

CHAPTER 4: DATA ANALYSIS

4.0 Introduction

Data analysis involves the processing and transforming data into useful information with the goal to provide insights to long term business plan and to support decision making.

The data analysis is divided into two parts, i.e. quantitative and qualitative. Quantitative data analysis uses the secondary data of customers and transactions. Qualitative data analysis involves the analysis of data gathered from the structured interview.

The quantitative analysis intends to compute and analyze the followings:

- a. Weighted Average Cost of Capital (WACC) for SPCSB
- b. Weighted Average Cost of Capital (WACC) for the fleet card business
- c. CLV for prepaid customers
- d. CLV for post-paid customers
- e. Segmentation of prepaid customers based on CLV
- f. Segmentation of post-paid customers based on CLV

Meanwhile, the qualitative analysis is aimed at understanding the strength as well as highlighting the issues required immediate attention so that the insightful information can be used for future references and recommendations. It leads to the development of a proposed marketing program based on the inputs from the structured interview.

4.1 The Company WACC Calculation

The risk-free rate (R_f) represents the interest rate an investor would expect from a risk-free investment over a specified period of time. As a proxy, the average 10 years Malaysia treasury bill yield has been used (in conjunction of the 10 years market return), i.e. 3.35 percent (Bank Negara, 2011). Market return (R_m) has been selected based on average annual 10 years return of KLCI (Kuala Lumpur Composite Index) which is 13.45 percent (Bloomberg, 2011). Therefore, the market risk premium would be 10.10 percent. Meanwhile, the adjusted market risk (β) is 0.679⁷ (Bloomberg, 2011) for the company.

The cost of equity or WACC of the company is 10.21 percent. As there is no interest bearing borrowings by the company, cost of debt is zero. The Table 7 below summaries the derivation of WACC for SPCSB:

Table 7: WACC computation summary for SPCSB

Weighted Average Cost of Capital for SPCSB	
Return on market (average 10-yrs return)	13.45%
Risk-free rate (average 10-yrs MGS)	3.35%
Beta of the company	0.679
Market risk premium	10.10%
Cost of Equity	10.21%
After-tax Cost of Debt	0%
WACC	10.21%

⁷ Bloomberg uses historical data of a security to calculate its adjusted beta, with the assumption that the beta of a security moves toward the market average over time. Hence, the adjusted beta is an estimated future beta of a security. Bloomberg uses the following formula to calculate adjusted beta: Adjusted beta = (.67) * Raw Beta + (.33) * 1.0
<http://libguides.babson.edu/content.php?pid=10456&sid=69436>. Accessed on Apr 30 2011.

4.2 The Fleet Card Business WACC Calculation

The fleet card business itself is not a P/L cost centre, hence it is hard to compute its WACC. Traditionally, the alternative approach is to compute and use the industry average or use the WACC of the closest competitor as a proxy.

The company has two close competitors in term of market shares. One is a public listed company and another one is a private company. It is noticed that the former only published its annual report up to year 2008, hence, the comparison is has to be done with the latter.

It is a challenge to assess the cost of equity for a privately held company due to the difficulty in estimating the risk, beta. Beta is estimated using historical price information as well as based on the assumption that the marginal investors are well diversified. It is the absence of the historical price information and failure of the private business owners to diversify make the computation of beta less accurate. In this context, the accounting beta for the private company will be established.

To obtain the accounting beta, the changes of operating income is regressed against market returns. This yields un-levered beta. If net income is used instead of operating income, it will yield levered beta. For this purpose, a 14-year historical data of operating income and KLCI market return starting from December 1997 – December 2009. The details are shown in Appendix 1 and 2.

There are three limitations by using this approach. The most significant one is limited observations due to earnings is reported once a year which limits the statistical power. Besides, inaccurate accounting beta is also noticed due to

earnings is subject to accounting judgement. Lastly, accounting earnings can be affected by non operating factors. Among others, corporate cost allocation at the business division level and changes involving depreciation and inventory methods (Damodaran, 2001).

Despite the above mentioned limitations, Damodaran did demonstrate the calculation of accounting beta using thirteen data points (Damodaran, 2001, p. 210). Hence, this study adopts the same guideline to calculate the private company's WACC. Un-levered beta is computed using the formula below (Damodaran, 2011):

$$\Delta \text{ Operating Income} = a + b \Delta \text{KLSE market return} \quad (12)$$

where b is the slope of the regression which is also the un-levered beta

The resulting un-levered beta is (0.01). Negative beta implies that the business returns and market returns are not positively correlated. The cost of equity is computed using CAPM model described above (12), using this un-levered beta as one of the inputs. Meanwhile, the cost of debt is also computed using the formula described above. In this case, the effective interest rate stated in the private company's Audited Report 2009 is 2.14 percent.

At debt ratio of twenty nine percent (Financial Year 2009), the cost of equity is 3.22 percent, the after-tax cost of debt is 2.17 percent. WACC for the private company is 2.91 percent. The resulting WACC is very small. This is due to negative accounting beta is used in the computation. Also, it is noticed that the private company obtains all long term loans from its parent company at a

very minimum interest rate. This explains small WACC. Table 8 below summarizes the derivation of WACC for the competing company.

Table 8: WACC computation summary for the competitor company using accounting beta

Weighted Average Cost of Capital for the private company	
Return on market (average 10-yrs return)	13.45%
Risk-free rate (average 10-yrs MGS)	3.35%
Beta of the company (Accounting Beta)	(0.01)
Market risk premium	10.10%
Cost of Equity	3.22%
After-tax Cost of Debt	2.17%
WACC	2.91%

4.3 Assumptions

The followings assumptions have been used in the CLV calculation:

1. Initial investment for Year 0 is zero. The current major acquisition cost component is travelling cost from office to customer premises. Minimum number of corporate gifts might be given to the customers. Besides, the company does not track expenses according to customer and sales person. All these acquisition costs, together with system investment cost are considered sunk cost.
2. A customer is defined as a company which uses the fleet card. Account registered under an individual is not included in the analysis. Only Corporate and Government accounts are included in the analysis.
3. A customer's account plan may change from prepaid to post-paid or vice versa during the period under study. In determining the CLV by

account plan, a customer's account plan reflects its latest account plan as of February 28 2011.

