

THE IMPACT OF PERCEIVED SERVICE QUALITY, CUSTOMER SATISFACTION ON CUSTOMER LOYALTY OF MEDINBOX

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Abstract: *The following study of this paper is to examine the impact of perceived service quality, customer satisfaction on customer loyalty of Medinbox with the 103 numbers of valid respondents. This study discusses the importance customer Perceived Service Quality which influence Customer Overall Satisfaction, Customer Loyalty in a long-term. The results stated that Perceived Service Quality, Customer Overall Satisfaction, and Customer Loyalty are significantly related to each other. Recommendations are for managers of Medinbox to understand a whole picture of how does this variable related to each other, so that they could take action into improving customer Perceived Service Quality to gain higher Customer Overall Satisfaction, in order to get Customer Trust and let customers become loyal by using service quality as a competitive advantage.*

Keywords: *Customer Loyalty, Customer Satisfaction, Customer Trust, Perceived Service Quality, SERVQUAL*

1. INTRODUCTION

- 1.1. **The Company:** Medinbox is a Toulouse-based start-up company which provides medical audio-visual solution system. The system is also named Medinbox which could integrate into the operating rooms. It is created for staffs from the healthcare industry to utilize for the educational purpose.
- 1.2. **Significance of the Study:** This study aims at finding out the insights of customers and enhance long-term customer relationship and loyalty, could influence customer sustaining and retaining for the repurchase, some studies discussed that the loyal customers tend to dedicate higher repurchase frequency with higher willingness to recommend. (Talor & Hunter, 2002).
- 1.3. **Statement of Problems:** Nowadays, the growing numbers of cases (Latest IMV market report on U.S. cath lab facilities shows digital archiving technology used by 92% of cath labs, 2004) market report Contrary to what one might think, the area of video capture of surgical operations experienced strong demand. (Cerelez, 2016).
- 1.4. **Objectives of the Study :**
 - To learn how perceived service quality relates to the customer overall satisfaction of Medinbox.
 - To define the relation of perceived service quality and customer loyalty of Medinbox.
 - To study how customer overall satisfaction relates to customer loyalty of Medinbox.

2. LITERATURE REVIEW

- 2.1. **Perceived Service Quality:** The assessment of customer perception towards the service quality that provided by a firm. (Zeithaml & Bitner, 2003) . The SERVQUAL model is effective to measure the perceived service quality. (Zeithaml & Bitner, 2003).
- 2.2. **Customer Overall Satisfaction :** The level of achievement of customer consumption which evaluated by both emotional and cognitive from customer experience on a product or service. (Oliver, 1997)
- 2.3. **Customer Trust:** Customer Trust was pointed out by many studies as an important consequence of customer satisfaction and an antecedent of loyalty. (Meyer-Waarden, 2006).
- 2.4. **Customer Loyalty:** Long-term of behaviors and long-term attitudes dedicated from customer to a certain brand is the customer loyalty (Meyer-Waarden, 2006).
- 2.5. **Hypotheses:**

- H₁: There is a positive correlation between Perceived Service Quality and Customer Overall Satisfaction.*
- H₂: There is a positive correlation between Perceived Service Quality and Customer Loyalty.*
- H₃: There is a positive correlation between Customer Overall Satisfaction and Customer Loyalty.*
- H₄: There is a positive correlation between Perceived Service Quality and Customer Trust.*
- H₅: There is a positive correlation between Perceived Service Quality and Customer Loyalty.*
- H₆: There is a positive correlation between Customer Overall Satisfaction and Customer Loyalty.*

