

## Impact of Customer Relationship Management on Brand Equity: Private Hospitals in Jaffna

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#### Abstract

The primary aim of the study is to find out the impact of customer relationship management on brand equity private hospitals in Jaffna city, Sri Lanka. The study was carried out independent sample t- test, one way ANOVA (f- test) and multiple regressions to test the operational hypotheses. The survey method used in this study is a questionnaire and a total of 127 usable responses were obtained using convenience sampling technique. Finding reveled that, Customer relationship management has impact on brand equity, and there is a significant mean different in brand equity between male and female consumers. Further the researcher suggested that, private hospitals administration bodies should have to acquire skills and knowledgeable employees in the hospitals, of action plans, providing quality of services based on humanity, and consider the organizational structure. This study would hopefully benefit to the new business makers of Jaffna as well as Sri Lanka.

Key words: Brand Equity and Customer Relationship Management.

#### Introduction

In today's economy organizations can't rely on brute strength to maximize the value of their customer relationships; rather, they need enabling technologies and tools. CRM is a technology that allows organizations to track and leverage every customer interaction to maximize revenue opportunities and improve customer loyalty. But CRM does much more than just track customer interactions. It also helps organizations optimize their operations by automating routine tasks and standardizing best practices. Ultimately, CRM allows organizations to better acquire, manage, serve, and extract value from their customers while improving operational efficiency something that is critical in today's economy. CRM is aimed at building strong long term relationship that keeps the customers coming back repeatedly. It aims to help the organization build individual customer relationship in such way the both the firm and customers get the most out of exchange, providing both parties with long term benefits. Customer relationship management (CRM) can help organizations manage customer interactions more effectively to maintain competitiveness in the present economy. Enterprises most frequently feel who their main customers are, but only some use systematized media of customers' stimulation, loyalty development. Firms strive to create and manage customer relationships, several emerging trends affect the approach and tools they employ to achieve sustainable growth. These trends reflect a fundamental change in the way firms interact with the customers they have and those they want to acquire.

Definition that American Marketing Association has about brand is such as: A name, term, sign, symbol, design or a combination of them to identify the goods or services of one seller or group of sellers and to differentiate them from competitors. A brand can be act as forensic tool, logo, company recognition system, images, personalities, relationships as an added value. Importance of Strong brand create significant image in the minds of customers. A strong and famous image, increased differentiation and provides a positive effect on buyer behavior. People choose the brand not the product. Brand should be such that be family members, this believes in Aker commitment and presence. A brand can protect Customers and suppliers against competitors that are trying to provide products. The hospital market has today changed from a seller's market to a buyer's market, where, the patient is more important. A marketing orientation is the latest need for the image upgrading of the hospital. The main task of a marketing orientation is to determine the needs and wants of their customers' patients and to satisfy them through design, communication, / pricing and delivery of appropriate and competitively viable products and services. A hospital's primary objectives are usually humanitarian, philosophical or regulatory and based on some perceived need. However, the problem may arise due to the difference in patient's needs and wants.

#### **Statement of the Problem**

In modern business world, companies are increasingly concentrated on managing customer relationship. Customer relationship management may be defined as the alignment of business processes with a customer strategy that increase customer loyalty and profits overtime. Customer relationship management (CRM) can help organizations manage customer interactions more effectively to maintain competitiveness in the present economy. CRM, an integration of information technology and relationship marketing, provides the infrastructure that facilitates long-term relationship building with customers at an enterprise-wide level. Business is constant race to increase the profits, keep the current customers and gain competing for customers on a globalized market



like never before. On of the many sets of tools aimed at aiding the interaction between suppliers and customers are the customer relationship management metholodigies. CRM is aimed at building strong long term relationship the keep customers coming back repeatedly. It aims to help organization build individual customer relationship in such a way the both firm and customers get most out of exchange, providing both parties with long term benefits.