4. A customer who does not transact in two consecutive months is considered gone for good. In calculating retention rate, the number of active customers is calculated at the end of each financial year, i.e. from March 2007-2010. A customer is said to be an active customer when non zero sales are recorded at the end of financial year and one period before the financial year end. For example, a customer who transacted in March 2010 and also February 2010 is considered active, while another customer who is transacted in March 2010 but not in February 2010 is an inactive customer.
5. Due to unavailability of rebate data, analysis of margin is carried out based on the same period, i.e. January 2009 until February 2011. However, as the business nature is non-contractual, both margin and rebate data is analysed based on the most recent twelve months period, i.e. from March 2010 till February 2011, close to the fiscal year end of the company in March 2011.
6. Due to incomplete revenue and cost data, analysis is carried out on customers secured as of February 28 2010 or before.
7. Customer requires one-month period to activate their cards fully. Customer acquired by February 28 2010 is assumed to fully utilize the usage starting from March 2010.
8. For revenue, gross margin per liter from the Fuel Revenue is used as this is the only complete revenue data available.

9. For cost, volume rebate from Advertisement and Promotion is used as this is the only complete cost data available

4.4 Data Analysis

The following analysis has been carried out to understand the characteristics of customers among different account plans and industry codes:

1. Customer Segment Analysis Based on CLV
2. Industry Code Analysis
3. Sales Person Efficiency
4. Margin Contribution by State

4.4.1 Customer Segment Analysis Based on CLV

This analysis is aimed at identifying high or low profitable customers by means of segmenting them using 3-year CLV against the duration of relationship. Customers are segmented according to account plan, i.e. post-paid and prepaid plan and also overall. The means of CLV and duration of relationship are established that further break the customers base into Butterflies, True Friends, Strangers and Barnecles (Reinartz, Werner & Kumar, 2002) as follows:

- Butterflies

This segment reflects high CLV (greater than the CLV mean) and low duration of relationship (below the duration mean)

- True Friends

This segment reflects high CLV (greater than the CLV mean) and high duration of relationship (greater than the duration mean)

- Strangers

This segment reflects low CLV (below or equal the CLV mean) and low duration of relationship (below or equal the duration mean)

- Barnacles

This segment reflects low CLV (below or equal the CLV mean) and high duration of relationship (greater than the duration mean)

The observations on CLV are as below:

1. A total of 32.7 percent of Corporate post-paid accounts is of high profitable customers as compared to 12.9 percent of Government accounts. This is so as on average, Corporate accounts contribute higher volumes than the Government accounts.
2. For Corporate Post-paid account, Butterflies and True Friends contribute 26.0 percent and 6.7 percent respectively.
3. For Government Post-paid account, Butterflies and True Friends contribute 1.9 percent and 11.1 percent respectively.
4. Majority of Corporate post-paid accounts are of low CLV and low loyalty (45.4%) whereas majority of Government Accounts are of low CLV but high loyalty (57.2%).
5. A total of 23.4 percent of Corporate prepaid is of high profitable customers. Butterflies and True Friends contribute 12.5 percent and

10.9 percent respectively. This may be due to the prepaid plan consisting of accounts of higher volume than postpaid accounts, which is also supported by the higher CLV mean of the prepaid plan.

6. The mean of CLV for prepaid accounts is higher than the post-paid accounts, i.e. RM2,760.54 vs RM1,064.36. Volume rebate may reduce the CLV of customers, hence the CLV mean.
7. The mean of relationship duration is longer for post-paid (7.5 year) as compared to prepaid accounts (3.4 year). The reason is due to the prepaid plan being introduced much later.
8. The Government Prepaid Account is not analysed due to its number being very minimum.
9. No account from Trading, Power and Utilities sectors is given the prepaid plan. This may imply that customers from these two industries contribute higher volume.

The details of the segments are summarized in Table 9, 10 and 11.

