A Study on Critical Contribution of 'Free Customer' on the Survivability of International Hypermarket in Malaysia: A Geographical Information System Approach

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Abstract: Traditionally, the hypermarket business have been used inventively customer database as platform for estimate their survivability by counting contribution of customer based on profits. In Fact, the hypermarkets have used some traditional model, as such customer lifetime value model, strategically as a baseline for understand and analyzing the profitability of each customer according to their spending and purchasing activities. However, the hypermarket has missing some segment of customer which has potential to contribute to their profits. Therefore, the 'free customer' segment is a traditional challenge for the hypermarket where the hypermarket has not alert and lacks many details about them. In fact, 'free customer' also identified as non-database customer, is totally free from hypermarket estimation of profitability, where information about them has not available in any database of hypermarket or organization. As consequences, this category of customer always neglects and un-accesses of their contribution although they have potentially affect the future prospect and survivability of the business. The study is aimed to analyze the critical contribution of 'free customer' to the survivability of International hypermarket business. Secondly, the study is aimed to modelling the location of each 'free customer' which potentially used as a baseline for estimated the contribution of each 'free customer' in term of spending and purchasing activities. The main method used is geographical information system, functionally in compose, establish and integrated the data of 'free customer' with exiting spatial data as well as hypermarket, residential area, village and so on. Meanwhile, the marketplace of Seberang Perai Tengah of Pulau Pinang, Malaysia was selected as location of study that be modelling as the marketplace of International Hypermarket. For visualized this model, a sample of 'free customer' will be collect by followed some procedures and tested into the model. At the end, suggestion will be made for enhanced the capability of geographical information system approach for mapping the location of 'free customer' as well as for visualized contribution of each free customer that will be indicated the future survivability of the hypermarket business. This study has contributes in term of visualized the critical contribution of 'free customer' by using geographical based model which is something new to the industry and current research.

Keywords: Critical Contribution, 'Free Customer', Geographical Information System, Approach Survivability, International Hypermarket, Malaysia,

INTRODUCTION

From traditional views, marketing effort has focused on attracting new customers for a company as mention in major literature of

customer value research. The Marketing Guru's Peter Druckers noted Customer is a King and Philip Kotler notes that customer is important stakeholders for every business. Today, this perspective was change dramatically and lead companies to recognize the importance of retaining current customers by establishing relationships with them using marketing tools initiatives as well as customer database program. Actually, this initiative has focuses on relationship development between firm-customer because it is economical to used existing customers rather than acquires new ones. With this perspective, the manager's of business including hypermarket business mainly task is to identify profitable and non profitable customers, which are underline as core strategic for any marketing department. In relation with this work, marketer will focus more efforts on the former and balance the cost of acquiring and retaining customers with current and potential revenue from those customers. In addition, traditionally, the hypermarket business have been used inventively customer database as platform for estimate their survivability by counting contribution of customer based on profits. The hypermarket have used some traditional model, as such customer lifetime value model (CLV), strategically as a baseline for understands and analyzing the profitability of each customer according to their spending and purchasing activities.

Over the past decade, the field of customer value management has rapidly emerged as an important area of research in marketing. Beginning with work started to consider the customer as an important asset of the firm by focused on customer data as a main source for estimate the future contribution of existing customer to their profitability. As implication of intensive use of database customer as main resources of estimate the contributions on business profitability, actually, the hypermarket has missing some segment of customer which has potential to contribute to their profits. Reinartz and Kumar (2000) investigated profitability of long-life customers in a non-contractual setting where it refers to non-database customer. In addition, the free customer segment is a traditional challenge for the hypermarket where the hypermarket has not alerted and lacks many details about them. In fact, free customer also identified as non-database customer, is totally free from hypermarket estimation of profitability, where information about them has not available in any database of hypermarket. As consequences, this category of customer always neglects and un-accesses of their contribution although they have potentially to affect the future prospect and survivability of the business.

