CUSTOMER LIFETIME VALUE AS A PREDICTOR FOR FUTURE PROSPECT OF RETAILER'S SURVIVAL: A REVIEW OF CUSTOMER LIFETIME VALUE MODEL

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ABSTRACT

Customer lifetime value is the top priority issues in every segment of business and it's become more significance during the world wide economy crisis. Estimating customer lifetime value of retailer's business plays important roles in determine the most profitable customer's to the business, as well as sustaining the performance of business, both short and long run operation. In perspective of global meltdown economy, specifically, the use of customer lifetime value will became as central issues because it has major influence on the strategy that adopted by the business. As a predictor of future prospect of retailer's survival, customer lifetime value are developed based on financial items/method, as well as payback period, net present value, return on investment, return on equity, and so on. Thus, the objective of the paper is to review's the model of customer lifetime value in-prospecting the future prospect of retailer's survival in the marketplace. For that, advantages and disadvantages of models are discussed. In addition, to the best of knowledge, there are limited discussions on the reasons of adopting the customer lifetime approach for prospecting the lifetime value of retailer's business, includes hypermarket business. Thus, discussion on the reasons of adopting the model was made with specific reference to hypermarket business. Moreover, it is important to the manager to understand the capabilities and constrains of those methods because it can affect the financial strategy of the business. At the end, suggestion was made on how to improvise the performance of estimates the customer lifetime value, accordingly to the chance of customer value in the geographical marketplace.

KEYWORDS: Customer Lifetime Value, Predictor, Future Prospect, Retailer's Survival

INTRODUCTION

Customer lifetime value (CLV) is the top priority issues in every segment of business and it's become more significance during the world wide economy crisis. Estimating customer lifetime value of retailer's business plays important roles in determine the most profitable customer's to the business, as well as sustaining the performance of the business, both short and long run operation. In perspective of global meltdown economy, specifically, the use of customer lifetime value will became as central issues because it has major influence on the strategy that adopted by the business. As a predictor of future prospect of retailer's survival, customer lifetime value are developed based on financial method, as well as payback period, net present value, return on investment, return on equity, and so on. With regard to CLV, managing customers is important for retails store because of profitability reasons, especially to the business performance. Researchers as well as Carrie Yu (2009); Fader (2009); Epstein, Friedl and Yuthas (2008); Fabel, Sonnenschein, Sester and Golestan (2008); Gilbert (2007); Berger, Eechambadi, George, Lehmann, Rizley and Venkatesan (2006); Adams (2005); Ching, Ng, Wong and Altman (2004); Bell, Deighton, Reinartz, Rust and Swartz (2002); Berger and Nasr (1998), and many more doing their research on customer value and how it can affects the business profitability, either in current and future setting prospects.

The current economic downturn has shaken people everywhere, precipitating a huge drop in consumer confidence. The resulting change in consumer spending patterns has had an immediate and dramatic impact on the retail sector. Survey on 1,124 CEOs around the world, it is hardly surprising that retail CEOs are much less confident about the prospects for revenue growth over the next 12 months than they were at this time last year. Specifically, the result shows that only 14% are very confident that they can increase their companies' turnover. Retail CEOs are considerably more optimistic when they look out over the next three years; 92% expect to boost sales, and 36% are very confident about doing so. However, focusing on customers remains a top priority. Ninety-three percent of retail CEOs rate high-quality customer service as important or critical to business growth (Carrie Yu, 2009). However, managing CLV is not only critical in term of economy downturn, but it is highly relevance in such kind economy conditions such boom-up, decline, weak or rise-up market, stabile, and so on. One of main reason is that CLV is an important indicator for predicts how long the business can survive in the marketplaces. All that such kind of economy conditions is a part of business survival that they experienced as long as they alive.

In the case of world wide business operation, most of leading retailers as well as Tesco, Carrefour, Giant, and many more actually understand and sharply projecting their customers exceptionally well. Better understanding customer values will lead the retailers to the higher performance, specifically in generating their long term profits. But, for international retail operation, retailers will face the different view of global customers and it environment. Hoffman, Wildman, Rebollo, Clarke and Simoes (2008) believe that when retailers come to global business retailer landscape, the sheer diversity of customers can confuse the best of product brands. Thus, to success in a global marketplace requires a fine balance of two essential capabilities which is refer to a global approach to the business and a local view of the customer.

