana (2000) followed Gremler and Brown's research (1996) and suggested several items for capturing loyalty. Based on Caruana's study, this study adopted an 8 item subjective scale for measuring loyalty. Loyalty is measured by 8 items with a five point Likert scale. This scale of 8 items presented a composite reliability of 0.909 which was obtained from PLS. The anchors for two questions items are: 1-Not very likely to 5-very likely. Then, the anchors for the other six items measuring loyalty are; 1- Strongly Agree and 5 – Strongly disagree. The eight items are as follows:

**Table 3: Measurement -Loyalty**

Item	Item Wording
lo1	How likely is it that you will continue using the company's services?
lo2	How likely would you be to encourage the Company to your friends and relatives to come to the company?
lo3	I will use this company's services every time I need a service
lo4	This company's service makes me come back to do business
lo5	I believe this company is good
lo6	I like doing business with this company
lo7	I have considered switching companies
lo8	This company is the first company I think of when buying construction materials
deleted	Items deleted

For the key constructs of interests, both of which are uni-dimensional all the items had a critical ratio greater than 1.96; therefore, all items were included in the final analysis.

Furthermore, discriminant validity which is the test for the uniqueness of the scale Bagozzi, Yi and Phillips (1991) was examined through PLS by examining the Average Variance Extracted (AVE). The AVE represents the average squared correlation (i.e., average communality) between the items representing a construct and the construct itself as obtained from the PLS analysis. It has been recommended that a construct should have an AVE larger than 0.5 to have acceptable discriminant validity (Chin, 1998). The findings of AVE from table 4 show results for discriminate validity (0.631 for satisfaction) and (0.614 for service loyalty). These findings provide evidence for discriminant validity.

The reliability of a measure determines its ability to yield consistent results (Nunnally, 1978). A reliability of greater than 0.7 is recommended (Nunnally, 1978). The composite reliabilities obtained from the PLS analysis suggests that all had acceptable reliabilities (Satisfaction, 0.869 and Loyalty, 0.926) as shown in table 4.

**Table 4: Measurement model, AVE and Composite Reliabilities**

Component and Manifest Variables	Loadings
Satisfaction	
AVE	.631
Composite Reliability	.869
Loyalty	
AVE	.614
Composite Reliability	.926

Having discussed the hypothesis PLS is used in this study because it is recommended for smaller samples, it avoids multi-variate normality assumptions and most importantly it is a valid technique to understand measurement and relationships. However, the evaluation of the model involves multiple indices (Lohmoller, 1981). Various fit indices for the predictive relevance are identified (Fornell and Cha 1994). These include r-squared, average variance explained (AVE), average variance accounted for (AVA), regression weights and loadings. Furthermore, important indices such as the variance explained by the paths (i.e., correlation x path coefficient) and critical ratios for the inner model are also provided. The r-squared should be larger than the recommended levels (0.10), the variance due to path should be greater than 0.015 (1.5%), the critical ratio should be greater than 1.96 for the relationships to be significant Falk and Miller (1992).

**Table 5 Model of the Hypothesis (*Customer satisfaction is positively related to service loyalty*)**

Predicted Variable	Predictor Variable	Hypothesis	Path	Variance due to path	R <sup>2</sup>	Critical Ratio
Loyalty	Customer Satisfaction	H1	.509	.35		7.62****
					.57	
AVA					.555	

\*\*\*\*=<0.001, \*\*\*=<0.010, \*\*=0.050, ns=not significant

The PLS analysis suggested that the path coefficient is 0.509 and the critical ratio was higher than 1.96 (7.62) and the variance due to path was 0.35, which is greater than 0.015. Thus the hypothesis was supported.

