Chapter 1 Introduction

1.1 Background

Digital technology has provided a new paradigm to society and changed life through Internet. The term "Electronic Commerce" refers primarily to the exchange of information and transactions between different commercial agents, such as firms, which are different from the relationship between firms and consumers. There are many people who became familiar with the idea of home delivery for consumer goods early. E-commercial products were predominant either suited for mail order and delivers, or digital products. Many marketing experts believe that websites are more conductive to relationship marketing than other target medium, such as direct mail. Although E-commerce is still in its infancy, purchasing product via Internet is one of the most rapidly growing types of shopping.

With the rapid growth in numbers of Internet users, an increasing number of web-based companies have started to build up e-retailing sectors. The Internet has created a new marketplace that could be characterized by commercial transactions and unlimited by time or region. Taiwan's electronic commerce is entering a new period. Due to the rapid development of Internet technologies and applications, electronic stores have emerged as a popular retail channel. Delivering goods to customers is a critical activity in any business area. Regarding to the organizational E-commerce transaction and physical distribution (PD), it is extremely important to distinguish between customer-related activities, such as order, sales and marketing, and the processing and shipment of goods.

The Internet has provided people with a new medium for social activities and has also opened up entirely new features of social reality. In Taiwan, convenience stores, which are widely distributed, provide a 24-hour purchasing environment for customers. Up to date, the convenience stores have integrated E-commerce with logistics system to form a new retail delivery model: "On-line shopping in an electronic store and pick-up goods in a convenience store." Because convenience stores remain open 24 hours a day even on holidays, on-line shoppers can pick up goods according to their schedules. In Taiwan, portal sites such as Yahoo.com and Pchome.com are providing retail delivery services for on-line customers and have made many remarkable successes.

Because of a short development history and the difficulty of data collection about E-commerce retail delivery, there are only few studies about the E-commerce retail

delivery. Besides, due to the similarity of retail delivery service from various convenience stores, the location of the convenience store becomes a major factor for consumers to decide the pick-up point. Since customer's loyalty is the main resource of gaining profits, how to develop the different strategies to maintain the existing customers and obtain more new customers becomes an important issue for convenience stores.

For a RD (Retailing Delivery) system provider, the business volume of the RD service is mostly based on store locations. Therefore, it is difficult for the provider to provide different services for customers. Generally speaking, 7-11 has the greatest share in the E-commerce retail delivery market. It has captured 70% of the market while the other convenience stores only account for 30% of the market. Due to the difficulty for retail delivery providers to make a difference on the operation process, the customer loyalty has become an important issue for marketing practitioners. In addition, it has been noticed that the marketing activity can influence the occupation rate of the market, as shown in Figure 1.1, in the month of marketing activity (November, and the non-7-ELEVEn company has the market program) the occupation rate of market of non-7-ELEVEn company obviously rises. This phenomenon makes known that if an effective marketing scheme can be offered, it will be very important retail delivery providers on the occupation rate in the market.
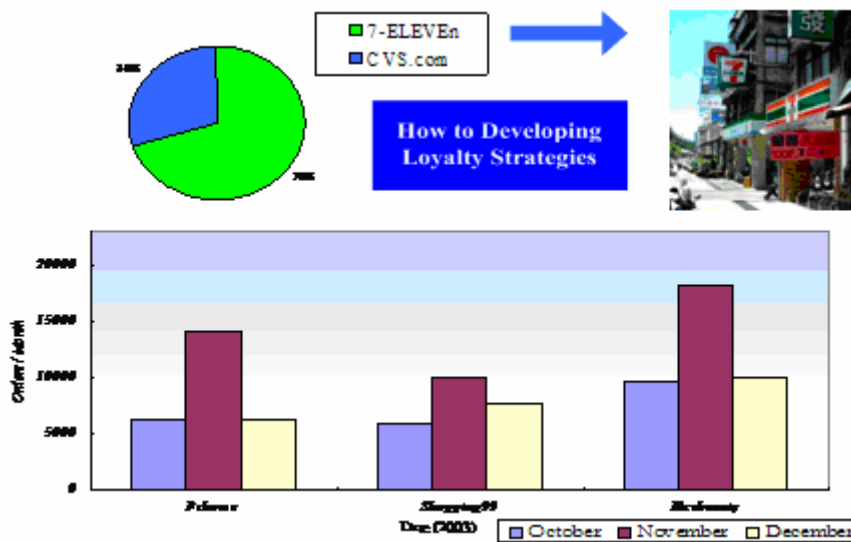

Figure 1.1 The Rate of Retail Delivery Market Occupation in the E-commerce

1.2 Motivation and Objectives

Because of the short development history and the difficulty of data collection in the E-commerce retail delivery, there are only few studies about E-commercial retail delivery. However, there are fewer studies about the EC (E-commercial) delivery

itself. In particular, the EC retail delivery has provided almost none research left. For retail delivery providers, how to provide good service quality for customers is one of the most important challenges.