Recently, it is critical to a retailer's survival to understand and monitor their business profitability, which is mainly containing various types of customer, both database and non-database customer. Fabel, Sonnenschein, Sester and Golestan (2008) noted that consumers have great power to revolutionizing their relationships to the business. The empowered consumer is no longer a vague concept, but a reality is that changing the face of commerce. Thus, the smartest companies try to figuring out on how to build relationship with customer to increase their revenues and in future to spurs growth. On the others hand, it is not easy to manages the customer profitability because retailer need to struggle with the key issues regarding their customers, especially non-database customer Thus, these issues identified by Berman and Evans (2007) are includes how the retailers stand out in a highly competitive environment where consumers have so many choices; and how the retailers grow up their business while retaining a core of loyal customers. With regard to these researchers, estimate the profitability of business is suppose involves database and non-database customer. However, sadly, to the best of knowledge, there is very limited work that focused on use of free customer to estimate the profitability of business.

Practically, managing customers is important for retails store because of many reasons, where almost for profitability purposes, with finale aim for sustaining the lifetime of 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 focused the research on use of database customer as a resources for estimate the business profitability that will measure the survival of the business. Actually, the use of database customer is major work where customer has identified an asset to the business as mention by Gupta and Lehmann (2003). In another perspective, the business must now how to valuing their customers that contributes the business performance (Gupta, Lehmann, & Stuart, 2004) as opposite of database customer. As implication, most of business understanding how to applied database of customer to predict the profitability, where, as opposite that the business still lacks in utilize the segment of non-database customer in some aspects of marketing as such targeting, retaining, satisfying, and maintaining their customers.

Issues of profitability and free customer contributions

Currently, managing the profitability of the business has faced some current issues and challenges specifically on predicting a specific category of customer, as called free customer. In fact, free customer is non-database customer and their information is not available to any business, but them also has lifetime value that potentially affects the future prospect of the business, as well as can determine the survivability of the firm. Some of current work as well as Abe (2009) and Gilbert (2007) coined that the most of the business has successfully predicting the profitability of the database customer; however, sadly they are unable to estimate the contribution of free customer segment because of inability of acquired the database. In fact, the information of free customer is un-restore and never formed as well as common customer database of the business. This is supported by Abdul Manaf, Ruslan and Malliga (2011) where noted that free customer is a missing segment in the estimation where the firms has neglect and non-accounting them as a part of their customer. By neglected the free customer from firm profitability, this is contrast with some of major domain in customer management. As example, researchers Baum and Singh (2008); Berman and Evans (2008); Long, Trouve, and Blackmore (2005); and Accenture (2007) believe that customer is crucial part that contributes to retailer profitability for a short and long term business life cycles. Similarly, Baum and Singh (2008) notes that understanding crucial customer touch of point and the most important expectations of customer are first step in establishing high-quality and effective customer services. With regard to these scholars, free customer is important segment, as important as database customer, where it needs to be accounted as a part of profitability estimations.

There are close relationship between customer lifetime value (CLV), free customer and hypermarket profitability where each component interact each other. Free customer is the major sources of CLV with finally contribute to the wellness of business profitability. Glady, Baesens and Croux (2009) coined 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. Customers are an important asset, and have to be precisely valuated. Similarly, Epstein *et al.,*(2008) mention that determine the most valuable customer to organization is important to estimate the profitability of then business, as well as strengthening the competitiveness in the marketplace. Thus, by measuring the profitability of segments and

managing customer relationships based on customer value, both the customer and company win. In addition, Janiak (2009) discussed the 2009 outlook for retailers is report that a challenging one as consumers will be intensely value-oriented in 2009, even more so than in the recent past. With regard to these works, measuring the lifetime value of free customer is equally important as measure the survivability of the firm, where both contribute to business long term prosperity.

In practice, most of leading hypermarket 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 (Abdul Manaf, *et al.,* 2011). In addition, Lenskold (2003) noted that 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. However, with refers to these works, in the case of Malaysia, there are lacks of study or articles discuss on current status of hypermarket business survivability where it was depend of CLV of customer includes free customer segment as mention before. More critically, most of hypermarket has no idea on how to estimated the segment of free customer, as opposite of successfully of predicting their regular database customer.