Table 9: Distribution of Corporate Post-paid Customer Segmentation

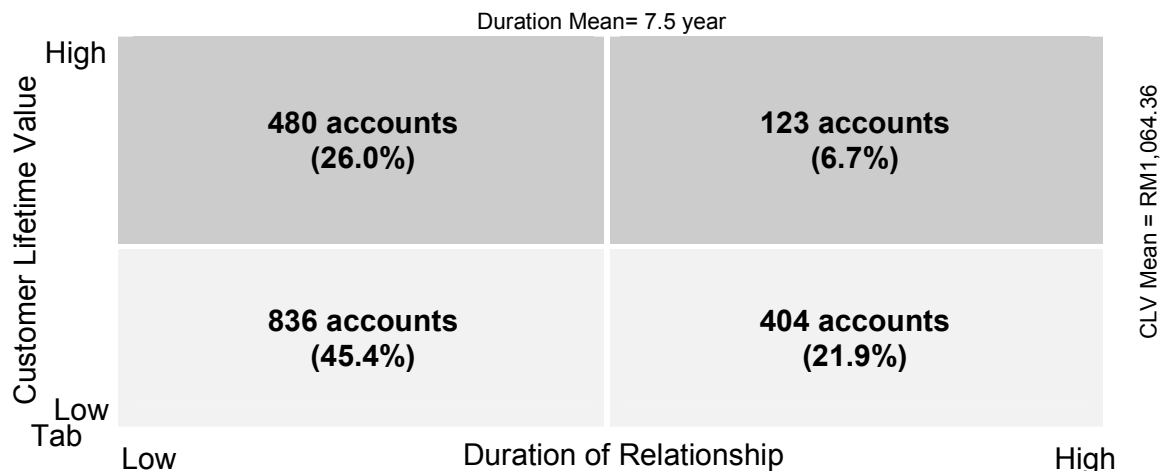


Table 10: Distribution of Government Post-paid Customer Segmentation

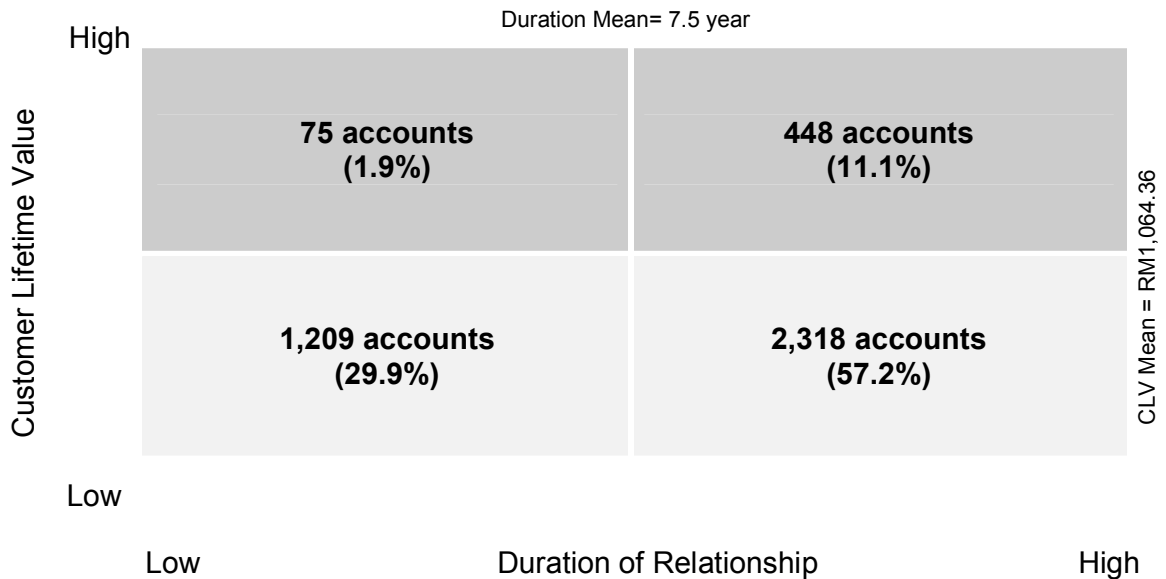
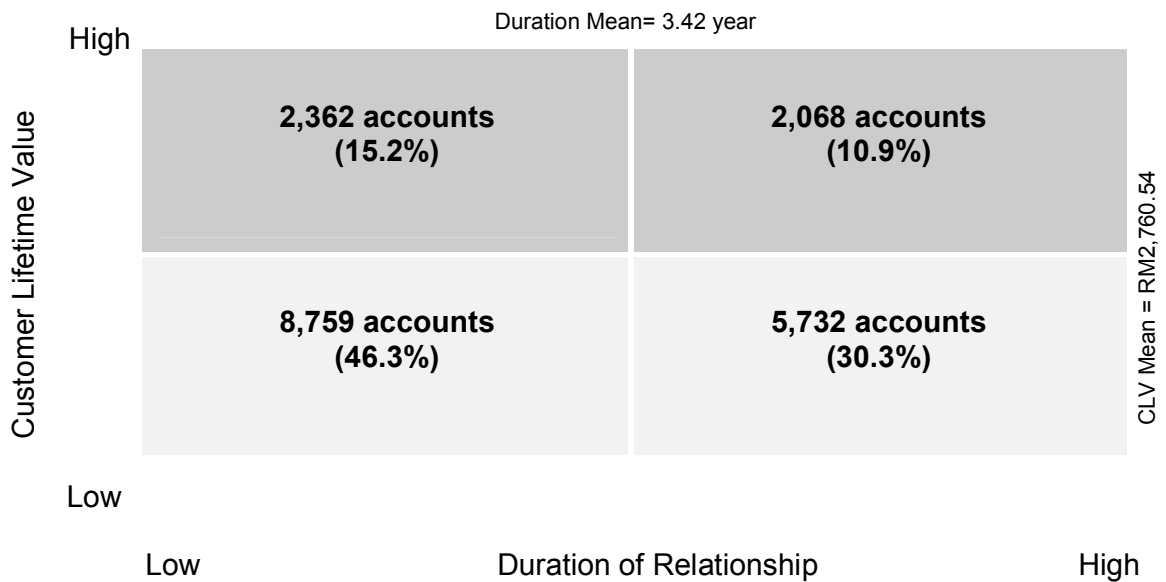


Table 11: Distribution of Corporate Prepaid Customer Segmentation



4.4.1.1 Industry Composition Analysis Based on CLV

This analysis intends to analyse the four customer segments further in order to identify industry composition in each segment. The results could be used to identify industries with high or low value customers; hence assists the sales

persons in making informed customer acquisition decision. The analysis is conducted in two parts, i.e. for post-paid and prepaid Corporate customers.

For post-paid customers, the observations are as follows:

1. Others⁸ and Transportation contribute the majority of high profit low loyalty customers, i.e. 40.2 percent and 32.5 percent respectively.
2. Construction and Property and Services contribute the majority of high profit high loyalty customers, i.e. 42.3 percent and 30.1 percent respectively.
3. Construction and Property and Services industries may have companies with various sizes and characteristics, as the two industries again constitute the majority of low profit high loyalty customers. Services industry (17.9%) is also noted as the second largest contributor to low profit low loyalty segment.
4. There is an urgent need to determine and reclassify customers from Others to the actual industry codes. It is the highest contributor in high profit low loyalty (40.2%) and low profit low loyalty (32.5%) segment.

For prepaid customers, the observations are as follows:

1. Others and Transportation industries are consistently dominant in all the customer segments in prepaid plan.

⁸ Others is the other industry codes which are not identifiable and not represented by the existing industry codes readily available in SPCSB database.

2. Others and Transportation industries may have companies with various sizes and characteristics supported by its significant presence in all the customer segments.

3. Like post-paid, there is an urgent need to determine and reclassify customers from Others to the actual industry codes in view of its significant contribution in each customer segment.

Table 12 and 13 summarize the analysis.

