

Customer Relationship Management Constructs under Social Networks towards Customers' Retention

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Abstract: An effective customer management strategy would be an assurance for any businesses towards their organizational objectives. Social networks can be served as an important communication tool with customers in online environment. This paper attempts to investigate social networks and see whether businesses can use online social network privileges to enhance their customer relationship management toward customers' retention. The CRM determinants (customer interaction, customer engagement, and churn prediction) for effective online social networks are then introduced. The results show that three CRM determinants directly influence customer retention in service based organization under investigation. It is also found that education level of managers and executives, besides CRM implementation period moderates the level of customer retention in respective organizations. The results also advocated the importance of effective social network and CRM implementation ensuring high level of customer retention for service based organizations. The medium sized sample was used for purpose of data collection in this paper.

Key words: Customer Retention, Customer Relationship Management, Social Networks.

INTRODUCTION

Sociology definition of social networks is that social networks encourage people to have collaboration and reliability in their communications and bring out from their isolation and solitary confinement. Social networks are the collection of existence norms in the social systems which caused enhancing in social member collaboration and also shrinking the cost of exchanging and communication (Alvani, 2006). Online social network sites provide this opportunity for individual to present themselves, articulate their social network, and establish and maintain connection with others. Social network sites (SNSs) must enable some primary features like formation of online communities, interaction among members, sharing of users created content (UCCs). These traits are provided by all online social networks, but in various ways of delivery and degree of sophistication (WonKim & Sang-WonLee, 2009).

Due to the popularity and adoptability of online social networks all around the world, SNS play a significant role in information propagation (BoXu, 2010). Truly speaking, in today's life, individuals' attitude and judgment, especially in adolescence, is affected by dispensed information across online social networks. They believe and trust on what they see on online social networks instead of traditional media (BoXu, 2010). The reason that makes SNS unique is trust and trustworthy derived from their relationships. Social networks not only a viable business but also can contribute other businesses to grow in terms of optimizing customer relationship management (CRM) (Burgee, 2009). It is important to note that the Internet can be served as an important communication tool with customers for brand recognition (Riley & Lacroix, 2003). Using social networks and show good brand picture is able to give a good impression to customers and cultivate the companies' online reputation for service excellence. Correspondingly, organizations' brand image and brand equity are enhanced (Walters, 1999) and customer loyalty will be foster in which translate to higher profit growth.

Companies should understand and know the nature and concept of customer relationship manager (CRM) before they want to use this system. CRM should be considered in the company as a key component of the operationalization. If they want to be successful, they should look at CRM that is beyond an implementation just using IT, but it is more than this while they should not ignore and forget the role of IT in the organization and also in the CRM project. If the system is going to be used for marketing purposes with all its sub-systems, that is the issue for the system in terms of capability and requirement. To have a successful CRM, it is required to maintain and keep the valuable customers in terms of economics while rejecting and throwing away the economically invaluable ones. Relationship marketing concentrates on creating interactions resulting in maintaining the customers' long-time faithfulness and also customer retention in adjacent with traditional transactional marketing where its prior goal was selling.

Marketing involves a deliberate mutual transaction relationship where both sides are pleased. Both parties must be able to converse, which could be through various mechanisms. In today's fierce competitive environment, businesses need to better know and understand their clients, who are the most critical component

of business generating net profit. Acquiring new customer is too much harder than retain customer (Jorge, 2005), however, some research found out that 60 percent of companies have no apparent program for customer retention (Ang & L.and Buttle, 2006). Increasing amount of purchase along with increasing trust, customer referral, and less price sensitive are the result of adding value to the customers. The fundamental reason for forming CRM is customer retention. CRM assists companies to make customer needs understandable and helps companies maintain these relationships more intelligently and help foresee the future. Such knowledge provides a key competitive advantage for businesses to achieve market share and reduce overall costs for retaining their customers. Majority of businesses have implemented their CRM, yet most of their marketing budget dedicate to customer acquisition (Ahmad, 2001). Marketing scholars strictly believe that retaining valuable customer and winning back defecting customers can be conducted only with appropriate strategy for customer relationship management (Rightnow, 2005).

The study(WonKim & Sang-WonLee, 2009) divided the members of social networks into 3 categories: individual users, businesses, and governments.The study also argued the ways that each of these clusters use and benefit from online social networks. Business visions for joining these websites are marketing, customer relationship management, corporate intranet, and external peer networking. A research posited that social networks are source of information and have influential impact on decision making (Nor zarih, 2010). Based on the study on tutorial program of social networks(Burgee, 2009), they emphasized that there was lack of research on role of social networks in business performance. The problem stated that once most of companies have no specific strategy for their customer retention, the attention to online social network with large number of participants and useful application would be lucrative for such companies. In this regard, online social networks can be used as tool for implementation of firm's CRM to boost customer retention rate.