Enterprise approach to developing full-knowledge about customer behavior the growth of many hospitals leads into a dynamic and competitive environment, so that there are competitions among hospitals in attracting the customers. A variety of environment changes caused hospitals to be more responsive to the customer's desires, needs, and expectations. So the hospitals are not only focus on improving the organization's structure and service quality, but also focus on delivering value to the customers. Hospitals should be able to create the competitive advantages over its competitor in order to survive. The concept of CRM is widely used by many companies and organizations for various purposes, such as to gain customer and customer retention. Beside tangible benefits, CRM also provide intangible benefits such as customer loyalty, customer trust, and service quality. Another strategy is to build brand equity and good reputation.

Brand equity is the strength of a brand in consumer's mind, experience, and knowledge. Brand equity can be termed as an additional value to a product in thought, words, and actions of the consumers. Managing brand equity is important for hospitals, since hospitals with strong brand equity will be easier in determining marketing strategies, so it able to get the potential customers and retain the existing customers. Hospital reputation is the public view of a hospital that judged good or bad. Hospitals with good reputations are able engenders trust, belief, and support of the customers rather than having bad reputations. Some researchers argue that there is a relationship between the factors in CRM, brand equity, and reputation. Reputation, apart from brand equity, also greatly affects the customers' consideration in liking a brand, as well as the potential to strengthen or weaken the influence of brand equity on customer relationship. Brand equity, and reputation. Reputation, apart from brand equity, also greatly affects the customers' consideration in liking a brand, as well as the potential to strengthen or weaken the influence of brand equity on customer relationship. In this field, lot of studies done, even though they have focused on different aspects of the brand, especially for consumer products particularly service industry. This research is consider the relationships of brands with their customers, investigated from the experienced in patients of a private hospitals in Jaffna city.

This research is focused that to "What extent customer relationship management influences on brand equity Of Private hospitals in Jaffna city."

#### **Research Questions**

Does the Customer relationship management impact on Brand equity?

## **Objectives of the Study**

The main objective of this research is to find out the customer relationship management on brand equity in private hospital in Jaffna city.

Sub objectives are:

- To find out variables or factors that impact on brand equity.
- To examine indicators for the customer relationship management.
- To find out relationship between the dimension of brand equity (brand loyalty, brand trust, brand image, Brand preference) and customer relationship management (revisit, positive word of mouth, satisfaction).
- To suggest the government officials, educators, potential entrepreneurs and policy makers to energize one's intention toward the CRM.

## Review of Literature Brand Equity

According to Ahmad and Hashim (2011), building and properly managing brand equity has become essential for any business organizations and hospitality organizations are no exception. As such, branding has become one of the most dominant indicators in the global hotel industry performance. Customer-based brand equity is a valuable tool in brand positioning and evaluating their marketing strategy. Necessary feedback can be obtained from consumers for this evaluation will aid in: identifying service or product related problems; identifying advertising/positioning problems; and also providing feedback to the employees on where improvements need to be made. Solayappan and Jothi (2010), said that brand building is in conjunction with the customers and it is supported by a clearly defined brand identity, as the customer's value statement is the basis for all action in the organization. It ensures that customers' brand experience is coherent, accessible and satisfying at every contact. Parsa, Eidelou, Abdolahi, Maleki and Mehrabi, (2013), found that One of the most valuable assets of any



company is its brand equity. Brand equity, of customer's perspective (CBBE) is a value that subjective estimates make for a brand and if the estimate of customer is higher than the value of a brand, the company in the shadow of this value could earn more benefits from consumers. The result shows that: Except the promotion of selected elements of marketing, they are effective in CBBE dimensions. From Dimensions of brand equity, respectively loyalty to the brand, brand image, perceived quality of brand, awareness of brand. Niga and Kaushik (2011), studied that, Brand equity is important tool for associating a brand and influencing customers in making purchase decisions for particular brand of hatchback cars. Factor analysis is used to understand the underlying factors influencing customers in positive purchase intension. The study throws light on various factors of brand equity marketers much focus on to attract and retain their prospective and existing customers. Yuliani,(2011), Pointed out The growth of many new hospitals causing environmental change into a dynamic and competitive environment, so that there is competition among hospitals in attracting customers. An effort to deal with the hospital's competitive environment is to maintain a good relationship with customers. Customer Relationship Management (CRM), brand equity, and reputation are intangible assets which important to gain competitive advantages.

