CHAPTER 3: RESEARCH METHODOLOGY

3.0 Introduction

Research methodology section describes the methods used to gather data for analysis. Research methodology is a research work plan established to provide a systematic way of carrying out a research which leads to answering the research questions and meeting the research objectives. Each method of data collection used is explained in detailed, including precautions taken to reduce data error.

There are two types of data available, i.e. the primary and secondary data. Primary data is data collected directly from the source or first hand experience. Generally, it can be obtained from questionnaires administered, interview, and focus group interview, direct observation from field experiments or direct involvement in an organization or group of target sample.

Secondary data is generally historical data collected in the past, collected or published by other parties. Secondary data can be obtained from published journal, archived documents and etc. The methodology can be either qualitative or quantitative or both in nature depending on individual researcher.

In this context, both qualitative and quantitative methods, i.e. a mixed method will be used in data collection to ascertain the answers of research questions.

3.1 Mixed Research Method

In their quest of getting the answer of their research questions, researchers always adopt various strategies or methods. It is noted that there is a recent

surge of mixed method adoption in order to have a better coverage and understanding of the research. Case study, ethnography and action research, among others, are known to employ mixed methods in their research strategy (Julia, 2005).

As the name suggested, the method employs the research strategy whereby more than one means of research method is used could be a combination of qualitative and quantitative methods, a combination of quantitative methods or a combination of qualitative methods. A part from that, this method is also referred in the context of working with different nature of data. Thus, according to Bryman (2001), the mixed method is also known as multi-strategy research which refers to the usage of variation of research strategies that pertaining to a complex range of research questions and a complex research design.

More often than not, majority of researchers always imply mixed methods as the mixture of qualitative and quantitative approaches to research. These methods have been classified and defined in the context of various basis, examples are by the type of data studied (textual or numeric; structured or unstructured), the means of analysis (interpretive or statistical), the logic adopted (deductive or inductive), the variation of investigation (exploratory or confirmatory) , the strategy used for explanation (variance theory or process theory), and even on the basis of the underlying paradigm assumption (positivist or interpretive/critical; rationalistic or naturalistic). Due to the fact that there is no necessary congruence within the differing dimensions between the quantitative/qualitative distinction, the terms itself are used for either giving a directive feeling in a study, or possibly just as descriptors of the

type of data being used (textual or numeric). Nevertheless, the most fundamental of describing a mixed methodology is related to methods that make comparisons between quantitative and qualitative data (Jones, 2004).

Quantitative data is information in the form of numerical and it is normally obtained from questionnaires or structured interviews. Also, it includes data from closed-ended information that can be yielded from the sources such as attitude, behaviour, or performance instruments where checklist is used to observe the apparent behaviour show by the respondents. Apart from that, sources like census record gathered on checklist, instrument or other medium to confirm the hypothesis or answering the research question can also be considered as the type of quantitative data as well.

Qualitative data, according to Taylor (1995) on the other hand, is defined as the descriptive data from unstructured interviews or observation. Contrary to quantitative data, qualitative data basically is made of open-ended information gathered via interviews with participants where they can freely provide answers in their own words. Furthermore, this type of data can also be obtained by observing participants or sites of research, gathering documents from a public (examples such as in annual report) or private (examples such as notations) source or from audiovisual medium such as videotapes or artifacts. Generally, qualitative data such as image, words or text, are analysed by aggregating it into types of information and thus exhibiting the diversity of ideas obtained during data collection.

Researchers may have various justifications to make use of mixed methods. One of the prominent reasons is to offset the weaknesses of using a single

approach by expanding the research breadth and scope which is observed under mixed method (David, Afua, Philip & Douglas, 2007). This method also allows thinking outside the box as it is intuitive and does not limit the researchers to a specific discipline.

There are two types of data collection design in mixed methods, i.e. concurrent design and sequential design. In concurrent mixed method data collection design, both qualitative and quantitative data are provided by the same respondent in an attempt to validate one form of data from another.

In sequential mixed method data collection design, data collected and analysed in one phase contributes to the collection of data in the next phase. Often, data collected in the next phase is to augment the analysis in the next phase.

