

CUSTOMER SATISFACTION FOR QUALITY OF DIGITAL CONTENT SERVICE: A STUDY IN BA RIA - VUNG TAU PROVINCE

● NGUYEN VAN VEN - TRUONG TAN LOI

ABSTRACT:

This research examines customer satisfaction with the quality of digital content service in Ba Ria - Vung Tau Province. The research's results show that service quality is an important factor for customer satisfaction. Based on this research's findings, some implications for managers and directions for future research are also proposed.

Keywords: Services, services quality, digital content service, customer satisfaction.

1. Introduction

Digital content services (DCS) have been formed and developed in Vietnam with the development of the media and information technology industries, digital information can be found, such as movies, documents, music or others is shared on the internet via Google, Facebook, youtube or other tools easily. The DCS such as digital music, digital data, digital entertainment, online information lookup, e-learning, digital libraries and museums, content development on broadband networks, content development on mobile telecommunications networks, listening to online radio, watching movies, downloading movies, digital TV, online health care, voting online, selling books online, texting winning and many more ... forming a virtual community, providing digital content information, buying and selling transactions, and enriching the daily life of local customers (Constantinides & Fountain, 2008). According to the Government (2007), the DCS include: (a) digital content distribution and distribution services; (b) digital data entry, update, retrieval, storage and processing services; (c) administration, maintenance, maintenance and warranty services for digital information content products; (d) editing, feature addition and localization services for digital content products; (e) distance training service; remote medical

examination and treatment services; Communication services provided on the network environment; (f) other digital information content services.

Currently very few studies on the Quality of DCS in Vietnam. In the context of different fields, economics, and research societies, governed by different cultural environments, clients may have different perceptions of service quality (Malhotra et al., 2005). In this study is to explore and measure factors of Quality of Services affecting the satisfaction of customers using the DCS at the Ba Ria Vung Tau Province. The following contents include: (1) Literature Review Quality of Services; (2) Theoretical background and research model, (3) research methods and results, (4) Discussion and suggestions.

2. Theoretical background and research model

2.1. Service Quality Concept

In the process of developing this research, authors base on the Root of Service Quality Concept discuss to Services Quality, such as: Lewis and Booms (1983), Gronroos (1984), Parasuraman et al. (1988), Cronin and Taylor (1992) Brady and Cronin (2001).

In general, these authors build and test the 5 components of Quality of Services: (1) reliability, (2) responsiveness, (3) assurance, (4) tangible means

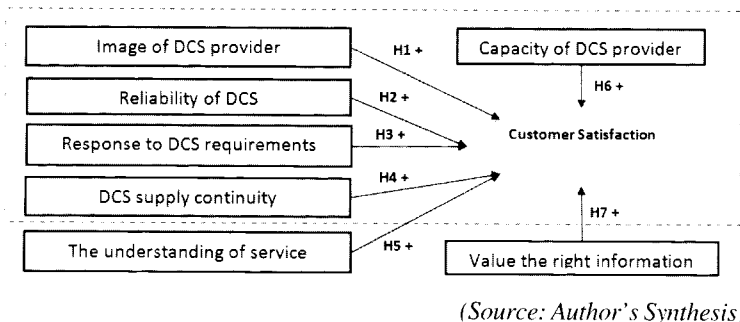
and (5) empathy, called SERVQUAL consisting of 22 variables. Although Parasuraman et al. (1991) confirmed the complete SERVQUAL scale on Quality of Services, although in the development of research on Quality of Services, many research have relied on the SERVQUAL scale to adjust and test their research. Service image and in the context of different regions to suit specific studies (Bojanic, 1991; Cronin & Taylor, 1992; Lassar et al., 2000). The SERVQUAL scale is widely used in all types of services, but using this scale in measurement research DCS is still a new problem for domestic and foreign researchers. The research which were conducted by Miranda-Gonzalez & Benagil-Palacios (2004) focuses on four factors: accessibility, speed, control and content. Bhattacharjee (2001) researched the behavioral hypothesis model to continue buying digital content, then tested experimentally and used through online customer survey. Research by Negash, Ryan and Igbaria (2003) is on the quality of webbased support system such as information quality, system quality and Quality of Services. This research's results indicate that information and system quality can affect customer satisfaction.

This research, the scale is built based on qualitative research, service theory and SERVQUAL to develop the scale in context the testing customers using DCS in the Ba Ria Vung Tau Province.

