

A Study on Customer Lifetime Value Method for Prospecting Lifetime Value of ‘Free Customer’: A Case of Retailer Business in Seberang Perai, Pulau Pinang, Malaysia

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Abstract

The current world wide economy situation has impacts on many aspect of hypermarket profitability includes lifetime value of their ‘free customer’. Although the hypermarket have putting hard efforts on strengthening the customer relationship management to making more financially accountable, however most of them still have problem in sustaining their lifetime value of ‘free customer’. Theoretically, customer lifetime value (CLV) is a model for measure contribution of customer to the business, as long as their doing of his/her transaction with the business. In practice, there are different models may be used for estimates CLV where potentially to create different impacts on future prospects of the business. Most of CLV model are modelled base on database customer, as opposite of less attention on ‘free customer’. Critically, this segment of customer is non database customer, free from assessed, and their particular has no available to any hypermarket database. As implication, most of CLV model has risky where there are disobey the assessed of free customer profitability. The objective of paper is to investigate the different method of CLV model used by the supermarket and hypermarkets specifically on ability for estimate lifetime value of ‘free customers’. An interview approach will be applied to 18 key persons of the supermarket and hypermarkets. This is for gathering some information regarding the CLV model and approach that have been applied by them. The Seberang Perai of Penang of Malaysia has selected as a study setting for this study where involved 4 Hypermarkets and 14 Supermarkets. At the end, suggestions will be made for strengthening the usability of CLV model for estimate lifetime value of ‘free customer’ with specific attention on the potential used of spatial information.

Key Words: Lifetime Value Model, Free Customer, Retailer Business, Seberang Perai of Penang of Malaysia

1. Introduction

The current world wide economy situation has impacts on many aspect of hypermarket profitability includes lifetime value of their ‘free customer’. Although the hypermarket have putting hard efforts on strengthening the customer relationship management to making more financially accountable, however most of them still have problem in sustaining their lifetime value of ‘free customer’. Theoretically, customer lifetime value (CLV) is a model for measure contribution of customer to the business, as long as their doing of his/her transaction with the business. In practice, there are different models may be used for estimates CLV where potentially to create different impacts on future prospects of the business. Most of CLV model are modelled base on database customer, as opposite of less attention on ‘free customer’.

Critically, this segment of customer is non database customer, free from assessed, and their particular has no available to any hypermarket database. As implication, most of CLV model has risky where there are disobey the assessed of free customer profitability. In addition, un-predictable change in business environment, strategically, will be the most important reason of retailer as well as Glady, Baesens and Croux (2009) noted CLV is a central issue in today business agenda. Similarly, scholars Fader (2009); Epstein, Friedl and Yuthas (2008); Graf and Maas (2008); Bejou, Keiningham and Aksoy (2007); Gupta, Lehmann and Stuart (2004); Gupta and Lehmann (2003); and many more cited customer lifetime value is strategically important to sustaining lifetime value, as well as important to their future survivability.

To gain more profitable customers, retailers must exploring more detail on customers' insight include their location and factors contribute to spending in their store. Carminati and Trouvé (2004) noted marketing directors from major retailers in Asia, Europe, South America and North America from surveyed found that 69 percent of respondents are not effectively leveraging customer insight. Of that 69 percent, 44 percent report that they gather a large amount of data but gain little customer insight from it; 25 percent "gather little customer data" at all. Less than a third of the respondents believe that they collect a large amount of data and leverage it to generate significant customer insight. When asked what kind of data retailers collected or tracked, the three top results were purchasing behaviors (86 percent); geographic (80 percent) and demographics (76 percent). In addition, Accenture (2007) report that increase in customer expectations is slightly different within countries. Sampled more than 3,500 consumers in the United States, United Kingdom, Australia, Brazil, Canada, China and France, found that while consumers everywhere value customer service and in some countries, such as France and China, they value it very highly. Surprisingly, the factors that determine whether they find a service experience satisfying or frustrating vary significantly by country. Overall, most of country result closely to 50 percentages that believed customer expectations is increased compared to five year ago.

