連續服務經驗對消費者決策之影響

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中文摘要

對於店家說，顧客對其的評價是很重要的。因為店家們沒辦法確保每一次的服務都是成功的，因此我們就有必要去仔細探討顧客對店家的評價模式：到底每次消費後，顧客都是如何對店家評價的呢？

這篇文章主要是要了解顧客是如何利用心靈帳戶與展望理論的結合，來為店家下評價。我們發現對顧客而言，店家的信用在服務成功與服務失敗的情況下，會有明顯的不同。店家對顧客的信用會隨著失敗次數越多而越低，但卻不會因成功次數越多而越高。「公平理論」告訴我們，顧客們因為在消費中付出金額，因而認為得到成功的服務是一件理所當然的事。也就是說，顧客們認為，成功的服務是對店家們的一個基本要求。

關鍵字：心靈帳戶、展望理論、公平理論

ABSTRACT

For sellers, buyers' evaluations of service are the most important thing. However, it is impossible to provide 100% successful service every time. Therefore, it is necessary to discuss a consumer's evaluation of a company after each service encounter and answer the following question: How do buyers evaluate sellers after service experiences?

This paper focuses on the way consumers formed their judgment by using the concept of mental accounting and prospect theory. We found that sellers' credit to buyers would be different from successful to failed service outcomes, and it could be withdrawn with an increase in the number of failed service experiences. However, sellers' credit could not be accumulated with the increase in successful service experiences. Equity theory made buyers take the successful service experience for granted because of their payment, and it made buyers regard the success as a necessity of the whole service encounter.

Key words: Mental accounting, Prospect theory, Equity theory

誌謝詞

碩士生活真的是比我想像中的充實很多。本來以為會和大學生活一樣，只是多了論文的部分(但是沒想到多了論文的部分就多了很多。)每個禮拜都有論文要看、有報告要做，整個就很忙碌。不過也因為如此，不知不覺中發現自己看 paper 的速度也變快了，擺脫了以前看英文文章的排斥感。

首先要謝謝家齊老師這二年多來的照顧，除了學術上的指導外，也因，擔任了助理，讓我從電腦白痴變成辦公室解決電腦問題的人。(老師，等我當兵完，還要請你幫我介紹工作啊) 再來要謝謝這二年多來幫助我的學長姐們：慧芸、佳誼、愛華、柏宇、大萱、依璇，真的很謝謝學長姐們過去的幫助，以及持繼地被我騷擾問問題。最後，要謝謝我們這一屆的同學們。新嵐、宥文、依婷、郁珊、力仁，我們一起努力的在六月底前口試完了！(這真的是太驚人了這)

除了學術上的幫忙要感謝之外，還要謝謝陪我在這碩士生涯中玩樂的人，沒有這些玩樂，我想我這二年會很無聊吧！謝謝克拉克、豆子、阿惟、巴力歐、阿狗、小浩、慶洋，和你們在一起哈啦打屁真的很開心！還有要謝謝給我很多 p 幣，讓我發線上問卷可以神速發完的 Eason，以及這一年來很照顧我的愚人傑。要謝謝的人真的太多了，最後就來謝天吧！

2010.07.01 黃信堯

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Chapter 1 Introduction

After Thaler (Thaler 1980) proposed the concept of mental accounting, it became a popular topic in the marketing field. A majority of researches took gambling as an example and examined the role of mental accounting in the service industry (Kahneman 1992; Richard 1999; Thaler 1985). However, few of the past studies investigated the context of the credit accumulation/attrition which resulted from consecutive service experiences. When Richard considered the usage of mental accounting, he only focused on how consumers perceived outcomes and how they evaluated and made decisions in a particular state. He emphasized the change and the shift of a reference state when consumers used a budgeting process for making rational trade-offs.(Richard 1999). Past studies paid little attention to the accumulation of companies' credit, and none of them examined the interaction effects between prospect theory and mental accounting in successful/failed service encounters(Lisa 2008). Although this topic seems obvious, it has never been incorporated in the models of customer choice behavior. Therefore, this paper will investigate the accumulation / attrition of companies' credit in consecutive service encounters.

1.1 Background

Because flaws are inevitable(especially in a high-contact service industry), consumers' evaluation after service failure becomes an important issue for every company (Anna and David 2005). Customers have limited budgets, so they will use a budget process as a self-control device, making decisions after evaluating their income and a company's performance(Stefan and Matthew 2008). In this way, making customers voluntarily pay the bill is not an easy thing, considering their limited income. A failed service could turn loyal customers into the customers of your competitors; a successful service works to customers' satisfaction and repurchase intention. Firms should try their best to make customers satisfied and make them remain loyal customers, even after failed services.

1.2 Research Motivation and Purpose

Past research has shown that money is fungible, but how about companies' credit from their customers? None of the studies in the field of mental accounting investigated the accumulation and attrition of companies' credit program in consecutive service encounters, which left the formation of companies' credit constitution unknown. Present papers have already been concerned primarily with

gambling and monetary outcomes in the mental accounting field (Kahneman and Tversky 1979), and they could be applied for future research in other situations such as customers' evaluation after each service encounter. It is not difficult to do this, yet there is little formal testing. This is why I would like to test the interaction between mental accounting and prospect theory in consecutive service encounters.

This study predicted that companies' credit will be gained / lost in the respect of mental accounting with the formation of a prospect theory model: accumulations and losses diminishing with the characteristic of loss aversion. Meanwhile, the negative impact on customer evaluation for firms w ill be stronger than the positive impact.

This study focused on how consecutive successful and failed services are perceived and evaluated. If customer evaluation in successful service is different from that in failed service, what is the way companies' credit is gained/lost to consumers due to service experiences? In the last part of the study, we would demonstrate the results and discuss the implication.

1.3 Research Process

This paper is structured in the following manner. . First, we identify the research direction. Second, hypotheses are developed from literature reviews which are largely about mental accounting and prospect theory. Third, we describe the scenario-based

experiment design, data collection, measurement, manipulation check, and pretest. Finally, we will conclude experimental results and end the paper with managerial implications according to our findings. The research processes are as follows:

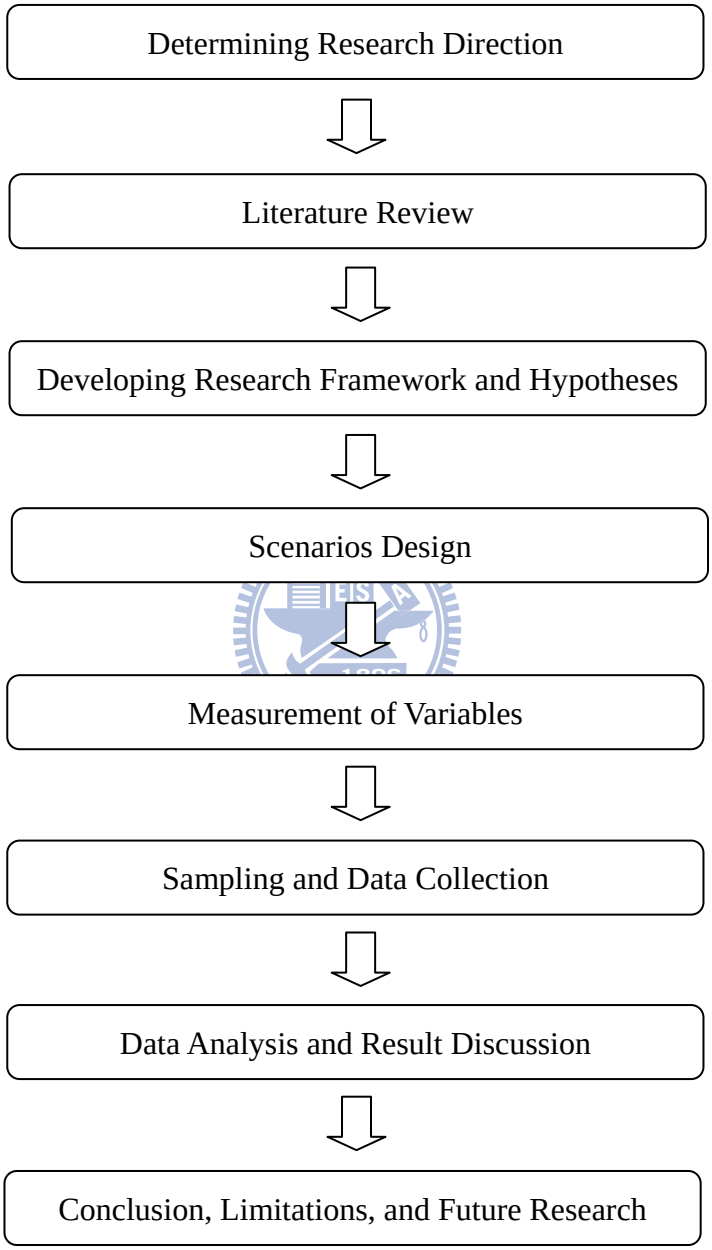


Figure 1 Research Flow Chart

Chapter 2 Literature Review

2.1 Mental Accounting

Prior study pointed out that mental accounting contains three features. The first is “perceived utility,” which is transaction utility that can be incorporated into the repurchase decision calculus before consumers make a choice (Richard 1999). In this way, how the outcomes are perceived and experienced will be an important issue. Spending 20 minutes walking to a store that is 5 miles away in order to save $10 might sound attractive while buying a $50 vase, but it would become unattractive when the vase costs $300.