2.6 Theoretical Framework

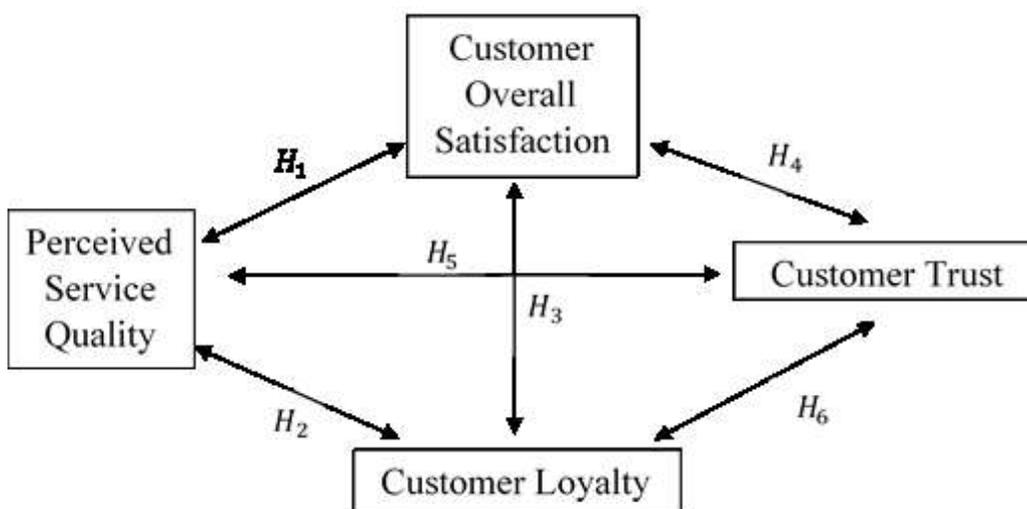


Figure-1: Theoretical Framework

3. METHODOLOGY

This study will adopt a quantitative survey with the primary data from the customers' database of Medinbox. The questionnaire is distributed by E-mails towards 1600 existing customers.

Questionnaire was constructed follow the scales and tools in the table below.

Statistical Package for the Social Sciences (SPSS) will be used as the statistical software tool to validate or reject the hypothesis.

Table-1 Measures

Measure	Scale	Tool	Source
Perceived Service Quality	5-Point Likert-scale	The SERVQUAL model	(Parasuraman, Zeithaml, & Berry, 1988)
Customer Overall Satisfaction	5-Point Likert-scale	Statement of Customer Overall satisfaction	(Westbrook & Oliver, 1981)
Customer Loyalty	5-Point Likert-scale	Several items for loyalty	(Zeithaml, Valerie, Leonard, & Parasuraman, 1996)
Trust	5-Point Likert-scale	2-items for trust	(Moorman, Deshoande, & Zaltman, 1993)

The 103 valid respond data were gathered, tested, and analyzed by several statistical methods such as T-test, Correlation or one-way ANOVA.

4. RESULTS AND DISCUSSION

4.1 Reliability Test: According to (Nunnally, 1978), Cronbach's alpha is conventional when it is above a level of 0.7.

Table-2 Measures

Measures	Cronbach Alpha	No. of items
expectation on service quality	0.704	11
perception on service quality	0.793	11
customer loyalty	0.705	4
customer trust	0.713	2

From the table above, "expectation on service quality", "perception of service quality", "customer loyalty", and "customer trust", these four measurements are reliable since all of the Cronbach alpha are higher than 0.7, which means these measurements are valid.

4.2 Pearson Correlation Test

Table-3 Hypothesis Testing

	Hypothesis	Pearson's Correlation	Significance level	No. of Respondents
H_1	PS ↔ CS	$r=.343,$	$P < 0.01$	N=103
H_2	PS ↔ CL	$r=.222$	$P < .05$	
H_3	CS ↔ CL	$r=.543$	$P < .01$	
H_4	CT ↔ PS	$r=.219$	$P < .05$	
H_5	CT ↔ CS	$r=.288$	$P < .01$	
H_6	CT ↔ CL	$r=.492$	$P < .01$	

PS = Perceived Service Quality / CT= Customer Trust/ CS = Customer Overall Satisfaction / CL = Customer Loyalty

All hypothesis are supported.