Ahmad and Hashim,(2011), revealed that the relationship between the multidimensionality of brand equity construct, satisfaction and loyalty in the conference market segment within the hotel industry. Solayappan, Jayakrishnan (2010), studied that Brand consideration, brand preference, brand image, brand trust, patient satisfaction and brand loyalty are the factors considered as influencing variables of positive word of mouth. Parsa, Eidelou, Abdolahi, Maleki, and Mehrabi, discussed that Dimensions of brand equity, respectively loyalty to the brand, brand image, perceived quality of brand, awareness of brand, have a significant positive effect on brand equity. Repeat a brand, have a positive and non-significant effect in brand equity. (Aaker, 1991) concluded that brand equity can be evaluated through brand loyalty, brand awareness, perceived quality, brand associations and other proprietary brand assets.

#### **Customer Relationship Management**

Patrick, (2012), revealed that the banking sector in Nigeria went through various reforms in the last few years and this has resulted in stiff competition in the industry. The link between customer relationship management and performance on the banking sector. The study built a model using continuous product development to moderate the effect that CRM has on bank performance. Urbankiene, Zostautiene and Chreptaliiciene (2008), found client relation management system by disclosing the role and place of relation marketing in formation of CRM theoretical foundations. it is more important to perceive relationship management and development. Parvatiyar, Jagdish and Sheth (2002), Customer Relationship Management is a comprehensive strategy and process of acquiring, retaining, and partnering with selective customers to create superior value for the company and the customer. It involves the integration of marketing, sales, customer service, and the supply chain functions of the organization to achieve greater efficiencies and effectiveness in delivering customer value. Yuliani (2011), the growth of many new hospitals causing environmental change into a dynamic and competitive environment, so that there is competition among hospitals in attracting customers. An effort to deal with the hospital's competitive environment is to maintain a good relationship with customers. Customer Relationship Management (CRM), brand equity, and reputation are intangible assets which important to gain competitive advantages. Shang and Shan Lu(2012), examines that empirically identifies customer relationship management (CRM) and examines its impacts on firm performance in the context of freight forwarder services. Using data collected from a survey of 144 freight forwarding firms in Taiwan, a structural equation modeling exercise was conducted to identify crucial CRM dimensions and their influences on the perceived financial performance.

Schierholz, Lutz, Kolbe, Brenner (2006), defined customer relationship management (CRM) as a complex set of interactive processes that aims to achieve an optimum balance between corporate investments and the fulfilling of customer needs in order to generate maximum profit. The model developed here answers what the different customer segments are, who more likely to respond to a given offer is, which customers are the bank likely to lose, which most likely to default on credit cards is, what the risk associated with this loan applicant is. Thomas and Burgess (2008), Customer Relationship Management (CRM) systems can help organizations manage customer interactions more effectively. Like many new technologies, CRM has been accompanied by vendor hype and stories of implementation failure. Work on critical success factors (CSFs) should encourage more appropriate implementation practice; however many CSF studies conclude with a list of factors but provide little further guidance.