Therefore, it is critically to performance specific work on exploring critical contribution of free customer where it has being less attention from scholars and academician, as mention early. In the case of huge market of Malaysia, identified the latest trends of lifetime value among free customer can contributes to the previous knowledge on the body of knowledge. With multicultural market, as existing of multiracial group of free customer, this study bring a usefully idea of how to explored insight of free customer where can reflect future direction of such study (Abdul Manaf, *et al.,* 2011). In fact, ideas on how to conceptualize the idea of business profitability and link the concept to other constructs vary widely as mention by Graf and Maas (2008). As implication of these foundation, GIS is one of platform that potential to be a new of understand about the issues of free customer profitability where this application is suitable to model the location of customer, as mention by some literatures of Abdul Manaf *et al.,* (2011), ESRI (2007), ESRI (2004), and so on.

OBJECTIVE OF THE STUDY

The study is aimed to analyse the critical contribution of free customer to the survivability of International hypermarket business.

Secondly, the study is aimed to modelling the location of each 'free customer' which potentially used as a baseline for estimated the contribution of each 'free customer' in term of spending and purchasing activities.

METHOD OF THE STUDY

In general, literature survey will use a sources for investigate the contribution of free customer with focused on what can free customer contribute to the firm profitability. Some of latest literature work will used to understand the critical contributions of this customer segment where lead to conclude that free customer is almost important for hypermarket business.

Specifically, the main method used is geographical information system (GIS), functionally in compose, establish and integrated the data of free customer with exiting spatial data as well as hypermarket, residential area, village and so on. Meanwhile, the marketplace of Seberang Perai Tengah of Pulau Pinang, Malaysia was selected as location of study that be modelling as the marketplace of International Hypermarket. After visualized this physical location of marketplace, a sample data of free customer will be collect and integrated with spatial data by followed some procedures. The number of sample was 400 respondents where it exists in database format.

FINDINGS

The finding will demonstrated to major part of the results, as such critical contribution of free customer to the survivability of International hypermarket business and model of location of each free customer which potentially to be used as a baseline for estimated the contribution of each 'free customer'.

Critical contribution of Free Customer

Customer intensely value-oriented is one of the main reasons why the hypermarket continuously survive and maintain their performance and profitability from year to another years. Currently, Janiak (2009) argue that consumers will be intensely value-oriented in 2009, even more so than in the recent past. In an environment of slow growth by the year 2009, retailers will need to focus on building market share via business models that are more responsive, adaptable, and efficient with resources and assets. Retailers also should evaluate opportunities to drive short-term, bottom-line results. These could include integrating and leveraging multi-platform

communication channels to reach more consumers. According to Abdul Manaf *et al.,* (2011), the hypermarket business is one of business segment that has great impacts from this economy phenomenon where it depends on huge number of customer. In practice, estimating the CLV of every hypermarket can estimate by using CLV model that purposely for understanding how much contribution of customer to the hypermarket future prospect as reported in some works as such Venkatesan and Kumar (2004); Gupta and Lehmann (2003); Reinartz and Kumar (2003); Rust, Lemon, and Zeithaml (2004); and Rust, Zeithaml, and Lemon (2000). However, most of the CLV model has constrains in applied to free customer as implication of CLV model has design aimed for database customer.

The general questions about applied the CLV model on free customer segment is about how they can implement CLV to ensure they can cope with the issues of customer value-oriented, for both data based and free customer? How their analyze CLV of free customer to maximize the value oriented, as well as using some information from customer database. How they can effectively designing business model and evaluate opportunities, based on free customer, without understanding the profile or demographic characters of them. These statement has supported by Long, *et al.,* (2005) mention retailers who use customer centricity successfully continually monitor performance with key segments, testing the relevance of their strategy with that ever-evolving profitable consumer. The future orientation is more vital than ever because today's best customers are not necessarily tomorrow's. To sustain profitability in the flow of a changing marketplace, retailers need to offer the customer a constantly relevant reason to buy. Suppose that reason can vary from one customer, situation and region to another. As support, Jahromi, Sepehri, Teimourpour and Choobdar (2010) coined that although different studies have focused on developing a predictive model for estimate CLV under contractual settings, performing in a non-contractual setting in which customer churn is not easy to define and trace, has always been neglected in such investigations.