For global retailing sector, they are more 100 firms opening around the world. Overall, the Top 25th Food Retailers which is operating around the world market place are dominating by Europe and United States based retailers. Specifically, for the top ten, Wal-Mart Stores dominating the list with global sales reached around USD 374.5 billions sales in the year 2008, following by Carrefour (USD 112.4 billions), Tesco (USD 94.6 billions), Metro Group (USD 88.0 billions), Kroger (USD 70.2 billions), Schwarz Group (USD 67.9 billions), Rewe (USD 64.0 billions), Costco (USD 63.1 billions), Aldi (USD 57.5 billions), and Auchan (USD 50.2 billions). All of the world top ten retailers were operating around the world, but, surprisingly, Kroger still seat in the fifth rank with just operating in United States (*Refer Table 1*). Thus, Kroger are highly depending to American based consumer to survive and most importantly their CLV. Mean that, the size of customers is distributed not real important, but the important point is how the retailer manage and maximize the customer values for enhance their profitability.

Table 1: The Selected 12 Retailers from Top 150 Retailers of 2008 Annual Industry Report.

RANK			COMPANY		SALES (IN MILLIONS)			EARNINGS* (IN MILLIONS)			STORE COUNT		
'08	'07	TICKER		CODE	FY08	FY07	%CHG	FY08	FY07	%CHG	1/07	1/08	1/09e
1	1	WMT	**Wal-Mart Stores Inc.**, Bentonville, Ark. [1]		$374,526	$344,992	8.56%	$21,996	$20,497	7.31%	6,779	7,262	7,768
			Wal-Mart Stores U.S.		239,529[e]	226,294[e]	8.85	17,516	16,620	5.39	3,443	3,550	3,632
			– Supercenters	SPR-CNTR	198,256[e]	180,992[e]	9.54	N/A	N/A	N/A	2,256	2,447	2,617
			– Discount Stores	DDS	38,623[e]	43,003[e]	(10.19)	N/A	N/A	N/A	1,075	971	858
			– Neighborhood Market	SPR-MKT	2,650[e]	2,299[e]	15.27	N/A	N/A	N/A	112	132	157
			International	MISC	90,640	77,116	17.54	4,769	4,265	11.82	2,757	3,121	3,524
			Sam's Club	CLUB	44,357	41,582	6.67	1,618	1,480	9.32	579	591	612
2	2	HD	**The Home Depot Inc.**, Atlanta, Ga. [2]		77,349	79,022	(2.12)	7,242	8,866	(18.32)	2,151	2,234	2,289
			Retail segment	DIY	69,958	67,207	4.09	N/A	N/A	N/A	2,151	2,234	2,289
			Discontinued Operations (Supply segment)	MISC	7,391	11,815	(37.44)	291	806	(63.90)	893	0	0
3	3	KR	**Kroger Co.**, Cincinnati, Ohio [3]		70,235	66,111	6.24	2,301	2,236	2.91%	4,290	4,358	4,405
			Supermarkets	SPR-MKT	57,712[e]	54,446[e]	6.00	N/A	N/A	N/A	2,468	2,486	2,498
			Fred Meyer/Marketplace	SPR-CNTR	8,171[e]	7,721[e]	5.83	N/A	N/A	N/A	152	158	162
4	4	COST	**Costco Wholesale Corp.**, Issaquah, Wash. [4]	CLUB	64,400	60,151	7.06	1,609	1,626	(1.05)	458	488	517
5	5	TGT	**Target Corp.**, Minneapolis, Minn.		63,367	59,490	6.52	2,849	2,787	2.22	1,488	1,591	1,686
			Discount Stores	DDS	48,898[e]	47,644[e]	2.63	N/A	N/A	N/A	1,311	1,381	1,451
			Supercenters	SPR-CNTR	12,573[e]	10,234[e]	22.86	N/A	N/A	N/A	177	210	235
6	7	WAG	**Walgreen Co.**, Deerfield, Ill.	DRUG	53,762	47,409	13.40	3,189	2,754	15.80	5,461	5,997	6,472
7	6	SHLD	**Sears Holdings Corp.**, Hoffman Estates, Ill.		50,703	53,016	(4.36)	1,586	2,529	(37.29)	3,893	3,847	3,889
			Sears (domestic)	PDS	27,845	29,179	(4.57)	784	1,323	(40.74)	2,052	2,085	2,108
			Kmart	DDS	17,256	18,647	(7.46)	402	948	(57.59)	1,416	1,382	1,393
			Sears Canada	MISC	5,602	5,190	7.94	400	258	55.04	357	380	388
8	8	LOW	**Lowe's Cos. Inc.**, Mooresville, N.C. [5]	DIY	48,283	46,927	2.89	2,809	3,105	(9.53)	1,385	1,534	1,652
9	9	CVS	**CVS Caremark Corp.**, Woonsocket, R.I. [6]	DRUG	45,100[e]	43,821	2.92	N/A	2,442	N/A	6,202	6,245	6,562
10	11	SVU	**Supervalu Inc.**, Eden Prairie, Minn. [7]		44,048	37,406	N/A	1,684	1,305	29.04	2,478	2,474	2,549
			Supermarkets	SPR-MKT	34,341	28,016	N/A	1,550	1,179	31.47	2,478	2,474	2,549
			Food Distribution	MISC	9,707	9,390	3.38	274	257	6.61	N/A	N/A	N/A
11	10	SWY	**Safeway Inc.**, Pleasanton, Calif.	SPR-MKT	42,286	40,185	5.23	1,772	1,600	10.75	1,761	1,743	1,766
12	12	BBY	**Best Buy Co. Inc.**, Richfield, Minn. [8]	CE	40,023	35,934	11.38	2,161	1,999	8.10	1,177	1,314	1,459