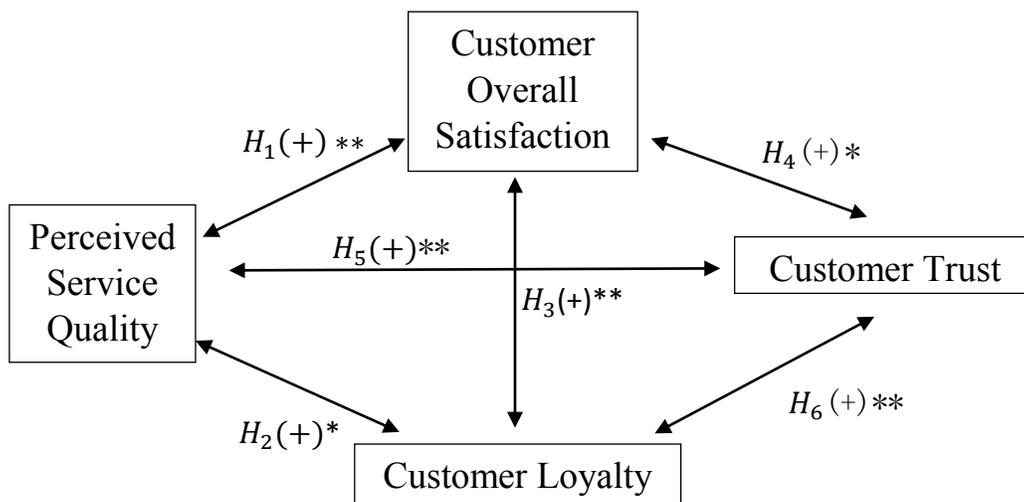


Figure-2 Hypotheses Testing

** . Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed)

To conclude the tests above, the hypothesis are all supported which about there are some positive correlations between “Perceived Service Quality”, “Customer Overall Satisfaction”, “Customer Trust” and “Customer Loyalty”.

4.3 The One-way ANOVA (The one-way analysis of variance): there was no significant difference in mean of “Customer Overall Satisfaction”, “Customer Loyalty”, “Perceived Service Quality”, and “Customer Trust” between: “respondents at different ages” or “respondents who have different jobs”.

4.4 Descriptive Data: The final numbers of respondents are 125; however only 103 out of 125 are valid answers, answers with incorrect data were eliminated. There are 61 male and 42 female respondents, 99.3% respondents are under 59 years old, and only 13 of them are under 30. And only 1 respondent is above 59. Most of the respond users are physicians with a frequency of 32 and 31.07 %. The second majority are 28 nurses which dedicated 27.18%. Then doctors group has 23 people with 22.33%. 20 technicians indicated the smallest group with 19.42% population. This system is not used for any diagnosis, and just for medical procedure recording instrument, that’s why people who have different job functions can use it. Figures 1-3 depicts the graph of the demographics.