Discussing on the key finding, it is structured according to the hypothesis. Customer satisfaction is considered as an important factor for loyalty and buyer retention, profitability and return on investment (Hackl and Westlund 2000). The Research Objective; **(to identify the relationship between customer satisfaction and loyalty)** highlighted the relationship between customer satisfaction and loyalty. The Hypothesis is: **customer satisfaction is positively related to loyalty**, essentially arguing the antecedent nature of customer satisfaction to service loyalty. Lovelock et al, (2001) showed that if consumers are confident of the company's ability to meet their requirements reliably and efficiently (i.e., satisfaction), they would prefer to buy services from the company (loyalty) and this process also avoids switching costs for the consumer. Furthermore, Patterson (2000; cited in Lovelock et. al., 2001) showed a direct link between performance and satisfaction for a high involvement product, with emphasis placed on post purchase evaluation. It is essentially argued in this study that the levels of customer satisfaction, founded on the experiences of the customers with the firm, will results in higher levels of loyalty.



## CONCLUSION AND LIMITATIONS

In conclusion, this research is couched in the marketing literature relating to customer satisfaction and loyalty. This study was guided by the research question; How do customer satisfaction relate to loyalty in the Thai construction material supply business?. The research objective and the related hypothesis developed from the literature review provided the foundation for the empirical investigation of the relationships. The research methodology was discussed and then presented the finding of the hypothesis. Statistical packages were applied to test the hypothesis finding. The result suggests that customer satisfaction is positively related to loyalty. The findings from this research will allow the Thai managers to re-explore their services strategy development, specifically in the context of extending customer satisfaction and thereby loyalty. This service strategy development can help in gaining customer satisfaction and loyalty, which is crucial in obtaining and sustaining competitive advantage in an increasingly competitive market place. Understanding this is important because of the extreme competition; the key to a sustainable competitive advantage lays in delivering a high quality service that will result in satisfied customers. In conclusion, the purpose of this study was to perform an investigation of the literature relating to service loyalty, and customer satisfaction within Thailand, with emphasis on the construction material supply business industry.

However, there are several limitations to the study. Firstly, the sample respondents were exclusively from Bangkok so the generalizability of the findings to Thailand in general must be made with caution. Secondly, there are limitations in the methodology relating to some aspects of translation. For example, Ramachandran (1991) argues that translation of the questionnaire is necessary for preventing miscommunication or misinterpretation. However, the questionnaire translation from English to Thai or Thai to English versions may not have interpreted the nuances of the language and therefore the differences in meaning may have an affect on the quality of the data collection.

## REFERENCES

- Anderson, E.W., and Fornell, C. (1994) *A customer satisfaction research prospectus in R. T. Rust and R.L. Oliver (eds), Service quality: New directions in Theory and practice*, Sage, Thousand Oaks.
- Bagozzi, R.P., Yi, Y. and Phillips, L.W. (1991), "Assessing construct validity in organisational research", *Administrative Science Quarterly*, 36, 3, pp.421-458.
- Bateson, J.E.G., and Hoffman, K.D. (1999) *Managing Services Marketing: Text and Readings*, TX: Dryden Press, Fort Worth.
- Burns, R.C., Graefe, A.R., and Absher, J.D. (2003) Alternate Measurement Approaches to Recreational Customer Satisfaction: Satisfaction-Only Versus Gap Scores, *Leisure Sciences*, 25, pp.363-380.