Sources: Adapted from Company Reports and Retailing Today Research (2008).

OBJECTIVE OF THE PAPER

The main objective of the paper is to review's the model of customer lifetime value in-prospecting the future prospect of retailer's survival in the marketplace with major concern to advantages and disadvantages of the model. Secondly, this paper is aimed to discussed the reasons of adopting CLV model as a method for predicting the business survival, because of, to the best of knowledge, there are limited discussions on the reason of adopting the customer lifetime approach for prospecting the lifetime value of hypermarket's business.

THEORITICAL FOUNDATION OF CLV'S MODEL

Strategically, Epstein, *et. al.,* (2008) had have establish an approach for managing customer using the customer value management cycle by presents a comprehensive model for measuring and managing customer value and it has five recurring steps. The steps are includes (a) Manage Customer Segmentation; (b) Measure Customer Segment Margins; (c) Measure Customer Lifetime Value, (d) Measure Customer Impact and (e) Manage Customer Profitability. Further more, all of the information derived from the measurement of customer value should be analyzed. This goes far beyond simple reporting of which segments have been more or less profitable. In the end, retailer will understand the innovative segmentation of customers and the interpretation of the results, actually can uncover areas where small improvements can yield big improvements in value. But, ultimately, the primary focus for all retailers is customer value and for that researchers Berman and Evens (2007) introduced the concept of relationship retailing whereby retailers seek to form and maintain long-term bonds with customers. For relationship retailing work, enduring value-driven relationships are needed especially with customers, as well as with others channels.

As far as CV introduce to the field on marketing research, a multitude of CLV approaches have emerged, with variation in definitions, terms, and analogies. However, specifically, there are two theoretical differentiable approaches for CLV:

- CLV from a company perspective

Here, the value of the customer is assumes as central activity for the business. The mainly objectives is to evaluate how attractive individual customers or customer groups are from a company perspective. This approach became a popular research topic in the last few years, as well as noted by researchers, Reinartz and Kumar (2003) with specific focus on profitable lifetime duration; Rust, Lemon, and Zeithaml (2004) focused on utilizing customer equity in marketing strategy; and Krafft, Rudolf and Rudolf-Sipotz (2005) on valuation of customers in growth companies with specific attention on scenario based model. So, company perspectives on CV are more toward accounting or financial based approaches with highly consideration on financial based instrument and assessments. Thus, everything related to costs, expenses, investment, and any kind of tangible values will account under these perspectives.