Ghafari, Karjalian and Mashayekhnia (2011), investigated the relationship between different dimensions of customer relationship management and innovation capabilities in Melli Bank of Iran. Five dimensions of CRM include information sharing, customer involvement, long-term partnership; joint problem solving and



technology-based CRM are selected to measure their relationship with innovation capabilities including innovation. The Data collected were fitted into regression model. CRM principles provide a strategic and tactical focus for identifying and realizing sources of value for the customer and the firm and can guide five key organizational processes: making strategic choices that foster organizational learning, creating value for customers and the firm, managing sources of value, investing resources across functions, organizational units, and channels, and globally optimizing product and customer portfolios. George, Amoako, Emmanuel Arthur, Bandoh and Rachel Kafui Katah, (2011), the results showed that 46.3% of the respondents were females whilst 53.3% were males. Most of the respondents had heard about the hotel from newspaper advertisements (40%) and referrals from people who had used the hotel (30%). 80% of the respondents were willing to refer to the services of the hotel to other people whilst 90% of them were satisfied with the services at the hotel. The accommodation and catering facilities were mostly patronized. The perception among respondents about the hotel was good since they gave a positive review of the services. Most of the respondents agreed that they would come back to the hotel. The corporate clients were also satisfied with the services provided at the hotel with 20% having used the hotel for up to 4 years. The corporate clients said they would use the facility again, thus, customer loyalty existed among these clients as well as, the individual clients. It is recommended that the hotel improves the cooling system in the conference room and provide better business center facilities to attract more customers.

Alok and Deepti (2009) concluded the successful implementation of CRM from process perspective in a transnational organization with operations in different segments. Payne and Frown(2005), found that develop a crossfunctional, process-based CRM strategy framework that aims to help companies avoid the potential problems associated with a narrow technological definition of CRM and realize strategic benefits. Alan and Smith (2004), Findings The differentiation of the marketplace includes unique ways to collect user-based information and customized, proprietary algorithms that generate what are believed to be the best matches, based on user and matchmaking service criteria. Online dating services use statistics, data mining, and activity monitoring to provide appropriate matches; thus, differentiating their services and understanding the success of their product offering.

Mustafa (2010), Today, a brand reflects the quality of a firm's products rather than the firm's name, logo, and color etc. the brand is perception of the consumers towards the firm's. Therefore, firms are creating strong brands to be one step ahead of their rivals in a fierce competition. So, they are developing strategies to increase their brand's equity. The firms that could not develop such strategies encounters with the risk of extinction. It is significant to note that in global competition one of the important aspects of modern marketing is to create a strong brand. Industrial marketing management, (2008,) studied that customer relationship management (CRM) remains a huge investment with little measured payback. Intuition suggests that increased management of customer relationships should improve business performance. Walfried Lassar(1995),Brand equity is very important to marketers of consumer goods and services. Brand equity facilitates in the effectiveness of brand extensions and brand introductions. This is because consumers who trust and display loyalty toward a brand are willing to try to adopt brand extensions. While there have been methods to measure the financial value of brand equity, measurement of customer-based brand equity has been lacking.

The customer-based brand equity scale is developed based on the five underlying dimensions of brand equity: performance, value, social image, trustworthiness and commitment. In empirical tests, brands that scored higher on the customer-based brand equity scale generally had higher prices. Solayappan and Jayakrishnan (2010), Brands create value for their customers. The dominance of brands during the last century was obvious in all markets, particularly in the consumer market. Consumers may even switch stores, or postpone their purchase, when they cannot find their desired brand in the store where they normally shop. The extent of this behavior emergence depends on the brand and the customers, but surprisingly even store loyal consumers tend to switch stores as much as the non-store loyal consumers when they cannot find the brand they require. This attitude indicates that a bond with the brand exists, since these consumers are not willing to buy alternative brands of the same product category available in the stores.

Yulian (2011) The growth of many new hospitals causing environmental change into a dynamic and competitive environment, so that there is competition among hospitals in attracting customers. An effort to deal with the hospital's competitive environment is to maintain a good relationship with customers. Customer Relationship Management (CRM), brand equity, and reputation are intangible assets which important to gain competitive advantages. Semih onut CRM is a sound business strategy to identify the bank's most profitable customers and prospects, and devotes time and attention to expanding account relationships with those customers through individualized marketing, reprising, discretionary decision making, and customized service-all delivered through the various sales channels that the bank uses.