As the online businesses develop in rapid pace, the importance of online media becomes more obvious for business owners. Social network sites, in this regard, play a key role to assist businesses towards achieving their objectives. On the other hand, effective customer relationship in competitive environment can add value to the business. CRM makes the perception of relationship marketing complete and meaningful. It is an amalgamation of technology and business process for realizing the customers of the company. CRM does center of its attention on customer retention and relationship enhancement with the view on relationship marketing. Despite the efforts have been done on this area, a clear study on the effect of companies' CRM and its determinants within social network sites to boost customer retention fall short. This research paper aims to explore the role of online social network through CRM determinants on customers' retention. This research tries to investigate the CRM as part of social network sites and see whether businesses can use online social network privileges to enhance their customer relationship management through customer interaction, customer engagement, and churn prediction identifying dissatisfied customers. This paper organized in following order. Section

Literature Review:

Social Networks linking Businesswith CRMP:

It was argued that online social networks influence on increasing popularity and traffic of business websites(Milanoa, Baggio, & Piattelli, 2011). The research conducted by Demailly and Silman (2008) purposed some opportunities for online social networks businesses. These opportunities can be applied to enhance business performance especially through company's CRM. Other studies, however, suggest that online social network application can be used for target marketing, advertisement, and churn prediction (DEMAILLY & SILMAN, 2008; Klier, Heidemann, Gneiser, & Weiá, 2009). Social media have the power to leverage customer relationship management(Bonchi, Castillo, Gionis, & Jaimes, 2011);social networks give this opportunity to CRM section of companies to predict customers' needs and identify prospect business opportunities and monitoring word of mouth. Social network websites, in same way, allow businesses tracking product delivery or detecting dissatisfied customers by leaving negative comments, these moves regarded as business intelligence (Bonchi, Castillo, Gionis, & Jaimes, 2011).

Customer insight can be obtained by collaboration with customers in online social networks while these insights can be applied for production management schedules. The study also noticed about some potential activities like tracking of new customer or product strategies for management of financial resources. Social networks' data mining also can be beneficial in improving product mix (Bonchi, Castillo, Gionis, & Jaimes, 2011). Monitoring customers and company assessment in social networks quantify how large companies should invest to enhance their infrastructure; this would be applicable for all industries. As a result, social network evaluation have directly impact on knowledge management and its improvement, especially in designing processes of knowledge sharing, capture and use, which could be supported by business process. A recent study posited that social networks impact on customer actual purchase behavior (Sangman Han, 2006). Further, trust and positive word of mouth can be assigned to customers, for example, once a customer post a question, another customer come to answer as automate agent (Bonchi, et al., 2011). The viral collaboration in social network environment apart from providing exclusive marketing opportunity can influence on company's success

(Sangman Han, 2006). Social network theory has been powerfully supported by a research (Acar & Polonsky, 2007), which reveals affection and frequently in online social communication in a same level as traditional ones.

CRM and Customer Retention:

CRM is recognized as multi-functional organization practice, which concentrates on embarking, sustaining and improving long period relationship with profitable customer (Wang & Feng, 2012). CRM features are placed in organizational processes and refer to company knacks to identify most valuable customers, create and expand relationship with such customers, and lead the relationship to the highest level to create profits (Morgan, Slotegraaf, & Vorhies, 2009). New concept of CRM introduced with advent of Web technology, which called e-CRM (Norton, 2007). E-CRM comes in order to ease the implementation of CRM. Improvement in customer relationship, increase amount of sale and marketing efficiency are the outcomes of implementing e-CRM (Azila & NoorNeeraj, 2011). Majority of companies believe that CRM can be used as technique to increase customer satisfaction and loyalty (Azila & NoorNeeraj, 2011).

In the other words, CRM provides a suitable path for the firm to interact with customer. The motivation for firms to form customer relationship management is to boost their profitability through bolstering their tie with attractive customers (Schoder & Madeja, 2004). It is essential to understand CRM capabilities for companies' development and know how these capabilities enhance business performance (Wang & Feng, 2012). If those capabilities are unique and hard to imitate, the company would be able to make sustainable competitive advantages among its rivals (Day, 1994). Former study indicates that higher business performance is dependent on better CRM aptitudes (Wang & Feng, 2012). Therefore, marketing capabilities operationally exposed in CRM activities like customer interaction process in terms of customer acquisition, engagement, retention, additionally enhancing customer relationship with up-selling and cross-selling strategy preventing customer churn.