The assignment of activities to specific accounts will be the second feature. Money, time, and wealth have been argued to be fungible (Kahneman and Tversky 1979). Customers would assign each expense to different accounts, which depended on customers’ minds. If you already spent $50 on a baseball game last week, you will tend to spend another $50 in parking lot fees rather than on a football game this week because the recreation account is different from the daily necessaries account. But actually, they are all monetary spending.

The third part is “evaluation frequency,” the frequency with which accounts are evaluated. A customer’s tendency to risk is related to the evaluation frequency. The

risk attitudes of investors / consumers depend on the frequency with which they reset their reference point. If investors/consumers evaluate their judgment more frequently, they would tend to be more risk-averse (Richard 1999).

2.2 Prospect Theory

According to Kahneman and Tversky (Kahneman and Tversky 1979) , prospect theory has three important characteristics capturing essential features of mental accounting.

First, the value function is defined over gains and losses relative to reference point. Service outcomes will never be the only concern after services, and the reference point should be included. People usually formulate their decision problem in terms of final assets rather than gains and losses, so stimuli are perceived in relation to their reference points. Therefore, consumers' perceptions of a service mainly focus on the evaluation of status changes rather than the evaluation of absolute magnitudes (Kahneman and Tversky 1979; Richard 1999). In other words, **t**he reference point is the expected satisfaction level (Homburg et al. 2005).

Second, the function displays diminishing sensitivity in both gains and losses: concave for gains and convex for losses (Thaler 1980). The impact of the difference between 0 and 100 seems stronger than the impact of the difference between 1,000

and 1,100. A purchase of $75 might be regarded as a huge expense individually, but it might be less salient when the credit card bill arrives, mixed among many other expenses.

Third, the value function is loss aversion. The function is steeper for losses than gains. Because consumers evaluate services one at a time, prior experiences might make consumers have a tendency to avoid taking risks (Kahneman and Lovallo 1993).

2.3 Satisfaction

Satisfaction is a judgment that the product or service itself provides a delightful level of consumption fulfillment that falls beyond customers' expectation (Katherine et al. 2006; Kiran et al. 2007). It is the result of the evaluation after consumers' consumption, including cognitive and affective features (Homburg et al. 2005).

Satisfaction displays an important role in prospect theory. The reference point is related to the expected satisfaction level. The higher the expected satisfaction, the higher the reference point. The positive-direction shift of reference point would lift up the satisfaction standard. With the accumulation of credit from the company after consumption, customer satisfaction would increasingly diminish.

2.4 Expectation

Expectation is a significant determinant to satisfaction in service encounters. Customers expect service providers to respond in a supportive way to both their positive and negative emotions. The value attached to these responses will lead to higher satisfaction when service providers' response meet or surpass these expectations (Menon and Dub 2004). Therefore, if the service provider performs congruently with consumer's expectation, satisfaction will be higher (Surprenant and Solomon 1987). However, customers' expectations have a direct, negative effect on customer satisfaction (Wen-Hsien 2008). When service providers perform well in the service encounter, the performance will meet or surpass customers' expectation, making customers feel a higher satisfaction and raise their future expectation. As a result, customers will hold a higher service standard next time because of the rising expectation.

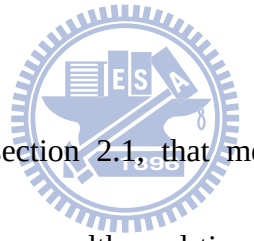
2.5 Repurchase Intention

Recently, relationship marketing has become a popular issue in marketing. Companies aim at retainable and profitable customers by catering to their individual needs through emphasizing a long-term relationship. Prior research has pointed out that a company could increase its profits 100 percent by enhancing its customer

retention rate by 5 percent (Kau and Loh 2006; Mattila 2001). Building and maintaining relationships with customers will lead to long-term customer retention, which results in higher profitability (Mattila 2001).

On the other hand, repurchase intention is positively related to satisfaction, loyalty, emotional bonding, and word-of-mouth behavior (Kau and Loh 2006; Mattila 2001; Mattila 2004; Stefan and Matthew 2008). The higher that the satisfaction level is, the higher the probability that customers will repurchase.

2.6 Hypotheses



It has been presented in section 2.1, that mental accounting has been well discussed in past decades. Money, wealth, and time could be fungible and assigned into different mental accounts in a service encounter (Richard 1999), but none of them mentioned the accumulation of companies' credit in service encounters. Could consumers remember their perceptions after service encounters and let the feeling last until next consumption? Could companies' credit act as other stated elements, gained and lost from service experiences each time? We believed that companies' credit accumulated from the service encounters could play the same role in service encounters as wealth and time. In other words, it could be fungible. Therefore, we proposed that companies' credit, as wealth and time, could be deposited / withdrawn

from customers' mental account.

$H1_a$: The number of successful service outcomes will have a positive impact on customer evaluation. The greater the number is, the higher the customer evaluation is.

$H1_b$: The number of failed service outcomes will have a negative impact on customer evaluation. The greater the number is, the lower the customer evaluation is.

After testing companies' credit, accumulated and decreased from service encounters, we continued going further in our research: What's the formation of mental accounting in companies' credit program? Does it form in as a linear model, or non-linear model? Since it is common in marketing to combine prospect theory and mental accounting, we proposed that companies' credit will form in the shape of a prospect theory model in customers' service accounts, featuring the same characteristics as display diminution and loss aversion.

H_{2a}: The positive effect will diminish as the number of successful outcomes increases.

H_{2b}: The negative effect will diminish as the number of unsuccessful outcomes increases.

H_3: The negative influence of the service failures will be stronger than the positive influence of the successful services on a customer's evaluation toward the company.

In order to enhance the accuracy of our study, we offered a multiple choice to testify loss aversion effect (store A: the one you have bought bento box twice with a once-success-once-failure service record; store B: the one you have never been before) If participants choose store B, it would indicate that negative influence is stronger than positive influence, so one successful service experience could not make up prior failed service experience. If the service provider had offered one successful and one failed services before, customer would take a chance with a brand new store, rather than the one they have ever been before.

H_4: Compared with the store with a once-success- once-failure service record, customers would rather shop at the one they have never been to.

2.7 Research Framework

The major purpose of this research was to test (1) how successful and unsuccessful service encounters are perceived/evaluated and (2) how companies' credit is gained/lost to consumers due to service experiences and (3) the

characteristics of the credit program. The conceptual structures of the research are presented below.