- CLV from a customer perspective

The focus here is on value generated by a company's product or service as perceived by the customer or the fulfillment of customer goals and desires by company products and/or services. Simply, this CV can be defined as the overall value of the current and future customer base, specifically from the ground view of consumer's society and sometime, is seen as a proxy for firm value or stock price. In this fact, CV is divided into two major categories, mainly, called as Perceived Customer Value (PCV) and Desired Customer Value (DCV). More specific, the approaches of PCV can be divided into an either more product-oriented or more relationship-oriented one. According to Flint, Woodruff and

Gardial (1997), PCV focuses on the assessment of specific benefits and sacrifices, while, in contrast, DCV focuses on the customer's needs and desires and thus involves a higher level of abstraction on the customer's part. DCV is independent of use-specific experience and more enduring than PCV.

Fundamentally, in marketing, customer lifetime value (CLV), lifetime customer value (LCV), or lifetime value (LTV) and a concept of customer life cycle management is the present value of the future cash flows attributed to the customer relationship. In early stage, use of customer lifetime value as a marketing metric tends to place greater emphasis on customer service and long-term customer satisfaction, rather than on maximizing short-term sales. However, today, CLV use as strategic tools for prospecting profitable customers for firms which are highly potential to contributes growth and performance of long term operations.

The Basic Model of CLV

Fundamentally, CLV, the quantified value of a customer, has become a prominent concept with the rise of customer value management, especially in marketing and any others of business sectors. Berger and Nasr (1998) mention that CLV is the difference between what it costs to acquire, service, and retain a customer and the revenue generated by that customer over the total duration of the relationship with him. The formula for CLV in its simplest form is:

$$CLV = \sum_{t=1}^{n} \frac{(R_t - C_t)}{(1+i)^t}$$

Sources: Berger & Nasr (1998)

With,
Rt = revenue earned from a particular customer in the year t,
Ct = customer specific cost in the year t,
i = discount rate and
n = duration of relationship.

In the context of long term customer relationships, most of researchers believed that loyal customers always seen as an enduring asset for the retailer. Customers spend money on certain product or services, by various channel not just once, but generally regularly either by weekly, monthly or yearly for the rest of their lives. It not surprise, some of customers spending their money on daily basis, especially for food and drink items. Mean that, CLV can be fluctuate and change in every time, location, and even situation of environment.

The Gamma/Gamma sub Model

Until now, the profit of a transaction, needed to predict the CLV, was not introduced in the model yet. For this purpose, the Gamma/Gamma sub model of Fader, Hardie and Lee (2005) can be taken as discussion. Actually, this sub model estimates the average profit per transaction of a customer. The profit of a transaction is then defined as the net cash flow it yields. Thus, according to formulas in below, zi;1; . . . ; zi;xi is the profit of each observed transaction made by the customer i, and mi;k the average profit of the transactions of the customer i from the beginning of the customer relationship with the company until time k. Note that when k ¼ T i,

$$\tilde{m}_i \equiv m_{i,T_i} = \sum_{l=1}^{x_i} z_{i,l}/x_i.$$

Sources: Fader *et al.* (2005)

This is the monetary value, the average profit per transaction of a customer until now. An assumption made in Fader *et al.* (2005) is that, for each individual i, the profit per transaction is independent of the number of transactions. Moreover, it is assumed in the Gamma/Gamma submodel that the expected profit per transaction does not vary over time and we denote it by mi. The monetary value ~mi is then a sample estimate of mi. Moreover, a further assumption of Fader *et al.* (2005) is that the zi;l are Gamma distributed with shape parameter pxi and scale parameter 1=mi. The last assumption is that the values of mi are again Gamma distributed across the population with shape parameter q and scale parameter 1=c. It leads to the total likelihood of the Gamma/Gamma submodel, depending on three unknown parameters.

Pareto/Independent Model

Most papers, such as Venkatesan and Kumar (2004) and Fader *et al.* (2005), apply the same principle to predict the CLV value, either for individual or group of customers. Once the number of transactions in a future time period k is estimated using, they multiply this value by the expected average profit per transaction given and it follows that the CLV is estimated as:

$$\widehat{\mathrm{CLV}}_{i,h} = \sum_{k=1}^{h} \frac{(\hat{x}_{i,T_i+k} - \hat{x}_{i,T_i+k-1})\hat{m}_i}{(1+d)^k}.$$

This prediction requires the Recency, the Frequency, and the Monetary value, as the well-known RFM (Recency, Frequency and Monetary) framework. However, this model is not considering any spatial base variables for prospecting the final value of CLV. Although some of researchers modified the basic CLV model, but it never meet the concept of precision data. The main reasons is CLV formulations never counting spatial variables as main factors that influencing the final value of CLV.