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## Conceptualization

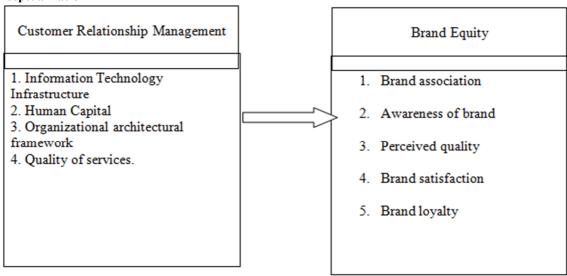


Figure No1: Conceptualization model.

Source: Author Construct.

## **Hypotheses Development**

The following hypotheses are developed for this study

H1: Customer relationship management has impact on brand equity.

H1a: An Information technology facility has impact on brand equity.

HI b: Human capital has impact on brand equity.

H1c: Quality of service has impact on brand equity.

H1d: Organizational architectural framework has impact on brand equity.

**H2:** There is a significant mean different in brand equity between male and female consumers.

**H3:** The significance means differences exist of brand equity and across the preferences of hospitals.

## Methodology

## **Date Sources**

Primary and secondary data were used for this study. Primary data were collected through the questionnaire & structured Interviews. Secondary data were collected from, texts, journals and magazines.

## Research Design and model

In this study, brand equity is a function of the information technology infrastructure, Human capital, Organization Architectural frame work, Quality of services.

 $Yi = \beta o + \beta 1 X1i + \beta 2 X2i + \beta 3 X3i + \beta 4 X4 ....$ 

According to the above model, we can construct the new research model for the study.

BE =  $\beta o + \beta 1 X1 + \beta 2 X2 + \beta 3X3 + \beta 4 X 4 \dots$ 

#### Where,

CRM – Customer relationship management (Independent variable).

BE – Brand equity (Dependent variable).

X1 – Information technology infrastructure.

X2 - Human capital.

X3 – Organization Architectural frame work.

X4 – Quality of services.



## Sampling Frame Work

In the quantitative approach, the survey instrument in the form of close-ended questionnaire was developed for the purpose of collecting the main data for the study. The study was limited to in Jaffna city, Sri Lanka. Therefore, random sampling method was adopted to select respondents. Researcher has issued one hundred and thirty (150) questionnaires for selecting the respondent. Out of one hundred and fifty (150) questionnaires, one hundred and twenty two (140) was returned; the response rate was 94%. Then, Out of one hundred and forty (140), one hundred and twenty seven (127) was used for the study purpose.

This method was most appropriate to obtain valid and compare result. This study concentrate on customers of medical service providing hospitals who belong to all the selected hospitals like Northern central hospital, Yarl hospital, Holy cross.

#### **Instrument development**

#### Questionnaire

An instrument/ questionnaire were used to collect data.

This questionnaire consists of three sections. A, B, and C.

**Section A** - consists personal details such as sex, status, age, education, monthly income, hospitals name, and length of time customer has been in brand, kinds of medical services.

**Section B** - consists of twenty statements such as information technology infrastructure, human capital, organization architectural framework, and quality of services to measure the customer relationship management.

**Section C** – consists of twenty statements to evaluate the brand equity with the help of following variables availability of awareness of brand, brand association, perceived quality, loyalty of brand, satisfaction.

Above information/ data were collected through the questionnaire which is prepared with five point likert scale ranging from excellent to poor. Then data were converted into quantitative and then the analysis was made. All items were measured by responses on a five-point Likert scale of agreement with statements.