The primary scope of CRM concept refers to identify customer needs and retain current customer. The features of an efficient CRM are increasing rate of satisfaction, loyalty and depict strong commitment to customers (Terblanche, 2006). Customer retention is one of important CRM objectives. In order to let this strategy become more effective, retention's program must focus on customer needs and facilitate satisfaction and loyalty (Nataraj, 2010). It is obvious that customer retention cost is too far cheaper than acquiring new customer (Ang & Buttle, 2006). The main strategy of companies CRM is retention program without notifying firm size, this strategy has been perceived as complementary strategy for customer acquisition, retention and interaction with valuable customer, which makes mutual value for the company and customer (Azila & NoorNeeraj, 2011). Furthermore, CRM contributes to increase consumer loyalty. CRM is not just dedicating to monitor consumers behaviors, but it has this capabilities to raise earned revenue and excel customer relationship with the company (Azila & NoorNeeraj, 2011).

Investigations conducted in past illustrated companies which implemented CRM successfully reached 270% growth in their business profit and witnessed huge surge in their stock price (Wang & Feng, 2012). There is also evidences stated that a single growth percentage in customer retention would influence nearly five time more on company's financial performance; however, one percent decline in discount rate or cost of capital never impact this much on company's monetary performance (Nataraj, 2010). Creating customer satisfaction is fastest expectation of implementing CRM. It is perceived customer loyalty and retention as medium-terms aim and afterwards organization (Azila & NoorNeeraj, 2011). So aforementioned literature review support that social network have positive influence on improving company's CRM and a successful CRM lead in customer satisfaction and retention. Following, the paper discussed CRM factors towards customer retention.

CRM Factorson Customer Retention:

CRM is a process consists of individuals' customer, technology and business strategy search for comprehending customer's necessities. It is a synthesis methodology, which concentrate on customer interaction improvement and retention. In the point of fact, implementing CRM strategy trough SNS comprises many related criteria's link to each other. Existing papers recommends significant CRM innovations has been greatly impacted by interaction among organizational sectors (Chen & Popovich, 2003; Plakoyiannaki & N. Tzokas, 2001). The study argued that the organization uses CRM must integrate the dimensions involved, since without integration successful implementation of CRM is not possible in online environment (Sahoo, 2011). Moreover, CRM concentrates on estimating customer exact needs make sure that firm's investment on customer relationship improvement dispatch maximum return. To reach this approach, it is indispensable to delivering maximum value to customer, identifying equilibrium point of risk and prize accompanied with customer relationship, providing suitable customer portfolio, and seeking to extent customer's communication channel. Successful companies always try to find out ways to implement the CRM by using factors such as customer interaction, customer engagement, and churn prediction in order to better satisfy customers and retain them. As a result, it can be concluded that CRM make companies to be customer centric with mandatory coordination

among customers, technology and process (Peppers & M. Rogers, 2004). In next section, the CRM dimensions under social network setting are discussed for attaining customer retention and organizational profit.

Customer Interaction:

Since last decade high-end campaign management application has been introduced which presented extra functional abilities to firm's marketing group to excel quantity and quality of customer's communication while sustaining or even diminishing marketing team size. Beside, new method of communication, which diminished cost of communication process, like short texting and e-mail has led to prodigious growth (almost 100 times more) in number of communication in the same marketing team. The new concern is the other marketing processes which are not able to assimilate themselves with cumulative marketing communication power engine. Therefore, companies are inevitable to employ fine automation for their marketing approaches and develop their customer interaction systems (Doyle, 2001). The business most priority is a fine inbound and outbound customer communication management. Possible interaction channels can be e-mail, online chat, call center, sale point or any other access point. Inbound interaction indicates customer attention. Since they need something at that moment they try to contact sale force through website, call center, or ATM for asking for help or getting information about a good or service. This contact from engaged customer normally create a fine opportunity for the firm to extract important information about customers' needs and desires. Outbound interactions belong to target customers who special goods is dedicated to. These particular products have designed from customer data mining. The precise data collection and perfect customer's data analysis are the key factors for understanding and forecasting customer needs and desires, which guarantee the success of this interaction.

As matter of fact, the foremost way of online interaction predominately in online social network sites or online communities is word of mouth. Usage of this concept grew very rapidly. There was huge growth in number members joined (from 3 to 350) to the association of word of mouth in less than 3 years(Fay, 2006). There is No surprise that this growth took place in online environment particularly in social Medias. Researchers believe almost 90% of word of mouth occurs in offline environment and only 15% of online word of mouth conversion occurred in United States. Those conversations placed on internet which consider as source of information primarily propagated among family members and close friends (Fay, 2006).Online word of mouth behavior cannot be justified by current inter personal communication theories, as these theories have accentuated on social setting cues and tended to conduct face to face. The result of research focusing on individual's emotions interpreted online communication based on social cognition and psychology principles. It also indicated that with given of sufficient time, users can conceive their perception toward distributed electronic messages in online environment. The marketers mandate to figure out the impact of this perception on customer assessment about goods, service, brands, and organization and consequently predict consumer behavior in online and offline environment. The astounding popularity, progress and impact of word of mouth on customer behavior particularly in online communities make marketing practitioners to focus on this interesting communications (Parks & K. Floyd, 1996; Knapp & Daly, 2002).