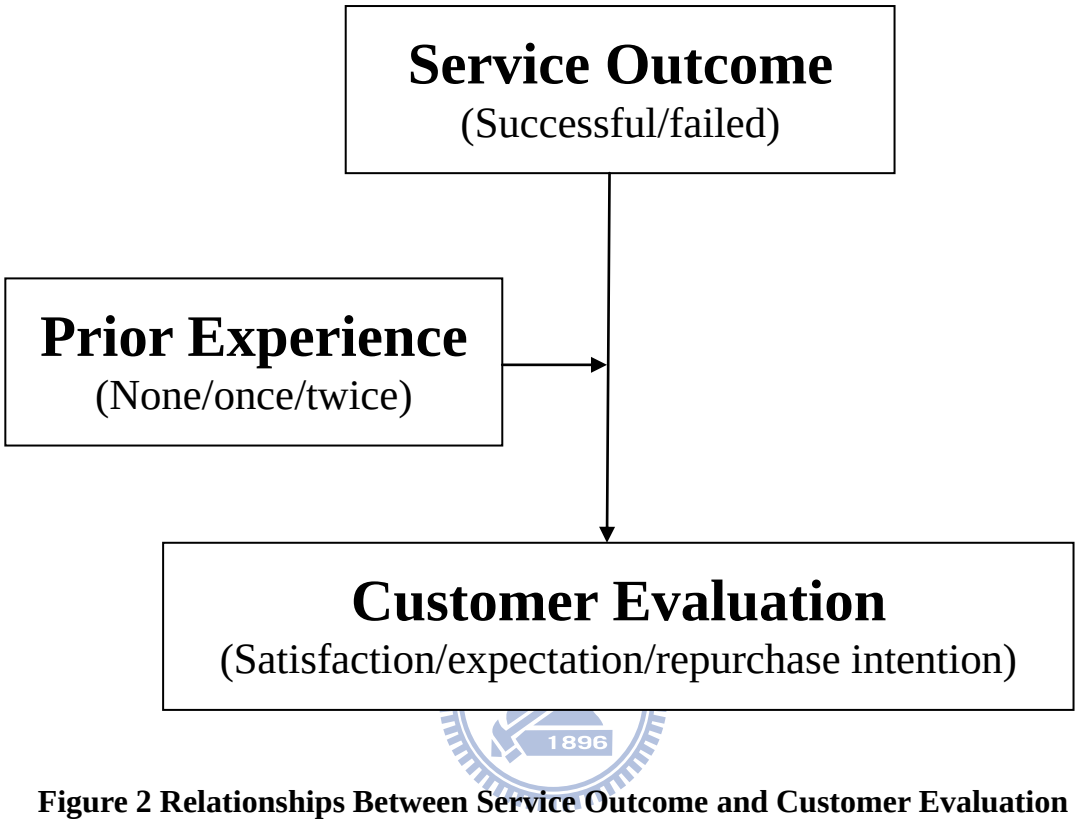


Figure 2 Relationships Between Service Outcome and Customer Evaluation

Chapter 3 Methodology

3.1 Conceptual Research Framework

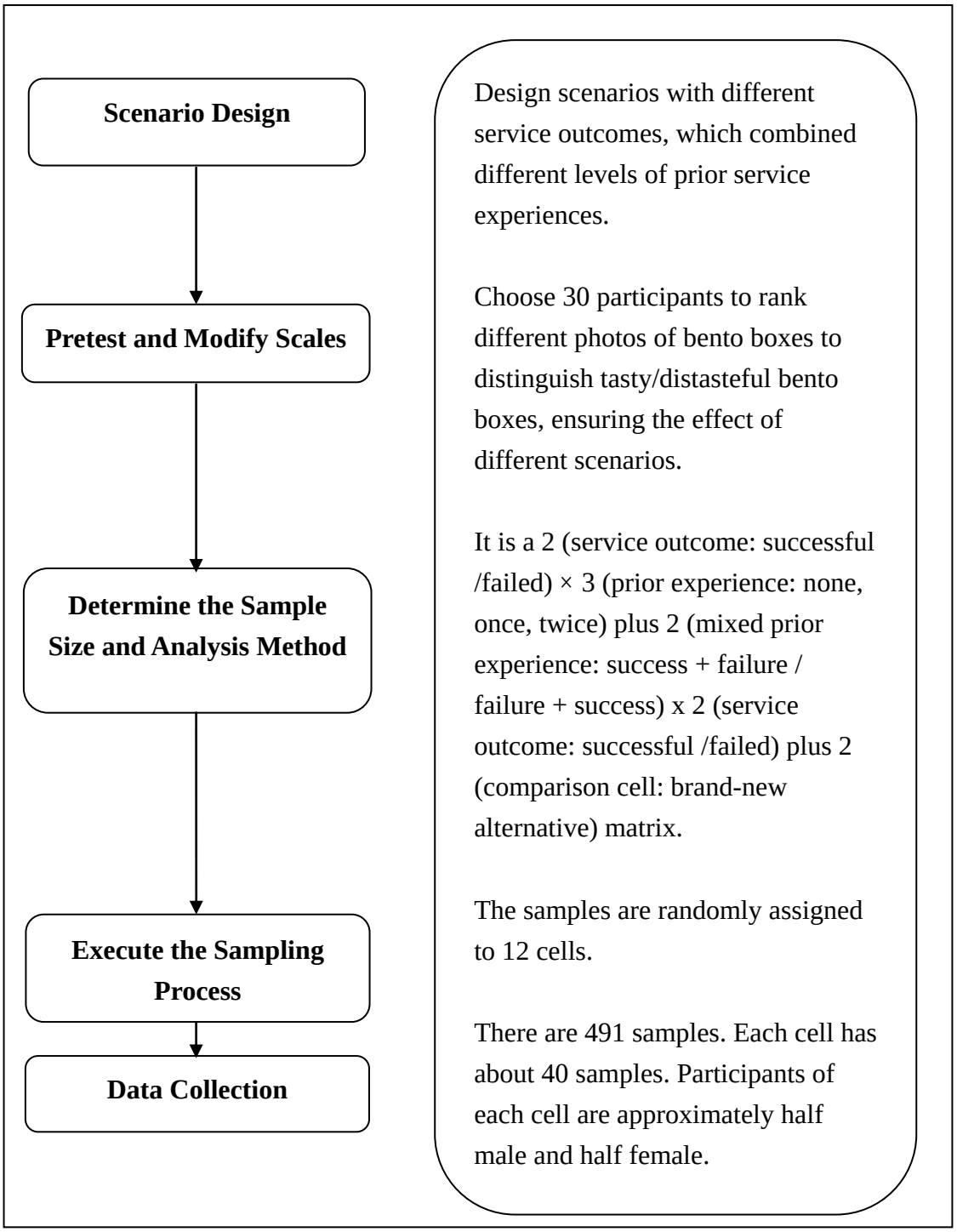


Figure 3 Conceptual Research Framework

3.2 Scenario Design

A role-playing experimental method was adopted to test the conceptual model for this study. Role-playing experimental method is a methodology which has been frequently used to study the effects of service (Bitner et al. 1990; Ronald et al. 2003; Smith and Bolton 1998). Participants were asked to read a photo-based scenario, presented in 2 ~ 5 photos. After reading the scenario, they are asked to pretend that they were in the situation and to complete the questionnaire in order to collect their evaluations after various levels of service.

The scenario used in this study was an experience of buying bento boxes. In the scenario, the service failure was defined as "This bento box looks distasteful" and the successful service was defined as "This bento box looks tasty." The reason why we chose buying bento boxes as our example is because the experience of buying bento boxes is familiar to people in Taiwan, and participants could imagine such a scenario easily.

3.3 Experiment Design

A 2 (service outcome: successful/failed) × 3 (prior experience: none/once/twice) plus 2 (mixed prior experience: success + failure/failure + success) x 2 (service

outcome: successful/failed) + 2 (comparison cell: brand-new alternative) between-subject factorial design matrix was used to testify our hypotheses: Thirty participants were asked to participate in each scenario independently, which meant the sample size would be more than 360(30 x 12 = 360).

Table 1 Experiment Cells

Prior Experience / Service Outcome	None	Once	Twice
Successful	S	S+S	S+S+S
Failed	F	F+F	F+F+F

Prior Experience / Service Outcome	Success + Failure	Failure + Success
Successful	S+F+S	F+S+S
Failed	S+F+F	F+S+F
Comparison	S+F+C	F+S+C

Note: S: Success; F: Failure ; C: Comparison

Participants were exposed to a photo-based scenario describing a successful/failed service in a bento-box-buying experience, half of them in the situation of failed service and others in the situation of successful service. Participants were told that it was a study about consumer behavior and were given a questionnaire after they finished reading the scenario.

The questionnaire contained two major parts. In the first part, it listed some questions about satisfaction, expectation, and repurchase intention. The second part

was consisted of some demographic questions. Questionnaires are attached as Appendix III.

3.4 Measurement

3.4.1 Satisfaction

Measures of satisfaction were adapted from Maxham (Maxham and Netemeyer 2002) and Weun *et al.* (Weun et al. 2004), with a little adjustment. The items were "On the whole, I am/was very satisfied with my experience with this/that service.", "In general, I am/was happy with the service experience." , "Overall, I was pleased with the service I experienced." and "Overall, my positive experience outweighs /outweighed my negative experience with this/that service." All of the items are 7-point Likert-scale.

3.4.2 Expectation

The items used to assess expectation were from those developed by Hong-Youl (Hong-Youl 2006). The items were "With respect to the purchases, the bento box store will offer good meals to me" and "I expect the bento box store will offer delicious meals to me." All of the items are 7-point Likert-scale.

3.4.3 Repurchase Intention

The measures of repurchase intentions were based on established measures from Blodgett *et al*. (Blodgett et al. 1993) The items were “You would shop at this bento box store in the future”, “There is a strong likelihood that I will shop at this bento box store.” and “If this had happened to me I would still shop at this store in the future. ” All of the items are a 7-point Likert-scale.

3.4.4 Brand-New Alternative

To double-check the accuracy of our hypothesis about repurchase intention, we added a short paragraph describing a certain case that after Failure + Success/ Success + Failure experiences, participants were in front of the same store again. They found that there was a brand-new bento box store nearby this time. At this point, what would participants do? The multiple choice question “Which store will you shop at this time?” was listed and there were two choices offered. (Store A: the one you have bought bento box twice before / Store B: the one you have never been before.)

3.5 Data Collection

Data were collected via internet. The sample was composed of students and the general public. A total of 491 participants were in the official study. There are 12 kinds of questionnaire, all with different scenarios, mixed and assigned randomly to the participants. The purpose of this study was mentioned in the beginning of the questionnaires, and all participants were asked to imagine themselves in the stories as the protagonist.