A Pareto/NBD Approach

The Pareto/NBD model is referred by several authors such as Jain and Singh (2002) as a powerful technique to predict the future activity of a customer in a non-contractual relationship. Since the Pareto/NBD model forecasts only the probability of activity and the number of transactions of a customer, some adaptations are to be made in order to incorporate the profit of the transactions and to estimate the CLV. A key assumption, made by this Pareto/NBD-based model for CLV prediction, is the independency between the number of transactions of a customer and the related profit per transaction. However, sadly, these approaches are still not considering any spatial variables in estimating the CLV values. Thus, the weakness of a basic Pareto/NBD approaches will lead to modification of it component, especially independent assumption part.

A Modified Pareto/NBD Approach

As discuss before, the independence assumption between the number of transactions and the average profit per transaction is questionable. In Fader *et al*. (2005), the authors found an average value of.06 for the correlation between ~mi and xi in their empirical application. They accept the independence hypothesis nevertheless, arguing that this value is very small. Thus, the new approach takes into account a possible dependency between the number of transactions and the average profit per transaction. This dependency will be designed at the customer level, accounting for the heterogeneity in the population. Moreover, a constant expected profit per transaction over time is not required and then, the resulting model will be referred to as the Pareto/Dependent model.

In the Pareto/NBD-based models, the independence assumption between the number of transactions a customer makes and the average profit yielded by these transactions. But, form empirical research where have done by several researchers, that these two variables cannot be considered as independent for all customers. One of main reason is customer are differs accordingly to their demographic background, location, value perception, and many factors surrounding their environment. As implication, predicting the future number of transactions and the future profit per transaction separately could lead to a loss in predictive performance. Thus, a modification needed to the original version of CLV in order to predict the accurate CLV, in presence of dependence between the number of transactions a customer makes and the profit per transaction.

Overall, most models to calculate CLV apply to the contractual or non-contractual setting environment, with less effort on testing and utilizing new variables, as well as spatial variables, on the prospecting the CLV. Seriously, most of the models are adaptable to contractual setting, rather than non-contractual setting. For contractual setting, the models make several simplifying assumptions and often involve the following inputs:

- Churn rate

Refer to the percentage of customers who end their relationship with a company in a given period. One minus the churn rate is the retention rate. Most models can be written using either churn rate or retention rate. If the model uses only one churn rate, the assumption is that the churn rate is constant across the life of the customer relationship.

- Discount rate

Refer to the cost of capital used to discount future revenue from a customer. Discounting is an advanced topic that is frequently ignored in customer lifetime value calculations. The current interest rate is sometimes used as a simple (but incorrect) proxy for discount rate.

- Retention cost

Refer to the amount of money a company has to spend in a given period to retain an existing customer. Retention costs include customer support, billing, promotional incentives, etc.

- Period

Refer to the unit of time into which a customer relationship is divided for analysis. A year is the most commonly used period. Customer lifetime value is a multi-period calculation, usually stretching 3-7 years into the future. In practice, analysis beyond this point is viewed as too speculative to be reliable. The number of periods used in the calculation is sometimes referred to as the model horizon.

- Periodic Revenue

Refer to the amount of revenue collected from a customer in the period.

- Profit Margin Profit as a percentage of revenue

It depending on circumstances this may be reflected as a percentage of gross or net profit. For incremental marketing that does not incur any incremental overhead that would be allocated against profit, gross profit margins are acceptable.

Historically, the term CLV was first fully described in Arthur M. Hughes in his book entitles Database Marketing, formerly called as Customer Lifetime Value. After that, CLV is in widespread use among almost all small, medium and large firms in the marketing field in every sectors of business. There are three generic strategies for increasing CLV includes (a) increase customer spending rate; (b) increase customer retention rate; and (c) increase customer referral rate. But, these are multi-way for increasing CLV for every customer and for that, some factors must consider when business want to used LCV as strategic tools for helps them in improvise their current and future performance. That why, Gupta and Lehmann (2003) believe that CLV is a key element of the company perspective, which is the present value of all future profits generated from a customer.