2.2. Research model

The research hypotheses model and hypotheses in Figure 1 show the relationship between Quality of DCS and customer satisfaction with the DCS in the Ba Ria Vung Tau Province.

Figure 1. Research hypothesis model



3. Research method

3.1. The scale

All scales of research concepts in the model are

multivariate scales, except for the scale of customer satisfaction that is measured by two endogenous variables. These scales use the Likert format, with five points from "1 - Strongly disagree" to "5 - Totally agree". The scale of factors that influence Quality of DCS Quality is comprised of seven components: image of DCS provider (HA), Reliability of DCS (TC), Response to DCS requirements (ĐU), DCS supply continuity (ĐB), The understanding of service attitude (CT), Capacity of DCS provider, (NL) Value the right information (GT).

3.2. Research sample

According to Hair (1998), to research sample in this research: 251 survey questionnaires passed out through Google Form, which has 237 valid responses and is used to include in the analysis, has a valid rate of 94.4%. The number of customers using DCS every day is 204 persons, accounting for 81.9% while 47 people use DCS several times a week, accounting for 18.9%. In which, the number of customers using DCS for entertainment purpose? is 190 persons, accounting for 76.3%; for research purpose is 120 persons, accounting for 48.2%; 142 people studying, accounting for 57%; Internet access exploiting digital content for other purposes accounts for 3.6%. The data shows that customers exploiting the DCS for entertainment account for the largest proportion in the remaining digital content exploitation purposes.

3.3. Data analysis and discussion of results

3.3.1. Analysis Cronbach's Alpha

The results Cronbach's Alpha coefficient is greater than 0.6 and the total variable correlation coefficient is greater than 0.3 (Table 1).

3.3.2. Analysis EFA

20 observed variables were analyzed using the Principal Component method of Varimax rotation, Bartlett's test: Sig. = 0.000 < 0.05, KMO coefficient = 0.714 > 0.5, Cumulative% = 78.715%, Eigenvalues > first. All observed variables have factor loading coefficient (factor loading) > 0.5. After analyzing the EFA we have the version and adjusted model (Table 2 and Figure 2).

3.3.3. Correlation analysis

All the independent variables correlated with the dependent variable reached the 1% significance level and between a number of independent

Table 1. Cronbach's Alpha

Mumerical order	Số biến	Nhóm biến	Hệ số Cronbach's Alpha
1	Image of Digital content Services provider (HA)	3	0,805
2	Reliability of DCS (TC)	3	0.823
3	Response to DCS requirements (ĐU)	3	0.901
4	DCS supply continuity (ĐB)	3	0.827
5	The understanding of service attitude (CT)	3	0.872
6	Capacity of DCS provider (NL)	2	0.821
7	Value the right information (GT)	2	0.814

Source: Author's calculations

Table 2. Adjusted model form the results of EFA analysis

Group of factors	Factors Name has changed	Encode	Ingredient factors					
			1	2	3	4	5	6
1	Understanding of customers	CT1	0,821					
		CT2	0,850					
		CT3	0,824					
		HA3	0,807					
2	Response to DCS Requirements	ĐU1		0,818				
		ĐU2		0,823				
		ĐU3		0,728				
		ĐU4		0,745				
3	DCS providers capacity	NL1			0,793			
		NL2			0,816			
		HA1			0,782			
		HA2			0,718			
4	DCS supply continuity	ĐB1				0,812		
		ĐB2				0,782		
		ĐB3				0,768		
5	Reliability of DCS	TC1					0,817	
		TC2					0,739	
		TC3					0,828	
6	Value information	GT1						0,756
		GT2						

Source: Author's calculations

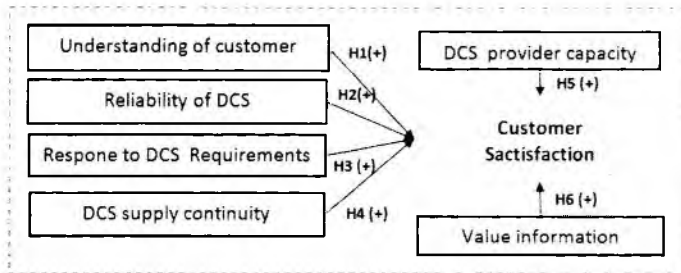
variables at the 1% significance level. The mean of the dependent variable of customer satisfaction (HL) correlated with the mean independent variable "response" (ĐU) of services (Pearson coefficient = 0.585) was quite high and with the mean setting the

lowest "provider capacity" (NL) (Pearson coefficient = 0.120), the remaining independent variables are correlated with the independent variables.