Overall, beside of an issues of important of free customer, actually CLV model that used by most of hypermarket under the study has un-ability to support activity related to classify an important of free customer accordingly to their contribution. Even, Customer Centric Oriented Model as applied by the major international hypermarket has limited capability to explore more detail about free customer contribution to the business profitability. While profiling of best free customer segments, by using some technology, but it is still not enough. Not only is it a matter of targeting the customer, it also

requires evaluating each customer segment's potential in terms of sales and margin contribution. In fact, Long, *et al.,* (2005) mention that the deeper information dive required of customer-centric retailing takes in considerations such as geography, demographics, income and buying behavior. Critically, Fader (2009) noted that increasingly, senior management of business has been asking analysts to obtain valid answers to questions such as: (i) Which individuals are most likely to be active customers in a future period of time? (ii) What will the aggregate and disaggregate purchase patterns look like for a group of customers in the future period? (iii) What will be the "lifetime value" for individuals within the firm's customer database (or the corporate database as a whole)? With regard to study have done by these work, actually the traditional method of CLV is not very well-suited to address these kinds of questions, as well as it also has not suitable to identified the contribution of free customer to the hypermarket profitability.

Plainly, knowing the CLV of individual customers enables a firm to improve its customer selection, customer segmentation, and marketing-resource-allocation efforts as discussed by Kumar, *et al.,* (2006). With a single view of the customer, an organization can take the next step toward building stronger customer relationships, then executing more precise targeting and superior campaigns. Using a variety of analytical tools and processes to deeply analyze customer and prospect data, the company can conduct strategic market segmentation to understand its relative position in the marketplace; strategic customer and prospect segmentation to understand the behavior and value of customers; and tactical customer and prospect segmentation to continually improve marketing campaigns based on initial response (Adams, 2005). In addition, scholars as such Mulhern (1999) and Bell, Deighton, Reinartz, Rust, and Swartz (2002) have identified a non-contractual setting as one of the barriers for generating precise results on the actual CLV of business. Based on this point, this study specified to focus on free customer, where there contribution is less evaluated compared to customer in contractual setting as mention early. However, doing some analytical work on free customer is not practical so far, because free customer in not able to evaluated and assessed.

In today's highly competitive market, conducting the customers as usual will not help the business to succeed and performance well in future. Thus, the business must go deeper, as far as they can. For instance, by provide the right services to customer, at the right time, to the right location of customers, this will enabling maybe effective in prospecting when free customer make a transaction. The capability that is at the core of customer insight is the single view of

free customer. Without such a view, it is impossible to get overall complete view of customers and their needs and preferences. Importantly, this information must be augmented by external demographic data on customers (Abdul Manaf *et al.,* 2011). More over, by teaming a customer's transaction history with key data such as number and ages of people in the customer's household, median income of the customer's neighbourhood, and customer's ethnic heritage, a company can transcend the one-dimensional, internal picture of a customer that purchase history alone provides, as suggested by Adams (2005). But, it is still under question to get clear picture of a single CLV without analyzing it in contact of location. Without location information of free customer, the profitability of hypermarket business will not produced in less precise, concurrent and timely of results. These will lead a work on where free customer located is and how to model the location of free customer as it exists in physical marketplaces.

Modeling the Location of Free Customer

There are five components for modellling the location of free customer, as below.

Modeling the socio-demographic of marketplaces

The output in Figure 1 shows that social-demographic variable as such as hypermarket, alternative store, public infrastructure, and so is used as a baseline of the study where it become a platform for better understand on how spatial environment can contribute to the real lifetime value of each customer in that area. Specifically, socio-demographic data is important for understand free customer purchasing activity, as well as produced data about CLV in individual form.

Modeling the Location of Hypermarket and Other related business

location of hypermarket and other related business should integrated, as shows in Figure 2 into socio-demographic of marketplaces model where it will be useful for indicated which hypermarket is refers to free customer on their purchasing activity. These kinds of socio-demographic information remains that spatial data is a main platform in visualizing the CLV of free customer in the specific geographical location.