Table 12: Industry Analysis for Post-paid Corporate Account

Industry	Butterflies (%)	Strangers (%)	True Friends (%)	Barnacles (%)
Agriculture and Agro Base	0.4%	1.0%	0.0%	0.2%
Construction and Property	6.5%	6.5%	42.3%	23.8%
Intercompany Sales	0.0%	1.2%	4.1%	12.4%
Manufacturing	8.1%	6.5%	8.9%	4.7%
Mining, Quarrying	0.6%	0.2%	0.0%	0.0%
Others	40.2%	60.3%	11.4%	15.6%
Power and Utilities	1.0%	0.1%	0.0%	0.0%
Services	10.0%	17.9%	30.1%	43.1%
Trading	0.6%	0.0%	0.8%	0.0%
Transportation	32.5%	6.3%	2.4%	0.2%

Note: Data source is the primary data from SPCSB

Table 13: Industry Analysis for Pre-paid Corporate Account

Industry Code	Butterflies (%)	Strangers (%)	True Friends (%)	Barnacles (%)
Agriculture and Agro Base	1.5%	1.6%	5.3%	4.4%
Construction and Property	1.6%	2.1%	5.9%	7.8%
Manufacturing	4.3%	5.8%	16.5%	18.9%
Mining, Quarrying	0.0%	0.0%	0.1%	0.1%
Others	76.6%	74.4%	22.3%	25.0%
Services	2.0%	4.4%	15.6%	20.8%
Transportation	14.0%	11.8%	34.2%	23.0%

Note: Data source is the primary data from SPCSB

4.4.1.2 Sales Person Portfolio Analysis Based on CLV

This section intends to analyse the CLV based customer portfolio managed by each sales person. The results provide insights into the customer portfolio managed by each sales person and serve as a reminder that the sales persons ought to solicit customers of higher CLV, as well as to identify high profitable customers consciously for account sweating and inefficient account distribution.

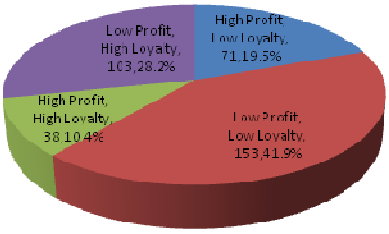
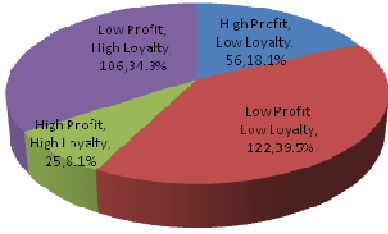
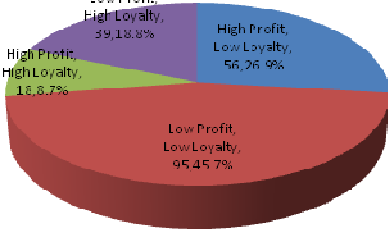
The analysis only takes post-paid Federal Government accounts and Corporate accounts into consideration. Prepaid customer is not managed directly by the sales force. Meanwhile, an individual state Government account is of small volume in nature, its inclusion in the analysis would dilute the result and cause the result to skew towards higher number of low CLV customers.

The observations are as follows:

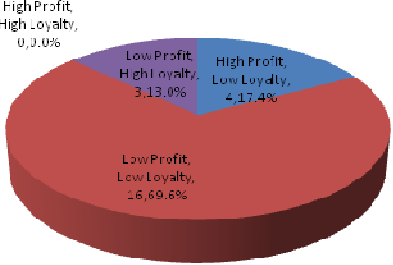
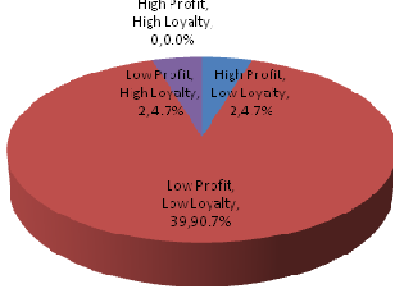
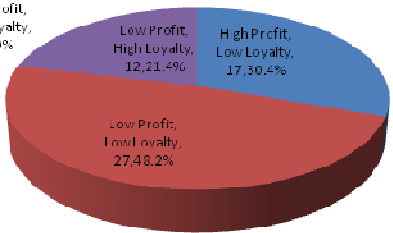
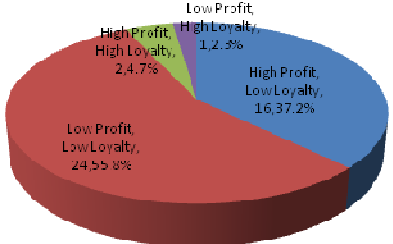
1. Among the five sales persons in Central Regions, Central 3 and Central 4 regions record a higher percentage in terms customers with high profitability, i.e. 35.6 percent and 36.8 percent respectively, while Government Central has 17.2 percent of high profitable customers.
2. Comparatively, sales persons at the regions outside Klang Valley record more customers with higher profitability. The highest percentage of high profitable customers is from Western (45.3%), followed by North (42.2%) and Sarawak 2 (41.9%). This could be due to Central region customers are of higher volume contributors and more demanding as compared to other regions, hence volume rebate is offered to entice these customers.
3. Sabah 2 is the region with lowest percentage of high profitable customer, i.e. 4.7 percent. This implies that Corporate account distribution is not balanced, which is proven by the uneven number of customers distributed, i.e. twenty three for Sabah 1 and forty three for Sabah 2.
4. Customers of High Profitability and High Loyalty are not found in Western, Sarawak 1, Sabah 1 and Sabah 2 regions. There is a need to grow this segment of customers in these regions.
5. Comparatively, Sabah 1 and Sabah 2 have the lowest number of high profitability customers, i.e. seven and four respectively. There is an urgent need to grow high profitability customers in these regions.

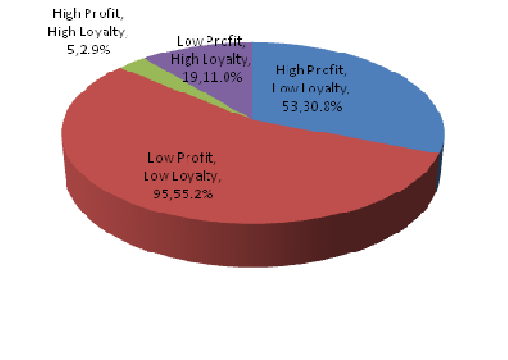
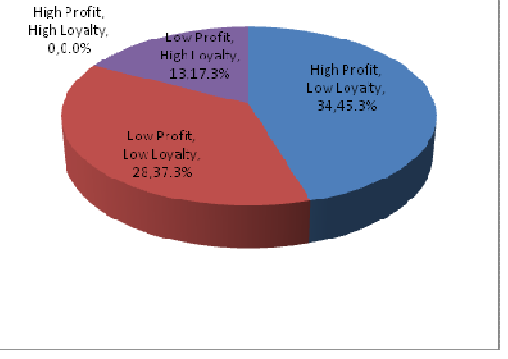
The observations are summarized in Table 14.