3.3.4. Multi-variable Regression analysis

Regression analysis tests the hypothesis that the

Figure 2: Adjusted model (Research Result Model)



(Source: Author's Synthesis)

model is used from 6 exploratory factors, including (see table 4), the results: $0.7 < R = 0.814^a$ and $0.5 \leq R^2 = 0.698 \leq 0.8$; Adjusted R^2 (Adjusted R Square) = 0,798; Very small F-test (Sig.) (Sig. = 0,000 < 0.05) (Table 3):

3.3.5. Analysis of Anova

The results show that the tolerance coefficient (Tolerance) is quite high (from 0.801 to 0.912) and the VIF magnification coefficient is low (from 1,012 to 1.132), less than 2 (Table 4).

3.3.6. Analysis of influencing factors

The results of regression coefficient estimation show the impact of the independent variables on the life satisfaction in order: CT -> HL; ĐB -> HL; NL -> HL; TC -> HL; ĐU -> HL; GT > HL) corresponding to the regression coefficient B is 0.279, 0.296, 0.136, 0.293, 0.239, 0.219. In the condition of the other constant, if one of the factors including GT, CT, ĐB, NL, TC, ĐU increases by 1

Table 3. Summary Multi-variable regression model

Model Summary ^b										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.814 ^a	.698	.798	.3291	.695	97.634	5	214	.000	1.845
a. Predictors: (Constant), GT, CT, NL, S DB, TC, ĐU										
b. Dependent Variable: HL										
ANOVA ^b										
Model		Sum of Squares	Df	Mean Square	F	Sig.				
1	Regression	52.878	5	10.576	97.634	.000 ^a				
	Residual	23.180	214	.108						
	Total	76.058	219							
a. Predictors: (Constant), GT, CT, NL, ĐB, TC, ĐU										
b. Dependent Variable: HL										
Coefficients ^a										
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics			
		B	Std. Error	Beta			Tolerance	VIF		
1	(Constant)	-.025	.170		-.087	.930				
	TC	.279	.032	.209	5.365	.000	.867	1.128		
	ĐU	.296	.029	.429	10.101	.000	.871	1.132		
	NL	.136	.026	.239	6.129	.000	.801	1.029		
	ĐB	.293	.029	.269	6.528	.000	.916	1.089		
	CT	.239	.028	.379	9.412	.000	.905	1.036		
	GT	.219	.021	.228	5.429	.000	.912	1.012		
a. Dependent Variable: HL										

(Source: Author's Synthesis)

Table 4. Analysis of Anova

ANOVA ^b						
Model	Sum of Squares	Df	Mean Square	F	Sig.	
1	Regression	52.878	5	10.576	97.634	.000a
	Residual	23.180	214	.108		
	Total	76.058	219			
a. Predictors: (Constant), GTTT, SCT, SDB, NLCC, DTC, SDU						
b. Dependent Variable: HLKH						

Source: Author's calculations

unit, HL will increase by a corresponding amount, the regression coefficient.

3.3.7. Test the hypotheses

The test results show that the hypothesis at the statistical level of $0.000 < 0.05$, the positive correlation between (1) Understanding of customer (CT) and Customer satisfaction (HL) is $\beta = 0.209$; (2) Response to DCS Requirements (ĐU) and Customer Satisfaction (HL) is $\beta = 0.429$; (3) DCS provider Capacity (NL) and Customer satisfaction (HL) is $\beta = 0.239$; (4) The DCS supply continuity (ĐB) and Customer Satisfaction (HL) is $\beta = 0.269$; The correlation between (5) Reliability of DCS (TC) and customer satisfaction (HL) is $\beta = 0.379$; (6) Value of information (GT) and Customer satisfaction (HL) is $\hat{\alpha} = 0.228$.

4. Discussion

Cronbach's Alpha's eight of concept scales included in analysis are reliable and satisfactory. Therefore, all 22 observed variables are retained for exploratory factor analysis (EFA), the result: the observed variables are correlated in the population, consistent with the research data, and explain 79.8% variation of data and 6 extracted factors are grouped with new group compared to the study hypothesis (see Table 4).