Modeling the Postal Address of Free Customer

Basically, the first point to model the postal address is by formed the database of free customer as shows in Table 1 below. This database has sources from survey data that basically contain current postal address. The postal address then design into postal address, alias (alternative address), postcode, name of residential part (village), and districts or town.
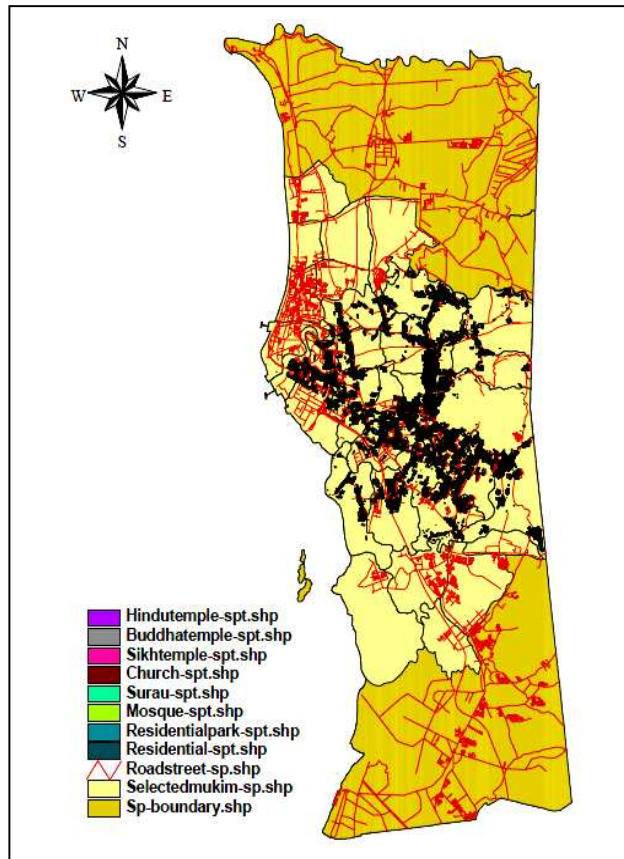
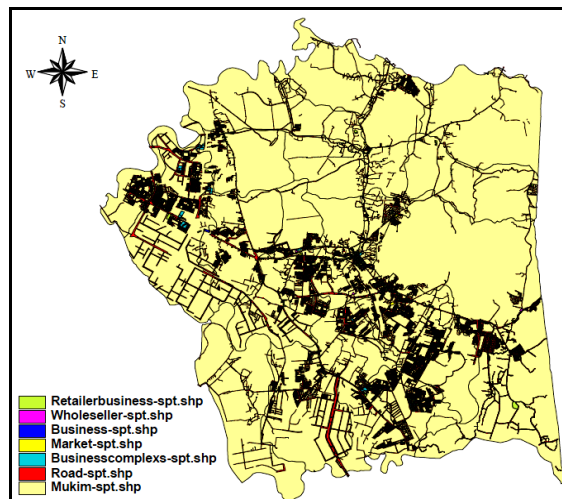**Figure 1:** A Social-Demographic of Location.

Figure 2: Location of Hypermarket and Others Business

Table 1: Field and Record of Postal Address of Respondents.