In this context, the study will employ sequential method where in phase one, secondary quantitative data is used to calculate CLV and to segment fleet card customers. This information will then be used in the next phase to select respondents randomly from each segment for structured interview where qualitative data will be collected. In summary, research question 1 is answered using quantitative method whereas question 2 is answered using both quantitative and qualitative methods. Finally, question 3 and 4 are addressed by using qualitative method.

Overall, this study covers the followings:

1. The calculation of benchmark Weighted Average Cost of Capital for a close competitor

2. The calculation of Adjusted Weighted Average Cost of Capital for fleet card business

3. The calculation of CLV for prepaid customers

4. The calculation of CLV for post-paid customers

5. The segmentation of prepaid customers based on CLV

6. The segmentation of post-paid customers based on CLV

7. The development of a proposed marketing program based on the inputs from focus group interview

3.2 Research Design

3.2.1 Quantitative Method

Research design provides the conceptual framework or blue prints for data collection and analysis. It includes the process and procedures of research, type of dependent and independent variables and types of measurement used, unit analysis, time horizon and etc.

This research is a case study where glimpses of studies done in other organizations under various settings are examined which show the past problem-solving experiences using CLV by the companies under study.

As illustrated in the literature review, companies in other industries such as credit card, telecommunication and others have been adopting CLV in their respective marketing strategies in order to better serve their customers.

The purposes of this research is to provide an insight of the CLV of SPCSB, as well as ways of calculating CLV by using the existing secondary data obtained directly from the company. Based on the resulting CLV, an attempt will be made to segment the customer base based on customer profitability. Various marketing programs will then be developed by customer segments which aim at better fulfilling of the customer needs.

3.2.2 Qualitative Method
In the effort to determine the appropriate marketing programs to be proposed to the company, an in-depth knowledge of what actually is desired or crucial to the customer of various segments must be ascertained. It is decided that conducting interview with customers would be an appropriate method of testing the criteria and providing insights into the efforts.

3.3 Research Data

3.3.1 Quantitative Method
The case study first makes use of the secondary historical transaction data provided by the company under study. The data furnished includes the customer unique identifier, monthly sales volumes/revenues gained and costs incurred in servicing the customers, number of transaction counts and retention rate.
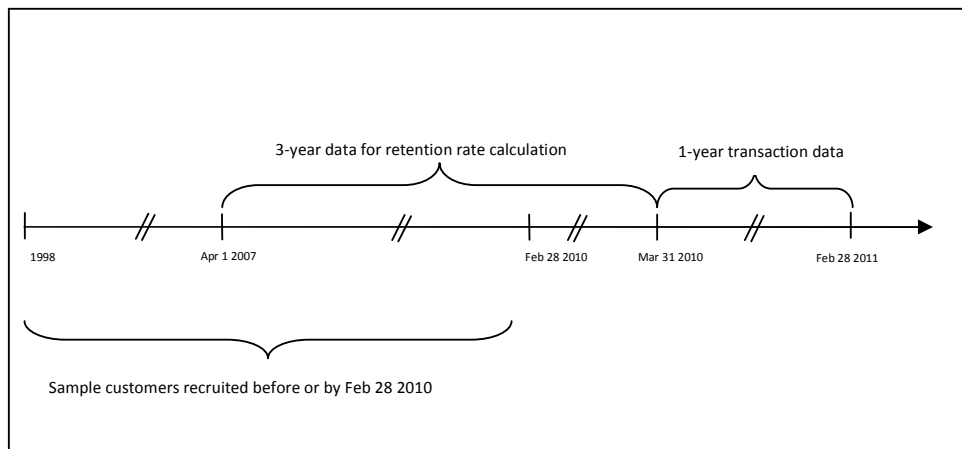
3.3.2 Qualitative Method
The second type of data used in this case study is the primary data from the interviews conducted with randomly selected customers from Corporate account customers, selected using the secondary data above. The purpose of

this interview is to investigate the aspect of what is important to the customers by segments, in order to improve the services offered by the company.