Table 14: Customer CLV Composition by Sales Person

Sales Person	Customer Portfolio																	
	High Profit Customer (%)	Low Profit Customer (%)	Customer Profitability Composition (Number of Account/Percentage)															
Central 1	29.9	70.1	 <table border="1"> <caption>Customer Profitability Composition for Central 1</caption> <thead> <tr> <th>Category</th> <th>Number of Accounts</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>High Profit, Low Loyalty</td> <td>71</td> <td>19.5%</td> </tr> <tr> <td>Low Profit, Low Loyalty</td> <td>153</td> <td>41.9%</td> </tr> <tr> <td>High Profit, High Loyalty</td> <td>38</td> <td>10.4%</td> </tr> <tr> <td>Low Profit, High Loyalty</td> <td>103</td> <td>28.2%</td> </tr> </tbody> </table>	Category	Number of Accounts	Percentage	High Profit, Low Loyalty	71	19.5%	Low Profit, Low Loyalty	153	41.9%	High Profit, High Loyalty	38	10.4%	Low Profit, High Loyalty	103	28.2%
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Central 2	26.2	73.8	 <table border="1"> <caption>Customer Profitability Composition for Central 2</caption> <thead> <tr> <th>Category</th> <th>Number of Accounts</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>High Profit, Low Loyalty</td> <td>56</td> <td>18.1%</td> </tr> <tr> <td>Low Profit, Low Loyalty</td> <td>122</td> <td>39.5%</td> </tr> <tr> <td>High Profit, High Loyalty</td> <td>25</td> <td>8.1%</td> </tr> <tr> <td>Low Profit, High Loyalty</td> <td>106</td> <td>34.3%</td> </tr> </tbody> </table>	Category	Number of Accounts	Percentage	High Profit, Low Loyalty	56	18.1%	Low Profit, Low Loyalty	122	39.5%	High Profit, High Loyalty	25	8.1%	Low Profit, High Loyalty	106	34.3%
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Central 3	35.6	64.4	 <table border="1"> <caption>Customer Profitability Composition for Central 3</caption> <thead> <tr> <th>Category</th> <th>Number of Accounts</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>High Profit, Low Loyalty</td> <td>56</td> <td>26.9%</td> </tr> <tr> <td>Low Profit, Low Loyalty</td> <td>95</td> <td>45.7%</td> </tr> <tr> <td>High Profit, High Loyalty</td> <td>18</td> <td>6.7%</td> </tr> <tr> <td>Low Profit, High Loyalty</td> <td>39</td> <td>18.8%</td> </tr> </tbody> </table>	Category	Number of Accounts	Percentage	High Profit, Low Loyalty	56	26.9%	Low Profit, Low Loyalty	95	45.7%	High Profit, High Loyalty	18	6.7%	Low Profit, High Loyalty	39	18.8%
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Central 4	36.8	63.2	<p>A 3D pie chart for 'Central 4' divided into four segments. The largest segment is blue, representing 'High Profit, Low Loyalty' at 72.28.5%. The next largest is red, representing 'Low Profit, Low Loyalty' at 111.43.9%. A purple segment represents 'Low Profit, High Loyalty' at 49.19.4%, and a green segment represents 'High Profit, High Loyalty' at 21.8.3%.</p>
Eastern	35.0	65.0	<p>A 3D pie chart for 'Eastern' divided into four segments. The largest segment is red, representing 'Low Profit, Low Loyalty' at 49.35.0%. The next largest is blue, representing 'High Profit, Low Loyalty' at 41.20.3%. A purple segment represents 'Low Profit, High Loyalty' at 42.30.0%, and a green segment represents 'High Profit, High Loyalty' at 8.5.7%.</p>
Government Central	17.2	82.8	<p>A 3D pie chart for 'Government Central' divided into four segments. The largest segment is red, representing 'Low Profit, Low Loyalty' at 308.39.3%. The next largest is purple, representing 'Low Profit, High Loyalty' at 340.43.4%. A green segment represents 'High Profit, High Loyalty' at 99.12.6%, and a blue segment represents 'High Profit, Low Loyalty' at 36.4.5%.</p>
North	42.2	57.8	<p>A 3D pie chart for 'North' divided into four segments. The largest segment is blue, representing 'High Profit, Low Loyalty' at 57.38.8%. The next largest is red, representing 'Low Profit, Low Loyalty' at 71.46.3%. A purple segment represents 'Low Profit, High Loyalty' at 14.9.5%, and a green segment represents 'High Profit, High Loyalty' at 5.3.4%.</p>

Sabah 1	17.4	82.6	 <p>High Profit, High Loyalty, 0,0.0%</p> <p>Low Profit, High Loyalty, 3,13.0%</p> <p>High Profit, Low Loyalty, 4,17.4%</p> <p>Low Profit, Low Loyalty, 16,69.8%</p>
Sabah 2	4.7	95.3	 <p>High Profit, High Loyalty, 0,0.0%</p> <p>Low Profit, High Loyalty, 2,4.7%</p> <p>High Profit, Low Loyalty, 2,4.7%</p> <p>Low Profit, Low Loyalty, 39,90.7%</p>
Sarawak 1	30.4	69.6	 <p>High Profit, High Loyalty, 0,0.0%</p> <p>Low Profit, High Loyalty, 12,21.4%</p> <p>High Profit, Low Loyalty, 17,30.4%</p> <p>Low Profit, Low Loyalty, 27,48.2%</p>
Sarawak 2	41.9	58.1	 <p>High Profit, High Loyalty, 2,4.7%</p> <p>Low Profit, High Loyalty, 1,2.3%</p> <p>High Profit, Low Loyalty, 16,37.2%</p> <p>Low Profit, Low Loyalty, 24,55.8%</p> <p>Low Profit, High Loyalty, 12,21.4%</p>