Idname	Address	Alias	Postcode	Residentpa	Town
006-TNN	11 Tingkat Siakap 1	Tingkat Siakap 1	13700	Seberang Jaya	Perai
007-TNN	43 Pintasan Terubok 4	Pintasan Terubok 4	13700	Seberang Jaya	Perai
008-TNN	8 Lorong Kalui	Lorong Kalui	13700	Seberang Jaya	Perai
009-TNN	42 Lorong Sutera Prima 9	Lorong Sutera Prima 9	13700	Seberang Jaya	Perai
010-TNN	127 Lorong Tenggiri 25	Lorong Tenggiri 25	13700	Seberang Jaya	Perai
011-TNN	44 Lorong Kurau 22	Lorong Kurau 22	13700	Taman Chai Leng	Perai
012-TNN	14 Lorong Sembilang 2	Lorong Sembilang 2	13700	Seberang Jaya	Perai
013-TNN	11 Lorong Talang 1	Lorong Talang 1	13600	Taman Talang	Perai
014-TNN	22 Pintas Terubok 1	Pintas Terubok 1	13700	Seberang Jaya	Perai
015-TNN	14 Tingkat Tuna 2	Tingkat Tuna 2	13700	Seberang Jaya	Perai
016-TNN	47 Lorong Siakap 24	Lorong Siakap 24	13700	Seberang Jaya	Perai
017-TNN	59 Lorong Kurau 25	Lorong Kurau 25	13700	Taman Chai Leng	Perai
018-TNN	9 Lorong Kikik 1	Lorong Kikik 1	13600	Taman Inderawasih	Perai
019-TNN	38 Lorong Bawal 7	Lorong Bawal 7	13700	Taman Inderawasih	Perai
020-TNN	128 Lorong Bukit Minyak 19	Lorong Bukit Minyak 19	14000	Taman IKS Bukit Tenga	Bukit Mertajam
021-TNN	31 Lorong Tenggiri 5	Lorong Tenggiri 5	13700	Seberang Jaya	Perai
022-TNN	51 Lorong Sembilang 18	Lorong Sembilang 18	13700	Seberang Jaya	Perai

Table 2: Postal Address with Longitude and Latitude.