The customers, both database and non-database or 'free customer' are important stakeholders to business where have great influence on retailers' profitability. According to Lucas (2009), the downturn in the economy in year 2009 will result in increased competition for key customers. Increasing focus on initiatives that differentiate retailer in the market and having a clearer customer value proposition will make it easier for customers to revisit the store for the next purchase. Empirically, Carrie Yu (2009a) noted that a drop in consumer confidence is one of the key markers of an economic downturn, and few sectors are affected as directly and immediately as the consumer goods industry. Accordingly to an interview with 1,124 CEOs around the world hence the pessimism of many consumer goods CEOs, result shows only 27% of respondents are very confident about boosting their companies' revenues over the next 12 months, compared with 50% in 2008. One of implication is the retailer has risks on loose their customer. An evident, Hoffman, Wildman, Clarke and Simoes (2007) coined that food retailers in the US and UK lose up to 40 percent of new customers within three months; and on average, US companies lose up to half of their customers every five years. Therefore, Lucas (2009) argued the retailer should know what the profitability values of their customer are and how to analyze their profitable customer within the geographical perspectives because the change in environments because it will influence their initiatives on concentrate their customers views and needs. At the behind of the studied done by Lucas (2009), Carrie Yu (2009), and Hoffman, *et. al.*, (2007), 'free customer' have not get attention to them although they also contribute certain amount of CLV. Sadly, 'free customer' are never appreciated to be accounting into business profitability because the business un-able to trace, data based and evaluated them.

In theory, the greatest asset of the firms is customer, specifically CLV, where cited by scholars Fruchter and Sigué (2009); Epstein, *et. al.*, (2008); Bejou, *et. al.*, (2007); Collings and Baxter (2005); Adams (2005); Gupta, *et. al.*, (2004); Aravindakshan, Rust, Lemon and Zeithaml (2004); Bauer, Hammerschmidt, and Braehler (2003); Berger and Nasr (1998); Blattberg and Deighton (1996); Dwyer (1989) and many more. In the one hand, not many company director's have much clue on what exactly mean by CLV and why CLV more important than number of customers. Implication is it's could be impact on their bottom line of business and for a long term operation, the business potentially to get seriously negative impact from their real value of customers. In the others hand, it's not enough to increase revenue by acquiring current value of CLV customers, where as opposite understanding insight of customer transaction activity is more important, as discussed by researcher Fader (2009) and Graf and Maas (2008). Actually, these are one of the fatal mistakes made by the managers because they still loyal to tradition method of CLV. More seriously, it will be repeating by other managers to another segment where 'free customer' is not counting into their CLV projection. The issues are who, what, and where 'free customer' is, as at behind of database customer. In addition, when and how 'free customer' will effects CLV of business, as well as regular customer acts and behavior to the retailers.

2. Selected Literature Review

Recently, the application and further research on CLV are dramatically expanded in other area and sector of business, especially on retailer business, as well as hypermarket and supermarket. Lao and Zhang (2007) as example identified that the most popular customer lifecycle value model which is recognized by many specialists and scholars is the net current value evaluating system where put forward by Frederick in 1996. Similarly, this is the extended variation of CLV definition term, as well as discussed by Lucas (2008), and Lenskold (2003).

Meanwhile, Lao and Zhang (2007) noted that Kotler developed the theory and thought that customer lifecycle value is the current value of all profits which customers contribute to companies during the whole lifetime. In other work, Mingliang (2002) divided customers into four groups according to two dimensions known as customer potential value (CPV) and customer current value where it's based on the two-dimensional model of customer segmentation at theoretical research for the difficulty of customer potential value estimate. In perspective of knowledge, ESRI (2002) coined customer knowledge is critical to the success of any business. The more retailers know about customers, distributions, demographics, psychographics, and density, the more profitable to business.