REASONS OF ADOPTING CLV MODEL

Thus, discussion on the reasons of adopting the model was made with specific reference to retailer's business. Moreover, it is important to the manager to understand the capabilities and constrains of those methods because it can affect the financial strategy of business.

Searching the best customer

Fine the real best customer is more complex than identifying the segments with the highest potential. This situation will lead to informed decisions are crucial to retailers. Whether a retailer is taking an aggressive or conservative approach to the new market of customer, managing customer value still a core concentration that help retailers analyze business opportunities and act accordingly. Thus, retailers should maximize the value of each customer interaction because for reasons, as well as (1) to manage profitability of retailers; (2) to increase sales; and (3) to beat competitors by making strong decisions based on value facts. At the same time, retailers should alert with the common problem regarding planning their value based strategy. In Berman and Evens (2007), there are five potential pitfalls to avoid in planning a value-oriented retail strategy for customer, where as (1) planning value with just a price perspective; (2) providing value-enhancing service that customers do not want or will not pay extra for; (3) competing in the wrong value/price segment; (4) believing augmented elements alone create value; and (5) paying lip service to customer service. So, it is important to understand and apply the best practice on servicing the customer because customers are the backbone of business.

Measures the level of customer knowledge

Fundamentally, customer knowledge is one of measurement for indicates retailer business success. Long, Trouve, and Blackmore (2005) indicates that in this consumerist world, the critical retail skill is not so much serving today's customers but keeping profitable customers coming in tomorrow, especially as the competition becomes ever more ingenious at luring those customers away. In future, customer orientation is more vital than ever because today's best customers are not necessarily tomorrow's. That why, to sustain profitability in the flow of a changing marketplace, retailers need to offer the customer a constantly relevant reason to buy which is a differentiating reason to shop in this particular store. And that reason can vary from one customer, situation and region to another. The retailer advised to use customer centricity approaches for continually successfully monitor their business performance with key segments, testing the relevance of their strategy with that ever-evolving profitable consumer. Further more, Gulati and Garino (2000) believe that it is important to understand customer behavior through analyzing customer information to differentiate between customers, to identify the most valuable customers over time, and to increase customer loyalty by providing customized products and services.

Estimates the current value of customer

CLV is a key concept for any business, includes retail and marketing based business and frankly understanding on it will transform the business perspective to a great extent. Totally, retailer can use it to estimate the current value of all its customers form wherever they are locating. Projecting the current value of the customer, retailers have ability to categorize customers into different categories based on different point of value. In retailing, segmenting helps the business to concentrate more on the valuable customer with final objective contributes to profitable retailer. Once customers are segmented based on different level of profitability, retailer can design their customer strategy and offerings differ marketing value to various segments of customer. Thus, CLV facilitate a formalised depiction of the customers and for long-term view that gives a clear direction of what the retail is going after. Suppose for strategic planning, CLV will consider as an important resources for developing better sustainable business in future.

Gaining the competitive advances

Bejou, Keiningham and Aksoy (2007) argued the CLV concept is extensively changing the way today's business is managed. By understand CLV, it provides the best way to gain the competitive edge in business. CLV can utilize to reshaping the way the business manage with final aim to maximize their profits. The managers and researchers can best use CLV to a business's advantage because CLV explores various practical approaches to the measurement and management of customer value that is focus on maximizing profitability and growth. It is important to leverage CLV in all aspects of business, including customer management, employee management, and firm valuation. Moreover, Gilbert (2007) and Epstein, *et. al.,* (2008) believed that CLV concepts is more toward customer valuation technique which is considers previous and currents information of customers, for estimating the future values of customers toward firms or business.

Preparation for develop customer metric

CLV is prerequisites for design and developing retail customer-centric especially for long lasting the relationship between business-customer. In fact, customer loyalty used as one of measurement in relation with CLV as well as discuss by others researcher. Lenskold (2003) mention that for well over a decade, the desire to increase profits through improved customer loyalty has been moving its way up the corporate agenda. Customer loyalty is the goal behind the significant investments into strategies and technologies that support customer relationship management, internal quality initiatives, employee satisfaction, and even some aspects of supply chain management. Research shows that the value of retaining customers can be as much as 100 percent more profitable than acquiring new customers, yet acquisition marketing programs still tend to draw a greater share of marketing budgets. But, in-contras, other researcher such as Berman and Evens (2007), Hoffmann *et al.,* (2008) and Long, *et al.* (2005), noted that customer value in new dimension is more that managing the customer loyalty.