It could be rational that these concepts can be applied on online environment. However, the consumer relationship with company is one, albeit powerful, metaphor (the interpersonal relationship metaphor) built on the employment of another (the brand as personality metaphor). As such, the metaphor is subject to certain limitations and may not be universally relevant or appropriate (Brown, Broderick, & Lee, 2007). Nevertheless, this study stand on focusing CRM by providing better vision to evaluate CRM performance and supplying appropriate justification for the process flaws. The change in company policies towards a customer centric business focus results in a strong demand for CRM solutions to be implemented. Changing policies and shifting focus does not necessarily yield successful implementation of CRM solutions; but modification and integration of existing methodologies and processes into the strategies of CRM is essential. Although abundant research have evaluated CRM performance drivers, there is not sufficient information to see whether CRM result truly reach the company to its intention purpose or not. The research asserts that CRM is path for customer communication with organization, which can certainly on customer satisfaction and retention.

Customer Engagement:

Customer Engagement (CE) is related to consumers get involved with other consumers, organization or even company's brand. Both Consumers and companies can commence this engagement and this phenomenon can be occurred both offline or online. Customer engagement concept unlike many other marketing concepts has not been followed by a sole resource. Many articles and manuscripts extensively discuss about customer engagement through the internet, in addition frequent conferences and seminars have been held about this interesting topic. Customer engagement usually occurred in long-term with more complicated strategic communication. Customer engagement is focused on maximum reduction in probability of repeated conversion. Customer advocacy and loyalty are the objectives of long-term customer engagement. The result of annual online customer engagement research published in 2006 shows that the customer engagement is a best tool for measuring current and prospect company's performance (Solutions, 2012). Online CE widely differs in quality

like brand customer's interaction from offline CE. Social networks, forums or blogs provide virtual environment for customer discussion and interaction which offline environment cannot replicate such opportunity for consumers to share their opinions. CE aims to form, arouse and impact on consumer behavior totally different with senior marketing interaction in offline environment.

Online CE activities make the company to react to substantial alterations in consumer behavior caused by internet as same as surge in ineffectiveness of old-style advertising broadcasting model. Because of segmentation and specialization of medias and communities, users make to think of businesses are gradually become powerless to prescribe their communications outline. Synchronal decrease in switching cost, market geographical broadening and procurement of goods and services for consumers, stimulate sense loyalty among them. Currently, one of significant competitive advantage source is leveraging customer assistances. This contribution reveals its important role in writing review, disseminating useful information, sharing advertising, participating in customer service FAQ's through the online communities in forum or social network sites (Solutions, 2012).

As academic angel, uses and gratification theory is giving holistic explanation of some factors impact on customer behavior via social networks (Calder, Malthouse, & Schaedel, 2009; Raacke & Bonds-Raacke, 2008). This theory comprises by following principles namely; incentives and needs to communicate, psychographic and social environment, perception and outlook toward medias, practical substitutes in using medias, interaction behavior, the outcomes of these behaviors (Rubin, 2009). Given the theory, it is perfectly used to direct their research on prior and outcomes of advertising cooperation in order to assess social media behavior. It is also practical to reinforce a strong customer relationship in online markets. Creating a profile to monitor consumer consumption behavior is one of important impacts of customer relationship in social networks and depicts social networks as utilitarian tool for marketing strategies.

The study explored impact of online customer engagement on optimization of customer relationship efficiency. Types of engagements were evaluated by researchers in different and specific occasions and realized social beside personal corporative experiences were certainly associated with efficiency of customer relationship. Moreover their research result can be exerted in social network context (Calder, Malthouse, & Schaedel, 2009). This study concentrates on social elements which are involving customer attitude toward firm's activities and their respond to them through online social networks and analyze the causes of their respond like value created for them or being affected social norms. Through all techniques, engaging customers to the company practically mean creating loyal customer; which increase the level of customer retention within the company. So as discussed, CE is linked to customer retention for purpose of this study. Next section presents churn prediction as another contributor of CRM shaping the research construct.

