Advanced Research in Business and Management Studies

The relationship between customer's attitude, behavior and financial performance

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ARTICLE INFO	ABSTRACT
	In management accounting area, non-financial measures obtained from questionnaire survey, like customer satisfaction and purchase intention, have the impact on future financial performance. Although these measurements have a positive impact on future financial performance, it is pointed out that there is a difference between "what customers think" and "what customers do". And recently researchers in the marketing area have been paying attention to customer retention – customer's actual behavior. Using a questionnaire survey of Japanese hotel company A, this study aims to clear the relationship between customer's attitude, customer retention and financial performance.

1. Introduction

In the management accounting area, Considerable attention has been devoted to non-financial measures from questionnaire surveys, like customer satisfaction and purchase intention. However, these measures couldn't explain future financial performance enough. In the marketing area, it is said the change of customer's perception/attitude leads customer's behavior, in other words behavioral outcome, as a result, financial performance will change（Figure 1）. In short, there is customer's behavior between customer's perception/attitude and financial performance. Therefore, variables related to customer's behavior, especially customer retention, are attracting attention as the variables that improve customer lifetime value and firm value greatly. On the other hand, it is pointed out that what customers think is not the same as customer's actual future behavior. It is possible that customers who answered, "I'm willing to purchase" don't purchase. Therefore it is necessary to make clear the relationship between customer's purchase intention（attitude）, customer's future behavior, and financial performance

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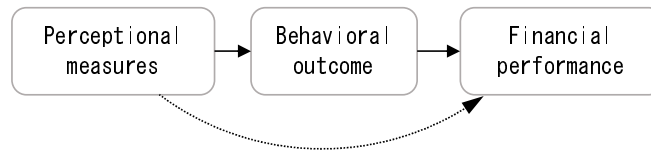*E-mail address: Kaori Yamawaki (yamawaki@ken-suzuki.net)*

Fig. 1. Customr's attitude, behaviour and financial performance

2. Prior Research

As stated above, in accounting area, many researches use customer satisfaction, purchase intention and such like non-financial performance as indicator of financial performance. Ittner *et al*. [1] analyzed the impact of customer satisfaction on customer retention, revenue and percentage changes in revenue [1]. They found customer satisfaction has positive impact on these three variables. Banker *et al*. [2] test whether non-financial measures, like purchase intention and number of claims, lead financial performance at business unit level or not [2]. They found purchase intention has positive impact on future revenue and profit. Next, Matsuoka [3] analyzed the impact of customer loyalty on transaction amounts [3]. In a series of his analyses, he found purchase intention has positive impact on transaction amount
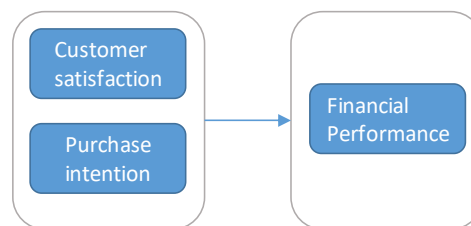

Fig. 2. Customer attitude and financial performance
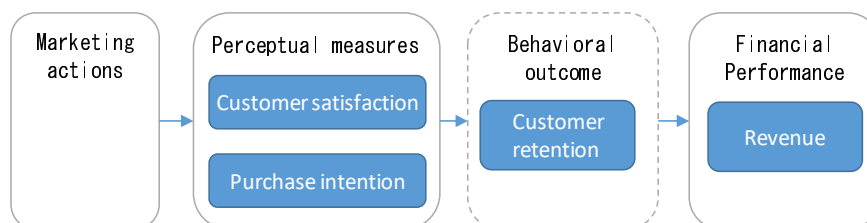

Fig. 3. The framework for customer metrics and their impact on financial performance

However, some researchers point out that there is a difference between customer's intention and actual customer's behaviour [4]. In the marketing area, there is a framework that shows how the

process of the marketing actions affect customer's perception, and then customer's behavior changes, and then this change leads financial performance（Figure3）[5]. According to their grouping, customer satisfaction and purchase intention are included in perceptual measures and customer retention is included in behavioral outcome.

Therefore, many researchers pay attention to customer's behavior, as it connects financial performance directly and especially considerable attention has been devoted to customer retention. The improvement of customer retention rate improves customer lifetime value and firm value. Reichheld *et al*. [6] say the improvement of customer retention improve customer life time value greatly [6]. According to them, when the firm can decrease customer retention rate by 5%, average customer life time value will increase by 25% - 85%. Gupta *et al*. [5] also mentioned the importance of customer retention [7]. They simulate the changes of customer lifetime value and firm value by changing customer retention rate. And they found 1% improvement of customer retention rate improve customer lifetime value and firm value by 5%.