3.6 Manipulation Check

Realism in this study was measured by two items based from Dabholkar (Dabholkar 1994), a 7-point, Likert-type scale. The mean of realism items was 5.53, higher than 4, which made the questionnaires regarded as realistic scenarios. In order to distinguish consumer perception toward different service outcomes, participants were asked to judge service experience after looking at the photos offered in the scenarios. The items are “Overall, I am satisfied with the service outcome” and “Overall, I am dissatisfied with the service outcome,” and are measured on a 7-point, Likert-type scale. The result of the manipulation will be stated in Chapter 4.

3.7 Pretest

To ensure that the manipulation works, we had two pretests. In our scenarios, the key element to determine whether it is a successful/failed service experience is the appearances of the meals. A delicious meal means successful service and an awful meal means failed service. Therefore, the purpose of the pretests is to find out if different meals are regarded as delicious/awful and ensure that the level of (un)attractiveness are the same.

In the first pretest, we asked 30 respondents to judge 6 different kinds of meals after looking at the photos. The question after looking at the photos is “I think the bento box in the picture is…..” Respondents scored each meal from 1 to7, with 1 standing for “extremely awful” and 7 standing for “extremely delicious”. The average scores of the meals were ranked from 5.33 to 6.93 in the first pretest, and they were regarded as delicious meals and successful services.

The same method was use in the second pretest, but with another 39 respondents and 6 different kinds of meals. The average scores of the meals were ranked from 1.87 to 3.21 in the second pretest, and these were regarded as awful meals and service failure encounters. Results were attached as Table 2.

Table 2 Average Score of Each Bento Box (Successful / Failed)

	N	Mean	Std. Deviation
Meal 1	30	6.2000	1.47157
Meal 2	30	5.9333	1.33735
Meal 3	30	5.9667	1.93842
Meal 4	30	6.9333	1.96404
Meal 5	30	5.6667	1.49328
Meal 6	30	5.3333	1.72873

	N	Mean	Std. Deviation
Meal A	39	2.4872	2.18694
Meal B	39	1.8718	1.86631
Meal C	39	2.2308	1.73905
Meal D	39	3.2051	1.68865
Meal E	39	2.4359	1.90284
Meal F	39	2.2564	2.07387

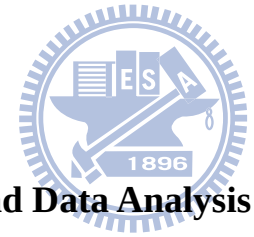
In order to ensure the delicious /awful levels of each meal in the photos and avoid the interference in questionnaire results resulting from different weights in successful/failed services, we ran Paired-Samples Test to find the statistically identical weighted meals after the pretests. As attached in Table 3, there was no significant difference within Meals 1,2, 3 ($p > 0.1$) and there were no significant difference within Meals C,E,F ($p > 0.5$). This finding meant Meals 1, 2, 3 are within the same level of success, and Meals C, E, F are in the same level of failure.

Table 3 Result of Chosen Bento Boxes

				Std. Error			t	df	Sig.
		Mean	Std. Deviation	Mean	Lower	Upper			(2-tailed)
Pair 1	Meal 1 – Meal 2	.26667	1.43679	.26232	-.26984	.80317	1.017	29	.318
Pair 2	Meal 1 – Meal 3	.23333	1.85106	.33796	-.45787	.92453	.690	29	.495
Pair 6	Meal 2 – Meal 3	-.03333	2.04237	.37288	-.79597	.72930	-.089	29	.929
Pair 11	Meal C – Meal E	-.20513	2.19064	.35078	-.91525	.50500	-.585	38	.562
Pair 12	Meal C – Meal F	-.02564	2.23002	.35709	-.74853	.69725	-.072	38	.943
Pair 15	Meal E – Meal F	.17949	2.38274	.38154	-.59291	.95188	.470	38	.641

Chapter 4 Data Analysis and Results

This chapter not only demonstrates the analysis and the results of the study, but also provides the background of the respondents, the manipulation check, and the validity and reliability of the results. Participants thought the situations described in the scenarios would happen in real life, hence, the following tests and discussions were meaningful. Most of the data analysis methods such as Independent-Sample T Test and Multiple- Comparison Test are adopted to test the hypotheses by using SPSS 17.0.



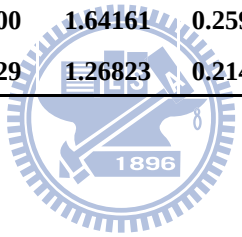
4.1 Manipulation check and Data Analysis

4.1.1 Manipulation check

The reliability of service outcome items is 0.846. The manipulation checks were tested by Independent-Sample T Test. There are 38/35 participants in one-success/ failure outcome, 44/43 participants in two-success/failure outcome, and 40/35 participants in three-times-success/failure outcome. The results are presented in Table 4, showing significant difference between successful and failed service outcomes ($p < 0.01$). Therefore, the manipulation check is successful.

Table 4 Manipulation Check

	Cell	N	Mean	Std. Deviation	Std. Error Mean	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
I was satisfied with the service experience.	S	38	5.5000	0.68773	0.11156	10.786	71	.000	2.50000	0.23179
	F	35	3.0000	1.23669	0.20904					
I was dissatisfied with the service experience.	S	38	2.5789	1.26559	0.20531	-6.872	71	.000	-2.16391	0.31695
	F	35	4.7429	1.44187	0.24372					
I was satisfied with the service experience.	S+S	44	5.7500	0.75097	0.11321	15.587	85	.000	3.40116	0.21821
	F+F	43	2.3488	1.23218	0.18791					
I was dissatisfied with the service experience.	S+S	44	2.4773	1.22927	0.18532	-9.783	85	.000	-2.80180	0.28640
	F+F	43	5.2791	1.43636	0.21904					
I was satisfied with the service experience.	S+S+S	40	5.6250	0.77418	0.12241	17.463	73	.000	3.39643	0.19449
	F+F+F	35	2.2286	0.91026	0.15386					
I was dissatisfied with the service experience.	S+S+S	40	2.8500	1.64161	0.25956	-7.864	73	.000	-2.69286	0.34243
	F+F+F	35	5.5429	1.26823	0.21437					



4.1.2 Factor Analysis

As an examination of the validity of questionnaire items, we conducted factor analysis, and the results were reported as follows (Table 5). Before the factor analysis, the KMO were reported as 0.878 in satisfaction, 0.5 in expectation, and 0.775 in repurchase intention. The Bartlett's test of sphericity were all significant ($p < 0.001$), which meant that the data was adequate for proceeding with the factor analysis. We used the principal component method for extraction and conducted the direct oblimin rotation. The result showed that items in different variables were all assigned to their

own dimensions with high loadings. Item loadings that are less than 0.5 are not shown.

Table 5 Factor Analysis

	Component
	1
SAT 1	.968
SAT 2	.954
SAT 3	.950
SAT 4	.950

	Component
	1
EX 1	.972
EX 2	.972

	Component
	1
RI 1	.984
RI 2	.978
RI 3	.971

Note 1: Extraction Method: Principal Axis Factoring. Rotation Method: Oblimin with Kaiser Normalization.

Note 2: SAT stands for satisfaction; EX stands for expectation; RI stands for repurchase intention

4.2 Background of participants

From the total 491 samples, 99.8% of them have the experience of buying a bento box (Table 6.1), and 89.2% of them buy bento boxes more than once a week. 57.8% are students, 51.1% are female; 59.1% are 21 to 25 years old and 62.5% have a bachelor degree. The demographics of participants were shown as follows (Table 6.2).

Table 6.1 Experience of Participants

		Frequency	Percent	Cumulative Percent
Do you have ever bought any bento box before?	Yes	490	99.8	99.8
	No	1	.2	100.0
	Total	491	100.0	
How often do you buy a bento box?	3 times a day	86	17.5	17.5
	Once a day	153	31.2	48.7
	Twice/3 times a week	123	25.1	73.7
	Once a week	76	15.5	89.2
	Once a month	31	6.3	95.5
	Few times a year	21	4.3	99.8
	Once more than a year	1	.2	100.0
	Total	491	100.0	
How much do you spend in buying a bento box?	Under $50	36	7.3	7.3
	$51~ $75	368	74.9	82.3
	$76 ~ $100	82	16.7	99.0
	$101 ~ $150	4	.8	99.8
	$151 ~ $200	1	.2	100.0
	Total	491	100.0	
Do you have ever work in catering industry?	Yes	164	33.4	33.4
	No	327	66.6	100.0
	Total	491	100.0	

Table 6.2 Demographics of Participants

		Frequency	Percent	Cumulative Percent
Gender	Male	240	48.9	48.9
	Female	251	51.1	100.0
	Total	491	100.0	
Age	16~20	61	12.4	12.4
	21~25	290	59.1	71.5
	26~30	107	21.8	93.3
	31~35	26	5.3	98.6
	36~40	5	1.0	99.6
	over 51	2	.4	100.0
	Total	491	100.0	
Education Degree	Junior high	1	.2	.2
	Senior high	12	2.4	2.6
	Junior college	11	2.2	4.9
	College	307	62.5	67.4
	Graduate upward	160	32.6	100.0
	Total	491	100.0	
Income Per Month	Under 10,000	274	55.8	55.8
	10,001~30,000	111	22.6	78.4
	30,001~50,000	88	17.9	96.3
	50,001-70,000	14	2.9	99.2
	70,001-90,000	2	.4	99.6
	More than 90,001	2	.4	100.0
	Total	491	100.0	
Occupation	Student	284	57.8	57.8
	others	207	42.2	100.0
	Total	491	100.0	

4.3 Reliability Analysis

The reliability of satisfaction, expectation and repurchase intention would be examined and tested by Cronbach's alpha. If it is above 0.7, that means the scale of this study is reliable. Table 6 shows the reliability of these three constructs. As a result, this study is deemed to be reliable.