In both instances above, data is gathered based on cross sectional studies. As for the case of the secondary data, a three years historical data is selected and used. In this context, the customer data used for retention rate calculation is from April 1 2007 to March 31 2010. This is as per the recommendation of. Kumar and Rajan (2009) that most applications adopt three years data period, mainly due to product life cycle, customer life cycle as well as the first three years transaction accounts for 80 percent of the profits. However, one year historical transaction data is used for revenue and cost calculation instead, i.e. from March 31 2010 to February 28 2011. The assumption is the latest one year historical data reflects and represents the most up-to-date transaction behaviours of the customers. Besides, the revenue data between May-December 2008 are not available for analysis. Target sample is customers secured before or by February 28 2010.

The below diagram summarizes the snapshot of data used.

Figure 3: Data and Time Frame

3.4 Research Sample

3.4.1 Qualitative Method

The population used for the case study is the entire customer database nationwide where all active customers (Corporation and Government only) recruited as of February 28 2010 are included. Active means the account status is active and the customers were actively transacting during March 1 2010 to February 28 2011.

Individual customers are not included in this study due to the individual sales volume is too and also incomplete individual customer information. It involves a total of 24,845 customers; with 5,893 customers are from the post-paid plan and 18,952 customers are from prepaid plan, which is summarized as in Figure 4

Figure 4: Pre-paid and Post-paid customers base

Distribution of Customer Base
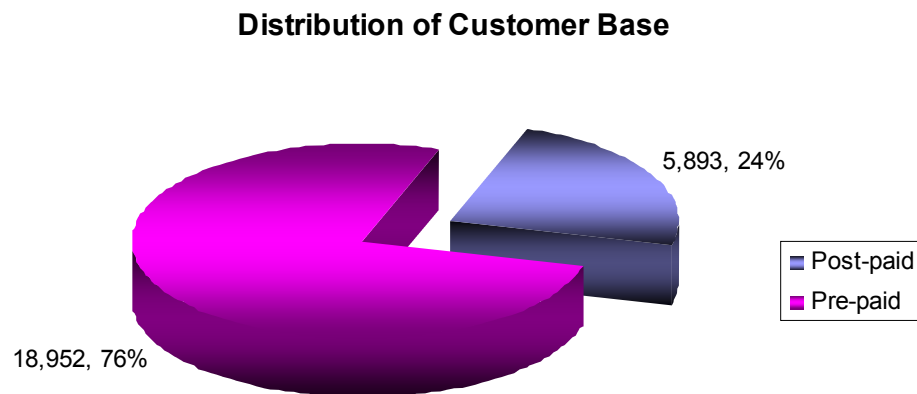
Two sample frames are selected, i.e. prepaid and post-paid customers. Prepaid customers are those who make payment in advance before purchases take place. Meanwhile, post-paid customers are those who make

payment upon invoice advice; purchase transactions are made based on a certain credit limit granted by the company. The credit limit can be granted based on unsecured basis or it is backed by certain percentage of security collateral.

3.4.2 Qualitative Method

For the interview session, a total of twelve customers were selected based on non probability convenience sampling for the interview. The participants or customers are chosen mainly due to the fact that they have the knowledge or capacity of providing useful information that is critical to improve the product of the company.

3.5 Research Procedure and Analysis

The research process starts with obtaining the written consent from the management of SPCSB to conduct a case study in the company to find out the most pertinent question – where the most profitable customers are. The consent grants the rights to use the data without any restriction, saves for customer data shall be handled with care and not to be divulged to any parties apart from the authorized researchers.

3.5.1 Quantitative Method

Below section details the three major components used in CLV computation, i.e.

3.5.1.1 Revenue Drivers

Commerce Dictionary defines revenue model as way or method which describes the income generation of a company or an organization

(http://www.commercedictionary.com/definition/revenue-model.html). In this context, the revenue streams of the fleet card business under study can be divided into fuel-based and non fuel-based as below:

a. Fuel-based Revenue

Fuel-based revenue is the direct income resulted from selling fuel products such as gasoline, diesel to fleet card customers. This type of revenue can be further divided into several revenue drivers such as below:

i.Margin Per Liter Fuel Sold

The difference within the selling price and the product cost price and other associated costs per liter fuel product sold is the main source of income. Associated costs are costs involved in the selling of per liter fuel such as staff salary, wages and benefits, product transportation cost, taxes and etc.

