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Design of Web-Based Promotion

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A B S T R A C T S

The purpose of this study is to determine customer satisfaction by looking at the variables of interaction quality, system quality, and usability. This is done so that Chocolatier Dessert, as one of the desserts and snacks retailers, can compete and grow, so a website is designed to promote the goods produced. The method used the waterfall method, which works on the essence of a system that is done sequentially or linearly. The data was collected by distributing a list of questions to 50 respondents. The data collected was then processed using the SPSS application to test its validation and reliability. It is done to measure customer satisfaction and the variables that influence it. The results show that promoting the chocolatier through the website was very effective where the interaction quality and information system variables affected customer satisfaction, while usability did not. From the results of this study, it can be seen to maintain customer satisfaction. It is necessary to pay attention to the interaction system and information systems in promoting the Chocolatier Dessert.

A R T I C L E   I N F O

I. INTRODUCTION

Promotion is a sales target to increase company profits (Jackson and Shepotylo, 2018). Promotion is also a part of marketing which has a very important role. Various media can currently be used to promote products, including through the internet, which has become the most popular medium for promotion (Lai and Vinh, 2013). Promotion using the internet can be done using the website, which acts as a means of innovation in promotion (Kurcheeva and Bakaev, 2017).

A large number of internet users has increased the use of websites as a promotional medium. Several studies have been carried out regarding the use of websites as promotional media, including research focused on evaluating the quality of websites created and used as promotional media (Aydin and Kahraman, 2012). The same thing is stated: website media is very effective for promoting and marketing the evaluation of products being sold (Wiranata and Hananto, 2020). Other researchers stated that the website is a means to optimize promotion in small businesses (Simmons et al., 2011).

This study aims to determine the effect of using the website in promoting Chocolatier Dessert's products. The variables studied are related to interaction and information systems as well as usability on customer satisfaction. The website becomes a media for promotion and evaluation in chocolatier dessert marketing; the evaluation process is carried out by looking at customer satisfaction.

2. PROPOSED METHOD

The research method used the Waterfall method to discover the website's effectiveness when used as a promotional media. There are four variables studied: customer satisfaction as the dependent variable, then the interaction system variable, information systems, and usability. To evaluate consumer satisfaction, we collected data by asking several questions to consumers who act as respondents.

The waterfall method is divided into three stages: requirements analysis, system, and software design, and implementation and unit testing. This method is done by working on the essence of a system which is done sequentially or linearly. Therefore, each stage must be completed in full before proceeding to the next stage to avoid repetition of these stages.

Website design research using the Waterfall method was carried out in Bandung Regency with an age range of 17-25 years. Using this method, the data collection process is carried out by distributing a list of questions related to the research to 50 respondents. It is so that the authors get feedback from consumers for research purposes. There are four types of variables taken, namely users (usability), information quality, interaction quality, and user satisfaction (Barnes and Vidgen, 2002). After formulating the questionnaire results that have been taken, the questionnaire is then tested for validity and reliability. If the research questionnaire is invalid and reliable, the questionnaire is redesigned. If the questionnaire is valid and reliable, it can only be implemented into the testing method, and finally, the research results are obtained (Figure 1).
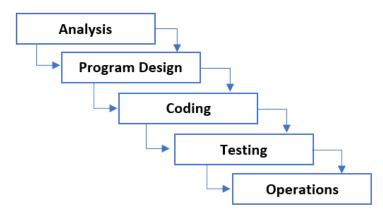
Fig. 1. Waterfall Method

The waterfall method consists of the following stages:

2.1 Analysis

The researcher collects information using interview techniques about the existing system for the analyst. By analyzing an existing system, the researcher can find out the problems contained in the system. Problems that exist in the existing system that is where the store product marketing system is still manually that is by marketing from one person to another, to make product purchase transactions between buyers and sellers must face each other face to face, the store do product promotion by opening a stand at in front of the store and making sales and product reports in the store are still manual.

2.2 Design

The researcher designed the program interface using the Sublime Text application as a text editor using the PHP programming language. The researcher designed the master admin homepage view, the admin master store data management view, the master admin purchase transaction management view.

The admin postage display, the admin product manages data display, the store admin chat view, the store admin dashboard view, the store admin product report display, store admin sales report display, customer homepage view, display customer transaction management, customer shopping cart display, and initial customer display.

2.3 Coding

This research used PHP and Html programming languages to translate the design into a language understood by computers. Code generation on the visitor's interface page to display the store's items, registration of visitors as customers, customer login forms. It was then Generating code on the customer interface page to display the product being sold.

2.4 Testing

Researchers tested the application using Google Chrome and Apache as its servers. Researchers tested the visitor interface page, customer interface page, customer transaction page, store admin interface page, store admin item order page, store admin transaction page, print sales report, and product report. By testing, the researcher can find errors that might occur so that researchers can make improvements, and also, researchers can ensure that the results applied have been achieved.

3. RESULTS AND DISCUSSION

Promotion using website media has many advantages, including a wider reach. The evaluation of using the website is also easier to monitor so that customer satisfaction can be monitored properly (Figure 2).

The definition of website quality is how well a website is designed and how well it meets user satisfaction (Barnes and Vidgen, 2001). This study's variables include user youth (usability), information quality (information quality), interaction quality, and user satisfaction. The summary of respondents' answers on the indicators for each variable can be seen in Table 1 to 3.