Churn Prediction:

The majority of organizations- regarding to fierce competitive burdens and pressures in this era-comprehended customers as the most valuable asset for their business. This point leads companies to stress more on their relationship with them. Service sectors also challenge with such difficulties. New companies beside many acute combination services provide variety of choices for customers to manipulate their necessities. The greatest concern for all service companies is controlling and monitoring customer churn and it has this potential to create serious trouble for companies once market develops. Statistics in mobile telecommunication service companies lighted out that churn rate is around 20 to 40 percent (Ahna, Hana, & Lee, 2006). Negative effects of customer churn create serious problem for companies such as dropping the level of profit, decreasing the number price premium deal, and no one will be referred to company by churned customers. In this context, defensive marketing is playing important role in the extremely competitive and expanded global market. Companies, in this strategy, are trying neither for grabbing new customer attention nor getting away the subscribers from competitors. Defensive strategy is seeking to dissuade current customers from brand switching and remain loyal to the company. Based on the study estimation (Reichheld, 2000), five percent surge in level of customer retention results 35% and 95% increase in customer net present value in computer-based companies and advertising agency respectively. Thus, for experiencing glory moments in global market, company's objectives from customer acquisition must be inclined to customer retention to drop customer churn rate.

Companies in order to handle this problem require to perfectly analyzing defected customer behavior and reasons for doing customer churn; but managing customer churn has been completely explored in the previous research (Ahna, Hana, & Lee, 2006). Former research primarily investigated on factors caused customer churn like loyalty and dissatisfaction instead of analyzing an inclusive encompassing relationship agenda between different paradigms on customer retention. A paper written by Gerpott, Rams, and Schindler (2001) explored a two-layer framework that accentuate customer loyalty significantly is being influenced by customer satisfaction, which in turn influences customers' intentions to terminate their contractual relationship. Authors realized some causes impact on customer churn in South Korea internet service. Authors also explored the impacts of switching obstacles on customer satisfaction and loyalty attribute to customer retention. Based on reality of customer data, most of studies target consumers as source of information so during the survey customer outlook

on service, the customers’ intention of leaving or remaining with firm is asked (Gerpott, Rams, & Schindler, 2001).

Generally customer retention is analyzed based on four elements: macro environment variables, customer attitude, behavior and demographic. This study tries to gather literatures focused on the independents variable, which is premised to influence on churn manners. Majority of studies on this topic consider maximum two indicators and carried out in service industry. Attrition models focus on the switching behavior of customers. Dual outstanding form of attrition model is discerned based on time of window observation. Static attrition models investigate churn behavior at a specific moment in time, while dynamic attrition models observe a set of individuals for a substantial period. These two outstanding forms facilitate the estimation of risk or accidental rates in different period of time cause of precise prediction they can make rather than models don’t permit its variables is measured in different time. It is depicted that most of research employ static attrition model to explore churn behavior in specific research situation, it mean the variables are measured in a unique time not in different period of time. They submit the instrument of data collection, which is questionnaire to selective individuals of their sample research they chose. This research follows such methods measuring churn rate. In general, if companies serve a customer for long period, the chance of retaining of this customer is trivial. Individuals tend to experience different brands in initial years after being loyal to a company. However, in long period of time churn level need to be measured preventing customer flee.

Research Framework and Methodology:

This cross – sectional study proposed a model based on the literature reviewed and tested it by exploring the relationships between the variables in the model. Hence, this was an exploratory study. Primary data on all the variables was obtained using survey questionnaires. The unit of analysis was the individuals. The study focused on investigating the direct and indirect influence of the key determinants of CRM within online social networks area to achieve customer retention. Based on the review of literature, it was posited that efficient implementation of CRM in a company has both direct and indirect influence on performance of the company as well as retaining the customers by making them loyal. The theoretical framework shows the overall construct of this study. It also shows the overall “big picture” of the elements in each category of customer interaction, customer engagement, and churn prediction that are linked to the customer retention. Figure 1 presents the theoretical framework.

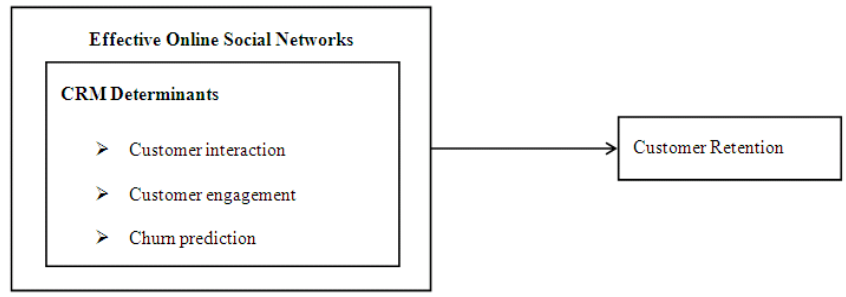


Fig. 1: The Theoretical Framework.