Margin for every fleet card customer is calculated on monthly basis, by subtracting the product cost from the revenue contributed by a customer. The formula used is as below (Personal communication, 2011):

Gross margin per customer

= fuel consumption in liter x margin per liter   (6)

For the purpose of illustration, assuming if RON 95 is sold at RM1.90 per liter retail price at the service station and total associated costs of selling per liter RON 95 is RM1.70, the fleet card net margin per liter is said to be RM0.20. If a fleet card customer purchases 10,000 liters of fuel in a month, it is said to

contribute a RM200 net margin to the fleet card business from buying fuel alone (RM0.20 x 10,000 liters).

b. Non Fuel-based Revenue

Non fuel-based revenue is an indirect income resulting from other selling other non fuel products such as mineral water, snacks and other auxiliary services. It can be further divided into the following categories:

i.Merchant Fee

From a fleet card transaction takes place at a service station, the service station operator has to pay a merchant fee to the fleet card issuer. The merchant fee is based on a certain fixed percentage of the transaction's dollar amount.

Before a service station is opened and commissioned, the payment card system includes servers and other peripherals necessary to accept fleet card is installed. The capital investment is forked out upfront by the oil company. Charging merchant fee is one of the ways to recover the system investment cost.

ii.Diesel Subsidy Recovery Cost

As mentioned in earlier sections in Chapter 1 and 2, fleet card is used as the means to channel diesel subsidy to the designated transport sectors through the introduction of Diesel Subsidy Scheme by the Malaysian Government in 2006. As a result of this, all oil companies which issue and operate in Malaysia are required to comply in term of payment card system readiness with the following system capabilities:

- to be able to authenticate legitimate diesel subsidy holders at the point of transaction processing

- to be able to accept diesel subsidy card at the service station

- to be able to provide diesel subsidy rebate to the cardholders, be it instantly or after a certain period of time.

Again, system compliance requires capital investment. To compensate the oil companies, the Malaysian Government agrees to reimburse oil companies a total of RM0.033 per liter subsidized diesel sold through fleet card.

In this context, the oil company decided to share this recovery cost with its service station operators. In other words, the recovery cost of RM0.033 is split among the oil company and the operator.

For the purpose of the illustration, based on the example above, the customer is said to contribute RM33 (RM0.033 x 10,000 liters) recovery cost for a total consumption of 10,000 liters of subsidized diesel.

iii.Margin from Selling Non Fuel Products

Besides using the fleet card to purchase fuel products, the cardholders can also use it to purchase foods and snacks available at service station, provided that the product codes are configured in the card. It is noticed that the purchases of non fuel products increase month-on-month. However, it is understood that the revenue from these types of transactions is not recognised under fleet card business. This is to prevent double counting of revenue as the selling of non fuel products is under the jurisdiction of another department in the company.

iv. Card Replacement Fee

The company is charging its customer RM10 per each card replacement request, for faulty, lost or stolen cards. Faulty card is a card which the encoding information stored in the magnetic stripe is not readable by the card reader at the point of acceptance. Faulty card can also be caused by a warped card as a result of not careful handling or excessive exposure to hot sun.

The purposes of charging the fee is to cover the postage and administration cost, apart from the non monetary reason of discouraging customers from changing the card unnecessarily.

The fee is debited directly in the monthly statement.

v. Monthly Statement Printing Fee

Hard copy statement is sent to post-paid fleet customer on monthly basis whereas the prepaid customers are not entitled to this service. Nonetheless, both the post-paid and prepaid customers could download the softcopy and print the statement from the company's online website.

In the event a reprint is required, a fee of RM5 would be charged and debited into the customer's statement the following months.

vi. Penalty Fee for Dishonoured Cheque

All customers can make payments for their monthly fuel usages at the appointed banks in the form of cheque or cash payment, as well as its cashier counter at its HQ office.

In the event a cheque payment is returned, a fee ranges from RM30 to 1 percent of the payment amount or a maximum of RM300, whichever is higher, is imposed. A cheque payment can be returned due to technical or non technical reason. The actual reasons are summarized in Table 5 below.