The grass roots of lifetime value concept is to accounting the sum of all of the business interactions and transaction that made with customer, traditionally in financial and or monetary value, and then used to develop customer based strategies to spurs relationship with customer with aims to be more profitable in future. This is supported by scholars Fruchter and Sigué (2009); Drèze and Bonfrer (2009); Villanueva, Bhardwaj, Balasubramanian and Chen (2007); Nauck, Ruta, Spott and Azvine (2006); Malthouse and Blattberg (2005); Rust, *et. al.*, (2004) and many more. The key is that the relationship by its true nature must be profitable customer. But, seriously, prospecting the CLV for successfully growth the customer value is not really completed, without understand and counting contribution of free customer to the business. As implication, the biggest question arise from previous work is how to used or modified CLV model to be more flexibility to used with database customer and free customer. If there are exist a CLV model that potential to modified as a model for evaluating free customer, so the next question are how this model can visualize CLV of free customer where information of them have no available to business database.

Identifying and creating CV is regarded as an essential prerequisite for long-term company survival and success (Porter, 1996; Huber, Herrmann & Morgan, 2001). In research perspectives, Graf and Maas (2008) stated that although CV research in many areas stands still at the beginning it has already generated a lot of fruitful insights into the value creation processes from customer and company perspectives. However, from company competitive advantages point of view, Johnson, Herrmann and Huber (2006) believed that understanding the way customers' judge and value a service or product is crucial to achieving a competitive advantage. Scientists and practitioners have recognized the power of the CV concept in identifying value for customers and managing customer behavior. By the way, Kothari and Lackner (2006) have introduces a value based approaches to manage the customers. Interestingly, Setijono and Dahlgaard (2007) identified that CV as a key performance indicator (KPI) and a key improvement indicator where it is important to benchmarking the firm performance. Issues of retail profitability are of continuing interest to managers, academic researchers and public policy makers. Managers are interested in maximizing the returns to the firms and to that end increase in retail long term operation is a necessary means. Here, based on some study conducted by selected researchers, issues regarding retailer and profitability will continuously important to future growth, as important to long live their customer value. Interestingly, beside the recent studies conducted by Lucas (2009); Glady, Baesens and Croux (2009); Epstein, Friedl and Yuthas (2008); Accenture (2007); Bejou, Keiningham and Aksoy (2007); Clarke and Simoes (2007) and Carminati and Trouvé (2004), clearly, estimating retail profitable will continuously become more critical issues especially when realizing that prospecting the profitability customer actually is not perfect without evaluating contribution of 'free customer'.

3. Objective of the Study

The objective of paper is to investigate the different method of CLV model used by the supermarket and hypermarkets specifically on ability for estimate lifetime value of 'free customers'.

4. Methodology of the Study

An interview approach will be applied for gathering some information regarding the CLV model and or approach that have been used by the supermarket and hypermarkets. There are 4 hypermarkets and 14 Supermarkets will be selected as target sample at the Seberang Perai of Penang of Malaysia. For that, selected key persons of respondents will choose for the interview session, such as Financial Manager, Supervisor, Head of Department (Marketing), Account Manager, and anybody who's responsible in customer relationship, profitability evaluation, marketing, customer research, and investment. There are five questions will ask to them includes types of CLV model used, ability of CLV for prospecting 'free customer', constrains of CLV usage, latest need and demand among customer, and an important of 'free customer' to the business. Interview session will conduct in-person with them and it depends on availability of respondents to be interviewed. Finally, findings of this study will validated by using literature review resources.

5. Findings

In general, there are 18 respondents involved in the interview session, where 4 from hypermarkets and 14 from Supermarkets. In term of gender, 10 of 18 respondents are male and 8 are female. Beside that majority of respondents were come from group ages thirty until thirty five years old (13 respondents) and minority was above forty five years old (5 respondents). For education level, there are 8 respondents gained secondary or diploma level and other 10 are bachelors. In term of position, there were 6 Financial Manager; (2) Supervisor; (2) Head of Marketing Department, (2) Head of Purchasing Department; (3) Account Manager, and 3 (Assistance Manager). The time used for completing the interview session is on average of 20 minutes per person.