According to Figure 1, CRM determinants for effective online social networks are introduced as an independent variable for this study. There are three dimensions were considered to evaluate the independent variable of the study; namely the customer interaction, customer engagement, and churn prediction. The customer interaction as one of the determinants in social network effectiveness describes the ability of companies to initiate connection with their customers. An efficient relationship with customers is a cornerstone for CRM implementation and success. It also helps organization keep its current customers as well. Another element of online social networks is “customer engagement” which describes how deep a customer connects to the company. To retain customers in current dynamic market, it is required to engage customers with company’s activities which is enduring and emotional. The last element of the online social network is said to be churn prediction which assist the companies comprehends customers’ behavior during their relationship with them. The churn prediction is advised for creating loyal customers and retains them. On the other hand, there are several important issues should be considered by organizations through their CRM activities. The main objective of effective CRM under online social networks is to construct a customer-centered environment to make them satisfy, loyal, and eventually retain them for long period of time. As such, the customer’s retention is considered as dependent variable for this study.

According to the results of investigation carried out in this paper, the conceptual model and elements, the research objectives and overviewed literatures, four key hypotheses is formulated for this research study. To

present a comprehensive image of the research work, the study tries to integrate the research objectives, literature review and development of appropriate hypotheses. The research hypotheses are adhered as: H1: There is positive significant correlation between customer interaction and the customer retention; H2: There is positive significant correlation between customer engagement and the customer retention; H3: There is positive significant correlation between churn prediction and the customer retention; and H4: The higher level of online social network efficiency, the higher level of customer retention.

Once the researcher is creating intensive framework, research design can assist him/her to assign scarce and limited resources during the research study (Denzin, 1978). The correlation of an independent variable with three dimensions in relation to sustainability and efficiency of the model will be examined with intention of achieving customer retention in this study. Quantitative research and hypothesis testing were chosen for this study. Quantitative research offers significant tools to interconnect empirical observation and mathematics to find relationships, so it mainly focuses on measurement and its processes. Data collected for this study are from medium scale survey. We applied our instrument in our interview with the managers of businesses in Klang valley, Malaysia who establish or reform their CRM activities via online social networks. This study targets IT specialists and senior Managers as the most knowledgeable participants when the key performance of CRM and the impact of CRM on business performance and customer retention become concern.

Data Analysis:

Reliability of data collection is in priority of data analysis. Therefore, data analysis in this paper divided into two parts; primary reliability of the questionnaire was tested and later statistical analysis was done for testing the hypothesis. This research employed the statistical analysis by SPSS for the required tests.

The Cronbach’s Alpha Test:

Reliability analysis of questions related to independent and dependent variable is important to ensure that validity of the result achieved. Four factors (three independents and one dependent) have been analyzed by researcher. Cronbach’s Alpha reliability coefficient has been used to validate the consistency of variables. Table 1 indicates Cronbach’s Alpha results for research variable.

Table 1: Cronbach’s Alpha Results.

Variables	Cronbach's Alpha
Customer Interaction	0.934
Customer Engagement	0.866
Churn prediction	0.888
Customer Retention	0.930
Overall Reliability	0.970

According to (Nunnally, 1978), the values in the range of more than 0.7 are perceived as reliable and acceptable for the study. From Table 1, Alpha test shows the value of above 0.7 for both individual and all variables, thus reliable measures were used for data collection.

Demographic Analysis:

The demographic analysis of the respondents has been conducted by the study. Table 2 presents the results for different categories.

The findings from Table 2 indicated that a majority of the respondents were from the male’s category. There were 104 (86.7 percent) respondents from male category, while 16 (13.3) respondents were female. Yet the result of T-test shows P-value of 0.591 which indicates there no big differences between two categories in terms of customer retention. In terms of education level, a majority of the respondents had master or equivalent. The next top group of participants had PHD. The statistics showed 9 (7.5 percent) of participants had diploma or equivalent; 27 (22.5 percent) of participants had degree or equivalent; 50 (41.7 percent) of participants had master or equivalent; and 34 (28.3 percent) of participants had PHD. According to position level, the statistics showed 39 (32.5 percent) of participants were vice president or deputy; 39 (32.5 percent) of participants were senior manager; and 42 (35 percent) of participants were executive or had equivalent position in their organization.

Based on companies’ establishment year in this study, 44 (36.7 percent) of participants were working in organizations established less than 5 years ago; 60 (50 percent) of participants were working in organizations established between 5 to 15 years ago; and 16 (13.3 percent) of participants were working in organizations established more than 15 years ago. Finally, the results for CRM implementation period showed 9 (7.5 percent) of participants were working in organizations implemented no CRM strategies; 51 (42.5 percent) of participants were working in organizations implemented their CRM less than 5 years ago; 53 (44.5 percent) of participants were working in organizations implemented their CRM between 5 to 15 years ago; and 7 (5.8 percent) of participants were working in organizations implemented their CRM more than 15 years ago. To comprehend the

effects and dependency of demographic factors on customers' retention, Chi-Square test was conducted by this study. Results are presented in Table 3.