Table 5: Technical and Non Technical Reasons of Dishonoured Cheque

Technical Reason	Non Technical Reason
A fee of RM30 will be charged and debited into the customer's statement for returned cheque due to the following technical reason: • drawer's signature differs or missing • altered, scribbled or mutilated cheque • wrong date, cheque post dated • amount in words and figures differ • unrecognised handwriting	A fee of 1% of the payment amount of a maximum of RM300 will be charged into the customer's statement for returned cheque due to the following non technical reason: • stop payment • insufficient fund

(SPCSB Head of Marketing, personal communication, Feb 2, 2011)

3.5.1.2 Cost Drivers

As of to-date, the company has spent a substantial amount of capital expenditures for setting up, enhancing the functionality and upgrading the fleet card payment system. Capital expenditure is considered a sunk cost, thus it will not be taken into consideration in CLV computation.

i.Product Cost

Product cost is the summation of total costs associated to the production of a product and services. In this context, the product cost varies every month, so does the margin per liter fuel.

ii. Advertising & Promotion Cost

As mentioned earlier, retail price for fuel at the petrol kiosk is regulated in this county, hence promotion activity is non existence. So does the advertising. What the oil companies are allowed to do quietly is to provide volume rebate to fleet card customers whose monthly purchases exceed certain quantity. The volume rebate is given based on a certain amount of rebate per liter fuel purchase. The higher the monthly fuel consumption, the higher the rebate per liter given, total volume rebate would be credited into the customer's account and offset against its monthly due.

Besides this incentive, the customers can also enjoy loyalty points when purchasing fuel. Loyalty points can be collected using loyalty card issued by the oil company. One liter fuel purchase will be rewarded with one loyalty point, whereas RM1 purchase of non fuel products via fleet card will be rewarded one loyalty point. One loyalty point is equivalent to RM0.01. The accumulated loyalty points can be burnt to redeem fuel and non fuel products.

iii.System Cost

Fleet card business depends very much on the card payment system which consists of the computer systems and other peripherals from a petrol kiosk to the host server at its HQ. The company spends quite a substantial amount of system maintenance cost to ensure the system is available all the time and operates accordingly to support the business.

In this context, the total system maintenance cost per month would be converted into per transaction cost by dividing the cost with the number of fleet transaction counts per month. The resulted per transaction cost will then

be used to multiply with the total transactions performed by a customer in a month to arrive at monthly transaction cost for that customer.

iv. Administration Cost

Administration cost includes all costs to maintain and service the customers. Among others, they are salary, wages and benefits of the card centre staff, office rental and other operation expenses.

In this context, only Advertisement and Promotion Cost of volume rebate is considered in CLV calculation. Product cost is not required as margin per liter will be used instead. Current monthly system cost per station is available, however total number of transaction per card type per month per station is not available, hence per fleet card transaction cost is unable to be established.

3.5.1.3 Retention Rate

Retention rate is used to predict the duration in which the customers would stay on as the customers of the company. In this context, the retention rate is derived based on the average three years retention rate from the set of target sample.

The retention is calculated annually, based on the following formula (Thorsten & Bernd, 2005):

Retention rate

$= (\text{number of customer}_{t+1} - \text{number of customer}_t)/(\text{number of customer}_t)$ (7)

A 3-year average retention rate is used in this case study.

3.5.1.4 CLV Computation

In some circumstances, companies face difficulty in assigning their costs to a specific customer. In this case, the company under study is also facing the same dilemma as Activity Based Costing is not being used to record each and every cost. In this instance, it is suggested that the use of gross contribution margin per customer is more appropriate than the revenue per customer (Randal, 2009).

The calculation of CLV for the company under study is done by using gross contribution margin per customer in the numerator. Having said that, volume rebate is being taken into consideration for the gross margin calculation. This is due to the fact that volume rebate is a significant factor which determines the profitability from a customer.