| Address	Alias	Postcode	Residentpa	Town	District	Latitude	Longitude
182 Lorong Tenggiri 27	Lorong Tenggiri 27	13700	Seberang Jaya	Perai	SPT	5.38936310	100.4024764
24 Pintas Sembilang 14	Pintas Sembilang 14	13700	Seberang Jaya	Perai	SPT	5.40177500	100.3996560
2 Tingkat Talang 1	Tingkat Talang 1	13700	Seberang Jaya	Perai	SPT	5.38291500	100.3889960
42 Tingkat Kikik 5	Tingkat Kikik 5	13700	Seberang Jaya	Perai	SPT	5.38993200	100.3805140
52 Lintang Talang 6	Lintang Talang 6	13700	Seberang Jaya	Perai	SPT	5.38204410	100.3901034
58 Tingkat Kikik 6	Tingkat Kikik 6	13700	Seberang Jaya	Perai	SPT	5.38832400	100.3823650
35 Lengkok Kikik 3	Lengkok Kikik 3	13700	Seberang Jaya	Perai	SPT	5.39258300	100.3813370
49 Lorong Perai Utama 4	Lorong Perai Utama 4	13600	Taman Perai Utama	Perai	SPT	5.38539900	100.3802740
22 Lorong Senangin 2	Lorong Senangin 2	13700	Seberang Jaya	Perai	SPT	5.38566400	100.3845820
151 Jalan Mohd Saad	Jalan Mohd Saad	12300	Taman Bagan Jermal	Butterworth	SPU	5.42858400	100.3798910
146 Lorong Melur 14	Lorong Melur 14	12300	Taman Bagan Jermal	Butterworth	SPU	5.43298540	100.3839315
19 Jalan Pangsapuri Emas	Jalan Pangsapuri Emas	12300	Taman Mas	Butterworth	SPU	5.42881200	100.3833140
141 Tingkat Kurau 4	Tingkat Kurau 4	13700	Taman Chai Leng	Perai	SPT	5.38785800	100.3916790
17 Lorong Senangin 1	Lorong Senangin 1	13600	Seberang Jaya	Perai	SPT	5.38471800	100.3856430
39 Lorong Kikik 3	Lorong Kikik 3	13600	Seberang Jaya	Perai	SPT	5.39280600	100.3829030
67 Lorong Kikik 6	Lorong Kikik 6	13600	Seberang Jaya	Perai	SPT	5.39311600	100.3842140
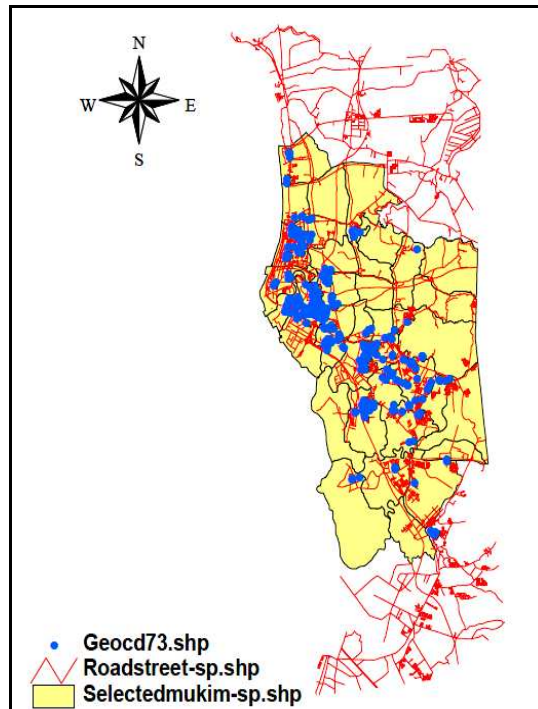
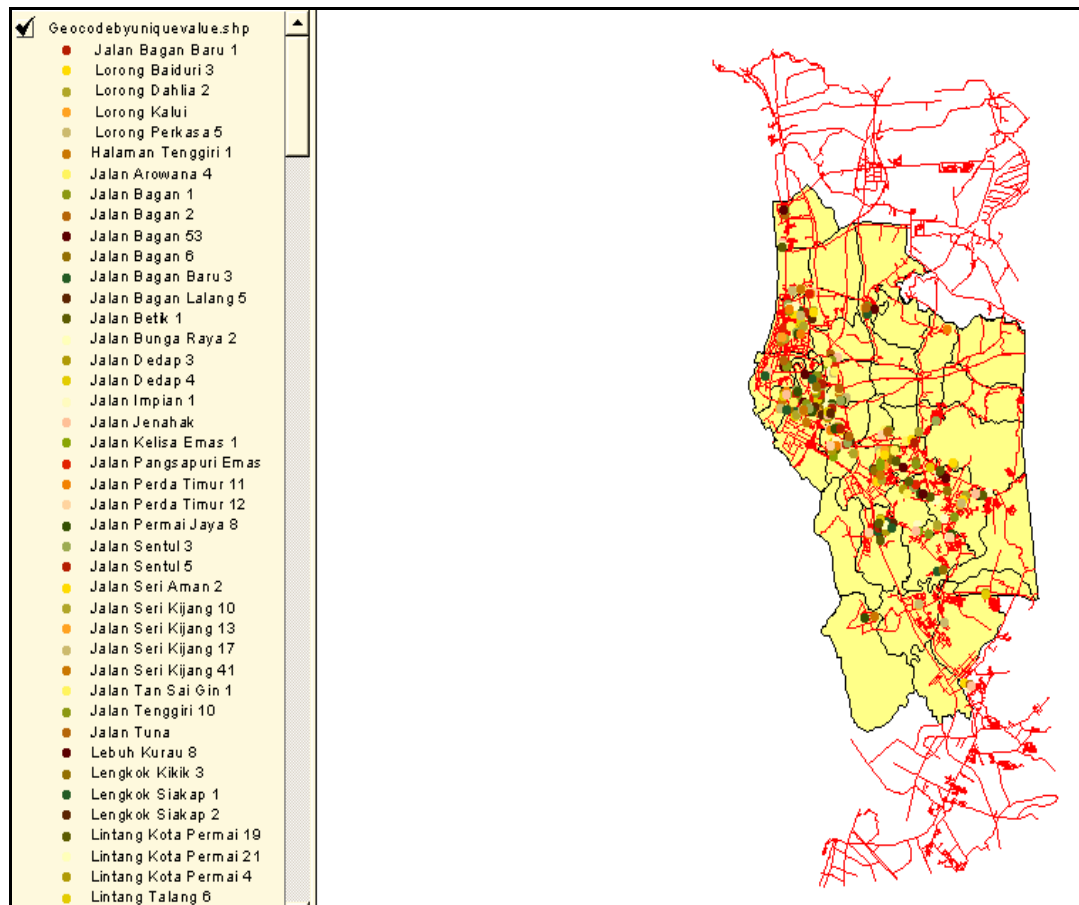**Figure 3:** Geo-Referenced Results

Figure 4: Spatial Location of Individual CLV of Free Customer.