South	33.7	66.3	 <table border="1"> <caption>South Region Data</caption> <thead> <tr> <th>Category</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>High Profit, High Loyalty</td> <td>5.29%</td> </tr> <tr> <td>Low Profit, High Loyalty</td> <td>19.11.0%</td> </tr> <tr> <td>High Profit, Low Loyalty</td> <td>53.30.8%</td> </tr> <tr> <td>Low Profit, Low Loyalty</td> <td>95.55.2%</td> </tr> </tbody> </table>	Category	Percentage	High Profit, High Loyalty	5.29%	Low Profit, High Loyalty	19.11.0%	High Profit, Low Loyalty	53.30.8%	Low Profit, Low Loyalty	95.55.2%
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West	45.3	54.7	 <table border="1"> <caption>West Region Data</caption> <thead> <tr> <th>Category</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>High Profit, High Loyalty</td> <td>0.0.0%</td> </tr> <tr> <td>Low Profit, High Loyalty</td> <td>13.17.3%</td> </tr> <tr> <td>High Profit, Low Loyalty</td> <td>34.45.3%</td> </tr> <tr> <td>Low Profit, Low Loyalty</td> <td>28.37.3%</td> </tr> </tbody> </table>	Category	Percentage	High Profit, High Loyalty	0.0.0%	Low Profit, High Loyalty	13.17.3%	High Profit, Low Loyalty	34.45.3%	Low Profit, Low Loyalty	28.37.3%
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Note: Data source is the primary data from SPCSB

4.4.2 Industry Code Analysis

Industry code analysis aims at identifying main margin contributors by industries to the business. The analysis is done for post-paid and prepaid accounts respectively. Further analysis can be carried out to better understand the industries and to target/penetrate certain industries in the future.

The overall observations are as follow:

1. For Financial Year 2009/10, almost eighty percent of margin came from three main industries, i.e. Others (29.1%), Transportation (28.1%) and Government (21.6%).

2. Power & Utilities and Trading recorded high average margin per account, i.e. RM87.2K and RM56.0K respectively.

As further analyses are conducted, it is noted that different industries contribute differently to post-paid and prepaid plans.

The observations for post-paid accounts are as follow:

1. Eighty percent of post-paid account margin came from three main industries, i.e. Government (34.6%), Transportation (28.2%) and Others (16.8%).
2. Transportation, Power & Utilities and Trading recorded high average margin per post-paid account, i.e. RM95.1K, RM87.2K and RM56.0K respectively.

The observations for prepaid accounts on the other hand are as follow:

1. Collectively, Others (49.1%) and Transportation (28.1%) contribute almost eighty percent (80%) of prepaid margin.
2. Government and Transportation recorded high margin (RM) per account, i.e. RM8.9K and RM4.1K respectively.

Table 15: Industry Code Analysis for All Fleet Card Account

Industry Code	% Margin Contribution	% Nett Margin ⁹ Contribution	No. of Account	Average (Margin-Rebate) (RM)/Account
Others	29.1%	29.6%	10991	3,362.43
Transportation	28.1%	27.3%	3605	9,465.61
Government	21.6%	22.2%	4080	6,812.24
Services	8.9%	8.7%	2352	4,629.20

⁹ Nett Margin is gross margin minus volume rebate

Manufacturing	5.1%	5.1%	2155	2,980.30
Construction and Property	5.0%	4.9%	1028	5,986.65
Agriculture and Agro Base	1.1%	1.2%	544	2,705.40
Power and Utilities	0.5%	0.4%	6	87,203.76
Inter-company Sales	0.2%	0.3%	65	4,891.27
Trading	0.2%	0.2%	4	56,009.95
Mining, Quarrying	0.1%	0.1%	15	7,858.74

Note: Data source is the primary data from SPCSB

Table 16: Industry Code Analysis for Post-paid Fleet Card Account

Industry Code	% Margin Contribution	% (Margin - Rebate) Contribution	No. of Account	Average (Margin-Rebate) (RM)/Account
Government	34.6%	36.3%	4,049	6,795.51
Transportation	28.2%	26.8%	213	95,119.76
Others	16.8%	16.9%	775	16,548.38
Services	9.6%	9.2%	409	17,067.06
Construction and Property	6.2%	6.2%	233	20,199.52
Manufacturing	3.0%	2.9%	123	18,104.93
Power and Utilities	0.8%	0.7%	6	87,203.76
Inter-company Sales	0.4%	0.4%	65	4,891.27
Trading	0.3%	0.3%	4	56,009.95
Mining, Quarrying	0.1%	0.1%	5	16,638.78
Agriculture and Agro Base	0.1%	0.1%	11	5,739.43

Note: Data source is the primary data from SPCSB

Table 17: Industry Code Analysis for Prepaid Fleet Card Account

Industry Code	% Margin Contribution	% (Margin - Rebate) Contribution	No. of Account	Average (Margin-Rebate) (RM)/Account
Others	49.1%	49.0%	10216	2,362.13
Transportation	28.1%	28.1%	3392	4,086.98
Manufacturing	8.5%	8.5%	2032	2,064.78
Services	7.9%	7.9%	1943	2,011.04
Construction and Property	2.9%	2.9%	795	1,821.11
Agriculture and Agro Base	2.8%	2.9%	533	2,642.79
Government	0.6%	0.6%	31	8,996.89
Mining, Quarrying	0.1%	0.1%	10	3,468.71

Note: Data source is the primary data from SPCSB

4.4.3 Sales Person Analysis

The main objective of this analysis is to identify effective sales force based on contribution by margin and percentage of rebate over margin. The result may lead to development new key performance indicator (KPI) for evaluating sales staff apart from the traditional KPI which is based on sales volume. Also, it can be used to reward the sales persons accordingly, as well as to identify the development needs of a sales staff.

The focus is on Corporate account. Volume rebate is given to Corporate customers, which indirectly determines the efficiency of sales effort.

The observations for post-paid accounts are as below:

1. Collectively, Central (60.8%), North (13.1%) and South (9.7%) regions contribute almost eighty four percent (84%) of post-paid margin.