The following formula is used to compute the CLV (Berger & Nasr, 1998; Blatterg & Deighton, 1996; Jain & Singh, 2002):

$$CLV = \sum_{t=1}^{T} \frac{(GM_t)r^t}{(1+d)^t}$$

(8)

GM_t = gross contribution margin per customer in time period t

r = retention rate

d = discount rate

t = a time index (e.g., a quarterly or yearly time index)

3.5.1.5 Discount Factor

The discount factor used to discount the gross margin is Weighted Average Cost of Capital (WACC). WACC is a company's weighted average cost of

equity and cost of debt or the cost of doing business. The cost of doing business may come from a combination of equity or debt funding. Generally, the return on capital expected from the investors of a company should be at least higher than the cost of capital.

WACC is used as a discount rate for the present value of future expected income from a customer relationship. This, according to Roudabeh (2004), links the concept of CLV to direct shareholder value analysis. Besides, it is deemed the most common approach to use WACC is as a discount rate (Thornsten & Bernd, 2005).

Capital Asset Pricing Model (CAPM) is used to estimate the discount rate. This is due to its ability to calculate appropriate discount rate for both non financial and financial assets (Harvard Business School, 2000).

Two WACCs are calculated and a comparison would be summarized to show the CLV using different WACCs. The two discount rates are as follows:

- The first WACC is the WACC for SPCSB

- The second WACC is the WACC for the fleet card business by benchmarking against the close competitor

The formula used to calculate WACC is as below (Stephen, Randolph & Bradford, 2008):

$$WACC - \left(\frac{E}{E+D}\right).Ke + \left(\frac{D}{E+D}\right).Rd.(1-t)$$

(9)

where $(\frac{E}{D+E})$ is the weightage of equity, $(\frac{D}{D+E})$ is the weightage of debt, K_e is the cost of equity, R_d is the cost of debt, t is the corporate tax rate

Capital Asset Pricing Model (CAPM) is commonly used to determine the cost of equity. CAPM states that investors will expect a return, $E(R_s)$ that is the risk-free return (R_f) plus the security's sensitivity to market risk (β) multiplies with the market risk premium ($R_m - R_f$) using the below formula (Stephen, Randolph & Bradford, 2008):

$$E_s = R_f + \beta_s(R_m - R_f) \qquad (10)$$

Cost of Debt is the current market rate a company is paying on its debt. As interest expense is tax deductible, cost of debt is calculated as an after-tax of cost, this is in line with the computation of cost of equity. The after-tax or net cost of debt is the interest rate paid minus the tax savings, formula is as below (Stephen, Randolph & Bradford, 2008):

After-tax cost of debt = d (1-t)   (11)

where *d* is the interest rate, *t* is the current Malaysia corporate tax rate

3.5.1.6 Customer Segmentation

The results of individual CLV later are used as an input to categorize the customer's base into four segments based on their CLV scores. With this knowledge, the customer base is dissected into different segments by using a combination of customer relationship profitability which is the calculated CLV and the duration of relationship. As at current, most of the times the company under the study merely is using total sales figure or total volume purchase as an indicator of a customer's profitability. . This poses a problem as it does not take into consideration the cost involved in serving the particular customer.

Also with this in mind, it creates a misleading perception such as high volume customer is cheaper to serve even tough the truth may not be so as highlighted by Reinartz and Kumar (2002). By segmenting the customer base using CLV (profitability) and Age of a fleet account (duration of relationship), a new insight into the customer can be obtained. The main reason why these factors are used for segmentation bases is due to the fact that is a small change in the customer retention and loyalty will results in significant increment in profitability (Reichheld & Teal, 1996; Reichheld, Markey & Hopton, 2000). Besides, numerous studies have shown positive links between loyalty and firm profitability (Anderson et al., 1994; Hallowell, 1996; Reichheld, 1996; Silvestro & Cross, 2000). It is also being supported by research that customer loyalty and CLV are directly positively correlated where a customer loyalty will definitely increase the revenue obtained as well as retention which in the end will lead to increment of CLV (Jason, Ashutosh & Roberto, 2010). This results in formulating more appropriate marketing strategies which it is hoped to be more effective to serve variation of customer profitability.

3.5.2 Qualitative method

Interviews are conducted with customers selected randomly from each segment of the two sample frames. The reason being is this is a qualitative research method that is capable of providing highly valuable information (Perreault, 1989; Rust, 1994). Besides, this is one of best platform for the customer to share their experiences in managing their cards and operations.