However, coordinate point (x,y) should applied to each postal address where it is important in the next process of data spatialization.

Spatialization Process of Postal Address

The Spatialization process is refers to transfers the postal address into spatial-based address which has coordinate points. To perform this work, the combination of software iTouchMap and ArcGIS are important where each point of address will transform into points X, Y as it appears in the real marketplaces. Table 2 is output of from this process.

In addition, Geo Coding and Geo Referencing Techniques will applied for visualized these coordinate points into a map. Figure 3 shows how the location of free customer can determine by using geo-referencing technique. Determine the exact location of free customer is vital important where can solved the main problem regarding the non-database customer. By using specific procedure, as identified as adding coordinate into a map and geo-coding the address, most of the location of free customer can projecting into a map as in Figure 3. The map is

representing the real location of free customer as appears in a dot blue point.

Spatial Location of Free Customer

In addition, with regard to Figure 1, Figure 2 and Figure 3, CLV can analyzed with socio-demographic that can indicated association between CLV, any spatial variables, and socio-demographic variables. There efforts will make a news contribution how CLV must prospected in today's environment with take into account of spatial and non-spatial variables in one platform. For example, spatial factors as such location and accessibility that have potential to be introduced and used as new variables for in-cooperating with the non-spatial variables, as shows in CLV model. By applied such kind of technique, all of these major variable are available to operationalized with CLV and then prospecting them to produced spatial lifetime value of free customer. Figure 4 is shows how each location of free customer as it apperas in the real location of physical marketplace.

SUGGESTION AND CONCLUSION

Customer is the greatest asset to retailer, specifically, the current customers who will remain as customer in future also. Theoretically and practically, importance of customer is known to everyone in business, but what's surprising is the fact that many businesses well not understand the value of the customer in terms of location matters. This support by ESRI (2007) where estimates that approximately 50 percent of today's retail stores do not capture customer information as part of the business transaction. Without this find of information, it is difficult to quantify the demographics of your customers or market areas. Therefore, GIS application is powerful and useful which provides one means of identifying characteristics of a mathematically generated market area. Other analyses can be performed to add to the value of these areas including drive time and ring analyses.

According to Bult and Wansbeek (1995) individual profitability of customer can predict as it exist in the location of marketplace. Some studies as such Babak Sohrabi and Amir Khanlari (2007), Buckinx and Van den Poel (2005), and Fader, Hardie and Lee (2005) coined that CLV can predict accurately based on individual setting of non-database customer. Actually, this study had contributed new knowledge on how to utilized spatial platform of predicting CLV of non-database customer, where it is 'missing' in previous studied and literature review. Therefore, by using a spatial model of location of free customer, as shows in Figure 4, each purchasing activity can analyzed in individual setting accordingly to coordinates points of X, Y location. In fact, the use of coordinate points is remains about precise information that can generate from spatial model of locations.

In the current business environment, which up to now have had minor spatial aspects, spatial data are become more critical issues. In the large business, for examples, Pick (2008) noted that a data show that over 98 percent of analysis is non-spatial and only 2 percent is spatial. Hence, proportion of the non-spatial uses must be considered in recognizing the perceived importance of spatial data and the priorities given by managers and other stakeholders in utilizing it. Similarly, researcher Zhao (2000) noted that more than 80 per cent of all information in an organisation can be geographically referenced. In this case, domination of non-spatial data finally will contribute to un-balances results because of the results of CLV are tendencies skewed toward non-spatial bases. Here, this is one of reasons why GIS is need to used a platform of prospecting lifetime value of free customer where is has ability to trace and detect each location of free customer and how this customer can effect to business profitability.

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