Table 7 Reliability Statistics of Customer Evaluation

Construct	Cronbach's Alpha	Number of items
Satisfaction	**0.968**	**4**
Expectation	**0.941**	**2**
Repurchase Intention	**0.977**	**3**

4.4 Analysis of results

Descriptive statistical analysis and multiple-comparison tests were adopted to examine whether consecutive service encounters would influence the credit attribution to firm and therefore, influence satisfaction/expectation/repurchase intention. Hypotheses 1_a, 1_b, 2_a, and 2_b suggested that companies' credit could be deposited in/withdrawn from customers' mental accounts after service experiences and the gaining / losing effect on customers' mental accounts will display diminishing

effects. Hypothesis 3and 4 suggested that the negative influence of the service failure will be stronger than the positive influence of the successful service on a customer's evaluation toward the company, so customers would refuse to shop at the same store if the seller had a once-success-once-failure service record.

The overall MANOVA analysis of results is stated in Table 8, which indicated that all the interactions within outcome, prior experience, and DVs (satisfaction, expectation, and repurchase intention) are significant. ($p < 0.01$).

Table 8 Overall MANOVA

Effect	Value	F	Hypothesis df	Error df	Sig.
Intercept	**.071**	**2102.827**	**3.000**	**483.000**	**.000**
Outcome	**.383**	**259.199**	**3.000**	**483.000**	**.000**
Prior experience	**.964**	**2.960**	**6.000**	**966.000**	**.007**
Outcome * Prior experience	**.936**	**5.457**	**6.000**	**966.000**	**.000**

4.4.1 Satisfaction in successful / failed service outcomes

Figure 4 indicated that customer satisfaction to a firm could be gained / lost with the successful/unsuccessful service experiences. It was formed in a concave shape in a successful experience and convex in a failed experience, an S shape. Table 9.1 and 9.2

indicates that there is no significant difference within S, SS, and SSS, which means that the credit of customer satisfaction could not be deposited in consecutive successful service experiences. On the other hand, there are significant differences between F and FF/FFF, which means that customer satisfaction to a company could be withdrawn in consecutive failed service experiences. There is no difference between FF and FFF, which means that the negative impact on customer satisfaction will be displayed diminishingly with the occurrence of failure. Thus, Hypotheses 1_a was not supported, Hypotheses 1_b was partially supported, Hypotheses 2_a was not supported, and Hypotheses 2_b was supported.

cell	Mean	Std. Deviation	N
F+F+F	2.4714	.81973	35
F+F	2.4186	.78437	43
F	3.1571	1.05734	35
S	5.5132	.64971	38
S+S	5.7102	.62166	44
S+S+S	5.6688	.73027	40

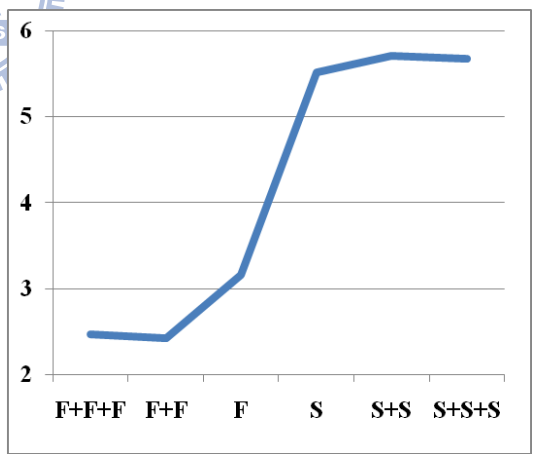


Figure 4 Interactions Between Service Outcome and Prior Experience on Satisfaction

Table 9.1 Multiple Comparison: Satisfaction in Successful Outcomes

(I) cell	Mean	(J) cell	Mean	Mean Difference (I-J)	Std. Error	Sig.
S	5.5132	S+S+S	5.6688	-.1556	.20933	.458
		S+S	5.7102	-.1971	.20464	.336
		F+S+S	5.4727	.0404	.19493	.836
		S+F+S	4.3177	1.1954*	.20065	.000
		F+S+C	4.4643	1.0489*	.21649	.000
		S+F+C	2.1726	3.3405*	.20689	.000
S+S	5.7102	S+S+S	5.6688	.0415	.20188	.837
		S	5.5132	.1971	.20464	.336
		F+S+S	5.4727	.2375	.18690	.204
		S+F+S	4.3177	1.3925*	.19286	.000
		F+S+C	4.4643	1.2459*	.20929	.000
		S+F+C	2.1726	3.5376*	.19934	.000
S+S+S	5.6688	S+S	5.7102	-.0415	.20188	.837
		S	5.5132	.1556	.20933	.458
		F+S+S	5.4727	.1960	.19202	.308
		S+F+S	4.3177	1.3510*	.19783	.000
		F+S+C	4.4643	1.2045*	.21388	.000
		S+F+C	2.1726	3.4961*	.20415	.000
F+S+S	5.4727	S+S+S	5.6688	-.1960	.19202	.997
		S+S	5.7102	-.2375	.18690	.982
		S	5.5132	-.0404	.19493	1.000
		S+F+S	4.3177	1.1550*	.18252	.000
		F+S+C	4.4643	1.0084*	.19981	.000
		S+F+C	2.1726	3.3001*	.18936	.000

Table 9.2 Multiple Comparison: Satisfaction in Failed Outcomes

(I) cell	Mean	(J) cell	Mean	Mean Difference (I-J)	Std. Error	Sig.
F	3.1571	F+S+C	4.4643	-1.3071*	.22089	.000
		S+F+C	2.1726	.9845*	.21149	.000
		F+S+F	2.8514	.3058	.21789	.161
		S+F+F	2.6410	.5161*	.21516	.017
		F+F	2.4188	.7385*	.21037	.000
		F+F+F	2.4714	.6857*	.22089	.002
F+F	2.4188	F+S+C	4.4643	-2.0457*	.21037	.000
		S+F+C	2.1726	.2460	.20047	.220
		F	3.1571	-.7385*	.21037	.000
		F+S+F	2.8514	-.4327*	.20721	.037
		S+F+F	2.6410	-.2224	.20434	.277
		F+F+F	2.4714	-.0528	.21037	.802
F+F+F	2.4714	F+S+C	4.4643	-1.9929*	.22089	.000
		S+F+C	2.1726	.2988	.21149	.158
		F	3.1571	-.6857*	.22089	.002
		F+S+F	2.8514	-.3799	.21789	.082
		S+F+F	2.6410	-.1696	.21516	.431
		F+F	2.4186	.0528	.21037	.802
F+S+F	2.8514	F+S+C	4.4643	-1.8233*	.21516	.000
		S+F+C	2.1726	.4684*	.20549	.023
		F	3.1571	-.5161*	.21516	.017
		S+F+F	2.6410	.2103	.21207	.322
		F+F	2.4186	.2224	.20434	.277
		F+F+F	2.4714	.1696	.21516	.431

Table 9.1 indicated the average means of customer satisfaction in F+S+S and S+F+S are both smaller than in S. If the positive influence of the successful service is equal to the negative influence of service failure, there should be no difference within S, F+S+S, and S+F+S. However, S+F+S is significantly smaller than S ($p < 0.001$). Likewise, Table 9.2 indicated S+F+F and F+S+F are both smaller than F, and SFF is significantly smaller than F ($p = 0.017$). Thus, Hypothesis 3 is partially supported.

4.4.2 Expectation in successful / failed service outcomes

Figure 5 indicated that customer expectation to a firm could be gained / lost with the successful/failed service experiences. It was formed in the concave shape in success and convex in failure, an S shape. Table 10.1 indicated that there is no significant difference among S, SS, and SSS, which meant that the credit of customer expectation could not be deposited in consecutive successful service encounters. On the other hand, there are significant differences between F and FF/FFF (Table 10.2), which meant that customer expectation of the firm could be withdrawn from consecutive unsuccessful service encounters. There is no difference between FF and FFF, which meant that with the occurrence of failure, the negative effect in customer expectation will display diminishing effects. Thus, Hypotheses 1_a was not supported, Hypotheses 1_b was partially supported, Hypotheses 2_a was not supported, and

Hypotheses 2_b was supported.