Table 2: Respondents' Distribution Results.

		Frequency	Percent	Valid Percent	Cumulative Percent
Gender	Male	104	78.8	86.7	86.7
	Female	16	12.1	13.3	100.0
	Total	120	90.9	100.0	
Education Level	Diploma or Equivalent	9	6.8	7.5	7.5
	Degree or Equivalent	27	20.5	22.5	30.0
	Master or Equivalent	50	37.9	41.7	71.7
	PHD	34	25.8	28.3	100.0
	Total	120	90.9	100.0	
Position	Vice President or Deputy Senior Manager	39	29.5	32.5	32.5
	Senior Manager	39	29.5	32.5	65.0
	Executive or Equivalent	42	31.8	35.0	100.0
	Total	120	90.9	100.0	
Establishment Year	Less than 5	44	33.3	36.7	36.7
	5-15	60	45.5	50.0	86.7
	More than 15	16	12.1	13.3	100.0
	Total	120	90.9	100.0	
CRM Implementation Period	None	9	6.8	7.5	7.5
	Less than 5	51	38.6	42.5	50.0
	5-15	53	40.2	44.2	94.2
	Above 15	7	5.3	5.8	100.0
	Total	120	90.9	100.0	

Table 3: Chi-Square Test Results.

		Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	Gender	0.478	2	0.787
	Education Level	46.693	6	0.000
	Position	1.071	4	0.899
	Establishment Year	6.516	4	0.164
	CRM Implementation Period	22.904	6	0.001

The result of Chi-square test between gender and customer retention shows the value of 0.478 with 0.787 level of significance having 2 degrees of freedom. Result showing a significance value of 0.787 (more than 0.05) indicates that there is no relationship between customer retention and gender. The result of Chi-square test between education level and customer retention indicates the value of 46.693 with 0.000 level of significance having 6 degrees of freedom. Result showing a significance value of 0.000 (less than 0.05) indicates that there is significant relationship between customer retention and education level. The Pearson Chi square shows the value of 1.071 with 0.899 level of significance having 4 degrees of freedom for position. Since 0.899 is greater than the alpha level of 0.05 using in this study, thus the result is not significant. Two variables are more independent (unrelated) while higher level of significant reached. Thus, position is independent from the customer retention.

The result of Chi-square test between year of establishment and customer retention also indicates the value of 6.516 with 0.164 level of significance having 4 degrees of freedom. Result showing a significance value of 0.164 (more than 0.05) shows that there is no relationship between customer retention and establishment year of organization. Finally, the Pearson Chi square result for CRM implementation period shows the value of 22.904 with 0.001 level of significance having 6 degrees of freedom. Two variables are less independent (unrelated) while lower level of significant reached. According to the result, the significance value of 0.001 is low which means the two variables (CRM implementation period and customer retention) are related. In another word, the CRM implementation period of organization is not independent from customer retention. Next section presents the correlation analysis of research variables.

Correlation Analysis:

To analyze the relationship between dependent and independent variables, Pearson Correlation test was conducted by this study. The results are presented in Table 4.

Table 4: Pearson Correlation Test Results.

		Customer Retention
Customer Interaction	Pearson Correlation	0.833
	Sig. (2-tailed)	0.000
Customer Engagement	Pearson Correlation	0.760
	Sig. (2-tailed)	0.000
Churn Prediction	Pearson Correlation	0.806
	Sig. (2-tailed)	0.000

The p-value of 0.000 is considered a very low significance for relationship between customer interaction and customer retention. This small value of significance level and r value of 0.833 shows significant and positive association between customer interaction and customer retention (H1). The significance level of 0.000 between customer engagement and customer retention is considered a very low significance. This small value of significance level and r value of 0.833 shows significant and positive association between customer engagement and customer retention (H2). The p-value of 0.000 is considered a very low significance for relationship between churn prediction and customer retention. This small value of significance level and r value of 0.806 shows significant and positive association between churn prediction and customer retention (H3). In general, the respondents' involvement in the evaluating social network efficiency through CRM determinants for service organizations was detected to have a positive relationship with the overall customer retention. These relationships were reflected in the scores from Pearson correlation coefficients (Jeremy Miles, 2001) as discussed above. The closer values to 1 show the stronger relationship between CRM determinants (independent variable) and customer retention (dependent variable). To discover whether CRM determinants as factors of efficient social networks can strongly and positively associate with overall customer retention for service organizations (H4), the Linear Multiple Regression Test was applied for this study. Table 5 shows the correlations among the dimensions of CRM working as effective social network determinants and the customer retention.

Table 5: Correlations between CRM Determinants and the Customer Retention.