Some studies suggest that customer loyalty provides the foundation of a company's sustained competitive edge, and the developing and increasing customer loyalty is a crucial factor for companies' growth and performance (Lee, Lee and Feick, 2001; Smith, Sparks, Hart and Tzokas, 2003). Loyalty marketing has become a particularly poignant topic for research and practice in services over the last few years (Anne, 2003; Crosby and Stephens, 1987).

Due to RD providers' difficulties to revolutionize the operation process, customer loyalty has become an important issue for marketing practitioners. The rapid growths of online transactions in the services of industries raise important research questions about the level of satisfaction and loyalty of online environment.

Some store promotions are a major activity for retailers. Indeed, an intensive promotional activity allows the store to maintain/increase its turnover by achieving a higher penetration rate in the market area, to increase in the frequency of visits, and to gain in the average amount of consumption in the store.

In general, most consumer choice behavior can be regarded as a discontinuous catastrophe phenomenon. The behavior can be nonlinear and complex, and the satisfaction or the dissatisfaction thresholds that may not be occurred at the same point (Zeeman, 1976; Stewart, 1982; Gilmore, 1981; Saunders, 1980; Oliva, Oliver and MacMillian, 1992; Rense and James, 2000; Byrne, Mazanov and Gregson, 2001; Lange, McDade and Oliva, 2001; Guastello, 1982). Despite a few studies, the impact of store-level promotions on store choice is an under-explored area. According to Oliva et al. (1992), Sethi and King (1998), the relationship between satisfaction and loyalty is both linear and nonlinear, to investigate the system with respecting to transitional, discontinuous behavior, a powerful mathematical tool is needed to analyze the nonlinear system.

On the following Oliva, *et al.* (1992), this thesis proposes a method for analyzing this complex behavior that can lead to the development of more accurate loyalty strategies through an understanding of the relationships among customer's switching cost, satisfaction, and purchase loyalty.

The catastrophe theory itself is not new, but there have been few studies on the choice behavior by catastrophe model. In sum, the major purpose of this study is to examine what kind of improved loyalty strategies can capture more market shares for

the convenience stores and investigate factors that affect customer loyalty in an online business-to-consumer (B2C) pick-up point.

1.3 Problem Analysis and Research Issues

In the electronic commercial environment, customer preferences are very diverse, and their loyalty level is very low. Companies should acknowledge the changes in customer demand patterns quickly and respond to consumer's behavior appropriately. Thus, an important issue is why consumers vary in, how they divide into their purchases across outlets, and how outlets can gain a greater share of consumer expenditures. It is necessary to use management experience and research results to create an overall picture of the relationships between loyalty and satisfaction. Figure 1.2 displays the problem analysis of this paper. The research issues are included in the following:

● Issue 1: To develop and validate a customer loyalty SEM model to describe the effects of switching cost, service quality and satisfaction on choice behavior of the pick-up point for the online shopping.

● Issue 2: Applying the catastrophe theory and modeling a Catastrophe Cusp Model to the consumer behavior on the pick-up point choice

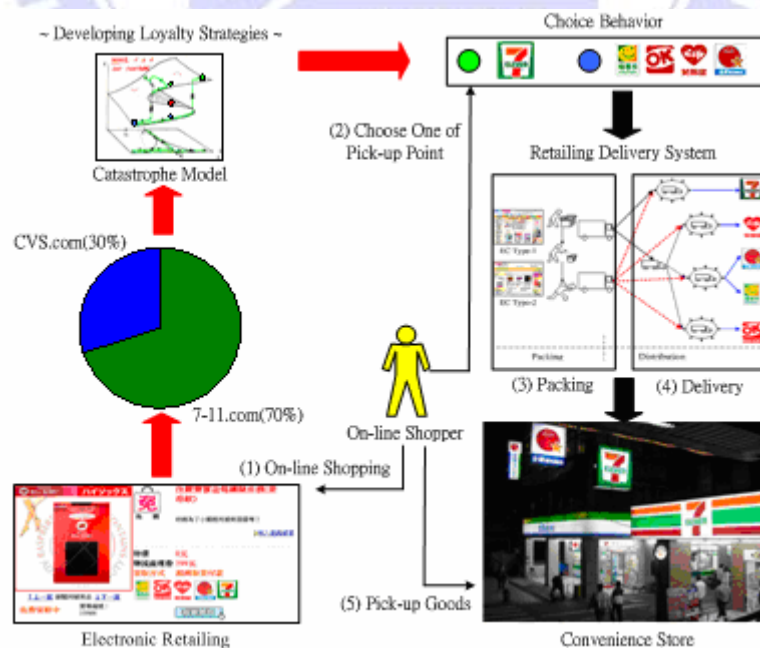● Issue 3: Using the Cusp Catastrophe Model for developing loyalty strategies.