Cell	Mean	Std. Deviation	N
F+F+F	2.4000	.98369	35
F+F	2.3953	.82778	43
F	3.4429	1.35458	35
S	5.4342	.59470	38
S+S	5.7045	.61302	44
S+S+S	5.7250	.73336	40

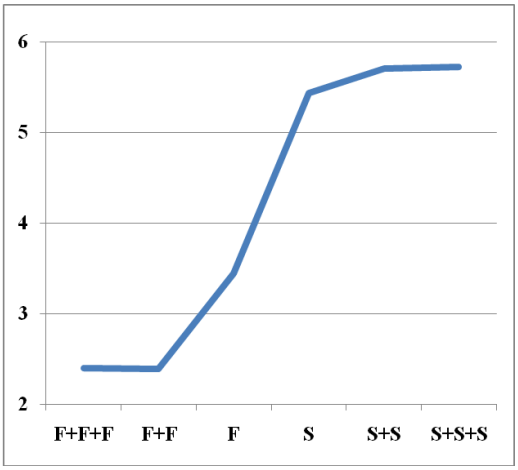


Figure 5 Interactions Between Service Outcome and Prior Experience on Expectation

Table 10.1 indicated the average means of customer expectation in F+S+S and S+F+S are both smaller than in S. If the positive influence of the successful service is equal to the negative influence of service failure, there should be no difference within S, F+S+S, and S+F+S. However, S+F+S is significantly smaller than S ($p < 0.001$). Likewise, Table 10.2 indicated that S+F+F and F+S+F are both smaller than F, and SFF is significantly smaller than F ($p = 0.006$). Thus, Hypothesis 3 is partially supported.

Table 10.1 Multiple Comparison: Expectation in Successful Outcomes

(I) cell	Mean	(J) cell	Mean	Mean Difference (I-J)	Std. Error	Sig.
S	5.4342	S+S+S	5.7045	-.2908	.23798	.222
		S+S	4.4286	-.2703	.23265	.246
		F+S+S	5.2000	.2342	.22161	.291
		S+F+S	2.4000	1.2467*	.22811	.000
		F+S+C	2.8333	1.0056*	.24612	.000
		S+F+C	5.2000	2.6009*	.23520	.000
S+S	4.4286	S+S+S	5.7250	-.0205	.22951	.929
		S	5.4342	.2703	.23265	.246
		F+S+S	5.2000	.5045*	.21248	.018
		S+F+S	4.1875	1.5170*	.21926	.000
		F+S+C	4.4286	1.2760*	.23794	.000
		S+F+C	2.8333	2.8712*	.22663	.000
S+S+S	5.7045	S+S	5.7045	.0205	.22951	.929
		S	5.4342	.2908	.23798	.222
		F+S+S	5.2000	.5250*	.21831	.017
		S+F+S	4.1875	1.5375*	.22491	.000
		F+S+C	4.4286	1.2964*	.24315	.000
		S+F+C	2.8333	2.8917*	.23210	.000
F+S+S	5.2000	S+S+S	5.7250	-.5250*	.21831	.017
		S+S	5.7045	-.5045*	.21248	.018
		S	5.4342	-.2342	.22161	.291
		S+F+S	4.1875	1.0125*	.20751	.000
		F+S+C	4.4286	.7714*	.22715	.001
		S+F+C	2.8333	2.3667*	.21528	.000

Table 10.2 Multiple Comparison: Expectation in Failed Outcomes

(I) cell	Mean	(J) cell	Mean	Mean Difference (I-J)	Std. Error	Sig.
F	3.4429	F+S+C	4.4286	-.9857*	.25113	.000
		S+F+C	2.8333	.6095*	.24044	.012
		F+S+F	3.046	.3483	.24771	.160
		S+F+F	2.7692	.6736*	.24460	.006
		F+F	2.3953	1.0475*	.23916	.000
		F+F+F	2.4000	1.0429*	.25113	.000
F+F	2.3953	F+S+C	4.4286	-2.0332*	.23916	.000
		S+F+C	2.8333	-.4380	.22791	.055
		F	3.4429	-1.0475*	.23916	.000
		F+S+F	3.046	-.6992*	.23557	.003
		S+F+F	2.7692	-.3739	.23230	.108
		F+F+F	2.4000	-.0047	.23916	.984
F+F+F	2.4000	F+S+C	4.4286	-2.0286*	.25113	.000
		S+F+C	2.8333	-.4333	.24044	.072
		F	3.4429	-1.0429*	.25113	.000
		F+S+F	3.046	-.6946*	.24771	.005
		S+F+F	2.7692	-.3692	.24460	.132
		F+F	2.3953	.0047	.23916	.984
F+S+F	3.0460	F+S+C	4.4286	-1.6129*	21789	.000
		S+F+C	2.83333	.6787*	.20835	.001
		F	3.4429	-.3058	.21789	.161
		S+F+F	2.7692	.2103	.21207	.322
		F+F	2.3953	.4327*	.20721	.037
		F+F+F	2.4000	.3799	.21789	.082

4.4.3 Repurchase intention in successful / failed service outcomes

Figure 6 indicated that repurchase intention to a firm could be gained / lost with the successful/failed service experiences. It was formed in the shape of concave in success and convex in failure, an S shape. Table 11.1 indicated that there is no significant difference within S, SS, and SSS, which meant that the credit of repurchase intention could not be deposited from consecutive successful service experiences. On the other hand, there are significant differences between F and FF/FFF (Table 11.2), which meant that repurchase intention to a company could be withdrawn from consecutive unsuccessful service experiences. There is no difference between FF and FFF, which meant that with the occurrence of failure, the negative effect in repurchase intention will have diminishing effects. Thus, Hypotheses 1_a was not supported, Hypotheses 1_b was partially supported, Hypotheses 2_a was not supported, and Hypotheses 2_b was supported.

cell	Mean	Std. Deviation	N
F+F+F	2.2095	.84438	35
F+F	1.9845	.70880	43
F	2.6190	1.10596	35
S	5.5702	.55295	38
S+S	5.8333	.70984	44
S+S+S	5.8083	.69548	40

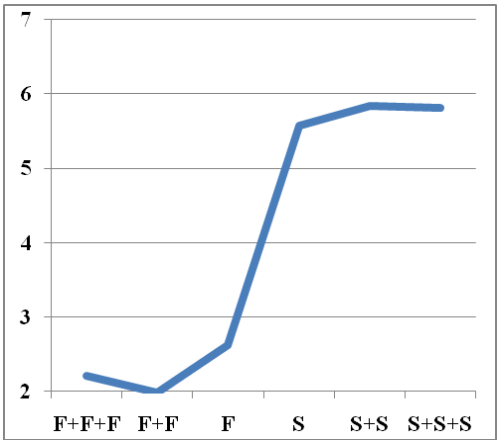


Figure 6 The Interactions Between Service Outcome and Prior Experience on Repurchase Intention

Table 11.1 Multiple Comparison: Repurchase Intention in Successful Outcomes

(I) cell	Mean	(J) cell	Mean	Mean Difference (I-J)	Std. Error	Sig.
S	5.5702	S+S+S	5.8083	-.2382	.23765	.317
		S+S	5.8333	-.2632	.23233	.258
		F+S+S	5.5152	.0550	.22130	.804
		S+F+S	4.1875	1.3827*	.22780	.000
		F+S+C	4.3333	1.2368*	.24578	.000
		S+F+C	2.5317	3.0384*	.23487	.000
S+S	5.8333	S+S+S	5.8083	.0250	.22919	.913
		S	5.5702	.2632	.23233	.258
		F+S+S	5.5152	.3182	.21219	.134
		S+F+S	4.1875	1.6458*	.21895	.000
		F+S+C	4.3333	1.5000*	.23761	.000
		S+F+C	2.5317	3.3016*	.22631	.000
S+S+S	5.8083	S+S	5.8333	-.0250	.22919	.913
		S	5.5702	.2382	.23765	.317
		F+S+S	5.5152	.2932	.21800	.179
		S+F+S	4.1875	1.6208*	.22459	.000
		F+S+C	4.3333	1.4750*	.24281	.000
		S+F+C	2.5317	3.2766*	.23177	.000
F+S+S	5.2000	S+S+S	5.7250	-.5250*	.21831	.017
		S+S	5.7045	-.5045*	.21248	.018
		S	5.4342	-.2342	.22161	.291
		S+F+S	4.1875	1.0125*	.20751	.000
		F+S+C	4.4286	.7714*	.22715	.001
		S+F+C	2.8333	2.3667*	.21528	.000