In general, most of the respondents (16 of 18 respondents) answered that CLV is typically assessed using current data of customer database of the business where it is focused on customer behavior, as well as type and quantity of items purchased, amount of spends, time and day of shopping, and many more. This is similar as explain by Donkers, Verhoef, and Jong (2007) where profitability can estimate by using customer behaviors database that retains obtain from registration of membership card. In specific, aggregated data as such spending amount and purchasing rates per month is useable to predict CLV, for the next one month. From literature review, there are some proposed behavior-based models as well as Pass Customer Value (PCV); Recency, Frequency, and Monetary (RFM) model; Share-of-Wallet; and many more are practically to used to predict customer behavior, including cross-buying, retention rate, and purchase quantity where its enable assessment of CLV at the individual and group level. Beside that, one of major constrain of using behavioral based model is the model is un-able to predict purchasing activity among free customer where current data of free customer are not restore or obtain from customer database. As implication, the business has no ability to evaluate the current and future trend of purchasing behavior among 'free customer', as long as they are not registered as a membership of any loyalty programmed of the retailer.

In term of how important of 'free customer' to the business profitability, most of answer (17 of 18 respondents) are 'free customer' is important to accessed as important as database customer to them. The increasingly apparent that the financial value of a business is depends on off-balance-sheet intangible assets, including 'free customer' contribution to them. Here, a part of critical aspect of a firm is refers to its 'free customers' where them unpredictable to evaluated. To them, valuing CLV of 'free customer' is vital important to makes it feasible to overall of CLV value, both current and future prospect where some aspects of valuations, as such retention, margin and acquisition cost are possible to re-evaluated. Empirically, Gupta, *et. al.*, (2004) find that a 1% improvement in retention, margin, or acquisition cost improves firm value by 5%, 1%, and 0.1%, respectively. They also find that a 1% improvement in retention has almost five times greater impact on firm value than a 1% change in discount rate or cost of capital.

Some of respondents (12 of 18 respondents) cited that they still using customer centric approaches for managing the customer value where it is one way to performance customer centric in business. Most of respondents are trains based on customer centric to find the best strategy to attract customers to visit the hypermarket or supermarket. The model that used by them are:

- (a) Acquisition Model: with emphasizes acquiring new customers quickly by applied some marketing campaign. It will involve all potential customers in targeted areas.
- (b) Growth Model: with emphasizes growing the dollar volume in product categories currently purchased by existing customers. It is used by using customer database with membership activities.
- (c) Multi-Growth Model: with emphasizes expanding the number of product categories as recorded from transaction database, purchased by existing customers. It is used by research department where emphasized on local based product (Malaysia product).
- (d) Cost Model: with emphasizes lowering the cost of serving customers without materially reducing service quality levels. Some initiatives are using local people as staffs and low cost labor, from Bangladesh, Myamnar, Vietnam, and Indonesia as operation workers.

In fact, these types of model are similar to Harris and Kohli (2000) where the used of the four different change models is depend on factor of a particular set of market conditions, and local situation where the retailers have been operated. However, there only one model (Acquisition model) is useful for understand and attracting 'free customer' to visits the store and other three is not applicable for that purpose.

That why, another approaches are possibly to apply in supporting any kind of customer centric models to become more friendly to a segment of 'free customer'.

Consumer relationship has always been at the heart of the retail business where retailer is highly depending on both, permanent customers (regular customer) and 'free customer'. However, the changing behaviour and expectations of consumers today need them to continuously monitoring, measuring and managing through a highly effective customer relationship strategy. With this fact, 10 of 18 respondents stated that for measuring the retailer profitability, several alternative measures of profitability need to applied, including net profit, return on net worth, return on total liabilities, and return on total assets. Net profit dollars were only used by 4 hypermarkets because the measure is dependent on store size. Because of supermarket establishing in different size, net profit dollars is not an appropriate profitability measure for the supermarket where all 14 supermarkets have disadvantages of the size of store. Other measurement such as return on total assets (ROTA) reflects the profitability of the assets available to management and it only used by hypermarket. Therefore, ROTA is applied with some predictor variable as well as sales growth (by quarterly), market share, relative promotional efforts, capital-to-labor ratio, and so on. In practical, these kinds of alternative ways to access retailer profitability are not accounting individual customer, as well as free customer that make transaction to them. In fact, this situation is similar to what was discussed by Gladly *et al.* (2009) that the value of an individual customer is important for the detection of the most valuable ones, which deserve to be closely followed, and for the detection of the less valuable ones, to which the company should pay less attention. In addition, Pauler, Trivedi, and Gauri (2009) indicated that one of the major problems faced by the management at supermarket is the determination of a fair and equitable assessment of individual store performance keeping in mind the variation in store features, competitive environment, and socio-demographic characteristics of the consumers facing each location.