		Customer Retention	Customer Interaction	Customer Engagement	Churn Prediction
Pearson Correlation	Customer Retention	1.000			
	Customer Interaction	0.833	1.000		
	Customer Engagement	0.760	0.871	1.000	
	Churn Prediction	0.806	0.843	0.722	1.000
Sig. (1-tailed)	Customer Retention	.			
	Customer Interaction	0.000	.		
	Customer Engagement	0.000	0.000	.	
	Churn Prediction	0.000	0.000	0.000	.

The results revealed that the strength of relationship between dimensions of CRM working as effective social network determinants and customer retention was near to 1 with significant value of 0.000, interpreting as strong association between them. This means the higher level of online social network efficiency gains, the higher level of customer retention results (H4). Customer Interaction had the strongest correlation with the value of 0.833 whereas, Customer Engagement showing the weakest in terms of strength of relationship between the two variables with the value of 0.760.

Research Discussion:

Majority of marketing managers agree that the Internet is served as an additional channel for communicating and promoting corporate image and product information. This was expected as company and product information can be easily uploaded to the company website and it required minimum cost and management. Furthermore, it was obvious that habit has occurred in how customers use the Internet to collect information prior decision making. Consumers regularly search through internet for specific product or services than looking in the thick yellow pages. There is a great chance of strategy failure and losing valuable customers if online strategies are missed in a business. The companies, however, understood the important of Internet and online services and designed their websites embrace business profile, product description and even social networking facilities. It is largely believed that social networking is a gate way to build their company's brand image to potential customers as well as potential investors.

The website has the ability to show what the company was about, what it has achieved, what the company direction in future was and why they deserved their customers trust and confidence. Besides, social networking was used as a tool for brand enhancement for Malaysia marketing managers. Social network websites brought new opportunities for managers to discover customers' behavior and bond to the brand and the company. Being seen by the companies, the brand was enhanced, seller-buyer relationship was developed and consumer felt more secure to purchase with them. The study indicated that companies were more comfortable to use the Internet to merely provide information but not to interact with their customer through CRM implementation. It has been blamed for the majority of the Malaysians who were needed to be heard. Consumers were afraid to purchase online because they can't be really sure whether the company support them after sale or follow them for dissatisfactions rises from the products and services. Thus, it is required setting up close relationship with customers and hearing them through efficient social networking tools.

Limitation and Further Study:

The online environment and electronic business is always challenging for organizations. Service industry, in this context, faces greater challenges due to non-tangible nature of its products. These challenges involves technical issues including security, electronic payment, integration between web technology with the legacy systems connect to backend databases, social impact, and technology innovation and adoption. Each of these areas needs to be researched. A business may have the best model in the designing and implementation effective social network through CRM, yet, lack of participation from consumers via the Internet, customer retention will not be achieved. All relevant moderating variables need to be further studied to enhance the proposed model of this study. CRM determinants under social networks also show great potential for extending of flourishing business and extend market boundaries, yet it makes sense when customer centric process becomes part of business strategy. The paradigm shift to electronic markets has not yet occurred, and may not in its entirety. Obviously, a shift must first occur in buyer behaviors, with an accompanying perceived value add or reduced search cost, while sellers seek their best balance with the transaction cost advantage offer by electronic markets. This market shift would be occurred only when an equitable balance with strong customer acceptance is reached.

Several facets of this research study may be improved or extended in the future. It is also needed to investigate more on other factors regard to efficiency of social networks through CRM implementation that can lead to customer retention for service based organizations. Further study can replicate the methodology used in this research for the other geographical area. Moreover, an extensive research can be undertaken for any of the specific CRM dimensions in order to conduct an in-depth study over social networks. Furthermore same methodology can be used in future study to find out the impact of CRM on any other industrial or business sector. Moreover, an extensive empirical study can be conducted from the customers' point of view regarding the business inclination towards CRM under social networks to find out the customers' opinion towards the level of loyalty to the business.

Conclusion:

The internet, then social networks, brought new perspectives to many specialists and business owners. It is believe that social networks and subset CRM implementation can transform business interface and makes traditional business models outdated. Thus, considering a customer based strategic framework to support business owners, strategic managers, and marketers is required under dynamic environment. This research aims to explore the role of online social network through CRM determinants on customers' retention. This research attempts to investigate the efficiency of social network sites and see whether businesses can use online social network privileges to enhance their customer relationship management through customer loyalty programs and relationship identifying dissatisfied customer. Given the goal, the finding of this study revealed that to achieve high level of customer retention in service based organization, three variables including customer interaction, customer engagement, and churn prediction can be notified for effective social network and CRM implementation. The results also advocated the importance of effective social network and CRM implementation ensuring high level of customer retention for service based organizations.

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