2. Central 3 (12.2%), South (10.5%), Central 1 (8.9%), Sarawak 1 (7.3%), West (6.5%), Central 4 (6.2%) and Sabah 1 (6.1%) contribute approximately fifty eight percent (58%) of rebate cost.
3. South (margin contribution vs. percentage of rebate over margin: 9.7% vs. 10.5%), West (margin contribution vs. percentage of rebate over margin: 5.7% vs. 6.5%), Sarawak 2 (margin contribution vs. percentage of rebate over margin: 2.2% vs. 4.1%), Sarawak 1 (margin contribution vs. percentage of rebate over margin: 2.2% vs. 7.3%), Sabah 2 (margin contribution vs. percentage of rebate over margin: 0.5% vs. 3.0%) and Sabah 1 (margin contribution vs. percentage of rebate over margin: 0.4% vs. 6.1%) recorded higher percentage of rebate over margin as compared to their margin contribution. High percentage of fuel sold is given rebate which implies rebate has been used as growth strategy in those regions.
4. Rebate is not an effective tool in Sabah. It recorded a negative growth of 4.5% FY011, as compared to Sarawak (6.9%), South (3.7%).
5. Central 1 and Central 2 take care of the most number of post-paid accounts, i.e. 365 and 309 respectively.
6. North, Central 3 and West record high average margin per post-paid account, i.e. RM44.3K, RM35.6K and RM36.6K respectively.
7. Government Central (31.6%), East (18.6%) and North (17.0) contribute sixty seven percent (67%) of margin from Government Post-paid accounts.

8. Sabah (9.9%) contributes higher margin as compared to Sarawak (5.6%).

Table 18: Sales Person Efficiency Analysis Based on Corporate Post-paid Account

Sales Person	% Margin Contribution	% Rebate over Margin	Average (Margin-Rebate) (RM)/Account	No. of Account
Central1	16.4%	8.9%	21,202.04	365
Central3	16.2%	12.2%	35,605.95	208
Central4	15.5%	6.2%	29,788.46	253
North	13.1%	4.4%	44,247.78	147
Central2	12.7%	4.1%	20,474.25	309
South	9.7%	10.5%	26,131.13	172
West	5.7%	6.5%	36,617.13	75
East	5.4%	1.5%	19,704.45	140
Sarawak2	2.2%	4.1%	25,504.63	43
Sarawak1	2.2%	7.3%	18,723.22	56
Sabah2	0.5%	3.0%	5,632.39	43
Sabah1	0.4%	6.1%	8,839.78	23
Government	0.1%	0.0%	11,542.15	5
Ops	0.0%	0.0%	1,032.27	4

Note: Data source is the primary data from SPCSB

Table 19: Sales Person Efficiency Analysis Based on Government Post-paid Account

Region	% Margin	Average Margin (RM)/Account	No. of Account
Gov Central	31.6%	11,186.77	778
East	18.6%	5,988.50	856
North	17.0%	5,910.89	793

South	9.5%	7,426.65	351
West	7.8%	5,757.23	374
Sabah1	5.1%	7,589.07	187
Sabah2	4.8%	4,717.94	281
Sarawak2	3.1%	4,709.89	183
Sarawak1	2.5%	2,745.22	247

Note: Data source is the primary data from SPCSB

The observations for prepaid accounts are as below:

1. Collectively, North (19.7%), South (15.6%), East (11.6%) and C4 (9.2%) regions contribute fifty six percent (56%) of prepaid margin. This implies the significance of prepaid accounts in these four regions.
2. Rebate cost for prepaid account is very minimum with Central 2 being the region with the highest percent rebate over margin 1.3 percent.
3. North (3,649), South (2,706) and East (1,904) record high number of prepaid accounts.
4. Government prepaid account analysis is not done as the number of accounts is negligible.

Table 20: Sales Person Efficiency Analysis Based on Corporate Prepaid Account

Sales Person	% Margin Contribution	% Rebate over Margin	Average (Margin-Rebate) (RM)/Account	No. of Account
North	19.7%	0.0%	2,653.79	3,649
South	15.6%	0.2%	2,825.19	2,706
East	11.6%	0.4%	2,993.49	1,901
Central4	9.2%	0.8%	2,490.51	1,797

Central2	8.1%	1.3%	2,532.51	1,552
West	7.9%	0.9%	2,449.51	1,570
Central3	6.4%	0.2%	2,152.01	1,462
Central1	5.3%	0.0%	2,024.81	1,297
Sarawak2	4.7%	0.0%	2,571.55	898
Sarawak1	4.3%	0.1%	2,360.85	891
Sabah2	3.6%	0.0%	2,930.45	609
Sabah1	3.6%	0.0%	2,967.72	589

Note: Data source is the primary data from SPCSB

4.4.4 Margin Contribution by State

This analysis is aimed at identifying states with high margin contribution. More sales effort can be focused on states with historical high margin contribution, in conjunction with the state economic forecast.

The observations are as below:

1. Klang Valley, as the centre economic growth area remains the highest contributor.
2. Collectively, Selangor (28.3%), W. Persekutuan (14.2%) and Johor (12.5%) contribute fifty five percent (55%) of Corporate margin for year 2010/2011.
3. W. Persekutuan (15.3%), Selangor (12.6%), Sabah (9.6%), Johor (9.4%) and Pahang (7.7%) contribute almost fifty five percent (55%) of Government margin For Year 2010/2011.

The details are summarized in Figure 5 and 6.