Though generally understood, all of respondents (18 respondents) are agreed that increasingly segmenting of their customers is important in order to increase profitability and gaining long term benefits. Basically, segmenting is one of initiatives by all marketing department in the survey, for guiding them to tailor their offerings to each of the segment in the Seberang Perai of Penang. One of the common ways of segmentation is based on combination of loyalty and profitability, as practices by 4 Hypermarket and 14 Supermarket of the study. Raab (2006) cited that by using loyalty and profitability, for examples, after segmenting customer successful done, so retailer start tailor their offerings publicly, and then, marketing strategies was implemented to convert existing customers to become more loyal and more profitable. However, they have major problem to evaluate the contribution of 'free customer', where these segment of customer are never registered as member of any loyal programme that applied by the retailer. In addition, Raab (2006) coined that although CLV is widely recognized as important, but more than a few managers will admit in private that they don't really know what to do with it. This naturally makes them reluctant to invest the considerable resources required to come up with a meaningful lifetime value model.

6. Discussions

Practically, CLV is declared as a powerful metric that rewards marketers for understanding their relationships with their customers, as well as coined by many scholar, as such as Berger, Bolton, Bowman, Briggs, Kumar, and Terry (2002); Gupta, Lehmann, and Stuart (2004); Collings and Baxter (2005); Donkers, Verhoef and Jong (2007); Kumar and George (2007); Drèze and Bonfrer (2009); and many more. CLV claim as powerful and straightforward measure that synthesizes customer profitability at individual and or group customer level. But while it is one of the more valuable measurements for marketers, many companies either do not collect the data or do not properly act on the current data. More seriously, to those firm applied on it, they never related CLV to the actual location of customers, where it is important for future prediction of CLV. Practically, most of CLV method that used by hypermarket and supermarket, as discussed before, has a major constrain on capturing, predicting and analyzing the lifetime value of 'free customer' where many information of 'free customer' has not available to them. Totally, transaction information of lifetime value of free customer is out-of record, as long as there are not registered as a member of any membership card of hypermarket or supermarket.

To capture information about 'free customer', the CLV model must have links with the current location of them. So far, from literature review research and from this study, there are no platform for links CLV projected value with location, where each customer acting and make decision on transaction to the business. Although the retailers can estimate the CLV with accurate value, but the results is still not precisely valued. Moreover, it just brings a small value to practitioner, marketers, even scholars where projected CLV without location is less in precision and concurrent.

In theory, marketers are dependent on customer engagement for increase the CLV of their customers in any location or places. In contrast, many marketers are willing to lose money on the initial sale knowing they will earn profit on subsequent purchases. But, the path to reengaging customers driven from paid search is far from clear and difficult to analyze because of lacking in CLV method. The result is the marketers un-able to evaluated the CLV of 'free customer' because the model is not jointly develop with location tool for refering the value with specific location of free customer. In future, this will become difficult because real time value of 'free customer' cannot reaches and generate simply as easy of establish customer database. Furhermoew, there is no guarantee that information on CLV of 'free customers' to be accounting into future practice of CLV evaluation.