They are asked to discuss a total of eight questions during the duration of the exercise. The interview is conducted in a few forms, i.e. face-to-face,

telephone calls and email interviews, subject to the preferences of the customers. The sample questions are as per Appendix 1.

The idea of having interview is to provide the opportunity for a flexible, free-flow format for the participants. The spontaneous responses are expected to yield a genuine opinion, ideas, and feelings of the members pertaining to the topic discussed.

Furthermore, the use of interview is considered especially effective with busy executives as compared to focus group interview. Interview can be conducted separately with the twelve customers at their own convenience. On top of that, it is relatively inexpensive and can provide a fairly dependable data within a short time frame.

The questions asked mainly focus on collecting a broad range of information about respondents' behaviours, requirements, issues and knowledge about the company's product offering. The interviews session are recorded with the results formed from a review of notes made. The interviews are later transcribed into transcript.

Interview, as a qualitative process of data analysis, normally adopts a "bottom-up" approach in its inductive nature (Creswell, 2005). This is where certain data is analysed to determine a more general theme which in turn will be adopted to assess and understand the meaning of the data. Transcribing is done mainly for two reasons. First, it creates a mean for the interview data to be transformed into a usable format. Secondly, it allows repetitive reading of the data as the process of transcribing is on-going. During this stage, the data becomes more familiar and common themes may begin to emerge. Portion of

the transcripts that shows a theme is identified where notations are made to record ideas while reading the data. Later a coding scheme is created to best define the themes that have been identified where it provide method to dissect the data for further analysis. Subsequently, the codes are utilized to determine the specific sections of the interview data that represented the category. The transcript is repeatedly read with these codes in mind and sections of the data are bracketed and coded. After that, when these sections of the data are examined in the context of themes or categories, it is useful to examine the data within "blocks" of text so that the data can be read in context versus only including the sentence(s) that specifically describes the data of interest. Finally after all of the interview data have been coded, it is then separated into themes where it is reviewed within the themes or categories, and an understanding of each theme is reached. Quotes may be included which give a "voice" of the interviewee when describing the data to best illustrate the meaning of the category.

In summaries, Table 6 shows the research methodology:

Table 6: Research Methodology Summary

Description	Details	
Method	a. Quantitative	Secondary data of fleet card customers
	b. Qualitative	Structured interview via face-to-face, telephone calls and emails. Interview transcript was produced.
Population	Fleet card customers of SPCSB	
Sample Frame	Active prepaid and postpaid accounts of Corporate and Government accounts	

Sample Unit	Individual fleet account			
Sampling Technique	Quantitative: Complete sample set		Qualitative: Non probability convenience sampling	
Quantitative: Sample Size (24,814)	Total	Plan	Corporate	Government
	18,921	Prepaid	18,921	0
	5,893	Postpaid	1,843	4,050
Qualitative: Sample Size (12)	Corporate postpaid account: 6		Corporate prepaid account: 6	
CLV Component	Revenue	Margin (sen) per liter fuel sold		
	Cost	Rebate (sen) per liter fuel sold		
	Retention	No. of active accounts at the end of financial year, for a period of 3-year		
Discount Rate	Capital Asset Pricing Model (CAPM)			
Historical Data Period	Revenue	Most recent 1-year data		
	Cost	Most recent 1-year data		
	Retention	Most recent 3-year data		
Segmentation Variables	a. X-axis : Customer Lifetime Value			
	b. Y-axis : Duration of Relationship			

3.6 Conclusion

This case study adopts mixed research method. In quantitative method, fleet card customer data is used to ascertain the CLV for customer segmentation. Margin, volume rebates and retention rate are the three components used to calculate CLV. The customers are then segmented using two variables, i.e. CLV and Duration of Relationship into four segments, i.e. High CLV-Low Duration of Relationship, High CLV-High Duration of Relationship, Low CLV-Low Duration of Relationship and Low CLV-High Duration of Relationship.

In qualitative method, structured interview is administered to gather information about customer needs. A total of twelve customers are selected randomly for the interview. The quantitative and qualitative data is analysed further for developing effective marketing programs.