Table 1: Demographic Breakdown of Respondents in the Study

Personal Demo	ographic Variables	No of Respondents	Percentage
Gender	Male	56	44.1%
	Female	71	55.9%
Total		127	100%
	Single	101	54.3%
Civil Status	Married	26	34.6%
Total		127	100%
	15-25	63	49.6%
	26-35	49	38.6%
Age Limit	36-45	7	5.5%
_	46-55	4	3.1%
	Above 55	4	3.1%
Total		127	100%
	Below 15000	48	37.8%
	16000-20000	30	23.6%
	21000-25000	16	12.6%
Monthly Income	26000-30000	22	17.3%
-	Above 30000	11	8.7%
Total		127	100%
	Northern Central Hospital	69	54.3%
Preferences of Hospitals	Yarl Hospital	44	34.6%
•	Holoy Cross	14	11%
Total	-	127	100%

## Results and Analysis Data Analysis Method

Various statistical methods have been employed to compare the data collected from 127 respondents. Inferential statistics which involves in drawing conclusions about a population based only on sample data. It includes multiple regression analysis, independent sample one-way Anova (f-test), independent sample t-test (t-test). And multiple regression analysis is used to find out the significant impact of Customer Relationship



Management on Brand Equity. And t-test and f-test are used to identify the significant mean different between the levels of brand equity across the personal demographic factors.

## Reliability

The internal consistency of the research instrument should be tested by reliability analysis (Ndubisi, 2006). Nunnally (as cited in Ahsan et al., 2009) suggested that the minimum alpha of 0.6 sufficed for early stage of research. The cronbach's alpha in this study were all much higher than 0.6, the constructs were therefore deemed to have adequate reliability. (Overall Cronbach alpha value was 0.895.)

#### **Multi Co-linearity**

Two major methods were used in order to determine the presence of multi-co linearity among independent variables in this study. These methodologies involved calculation of a Tolerance test and variance inflation factor (VIF) (Ahsan et al., 2009). The results of theses analysis are presented in table

**Table- 2 Test of Co linearity** 

Variable	Tolerance	VIF
Human Capital	0.572	1.747
IT	0.555	1.802
Quality of Service	0.390	2.567
Organizational Architecture	0.447	2.239

According to the table 2 Test of Co linearity, None of the tolerance level is < or equal to 1; and also VIF values are perfectly below 10. Thus the measures selected for assessing independent variable in this study do not reach levels indicate of multi-co linearity and also the acceptable Durbin Watson range is between 1.5 and 2.5. In this analysis Durbin Watson value of 2.006, which is between the acceptable ranges, Show that there were no auto correlation problems in the data used in this research.

#### Regression analysis

The purpose of regression analysis is to find out the significant impact or influence of independent variable on dependent variable (Ndubisi, 2006). In this study, Customer Relationship Management is considered as independent variable or predictor variable, and the Brand Equity is considered as dependent variable.

Table -3 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.830a	.689	.679	.32127	2.006

Table -4 ANOVA table in the Regression analysis

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	27.926	4	6.982	67.642	.000
Residual	12.592	122	.103		
Total	40.518	126			



Table- 5 Coefficients table in the Regression analysis

	Unstandardized Coefficients		Standardized Coefficients		
Model	В	Std. Error	Beta	t	Sig.
(Constant)	.512	.218		2.352	.020
Human Capital	.154	.056	.183	2.737	.007
IT	.284	.060	.321	4.736	.000
Quality of Service	.146	.074	.160	1.981	.050
Organizational Architecture	.269	.063	.324	4.288	.000

According to the Table 3 Model Summary, Adjusted R square is 0.679. It means that there is a 67.9 % of the impact of the independent variable (Customer Relationship Management) on the dependent variable (Brand Equity). From the table .4 Anova table in the regression analysis, Significant P value is 0.000. It is less than the significant level 0.05. Therefore, we can conclude that 67.9 % of the impact is in the significant level.