In the accounting area, Livne *et al.* [8] analyzed the relationship between customer retention, customer acquisition and financial performance. They said customer retention leads to improvement of future revenue [8]. As mentioned above, it is said that the relationship between customer's behavior and financial performance is quite strong.
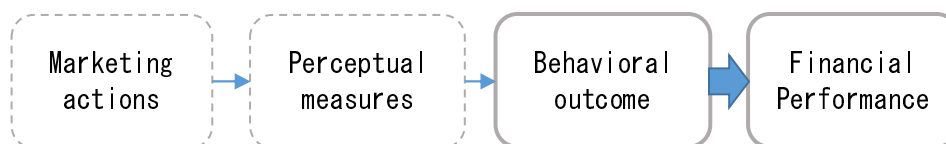
Fig. 4. The links of behacioral outcome and financial performance

Although this relationship is strong, the relationship between customer's attitude/ perception and customer's behavior is not clear on the other hand. A researcher made a mail survey about purchase intention and actual purchase rate for 900 customers and divide them into 3 groups by level of intent: Low Intention Group (will not buy / probably not will buy), Middle Intention Group (might not buy / might buy), High Intention Group (probably will buy / probably will buy). They found the actual purchase rate of even high intention group is only 36%, and even the low intention group is 12%. Another researcher also made a mail survey for 100,000 households in U.S（valid responses: 24,420）. They asked "Do you or does anyone in your household plan to acquire a personal computer in the future for use at home?"and divided respondents by intent purchase timing: Households in segment 1 is are more likely to purchase in 0 – 6 months, and households in segment 2 and 3 is are more likely to purchase in 1 year, and in 2 year. And they find actual purchase rate in even Segment 1 is only 48%, segment 2 is 24%, and segment3 is 12%.
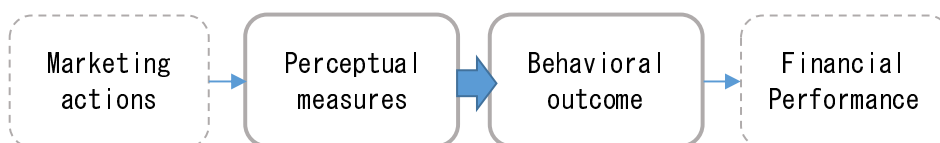
Fig. 5. The links ob perceptual measures and behavioral outcome

3. Research Design

As mentioned above, in the management accounting area, non-financial measures, like Customer satisfaction and Purchase intention, have the positive impact on future financial performance（e.g. Ittner *et al*., [1]). However, it is pointed out that there is difference between "what customers think" and "What customers do"[4]. It is possible that customers who showed willingness to re-purchase at questionnaire survey don't re-purchase in fact. The object of this paper is to make clear the relationship between purchase intention, customer retention and financial performance. We made 2 research questions.
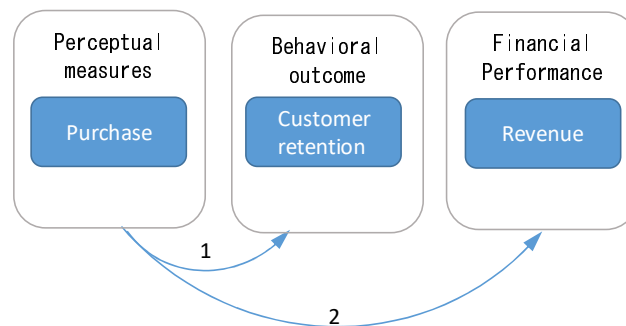

Fig. 6. The framework of research

1) RQ1：*Does What customers think correspond what customers do in fact?*
2) RQ2：*Is customer behavior need to be considered when we analyze the relationship between purchase intention and financial performance?*

To solve these questions, we conducted 2 analyses. Analysis 1 analyze the relationship between purchase intention and customer retention and we use analysis of variance. Analysis 2 analyze the relationship between Purchase intention and financial performance and we use regression analysis. Before analysis, customers are divided into 2 groups. Group1 is the customers whose purchase intention reflects their future behavior, and Group 2 is the customers whose purchase intention don't reflect their future behavior. And then, we analyze each group and compare their results.

4. Data and Measures

4.1 Data and Measures

The Research site is a Japanese Hotel company A and I used questionnaire survey in 2013. This survey has sent for the customers （Obtained responses was 1,991）. And we also use transaction data from 2013 and 2014. For analyses, we use purchase intention [2], customer retention, and transaction amount. Purchase intention is the composite variables consisting of 2 questionnaires about willingness to purchase in questionnaire survey in 2013 (5-point Likert-scale). "Would you like to use our hotel in future?" and" Would you like to keep using our hotels?". Customer retention is coded 1 who for 2013 customers who use hotels again in 2014, and 0 otherwise. Transaction amount is total transaction amount per customer in 2014. In addition to this, in analysis 2, we used transaction amount in 2013, Sex, Age, Income as control variables.

5. Results

a.   Analysis 1

First, Analysis 1 is about the relationship between purchase intention and Customer retention. Dependent variable is customer retention in 2014 and independent variable is customer's purchase intention in 2013. The impact of purchase intention on future customer retention is positive（$F(4,1684)$=4.343, $p<.01$. In results of Tukey post hoc test, there is a statistically significant difference between 1～1.5 group and all other groups. There is no significant difference among other groups. Therefore, in company A case, after a certain point, a level of purchase intention has no relation with customer retention.