Many models of CLV have been used the retailer with different interests, parameters, and scope with aimed to improved better performance in future. In this study, the retailers were used customer centric approaches as such as Acquisition Model, Growth Model, Multi-Growth Model, and Cost Model and consumer relationship approaches as such as net profit, return on net worth, return on total liabilities, and return on total assets. This is similar to Jain and Singh (2002) that work on comprehensive view on CLV research in marketing and also provide future direction. Before that, Blattberg, Getz, and Thomas (2001) focused on managing Customer Equity for building and managing relationship with the customer. To get more accurate prediction on CLV of retailer Reinartz and Kumar (2003) suggests that the impact of customer relationship characteristics is applicable to evaluating the profitable lifetime duration. Recently, researchers have started exploring the link between customer lifetime value and financial performance as such as Gupta and Lehmann (2003) and Gupta, Lehmann, and Stuart (2004). Meanwhile, Kumar, Ramani and Bohling (2004) noted that each customer varies in his/her lifetime value to a firm. A firm would like to estimate the lifetime value of each customer and use this information in planning differential marketing initiatives targeted at each customer. Recently, Glady, Baesens and Croux (2006) provide a framework for evaluating churner classification techniques based on a financial measure of accuracy, which is the profit loss incurred by a misclassification, considered from a customer lifetime value perspective. In sum, most of related works to CLV is still not cover a side of 'free customer' where this group also contribute to the performance of retailers, as well as important of database customer to them.

7. Suggestions

Alternatively, mapping the location of 'free customer' is the first step before CLV of them can evaluate. By using location of customer as main references, this actually creates a potential used of location base database for prospecting CLV with more precise. Actually, this is the gap between prospecting CLV on just using previous data of customer data based, compared to valuing and relating CLV into the real location of customers, as well as more suitable to capture and traced a location and CLV of every single 'free customer'. In addition, from spatial based view, CLV should be able helps the retailers to prospecting the future growth and long term relationship with the customers using location of customers as main reference. Thus, by utilizing spatial based CLV, the business will generate more comprehensive and more accurate knowledge of their customers, which is precisely in prospecting the CLV for customer in real location especially in specific existing retailing business environment. Some Scholars Laudon and Laudon (2008); Berman and Evans (2007); Miller (2007) and Toppen and Wapenaar, (1994) to analyzing the market and customers either international and local based perspectives, retailers need to utilize Geographical Information System (GIS) to helps them better understanding and analyses on real needs and expectation of customers. GIS facilitates retailer with spatial based solution and make close relation between predictive and real situation of customers. More important facts is GIS helps retailer to enhancing decision making with more precise information on the customers niche and values.

Not surprisingly, customer focus is always identified as the key to successful retailing in any marketplace. Obviously, successful retailers apply customer based strategy globally for gearing many more customers for contributes to firm profitability. To ensure retailers get more details on real customer situation, GIS should considered as important strategic tools for any reason, such as, GIS is an ideal tool for identifying and expanding markets, and increasing profits (Zhao, 2000); GIS provides answer for question about demand (customers) and supply (retail outlets and shopping centers) (Beaumont,1991); and GIS purposely used for target store sales predictions, sales territory modeling, product placement, and customer analytics (Thum, 2008). By using GIS technology, retailers enable and performing such kind of customer based strategy, as well as market differentiation, customer value identification, and streamlining and integrating their global customers to achieve high profitable market.

8. Conclusion

Traditionally, customers are at the heart of business is a known fact and a central issue of marketing orientation. Nauck *et al.* (2006) cited that in the last ten years there was a permanent pushing forward of the customer relationship management to make marketing more accountable. In a broader sense, marketers are using the data available to obtain valuable information about the customer. However, according to literature review research, until the end of the year 2010, most of researchers still used monetary or conventional based measurement for estimating CLV, as well as total value of average customers, potential contribution of customers to the business over a period of time, total revenue gained from current customer, and many more. To the best of the knowledge, predicting CLV of 'free customer' still mysterious where there are only a few study and literature mention about it. Most of the study related to CLV is still uncovers a side of 'free customer' where this segment is vital important to sustaining the survival ability of retailer business. Meanwhile, GIS application is one of latest platform to using jointly with CLV model and some technique of data acquisition for predicting CLV of 'free customer' where geographical location of 'free customer' has potentially to be modeled to GIS model. Further more, GIS has potential to be used for captured, traced and evaluated CLV of 'free customer' where location is a platform for modeled the real-time value of 'free customer' CLV.

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