Overally, estimating CLV is becoming increasingly important in order for firms to identify and invest on prospective profitable customers. This is because of some reasons, such as (1) customer is not equally contributes same values (Epstein, *et. al.,* 2008); (2) to understanding crucial customer touch of point and the most important expectations of customer are first step in establishing high-quality and effective customer services (Baum & Singh, 2008); (3) today's consumers are more demanding and also more diverse (Accenture, 2007); (4) to maintain long-term bonds with customers (Berman & Evens, 2007); (5) to facing the some key challenges for managing customer (Kumar, Lemon, and Parasuraman, 2006); (6) to estimates profitable performance tomorrow by matching the right product mix at the right time to customers (Long *et. al.,* (2005); and (7) to understand customer behavior (Gulati & Garino, 2000). According to Aeron, Bhaskar, Sundararajan, Kumar, and Moorthy (2008), CLV estimation can help a firm in making some of these crucial decisions.

DISCUSSIONS AND SUGGESTIONS

At the end, suggestion was made on how to improvise the performance of estimates the customer lifetime value, accordingly to the chance of customer value in the geographical marketplace. The grass roots of CLV concept is to accounting the sum of all of the company's interactions with that customer, traditionally in financial and accounting based instruments, and then used to develop customer based strategies to rise-up that relationship to be more profitable in future. The key is that the relationship by its true nature, must be profitable customer. But, seriously, prospecting the CLV and then, developing the strategy for success growth of customers value is not really practically, without understand and related the CLV with the location of customers in geographical area. Further more, because of implementing the CLV concepts in spatial based environment, thus spatial parameters and any factors related to location must be considers as variables or factors and take into account in redesign new CLV models. Actually, this is modification of previously CLV models with adding the spatial parameter into CLV prospecting values for enhances the modeling of CLV prospecting values. Moreover, CLV modeling based on financial instruments or any others instrument related to financial matters is not really applicable because all of it is un-able to answering the issues related to geographical or spatial matter. In addition, miss match between strategic marketing plans and profitable value of customers in specific location will continues occurs in future, as far as they are not considers spatial instruments or factors as one of the benchmarks. Ultimately, this will lead to major problem in term of located the marketing budget for highest priority of customer in right location, specifically referred to the geographical locations.

There are four (4) important question regarding retailer profitability. First, can retailers better manage their customer portfolio to improve profitability? Second, do retailers understand who the most profitable customers are? Third, do retailers have a large number of unprofitable customers? Four, can retailers renegotiate prices and service levels to improve profitability? Actually, factors that impact customer profitability include sales time and effort, trade terms, order frequency, special/bespoke products, production runs and special logistic and packaging arrangements. Understanding customer profitability lets retailers develop alternate models which are possibly new pricing, logistics or service levels with final aim to reduce the cost to serve for unprofitable customers (Lucas, 2009). Although the retailer are be able to used CLV based model for prospecting their valuable customers, but they still have problem in getting better understanding in-sight of customers profitability, especially analyze it from geographical perspectives. For examples, factors that effecting the retailer profitability is not limited to pricing, logistics or services, but the most important factors is customer it's self and the environment of market. Thus, new alternative should be used to investigate for ensure the retailers considering, both spatial and non-spatial factors into their profitability analysis.