- Caruana, A. (2002) Service loyalty: The effects of service quality and the mediating role of customer satisfaction, *European Journal of Marketing*, 36, 7/8, pp.811-828.
- Cheng, K. (2006) What Consumers Need from Restaurants: An Empirical Study on Different Classes of Restaurants in Taiwan and their Customer Service, *Journal of American Academy of Business, Cambridge*, 8, 1, pp. 156-162
- Chin, W. (1998). *The Partial Least Squares Approach to Structural Equation Modeling. Modern Methods for Business Research*. G.A. Marcoulides, New Jersey: Lawrence Erlbaum Associates, Inc.
- Cunningham, R.M. (1956) "Brand loyalty-what, where, how much", *Harvard Business Review*, 39, November-December, pp.116-138.
- Day, G.S. (1969) "A two dimensional concept of brand loyalty", *Journal of Advertising Research*, 9, September, pp.29-36.
- Disk, A.S. and Basu, K. (1994) Customer loyalty: toward an integrated conceptual framework, *Journal of the academy of Marketing Science*, 22, 2, pp.99-113.
- Disney, J. (1999) Customer satisfaction and loyalty: the critical elements of service quality, *Total Quality Management*, 10, 4/5, pp. 491-497.
- Falk, R.F. and Miller, N.B. (1992), *A Primer for Soft Modeling*, University of Akron Press, Akron, OH.
- Fornell, C. (1992) A National Customer Satisfaction Barometer: The Swedish Experience, *Journal of Marketing*, 56, 1, pp. 6-21.
- Fornell, C. and Cha, J. (1994), "Partial least square", In: Bagozzi, R.P. (Ed.), *Advanced Methods of Marketing Research*, Basil Blackwell Ltd, Oxford.
- Gremler, D.D., and Brown, S.W. (1996) "Service Loyalty: its nature, importance and implications", (Eds, Edvardsson, B., Brown, S.W., Johnston, R. and Scheuing, E.E.) American Marketing Associations.
- Hackl, P., and Westlund, A.H. (2000) On structural equation modeling for customer satisfaction measurement, *Journal of Total Quality Management*, 11, 4/5/6, pp.s820-s825.
- Higgings, K.T. (1997) "Coming of age", *Marketing News*, 31, 22, pp.1.
- Keaveney, S. M. (1995) Customer Switching Behavior in Service Industries: An Exploratory Study, *Journal of Marketing*, 59, 2, pp. 71-82.
- Kostecki, M.M. (1994) *Marketing Strategies for Services: Globalisation, Client Orientation, Deregulation*, Pergamon Press, Oxford.
- Kotler, P. (1999) *Marketing Management: Analysis, Planning and Control*, Prentice Hall, New Jersey
- Limsiritong, K. and Reongprasertvit, P. (2001) *Management Style at Ambassador Bangkok Hotel that impacts employee's performance*, College of management, Mahidol University, Bangkok.

- Lohmoller, J.B. (1981) *LVPLS 1.6 Program Manual: Latent Variables Path Analysis with Partial Least-Square Estimation*, University of the Federal Armed Forces, Munich, Germany.
- Lovelock, C., Patterson, P. and Walker, R. (2001) *Services Marketing - An Asia-Pacific Perspective*, (2ed), Pearson Education Australia, Sydney.
- Maloney, W.F. (2002) Construction product service and customer satisfaction, *Journal of Construction Engineering and Management*, 128, 6, pp. 522-529.
- Nunnally, J.C. (1978), *Psychometric Theory*, 2nd Ed., New York, McGraw-Hill.
- Oliver, R.L. (1980) A Cognitive Model of the Antecedents and Consequences of Satisfaction Decisions, *Journal of Marketing Research*, 17, November, pp. 460-469.
- Oliver, R.L. (1981) "Measurement and Evaluation of Satisfaction in Retail Settings.", *Journal of Retailing*, 57, Fall, pp.25-48.
- Olsen, M. D., Tse, E. C. and West, J. J. (1996) *Strategic management in the hospitality industry*, Van Nostrand Reinhold, New York.
- Ramachandran, K. (1991), Data collection for management research in developing countries, in Smith C.N. and Dianty, P. (Eds), *The Management Research Handbook*, Routledge, New York.
- Sivadas, E. and Baker-Prewit, J.L. (2000) Service quality, satisfaction and store loyalty, *International Journal of Retail and Distribution Management*, 28, 2, pp.73-82.
- Taylor, S.A., and Baker, T. L. (1994) An assessment of the relationship between service quality and customer satisfaction in the formation of consumers' purchase intentions, *Journal of Retailing*, 70, 4, pp.163-178.
- Wang, Y. and Lo, H. (2004) Service quality, customer satisfaction and behaviour intentions: Evidence from China telecommunication industry, *Journal of information system frontiers*, 6, 4, pp. 325-340.
- Zigmund, W.G. (2003) *Essential of Marketing Research*, 2<sup>nd</sup>.Ed, Thomson South-Western, Mason.