## Therefore, H1 as "Customer relationship management has impact on brand equity" is accepted.

From the Table. 5. Coefficients table in the Regression analysis, Beta value between Brand Equity and, IT is 0.321, Quality of Service is 0.160, Organizational Architure is 0.324, respectively, human capital 0.183. This is significant at 0.05 levels (P < 0.05). These are in significant level. The P values of these dimensions are greater than the 0.05 levels. However all the predictor variables have positive trend towards Dependent variable.

## Hence, H1a also accepted. It means that, an Information technology facility has impact on brand equity.

In contrast, we found that, there is a positive association between information technology facility and brand equity. Beta value between Brand Equity and, IT is 0.321. This is significant at 0.05 levels (P < 0.05). It reflects that, information technology facility has positive trend towards brand equity.

## Hence, H1b is rejected. It reflects that, Human capital has impact on brand equity.

Further, In contrast, we found that, there is a negative association between human capital and brand equity. Beta value between Brand Equity and, human capital is 0.183. This is significant at 0.07 levels (P < 0.05). It reflects that, human capital has negative trend towards brand equity.

Hence, H1c is accepted. It denotes that, Quality of service has impact on brand equity.

In contrast, we found that, there is a positive association between quality of services and brand equity. Beta value between Brand Equity and, quality of services is 0.160. This is significant at 0.05 levels (P < 0.05). It reflects that, quality of services has positive trend towards brand equity.

# Hence, H1d is also accepted it means that, Organizational architectural framework has impact on brand equity.

In contrast, we found that, there is a positive association between Organizational architectural framework and brand equity. Beta value between Brand Equity and, Organizational architectural framework is 0.324. This is significant at 0.00 levels (P < 0.05). It reflects that, Organizational architectural framework has positive trend towards brand equity.

## T-Test and F- Test Analysis

T –Test was used to identify the significance difference between the two variables. In this research, among the several t-tests, the independent sample t – test was used. The independent sample t – test was procedure compares means for two groups of cases. The F- Test also was used to identify the significance differences between sample means where more than two conditions were used.

## T-Test Analysis

In this study, t-test is utilized to find out the significant mean different in Brand equity among gender.

#### **Gender VS Brand Equity**

#### Table.-6. Results of Independent samples t-test

t-test variables	t-value	p-value / sig	Mean difference
Brand equity	.916	.362	.09309



**Table.-7. Results of Group Statistics** 

	Gender	N	Mean	Std. Deviation	Std. Error Mean
Brand Equity	Male	56	3.9710	.57404	.07671
	Female	71	4.0640	.56218	.06672

Source: Survey Data

According to the Table. 6 Results of Independent samples t-test, there is no significant mean different in Brand Equity between male and female consumers (P > 0.05). It means that both male and female consumers have approximately same level of Brand Equity. *Therefore H2 is rejected.* 

## F- Test Analysis

One- way ANOVA test can be used to find out the significant mean different in Brand Equity among preferences of hospitals.

Table -8 Results of Independent sample one -way ANOVA test

Statistics	ANOVA statistics		Test of homogeneity of variance		Test of equality of means	
	F-value	p-value	Levene p-value statistics		Welch statistics	p-value
Hospitals	6.154	0.003	7.1	0.001	18.136	0.000

Source: Survey data

According to the Table. 8 Results of Independent sample one- way ANOVA test, there is a significant mean different in Brand Equity across the Preference of Hospitals, (F 6.154, Sig = 0.003 less than the 0.05 levels (P < 0.05) It means that preferences of hospitals are in Northern central hospital, Yarl hospital, Holy cross, have the difference level of Brand Equity. Hence, *H3 is accepted*.

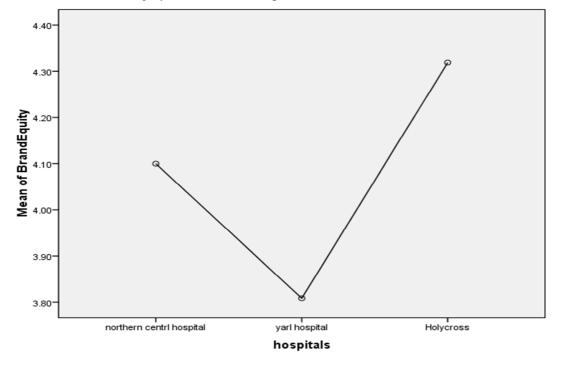


Figure 1 Mean Plot for brand equity s preference of hospitals.