Fig. 2. Website Appearance

Table 1. Questionnaire

No	Variable Name	Question List
1	X1	I feel the Chocolatier dessert website is clear and easy to understand
2	X2	The Chocolatier dessert website provides complete information and composition used in detail
3	X3	Chocolatier website provides convenience in the service of shipping goods by order and can attract the attention of visitors
4	Y	I am satisfied with the overall service available on the Chocolatier website

Table 2. Results

Statement	1	2	3	4	5	Total	Mean
Usability quality	0	0	8	33	9	201	4,02
Information quality	0	0	15	23	12	197	3,92
Interaction quality	0	0	8	32	10	202	4,04
User satisfaction	0	0	5	32	13	208	4,16

The results of processing the questionnaire will then be tested for validity to determine whether each variable used can measure what should be measured and show the

extent to which a measuring tool can be trusted or reliable. The validity test is calculated with the help of the SPSS application. The product-moment/Pearson formula does the validity test.

Table 3. Validity Results

Variable	R count	R table	
Usability quality	0,676	0,279	VALID
Information quality	0,884	0,279	VALID
Interaction quality	0,837	0,279	VALID
User satisfaction	0,833	0,279	VALID

This validity test uses the r table limitation with a significance of 0.05 and a 2-tailed test. Questionnaire items are said to be valid if the value of r count> r table with the value of n = 50 can be obtained df = 50, then the r table obtained is 0.279. It means that if the correlation value is greater than the specified limit, then the item is considered valid, whereas if it is less than the specified limit, then the item is considered invalid (Boudreau et al., 2001). Based on the correlation results, it can be concluded that all variables have a calculated r value (the value in the Corrected Item Total Correlation) that is greater than the value of the r table (obtained from table r). The conclusion obtained is that all of the questionnaire variables are valid.

The reliability test uses the Cronbach's alpha method to see whether there are inconsistent indicators (Diedenhofen and Musch, 2016) (Pangaribuan et al., 2020). The use of Cronbach's alpha method was chosen because this method is most often used to test the reliability of the questionnaire. According to Priyatno, "reliability of less than 0.6 is not good, while 0.7 is acceptable and above 0.8 is good". it can be stated that the questionnaire's reliability is reliable. It shows from the value of the reliability coefficient ≥ 0.7. The reliability test results with the Cronbach Alpha formula can be seen in Table 4.

Table 4. Reliability statistic

Cronbach's Alpha	N of Items
0.822	4

Based on the results of the reliability analysis shown in the table. With the Cronbach Alpha technique, it can be seen that the Cronbach Alpha value is 0.863 with several statements of 4. Because the value is more than 0.6, it can be concluded that the indicator on the quality-of-service interaction is reliable.

In Table 5, it can be seen that of the three Independent variables, only the X2 (Information Quality) and X3 (Interaction Quality) variables are significant at α = 5%. It shows from the significant probability that the variable has a value below 0.05.

Thus, the variable X1 (Usability) is excluded from the model because it is insignificant or does not affect the variable Y (User Satisfaction) and the value of the regression constant. Therefore, re-regression was carried out without involving the constant variable X1 (Usability). The results of the regression analysis are shown in Table 6 and 7.

Table 5. Coefficient

Model		Unstandardized Coefficients		Standardized Coefficient Beta	t	Sig.
		B	Std. Error			
1	(Constant)	1.313	.464		2.829	.007
	VAR00001	-.018	.111	-.018	-.164	.871
	VAR00002	.342	.106	.433	3.227	.002
	VAR00003	.390	.125	.403	3.130	.003

a. Dependent Variable: Y

Table 6. Coefficients

Model		Unstandardized Coefficients		Standardized Coefficient Beta	t	Sig.
		B	Std. Error			
1	(Constant)	1.272	.388		3.275	.002
	VAR00002	-.336	.100	.426	3.372	.002
	VAR00003	.387	.122	.401	3.172	.003

a. Dependent Variable: Y

Based on the ANOVA table or F test, the calculated F value of 30.083 was obtained with a significant value of 0,000. Because the significant value is smaller than 0.05, it can be concluded that the overall model can be considered good, and the independent variables X2 and X3 together affect the Y (User Satisfaction) variable.

Table 7. Test results F

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	9.327	2	4.694	30.083	.000[b]
	Residual	7.333	47	.156		
	Total	16.720	49			

a. Dependent Variable: Y
b. Predictors: (Constant), VAR0003, VAR0002

Based on the research results, it can be said that website media is very effective for marketing chocolatier dessert products. The evaluation of user satisfaction is also measurable where the interaction system and information system variables affect customer satisfaction, while usability does not affect. Consumer satisfaction is important because it is the basis for the continuity of the Chocolatier Dessert retail.

CONCLUSION

The development of the culinary world in Indonesia has developed very rapidly. The actors in this field must be creative and innovative in selling their products because there are many competitors. One thing that must be considered is the promotion of the products produced. Chocolatier dessert is a product produced to introduce the product; promotion is carried out through the media website. From the existing media, the research also evaluates the use of the website by measuring user satisfaction. In measuring user satisfaction, the variables that influence it are the inspection system and the information system. Usability does not affect user satisfaction.

Gregg needs to utilize the position as the market leader to promote the benefit of high-quality healthy food, use the revenue to start on research for healthy products innovation, use the healthy breakfast trend to introduce vegan breakfast menu, add more drink option for the breakfast deal to make it more convenient for people to commute, keep focusing on the quality and taste development with a competitive price, add more menu that correspondent with consumer demand, and try to efficiently spend the revenue based on priority to cut operating cost.

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