In correlation analysis, the results indicate the influence of the independent variables on customer satisfaction. The technique of multivariate regression analysis results: the relationship between the variables in the model is closely correlated, 68.8% of the variation of the dependent variable "the satisfaction of science" on the quality of services is explained. The linear regression equation is:

$$HL = -0.025 + 0.279 TC + 0.296 ĐU + 0.136 NL + 0.293 ĐB + 0.239 CT + 0.219 GT$$

The analysis of variance shows that the

phenomenon of multicollinearity between the independent variables in this regression model is not significant. Continuing to analyze the influencing factors: when the customer using the DCS feels conditions are required for good support, the higher the understanding, the greater sense of comfort, peace of mind, and assurance. many benefits, feel good service provider capacity, modern service delivery system, large-scale, reputation, stronger supply capacity, feel fast, responsive Internet access. According to the procedures, the exploitation instructions are clear, receiving valuable and new information, which helps to solve the need for decision-making at work, their satisfaction on the quality of civil services is high. Finally, testing hypotheses for the results of all hypotheses H1, H2, H3, H4, H5, H6 are accepted.

On the other hand, a recent study by Nguyen Thi Phung (2018) in Ho Chi Minh City focuses on surveying 7 factors affecting customer satisfaction using services. The regression analysis shows that the appropriateness of the model is 68.8%, which means that only 68.8% of the variance of the dependent variable "customer satisfaction" is explained by the factors in paradigm. Therefore, 31.2% of the variance of the dependent variable is explained by factors outside the model. In this study, there is an adjustment to clarify the scale and in the context of Ba Ria - Vung Tau province verified the appropriateness of 7 factors and determined that Nguyen Thi Phung's research model has similar meanings, At the same time, this study verifies the accuracy of the factors and data sets up to 79.8%, this shows that up to 30.2% of the components have not been mentioned in the research model or data set. The data is incomplete to propose a next research direction to supplement the model more completely.

5. Solutions

This study shows that SERVQUAL can be applied in the field of DCS in the Ba Ria - Vung Tau Province. However, we need to make some adjustments and additions accordingly. The research results show that Quality of DCS includes six components: (1) Understanding of customer, (2) Response to DCS Requirements; (3) DCS provider capacity; (4) DCS supply Continuity, (5) Reliability of DCS; (6) Value information. Research results show that if the Quality increases, it will increase the level of customer satisfaction. To enhance Quality of DCS, business managers providing service services should pay attention to the six components of Quality mentioned above. Recommended study on the need to secure broadband Internet access. Because the transmission line of service providers directly affects the customer's perception of Quality of digital content providers. Therefore, attention should be paid to measuring bandwidth traffic and capacity upgrades should be done and maintained regularly, especially building an online customer care system that records feedback of customers using the service. This study also conveys a message about the need for quality IT human resources, capable of programming, network administration and database administration, and dedicated service, courtesy, and quick for customers. Digital content enterprise

administrators must also pay attention to the variety of DCS products, pay attention to always update new information content with high information value. When providing DCS, administrators also pay attention to factors of personal information security. In short, corporate administrators in the field of digital content in the Ba Ria - Vung Tau Province should implement the work of planning, building and implementing the strategy to improve the quality of digital content service, regularly supplementing and updating the strategic plan to improve Quality to bring customer satisfaction.

As we all know, a high-quality consumer-perceived service will be an important competitive advantage of that service. Therefore, if capturing the factors affecting customer satisfaction to the quality of civil services, it will be easier for business people in the field of civil services to improve the quality of their service to meet more and more. requirement of customer. Finally, the theoretical model of factors affecting customer satisfaction about the quality of customer service services of the customer in this research contributes to the theoretical system of the quality of a particular service sector. Through this research result, researchers can see this model as a reference model for their studies in the context of other research on service quality, especially in new areas of Vietnam ■

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SỰ HÀI LÒNG CỦA KHÁCH HÀNG ĐỐI VỚI CHẤT LƯỢNG DỊCH VỤ NỘI DUNG SỐ: NGHIÊN CỨU TẠI TỈNH BÀ RỊA - VŨNG TÀU

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TÓM TẮT:

Nghiên cứu này nhằm đánh giá sự hài lòng của khách hàng đối với chất lượng của dịch vụ nội dung số tại tỉnh Bà Rịa - Vũng Tàu. Kết quả nghiên cứu này cho thấy chất lượng dịch vụ là nhân tố quan trọng trong sự hài lòng của khách hàng. Dựa trên kết quả nghiên cứu, một số đề xuất đối với các nhà quản lý và hướng nghiên cứu cho các nghiên cứu trong tương lai đã được đưa ra.

Từ khoá: Dịch vụ, chất lượng dịch vụ, dịch vụ nội dung số, sự hài lòng của khách hàng.