Table 11.2 Multiple Comparison: Repurchase Intention in Failed Outcomes

(I) cell	Mean	(J) cell	Mean	Mean Difference (I-J)	Std. Error	Sig.
F	2.6190	F+S+C	4.3333	-1.7143*	.25078	.000
		S+F+C	2.5317	.0873	.24010	.716
		F+S+F	2.7748	-.1557	.24737	.529
		S+F+F	2.7607	-.1416	.24426	.562
		F+F	1.9845	.6346*	.23883	.008
		F+F+F	2.2095	.4095	.25078	.103
F+F	1.9845	F+S+C	4.3333	-2.3488*	.23883	.000
		S+F+C	2.5317	-.5472*	.22759	.017
		F	2.6190	-.6346*	.23883	.008
		F+S+F	2.7748	-.7903*	.23524	.001
		S+F+F	2.7607	-.7762*	.23198	.001
		F+F+F	2.2095	-.2250	.23883	.347
F+F+F	2.2095	F+S+C	4.3333	-2.1238*	.25078	.000
		S+F+C	2.5317	-.3222	.24010	.180
		F	2.6190	-.4095	.25078	.103
		F+S+F	2.7748	-.5653*	.24737	.023
		S+F+F	2.7607	-.5512*	.24426	.024
		F+F	1.9845	.2250	.23883	.347
F+S+F	3.0460	F+S+C	4.4286	-1.6129*	21789	.000
		S+F+C	2.83333	.6787*	.20835	.001
		F	3.4429	-.3058	.21789	.161
		S+F+F	2.7692	.2103	.21207	.322
		F+F	2.3953	.4327*	.20721	.037
		F+F+F	2.4000	.3799	.21789	.082

Table 11.1 indicated the average means of repurchase intention in F+S+S and S+F+S are both smaller than in S. If the positive influence of the successful service is equal to the negative influence of service failure, there should be no difference among S, F+S+S, and S+F+S. However, S+F+S is significantly smaller than S ($p < 0.001$). Likewise, Table 11.2 indicated S+F+F and F+S+F are both smaller than F. Although there is no significant difference among S, S+F+F, and F+S+F, we still can see the trend that the negative influence is stronger than positive influence in repurchase intention from Table 11.2. Thus, Hypothesis 3 is partially supported.

4.4.4 Brand-New alternative choice

Hypothesis 4 suggested that the negative influence of the service failure will be stronger than the positive influence of the successful service encounter on a customer's evaluation toward the company. Table 12 indicated that participants would stop shopping at the same store with a once-success- once-failure record and become customers of its competitors if there is an appearance of a brand-new alternative (97.62% in S+F+C situation and 91.43% in F+S+C situations). Thus, Hypothesis 4 was supported.

Table 12 Result of Customers' Choice

Cell	Store A : the one you have bought bento box twice	Store B : the one you have never been there before	Total
S+F+C	1 (2.38%)	41 (97.62%)	43 (100%)
F+S+C	3 (8.57%)	32 (91.43%)	35 (100%)

Chapter 5 Discussion and Future Research

5.1 Discussion

Table 13 summarizes the results of the hypotheses. H1b was supported, but H1a was not supported, which meant that the credit attribution mechanism would not work in successful service encounters. Although $H2_b$ was supported, this study did not find any support for the hypothesis that the positive effort would influence companies' credit to customers with the increase of the number of successful service encounters, hence, H2a is not supported. H3 was partially supported in that the negative impact will be stronger than the positive impact on customer evaluation. Most of our participants chose the brand new alternative store, rather than the one with a once-success-once-failure service record, so H4 was supported. Details about each result of hypotheses are discussed as follows.

Table 13 Results of All Hypotheses (Summarized)

Hypothesis 1_a	Not Supported
Hypothesis 1_b	Partially Supported
Hypothesis 2_a	Not Supported
Hypothesis 2_b	Supported
Hypothesis 3	Partially Supported
Hypothesis 4	Supported

5.1.1 Satisfaction, Expectation, and Repurchase Intention in Successful Service Outcomes

The results of this study indicated that customers who experienced successful service encounters could give more credit to a service provider than the ones who experienced failed service encounters. The more times successful service was provided, the more credit to the service provider is given. The accumulation / attrition of customer credit were formed in S-shape, as predicted. Although there is no significant difference among S, S+S, and S+S+S situations in customer satisfaction, expectation, and repurchase intention, we could still find the trend lightly from Table 9.1, 10.1, and 11.1. Meanwhile, the difficulty of credit accumulation indicated that it was not easy to gain credit from customers, even though they perceived successful services.

Past studies pointed out that service providers could gain customer's credit from each successful service experience, so they held a bigger chance to keep their customers when service failure occurred (Mattila 2001; Sijun and Lenard 2007; Yany and Robert 2008). From our study, we did not find this idea worked, and equity theory might explain the results. Equity theory emphasized that people perceived themselves to be fairly treated in service encounters when they perceived the outcomes are fairly relative to their inputs (Kau and Loh 2006). In successful service encounters, participants might think they deserve tasty bento boxes given the payment and took

the successful outcomes for granted. Therefore, the evaluation of all the successful service encounters would be no different.

Although there is no difference in successful service encounters, we could still find the loss aversion effect to be at work. Table 9.1, 10.1 and 11.1 indicated all the DVs (satisfaction, expectation, and repurchase intention) in F+S+S are lower than those in S, and the overall evaluation in S+F+S are significantly lower ($p < 0.001$ in all the dependent variables) than those in S.

On the other hand, the evaluation in S+F+S is lower than F+S+S indicating that the recency effect worked. Recency effect, a cognitive bias that results from asymmetrical salience of recent stimuli, made people tend to recall items that were at the end of a list rather than in the middle of a list (Messier and Tubbs 1994). The recency effect usually occurred when the series of stimuli are inconsistent, so we could find the effect worked in half of the 12 cells. In our study, the recency effect made the influence of early incidents weaker and the influence of recent incidents stronger, so that the negative impact of failure on customer evaluation decreased with time. That is the reason why all the average means of DVs in S+F+S is lower than those in F+S+S.

In our study, the finding of recency effect supported the concept of perceived utility in mental accounting: The positive/negative effect of success/failure will be

different when they were in different positions of the service series. The effect of a successful/failed service outcome will be small if it occurred at the beginning of a series of service experiences. With the fading of time, rather the increase of the number of service outcome, the effect of positive/negative influence would diminish. Depending on the occurrence in different positions of the service experience series, the utility of each service outcome would be different.

5.1.2 Satisfaction, expectation, and repurchase intention in failed service outcomes

The results of this study indicated a significant difference between F and F+F situations ($p < 0.001$ in satisfaction and expectation; $p = 0.008$ in repurchase intention), but there is no difference between F+F and F+F+F situations. These findings supported our hypotheses that with the increase of the number of failed service encounters, customer evaluation toward a company will decrease and the negative impact will display diminishing effects. After two failed service experiences, customer evaluation toward the company might go to a bottom line. Firms would lose a customer's trust and be listed on his/her blacklist.

The loss aversion effect also showed up in failed service encounters. Table 9.2, 10.2 and 11.2 indicated the overall evaluation in F+S+F is lower than that in F, and the evaluation in S+F+F is significantly lower ($p = 0.017$ in satisfaction; $p = 0.006$ in

expectation) than that in S, except repurchase intention($p = 0.562$). The result enhanced our hypothesis that the negative impact on customer evaluation is stronger than the positive impact, so the evaluation in F+S+F and S+F+F is lower and different from S.

Most participants in our study chose store B, the one they have never been to, rather than store A, the one with a once-success-once-failure service record. The result indicated that the positive influence of a successful service experience would not be good enough to make up the negative influence of a failed service experience. Negative impact of a failed service experience would be much stronger than the positive impact of a successful service experience.

The evaluation in S+F+F is lower than F+S+F, indicating that the recency effect made the influence of early incidents weaker and the influence of recent incidents stronger. For customers, perceived utility of a service outcome would be different when it occurred in different positions of a series of service experiences.

In conclusion, we could find that the loss aversion effect made the evaluation in F+S+S and S+F+S lower than the evaluation in S, and the recency effect moderated the result, deciding whose overall evaluation is higher than another. On the other side, the loss aversion effect also make the evaluation in S+F+F and F+S+F lower than F, and the recency effect moderated and decided whose evaluation is higher.

5.2 Implications

This study indicated that customers regard successful service as necessary in chargeable services. In the real world, customers could make their choice freely and easily in a competitive market. They might take “success” as the standard requirement and “failure” as the forbidden element when they are facing a choice with payment. In this way, when there are alternative choices occurring nearby, customers would shop at a new store, rather than the old one offering a previously failed service. Losing a customer is easy, but gaining a customer is difficult.

Moreover, firms should never have the thought that one failed service experience might be forgivable to customers if the company offers a successful service experience later. Contrarily, failed service might be fatal to firms. The negative impact of one failed service experience could never be repaired by just one successful service experience. The positive impact of successful service experience is small, but the negative impact of a failed service experience is huge. Customers could easily become the customers of your competitors once the failure occurs. Thus, firms should keep pursuing 100% successful service as the ultimate goal and try their best to prevent defective service.

5.3 Limitations and Future research

The results of this study introduced some ideas to researchers and managers about how customers make decisions, but still face several limitations. First is the composite of the participants: 57.8 % of participants were students whose perception might not be the same as other consumers with different occupations. 71.5 % of participants were under 25 year old, and they might have different experience and preference from those who are older. 55.8% of participants' monthly income was less than NT $10,000 and might make different decisions from those who richer because of the distinct levels of income. To put this research into a more general sense, the data collection should cover different age and occupation groups.