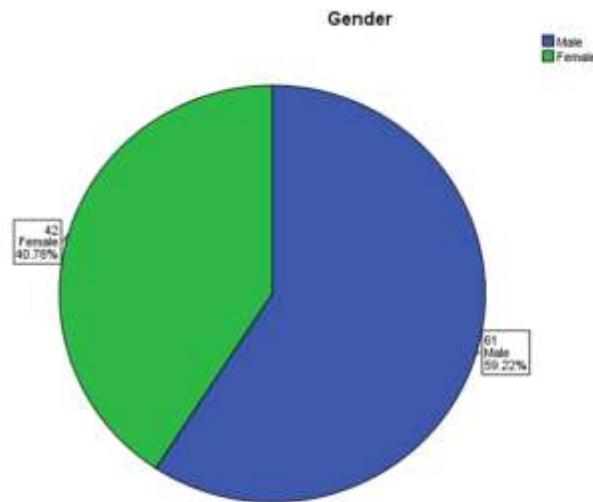


Figure-3: Gender

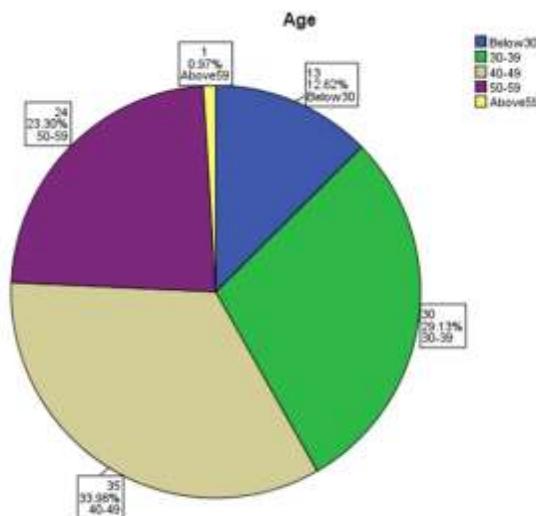


Figure-4: Age

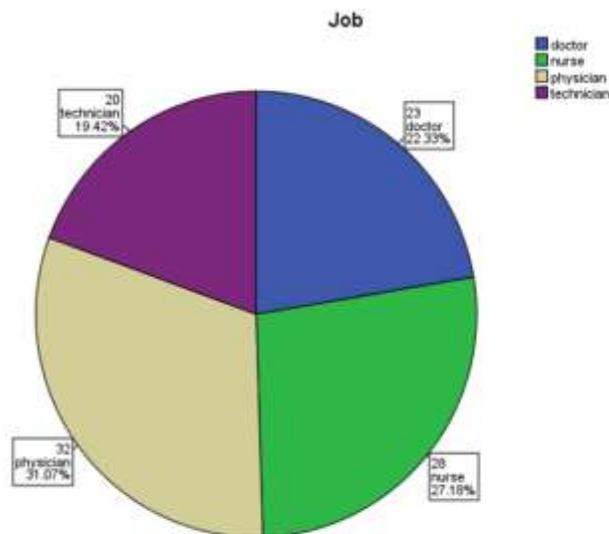


Figure-5: Job

5. CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusions

Objectives of this study were:

- To learn how perceived service quality relates to the customer overall satisfaction of Medinbox.
- To define the relation of perceived service quality and customer loyalty of Medinbox.
- To study how customer overall satisfaction relates to customer loyalty of Medinbox.

The results state that, there is a significant relationship between “Perceived Service Quality”, “Customer Overall Satisfaction”, and “Customer Trust”, but not least, the influence of “Customer Trust” also towards “Customer Loyalty”, meaning marketers need to think about ways to let customer trust in their brand in order to sustain and gain more loyal customers. Nevertheless, after T-test, to concludes, users of Medinbox have no significant difference regarding genders, 61 respondents are males, 42 are females.

Moreover, Medinbox customers have no difference in aspects of profession or age, after launched the One-way ANOVA test.

99.3 percent of our respondents are under 59 years old, 35 respondents are between 40-49 years old, 30 respondents are from 30-39 years old, 24 respondents from 50-59 years old, and 13 respondents who are below 30.

103 respondents include 32 respondents who are physicians, 28nurses, 23 doctors, and 20 technicians; there is no significant difference between these groups.

5.2 Overall Recommendation:

Medinbox should build stronger Customer Relationship management because customer trust will be constructed when they feel their interests have been taken care of by a product or service provider. (Uncles, Dowling, & Hammond, 2003) CRM is strategically used by marketers as a tool to measure, sustain, and strengthen customer relationships because it is worthwhile for a marketer to cultivate good relationships with customers, it will not only optimize profit but also benefit for brand's reputation build and help in company's future growth

5.3 For Future Study

Medinbox could use TAM model for the future study, because Medinbox is an innovative technology for operating rooms as the audiovisual management solution. It is interesting to test how users like to accept and use it. This way could also find out more about the willingness of users like to recommend as well as their loyalty. This system is not used for any diagnosis, and just for medical procedure recording instrument, that's why people who have different job functions can use it.

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