Table 1
Result of analysis 1

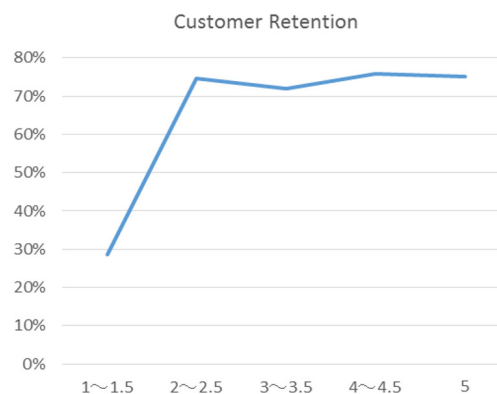| Purchase intention	Average	SD	n
1 ~ 1.5	0.286	0.116	14
2 ~ 2.5	0.746	0.055	63
3 ~ 3.5	0.719	0.025	303
4 ~ 4.5	0.757	0.016	773
5	0.752	0.019	536
Total	0.744	0.436	1,689

Fig. 7. Result of analysis 1

b.   Analysis 2

Next, Analysis 2 analyzed the relationship between purchase intention and transaction amount using regression analysis. Dependent variable is transaction amount in 2014 and independent variable is purchase intention in 2013.In addition to this, transaction amount in 2013, Sex, Age, Income as control variables. Before analysis, customers are divided into 2 groups. First group is Customer group who purchase intention fits customer behavior. They are the customers who have high purchase intention（over 4）and purchase in actual next year. Second group is customer group who purchase intention doesn't fit customer behavior. They are the customers who have low purchase intention（under 3）and purchase in actual next year.

4.2.1 Descriptive statistics

Table 2 shows descriptive statistics. Valid responses are 1,870.

Table 2
Descriptive Statistic

		Average	SD	
Purchase intention	(n=1,601)	4.211	0.774	
Age (n =1,601)	Average	58.89	SD	11.235
Sex (n =1,601)	Men	1,169	Women	701
		(62.5)		(37.5)

4.2.2 Correlation

Table 3 shows correlation. Transaction amount ('13) and Transaction amount ('14) are positively related. There are almost no significant relations among other variables.

Table 3
Correlation coefficient
Pearson correlation coefficient

	Transaction amount (' 14)	Purchase intention (' 13)	Transaction amount (' 13)	Age	Income
Transaction amount (' 14)	-				
Purchase intention (' 13)	0.123***	-			
Transaction amount (' 13)	0.514***	0.19***	-		
Age	0.055*	0.023	0.054*	-	
Income	0.061*	-0.095***	0.078**	-0.138***	-
Sex	0.017	0.078**	0.031	0.08***	-0.058*

***p<.001, **p<.01, *p<0.5

4.2.3 Results

Using regression analysis, we analyze 2 groups (Purchase intention＝behavior group, Purchase intention ≒ behavior group) .In regards to the result of Purchase intention＝behavior group, Transaction amount in 2013 and Purchase intention are positive. The impact of transaction amount in 2013 is the highest, and same as the other group. The impact of purchase intention in 2013 is quite small but significant. On the other hand, in the result of Purchase intention ≒behavior group, only Transaction amount in 2013 is significant. And adjusted R2 of Purchase intention = behavior group is higher than that of Purchase intention ≒ behavior.

4.3 Discussion

From analysis 1, it is not true that higher purchase intention leads higher customer retention, and there is no difference at some level of purchase intention. And the impact of purchase intention on customer retention is limited. From analysis 2, compared with the results of analysis of customer group whose Purchase intention ≒behavior, adjusted R squared in customer group whose purchase intention = behavior is high. This result is one example that show influence purchase intention to customer retention and transaction amount is limited. Purchase intention is one of the factors that

affect customer behavior and financial performance. And the reliability of questionnaire survey can be improved by considering customer behavior.

Table 4
Results of regression analysis 2

Purchase intention	= Behavior	(n=764)	Purchase intention	= Behavior	(n=206)
	β	t		β	t
Transaction amount ('13)	0.682	25.844***	Transaction amount ('13)	0.478	7.744***
Purchase intention ('13)	0.064	2.431*	Purchase intention ('13)	0.029	0.46
Age	0.033	1.228	Age	-0.012	-0.189
Income	0.027	1.021	Income	0.097	1.454
Sex	0.003	0.111	Sex	0.098	1.594
Adjusted R^2	.48		Adjusted R^2	.25	
			***$p<.001$,	**$p<.01$	*$p<.05$

5. Conclusion

Contribution of this paper is to show the limitation of using purchase intention obtained from questionnaire survey and to suggest the existence the threshold level of purchase intention that it doesn't improve customer retention any more. And we also show the necessity of using variables about customer's behavior when we use purchase intention as indicator of financial performance. It suggests that reliability of questionnaire survey to financial performance is differ from the groups and reliability of questionnaire survey will improve when customers who purchase intention doesn't fit their actual behavior are excluded. For future research, we have 3 ideas to analyze in the future. One is the Analysis using profit as financial performance. Second is the Analysis using other company's data. Third is the Analysis using multiyear data.

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