As usually, companies in the consumer goods and retail sector face a critical challenge as they emerge from the unpredictable economic environment and they are no methods to forecasts what will happen on the future prospect of customers. Normally, monetary based instrument were used to prospecting future profitable customers. However, conversely, Hoffman, Wildman, Clarke and Simoes (2007) believe that stores can drive profitable growth by optimizing the customer's in-store experience, which are based on customer shopping experiences shopping, as well as non financial instruments. By providing the right in-store experience they are able to retain the loyalty of the most profitable customers successfully. Top stores know just who their best customers are and they turn this insight to action by providing tailored product offerings in differentiated formats within engaging store environments that deliver exceptional customer service. Above all, they recognize the critical role of the right operating environment in reinforcing customer-centricity. Indeed, profitable growth depends on loyal customers and from survey this situation really happen in real market, where as 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. In relation with the grew up the profitability with in-store experience, three inter-related capabilities should be focused by the stores, as identified as (a) an exceptionally clear understanding of the specific needs and shopping missions of the most profitable target customers; (b) a commitment to translating this insight into tailored product offerings and a highly effective in-store experience; and (c) an operating environment that harnesses both technology and human capital to maximize profitability.

To gain more profitable customers, retailers must exploring more detail on customers' insight include their location and factors contribute to spending in their store. Marketing directors from major retailers in Asia, Europe, South America and North America were surveyed and among major findings shows 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). More than half of retailers surveyed collect data about customer attitudes (54 percent). However, bottom on the list were promotional responses, share of wallet and customer profitability (Carminati & Trouvé, 2004). Because of change in business environment, strategically, customer profitability will be chance based on the current trend of business environment. Here, business environment is so important to consider as new variable for in-cooperating with other CLV instrument.

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. Overall, interestingly, beside that study conducted by Lucas (2009), Carrie Yu (2009), Clarke and Simoes (2007), Kompil and Çelik (2006), Cicekoglu (2005), and Carminati and Trouvé (2004) clearly, estimating retail profitable will become more critical issues especially when realizing that prospecting the profitability customer actually not enough with just used the financial based model of CLV.

In hypermarket business, Abdul Manaf Bohari, Ruslan and Malliga (2009) suggested the Geographical Information Technology (GIT) to be a platform for managing the CLV of individual customer with sustainable efforts to specific initiatives for:

- Organising integrated spatial and non-spatial database using the GIT tools. By this ways, spatial and non-spatial data will handle and managing using on database platform, and then, this will integrates two types of data into meaningful view.
- The synthesis of the spatial and non-spatial information by utilizing the specific framework of a coherent data model. It also able to linkage between the different datasets and then reduce variations within database. So, data redundancy will decrease and accuracy will increase for used in predicting and estimating purposes.
- The GIT platform bringing together variety of information, from a variety of sources, location, and format. But, it's still fulfilled the qualifications of effective matching of similar or un-similar entities and demands for information consistency within the database design.
- Generation of spatial outputs with highly supported by tables, charts, and any others data presentation technique, and these never found in any kind of information systems. However, GIT finally aimed to enhance the development of planning, decision-making, and execution of critical tasks in organizations.
- The GIT package will be the workhorse and surely, it's always considers both spatial and non-spatial database sets. The GIT package offers tools and technique for handling spatial and non-spatial datasets of organisation. In addition, non-spatial datasets organisation is important to prospecting future look of organization because it mainly identified as important attributes of the spatial elements where as plays important roles in spatial based analysis.

CONCLUSION

Overall, the application and model development of CLV is not new to the business for managing their customers. CLV fundamentally, based on monetary valuation, apply by various kind of sectors including hypermarket business. However, CLV's application, valuation techniques, and approaches is continuously exposes to any new improvisations and enhancements. That why CLV issues consistently in the real practices of customer especially in every location, situation and time. For customers, CLV guiding the companies develop strategies to maximize customer value, as well as streaming their business performance. Also, it helps the companies develop strategies to grow the right customers in the right location. However, CLV is not just a number of value, but, more over, it is a way of thinking and prospecting the survival of business based on real need, expectation, and perception of customer. In future, utilization of CLV tools and technique will become vital important because of dramatically chance in customer global value. This is could be one of arguments for hypermarket to inventing in such kind of technology for enhances the capabilities in estimating their CLV of single customer.

To strengthening the capability of CLV model, GIT is suitable approach because is has tools and method to visualizes the real situation of CLV of individual customer in the marketplace. As suggested by Abdul Manaf Bohari *et. al.*, (2009), Zhao (2000) cited that business strategists are finding GIT to be an ideal tool for identifying and expanding markets, and increasing profits. In addition, ESRI (2007) and ESRI (2001), GIT software notes as important software that can be apply to performance business based analysis, such as site and location, business continuity plan, facilities and equipments, retail trade area, and so on.

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