Second, this study was measured by questionnaires with established scenarios. Although Bateson had indicated that there is no significant difference across slides, videos, and field study (Bateson and Hui 1992), we still think the study might be more robust and undeniable if a field study was done. To make the research more conclusive, a field study can be used in the future research.

Third, the scenario used in this study was a bento box store which belonged to the service industry. There are many kinds of products and types of service that were not verified in this study. Restaurant/bank/airline scenarios were more common in service failure field, and we could testify if the credit accumulation/attrition effect

exists in different industry. Service failure was consisted of process failure and outcome failure. We could investigate if different types of service failure deposited in / withdrawn from different mental account? Whether they could combine into the same account, or not? In the future, distinct scenarios could be addressed in the research

Moreover, participants were asked the manipulation check questions after reading the whole photo-based scenarios, which hardly ensure the effect of manipulation in each photo. Participants should answer the manipulation check questions after reading each photo. In this way, we could enhance the accuracy of the manipulation check and the results.

Last but not the least, we had made basic combination of prospect theory and mental accounting in our studies. There is more mental accounting elements left to be combined (e.g., the frequency of account evaluation and the assignment of activity). Meanwhile, we could propose more distinct items (e.g., confidence level) in our questionnaires to broaden the dimensionality. A more comprehensive study could be investigated in the future, thus making a greater understanding of the customer decision-making process.

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APPENDIX I---- Multiple Comparisons Tables

Multiple Comparisons - LSD (Satisfaction)

cell	Mean	Std. Deviation	N
S	5.5132	.64971	38
F+S+S	5.4727	.86022	55
S+F+C	2.1726	.89116	42
F+S+C	4.4643	1.27063	35
S+S	5.7102	.62166	44
S+S+S	5.6688	.73027	40
F	3.1571	1.05734	35
F+F	2.4186	.78437	43
F+F+F	2.4714	.81973	35
S+F+S	4.3177	1.17344	48
S+F+F	2.6410	.85608	39
F+S+F	2.8514	1.17032	37
Total	3.9771	1.65542	491

Multiple Comparisons - LSD (Expectation)

Cell	Mean	Std. Deviation	N
S	5.4342	.59470	38
F+S+S	5.2000	.91084	55
S+F+C	2.8333	1.39103	42
F+S+C	4.4286	1.25524	35
S+S	5.7045	.61302	44
S+S+S	5.7250	.73336	40
F	3.4429	1.35458	35
F+F	2.3953	.82778	43
F+F+F	2.4000	.98369	35
S+F+S	4.1875	1.24467	48
S+F+F	2.7692	1.07511	39
F+S+F	3.046	1.29012	37
Total	4.0275	1.62781	491

Multiple Comparisons – LSD (Repurchase Intention)

cell	Mean	Std. Deviation	N
S	5.5702	.55295	38
F+S+S	5.5152	.93143	55
S+F+C	2.5317	1.22100	42
F+S+C	4.3333	1.47971	35
S+S	5.8333	.70984	44
S+S+S	5.8083	.69548	40
F	2.6190	1.10596	35
F+F	1.9845	.70880	43
F+F+F	2.2095	.84438	35
S+F+S	4.1875	1.44711	48
S+F+F	2.7607	1.03999	39
F+S+F	2.7748	1.35868	37
Total	3.9260	1.80040	491

APPENDIX II---- Bento Box Samples

Sample 1 (for successful service encounters)

Sample 2 (for successful service encounters)

Sample 3 (for successful service encounters)

Sample C(for unsuccessful service encounters)

Sample E (for unsuccessful service encounters)

Sample F (for unsuccessful service encounters)

APPENDIX III---- Questionnaire Sample

您好：

非常感謝您撥冗回答以下問題，您的回答對我們的研究將有極大的幫助。

本研究目的在於了解了解消費者對服務業的看法。我們會請您先讀一小段情境故事圖片，再請您針對故事情境回答問題。本問卷約五分鐘可以完成，採不記名方式，所有資料僅供學術研究之用，絕不對外公開，請您安心作答。衷心感謝您的合作！

敬祝　　健康快樂、萬事如意

國立交通大學管理科學研究所

指導教授：張家齊　博士

學生：　黃信堯　敬上

第一部分—情境故事，在這個部分裡，您會先讀幾張有關購買便當的故事與圖片。在閱讀情境故事與圖片時，請想自己就是故事中的主角。由於之後的問題將與此故事情境相關，煩請仔細閱讀。

在一個晚餐時間，你來到了學校附近的一間便當店。印象中你從來都沒有來過/曾經來過一次/曾經來過二次，之前的用餐情形如下頁所示：

（實際問卷圖片請參見 Appendix II）

這是今天的用餐情形:

（實際問卷圖片請參見 Appendix II）

請您根據上述情境的內容，逐一回答下列題目，勾選出最能代表您意見的方格，以表示您對各個題項的同意程度，其中 1 表示非常不同意，7 表示非常同意。

	非常不同意 1	不同意 2	有點不同意 3	沒意見 4	有點同意 5	同意 6	非常同意 7
1. 發生上述事件之後，我對這間便當店所提供的餐點感到滿意	☐	☐	☐	☐	☐	☐	☐
2. 發生上述事件之後，我感到高興我選擇了這間便當店	☐	☐	☐	☐	☐	☐	☐
3. 發生上述事件之後，對這間便當店我的正面經驗高於我的負面經驗	☐	☐	☐	☐	☐	☐	☐
4. 整體來說，這次用餐的經驗是開心的。	☐	☐	☐	☐	☐	☐	☐
5. 我認為這間便當店將會提供我好吃的食物	☐	☐	☐	☐	☐	☐	☐
6. 我認為這間便當店所提供的食物應該會符合我的預期	☐	☐	☐	☐	☐	☐	☐
7. 我願意再來這間餐廳用餐	☐	☐	☐	☐	☐	☐	☐
8. 我會再來這間餐廳用餐的可能性是高的	☐	☐	☐	☐	☐	☐	☐
9. 下次如果我要去同一個地方，我會選擇這間餐廳	☐	☐	☐	☐	☐	☐	☐
10. 我很滿意這次的用餐經驗	☐	☐	☐	☐	☐	☐	☐
11. 我很不滿意這次的用餐經驗	☐	☐	☐	☐	☐	☐	☐
12. 故事中類似的情況是有可能發生的	☐	☐	☐	☐	☐	☐	☐
13. 發生描述的故事是可能在真實世界中發生的	☐	☐	☐	☐	☐	☐	☐

14. 包含這次的用餐，你一共來這間便當店用餐幾次？　共_____次

第二部分— 請您繼續閱讀情境，並根據情境所發生的問題，逐一回答下列題目，勾選出最能代表您意見的方格。

這時你發現這間便當店附近**新開了另一間類似的便當店 B**。你會選擇在曾經去過二次的便當店 A 用餐，還是去那間新開、你還沒去過的便當店 B 用餐呢？

15. 請問您會去那間便當店用餐？

☐ 曾經去過二次(一次好一次壞)的 A 便當店　☐ 從來都沒有去過的 B 便當店

第三部分— 請您根據您「實際購買便當經驗」，回答下列問題。

16. 請問您有沒有購買過便當？ ☐ 有 ☐ 沒有

17. 請問您平均約多久購買一次便當？ ☐ 幾乎三餐 ☐ 一天一次 ☐ 二、三天一次
☐ 一週一次 ☐ 一個月一次 ☐ 幾個月一次
☐ 一年以上

18. 請問您購買便當的平均花費金額？ ☐ 50 元以下 ☐ 51～80 元 ☐ 81～100 元
☐ 101～150 元 ☐ 151～200 元 ☐ 201 元以上

19. 請問您有沒有在餐飲業工作/打工過？ ☐ 有 ☐ 沒有

第四部分 — 請您提供您的*「個人基本資料」*

20．請問您的性別 ☐男 ☐女

21．請問您的年齡 ☐15 歲以下 ☐16~20 歲 ☐21~25 歲 ☐26~30 歲 ☐31~35 歲 ☐36~40 歲
☐41~45 歲 ☐46~50 歲 ☐51 歲以上

22．請問您的最高教育程度 ☐國中或初中 ☐高中、高職 ☐專科 ☐大學或學院
☐研究所以上

23．請問您的平均月收入 ☐ 10,000 以下 ☐ 10,001~30,000 ☐ 30,001~50,000
☐ 50,001-70,000 ☐ 70,001-90,000 ☐ 90,001 以上

24．請問您目前的職業 ☐ 軍、公、教 ☐ 資訊科技 ☐ 工商、貿易 ☐ 農林漁牧業
☐ 服務業 ☐ 家管 ☐ 學生 ☐ 其他_____

～本問卷到此結束，謝謝您的填答～