## Discussion

In terms of the Multiple Regression analysis, It could be concluded that the predictor power of the human capital in customer relationship management is in the weak level. The results of the regression analysis show that the customer relationship management contributes significantly to brand equity (F = 67.642; P < 0.05) and predicts



67.9 percent of the variation found (adjusted R Square is 0.679). Further IT, organizational architecture, and quality of services, in the Customer relationship management contributes significantly to Brand equity. And also brand equity is not contributed significantly by human capital. IT, organizational architecture, quality of services, in the Customer relationship management contributes significantly to Brand equity of private hospitals in Jaffna city .Sri Lanka.

According to the Results of Independent samples t-test, there is no significant mean different in Brand equity between male and female. (P > 0.05). It means that both male and female consumers have approximately same level of Brand equity respectively 3.9710 & 4.0640. Further, there is a significant mean different in Brand equity between preferences of hospitals in their choice (P < 0.05). It means that the more preferences of hospital have the highest level of brand equity in Jaffna city.

In terms of the Results of Independent sample one- way ANOVA test, there is a significant mean different in brand equity across the preference of hospitals, (F= 6.154, Sig = 0.003) and the significant level is less than the 0.05 levels (P < 0.05). It means that consumers of Northern central hospital, Yarl hospital, Holy cross have the difference level of Brand equity approximately.

In contrast, Personal Demographic variables have the significant moderating effect on Brand equity. Under the personal demographic variables, Sex, Marital status, Family income, Educational qualification, Occupation are the key factors to moderate the Brand equity in Jaffna city.

In the quantitative approach, Questionnaire was developed by the researcher to get the valuable information from consumers in private hospitals in Jaffna city. They all together have shared the information about the brand equity and customer relationship management in private hospitals in Jaffna city. Because consumers perceive generally there are so many inconvenience behind the customer relationship management and uncertainties in the business environment (political, economic, technological, & social).

Overall, we documented that, customer relationship management has the impact on brand equity among the customers or clients in Private hospital in the Jaffna District, Sri Lanka. This underpinned findings aids to frame the policy regarding customer relationship management in terms of information technology infrastructure, human capital, organizational architectural frame work and quality of services for the private hospital management and its activities. In this stand point, this study has the potential cues for the academics, scholars and policy makers in the field of customer relationship management.

## **Conclusion and Recommendations**

## Conclusion

In this way, we can point that ability of human capital in customer relationship management and the providing the training is the best strategy to enhance the customer relationship management in private hospitals. Because human capitals, IT infrastructure, organizational architecture, quality of services are education and training generally focus on the dimensions of customer relationship management.

## Recommendations

This study recommend that the customer relationship management should be considered as the specialization of along with marketing management, human resource management, financial management and accounting in the management in any service organization in Jaffna or other part of Sri Lanka. .

When we design customer relationship management, we should focus on the following objectives from the various scholars in the customer relationship management. Objectives are as follows.

- ✓ To increase the awareness and understanding of the process involved in initiating and managing a new business and strategies.
- To increase customers awareness on medical services in hospitals.
  Establishing the new business in Convince location to become actively involved in business activities.
  To identify and stimulate the employees talent and skills.
- ✓ To develop various skills required by employees as technical, business management skills, and personal entrepreneurial skills.
- To develop the ability to recognize the business opportunities.
- ✓ To focus on the understanding of the skills needed and means available to collect the market information needed to evaluate the feasibility of a new business concept
- To acquire skills and knowledgeable employees in the hospitals, of action plans.



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