Figure 5: Corporate Account Margin Contribution For Year 2010/2011

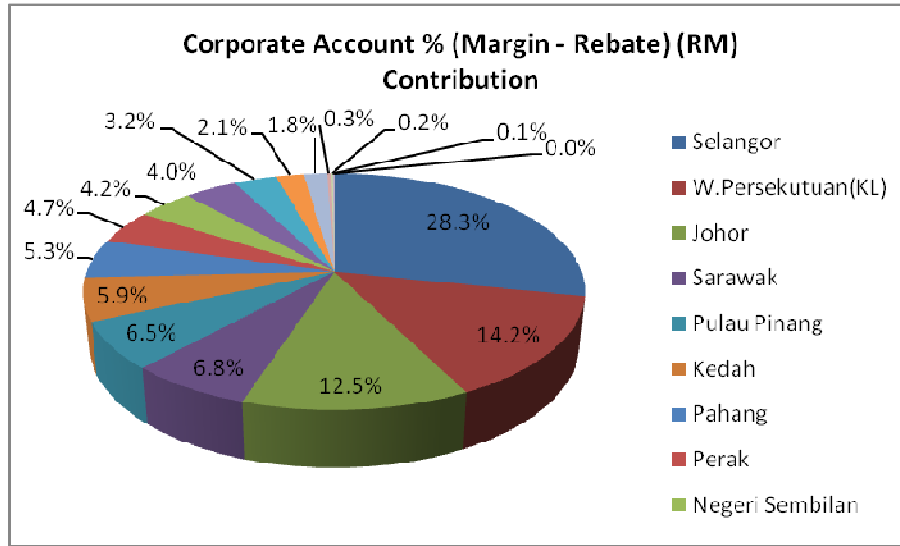
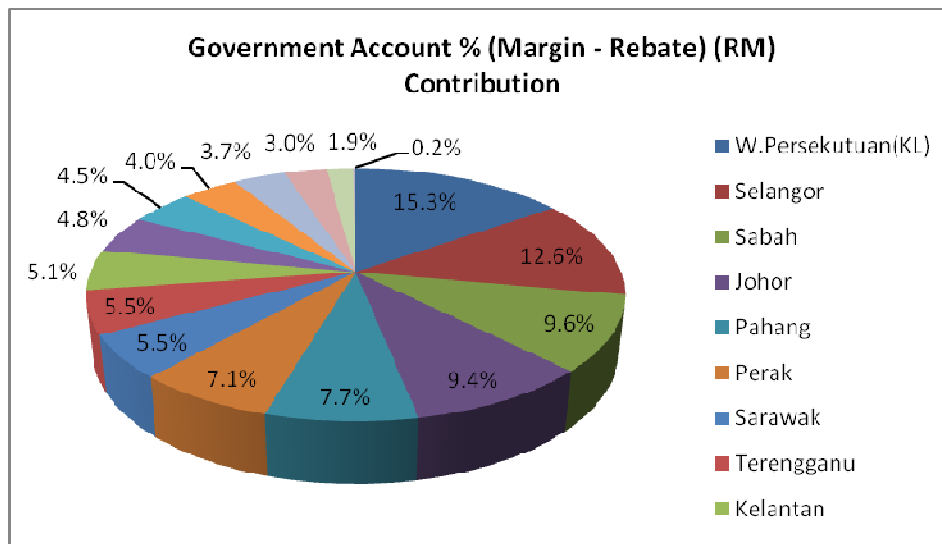


Figure 6: Government Account Margin Contribution For Year 2010/2011



4.5 Structured Interview Analysis

The following table summarizes the issues and concerns highlighted by the interviewees:

Table 21: Summaries of Structured Interview

Description	Post-paid Customer	Prepaid Customer
Convenience	The availability of the stations is the key reason influencing customers' brand selection	

	decision.	
Security	It is noticed that card security feature is the key concern highlighted by this segment of customers.	Security is not the utmost important concern.
System Reliability	Most customers highlighted that system reliability is the main issue faced and it is affecting their day to day operation.	
Customer Service	Customer service is satisfactory as post-paid accounts are serviced by the account managers	Customer service is not at a satisfactory level for this segment.
Communication/Education	Most of the customers are not well informed on the type of services and product features offered.	
Online Channel	Customers highlighted that data update in its online channel is unsatisfactory .	

From the above analysis, the findings are concluded in sequence of Product, Place and Promotion which among others:

- a. Others and Transportation industries are the main volume contributors. Approximately 80 percent of the accounts from Others industry code are diesel subsidy accounts, i.e. mainly from the transport sector. It is recommended that SPCSB to focus Corporate sales effort on Transportation sector (potential vol of 8.6mL/month). Transportation sector should be further identified down to the vehicle types in order to provide better understanding and prediction on target market in line with economy data.
- b. On average, a prepaid account contributes higher profit than a post-paid account (CLV mean is RM2.7K vs RM1.1K). SPCSB to focus on

growing prepaid segment, especially at the regions outside Klang Valley.

- c. Selangor, Wilayah Persekutuan and Johor are the main margin contributors (55 percent for Corporate and 37 percent for Government). It is recommended that SPCSB to focus sales effort in Selangor, Wilayah Persekutuan, Johor and Sarawak.
- d. SPCSB to perform database clean up urgently to identify and reclassify the accounts under Industry Code 'Others. In order to have better quality database, it is suggested that SPCSB to improve on the customer information to include gender, designation, contacts, IC, company gross income for database marketing purposes.
- e. Different customers have different expectation on services provided. System security is a key concern for post-paid customers whereas prepaid customers require efficient customer services through online system and customer service centre.
- f. Customers are unsatisfied with card system problem and poor customer service.
- g. CLV is a new way of measuring the performance of sales force. It should be considered as one of the KPI besides sales volume.
- h. Petrol kiosk location and system reliability are the two key success factors for fleet card business.
- i. Overall, 77 percent of accounts are low profitable accounts. There is a need to further analyse the low profit high loyalty corporate accounts. A

separate database to be created and maintained to keep track of share-of-wallet accounts for effective sweating exercises. Besides, to optimize resources, it is advised to channel the customer service for low profitable accounts to its customer service centre or online website which requires the enhancement of the functionality and stability of its online website for better customer service.

- j. Corporate customers are more profitable as compared to the Government. However, the latter is more loyal. It is recommended that SPCSB to reward high profitable customers in the CRM programmes planned.

In summary, the five research questions stated in Chapter 1 have been answered; details are as described in Table 22 below:

Table 22: Gap Analysis

Research Question	Research Type	Type of Analysis that Answers the Research Questions
1	Quantitative	4.4.1 Customer Segment Analysis Based on CLV 4.4.2 Industry Code Analysis 4.4.3 Sales Person Analysis 4.4.4 Margin Contribution by State
2	Quantitative	4.4.1 Customer Segment Analysis Based on CLV
3	Quantitative	4.4.1 Customer Segment Analysis Based on CLV
4	Qualitative	4.5 Structured Interview Analysis
5	Qualitative	4.5 Structured Interview Analysis

4.6 Conclusion

Result analysis is a very important phase as it provides the checking mechanism to ensure that the output is accurate as expected and reliable. A total of four quantitative and one qualitative analysis have been carried out. The results are used to provide better insights in understanding the customers as well as for business strategy formulation and decision making. The analysis results are compiled and interpreted to form the recommendations in Chapter 5.