Figure 1.2 Problem Analysis of Thesis

1.4 Dissertation Framework

This dissertation is organized as follows. Chapter 1 is the introduction, which given an overview of this research in terms of background, motivation and objective of this dissertation. Chapter 2 contains a briefly review of past researches for choice behavior includes the loyalty, service quality, satisfaction, switching cost and the catastrophe theory. Chapter 3 illustrates the methodology of cusp catastrophe model and the approaches for estimating cusp catastrophe model. Chapter 4 depicts the customer loyalty SEM mode. Then, the hypothesized cusp catastrophe model is developed in Chapter 5. In Chapter 5, we not only considered a appropriate approach for estimating cusp catastrophe model but also using cup catastrophe model for developing loyalty strategies. The finial Chapter concludes the research and provides suggestions for future empirical studies. The flow chart of this dissertation is shown in Figure 1.3.

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│            Chapter 1                 │
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│   for the retail delivery of main    │
│    research issues and methods       │
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│            Chapter 2                 │
│        Literature review             │
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│            Chapter 3                 │
│        Research approach             │
│      (Catastrophe theory)            │
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│    Chapter 4     │ │      Chapter 5       │
│ Conceptual model │ │ CCM modeling and     │
│   of choice      │ │ estimating and       │
│    behavior      │ │ development loyalty   │
│     (SEM)        │ │ strategies (GEMCAT)  │
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       │        Chapter 6        │
       │ Conclusions and         │
       │   recommendation        │
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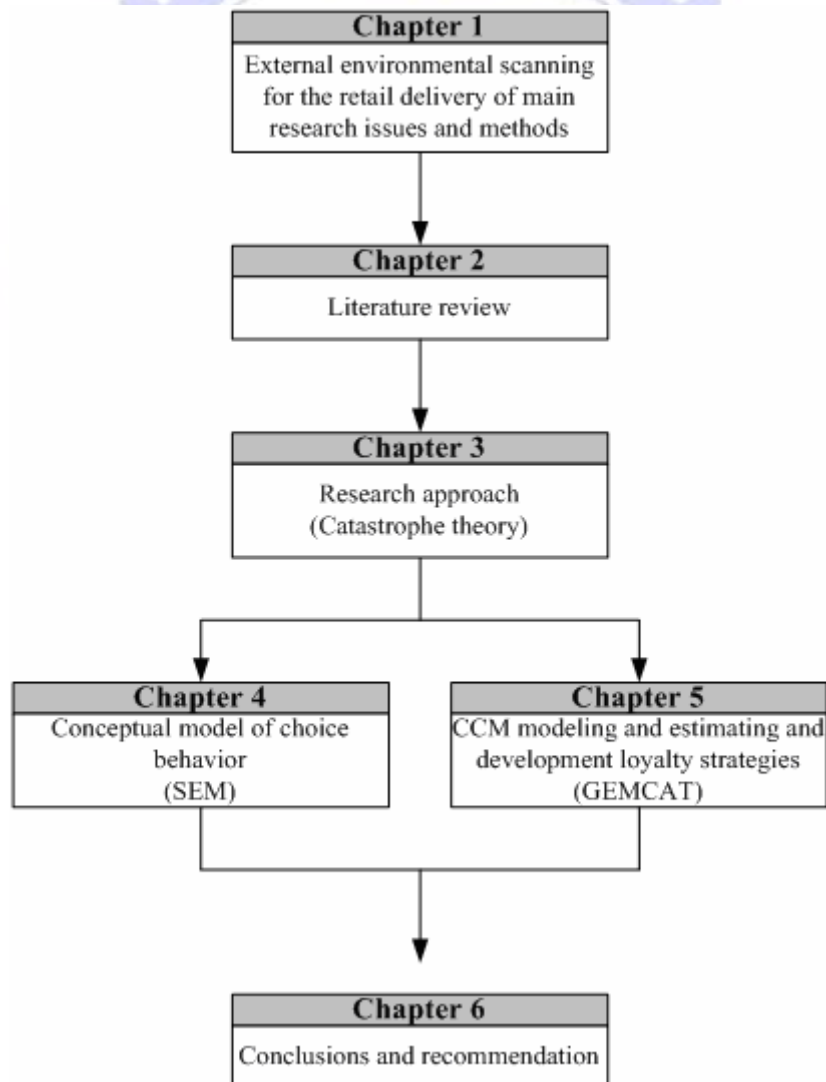
Figure 1.3 Flow-Chart of Dissertation