



A Cause And Effect Study Of Digital Marketing E- Quality Service On The Customers Trust & Consumer In Online Shopping Behavior

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Abstract:

This study aims to find the effect of Digital Marketing E- Quality Service on the Customers Trust & Consumer in Online Shopping Behavior. The exploratory research design is used for the exploration of new facts, new knowledge, and new information on online shopping trends. The descriptive research design is used to test the hypothesis. A total of 345 respondents are selected for the study of customer satisfaction in online shopping. The significance level is set at 5% in this study. The correlation and regression analysis are used for the cause-and-effect relationship between independent and dependent variables. The bar and pie chart are also used for the pictorial presentation of the data. The SPSS 23.0 version software is used for the data analysis. The findings concluded that there is an effect of digital marketing e- quality service on consumer trust and customer satisfaction in online shopping

Keywords: Digital Marketing E Quality Service, Customers Satisfaction, Customer Trust, Online Shopping Behavior.

Introduction

Digital marketing is evolved at a very fast growth rate in the field of consumer buying behavior. Consumers are learning about the application of digital marketing in the shopping of goods and services. Customer satisfaction is an integral part of any organization because the customers are the king in every business whether organizations are dealing with services or goods. In this study, the effect of Digital Marketing E- Quality Service on the Customers Trust & Consumer in Online Shopping Behavior has to be checked. The customer's satisfaction is responsible for the various factors such as products quality, product packaging, price of the product, distribution of the products, promotion of the products, after-sales service of the products, warranty and guarantee of the product, replacement policy, behavior of sales executive or customer care executive, delivery of the products, self-respect to own the product, social recognition, etc. The good service by the

organization improves the customer's satisfaction and loyalty towards the company. In the digital era, online shopping has gained tremendous response because it is easy to shop the products and services at the doorstep, at the convenience of the customers in the difficult time of the COVID pandemic.

Literature Review

Consumer characteristics such as generational age, degree of Internet usage, whether consumers like to have many choices, and whether they enjoy shopping moderate the relationships between consumer beliefs and online purchase behavior. **(Punj, 2011)** The significant relationship between consumers' purchase decisions and internet security of the online marketing activities exists in that potential online buyers consider the transaction security and the fulfilment process as much more essential issues than product prices or general company information making consumers being more cautious to avoid being defrauded. **(Gabriel & Kolapo, 2015)** Convenience was another significant factor when it came to online shopping as people preferred to stay at home and shop as supposed to going out and browsing through stores. **(Dost et al., 2015)** The influence of the digital channels not supporting in the change of opinion of customer towards purchasing a product, but in near future, the digital channels influence the customer purchase opinion as there is a consideration for digital channels among customers are evident. **(Mahalaxmi & P. Ranjith, 2016)** The research established that TV advertising is more reliable than internet advertising therefore it concludes that internet advertising contributes most to consumer behavior and that internet advertising was a significant factor in predicting consumer behavior. **(DrPriyaKalyanasundaram, 2017)** Changing buying behavior warrants the marketers to understand the youth in a better way to devise suitable marketing strategies to retain the present and to capture the potential market, so that the market can move on from the mere customer-oriented marketing approach to Technological Customer Oriented Marketing approach in the near future. **(Sivasankaran, 2017)** Most of the Customers are satisfied with the products purchased through Digital Channel. A company can do a lot more through Digital Marketing if they understand and delivers what consumer needs. **(Deekshith & Kinslin, 2016)** The study indicated that consumers of tier-III cities do shop online supporting the earlier report by eBay's India Census (2014) and convenience elements influence consumers positively to buy online. **(Sonwaney & Chincholkar, 2019)** In this study, the authors analyzed different definitions of the S-commerce concept and defined its key elements. They also offered a clear perspective with regards to the consumer's online IBB and identified the major differences between impulse buying behavior, unplanned or planned (rational) buying. Moreover, they presented the main characteristics of impulse buying. **(Abdelsalam et al., 2020)**

Research Gap

Based on the literature review, the research gaps are identified as, there was little work carried out on the effect of Digital Marketing E- Quality Service on the Customers Trust & Consumer in Online Shopping Behavior, hence this was the main research gap of the said

study.

Objectives

- To find the effect of digital marketing e- quality service on the consumer satisfaction in online shopping
- To know the effect of digital marketing e- quality service on the consumer trust in online shopping
- To check the effect of consumer trust on consumer satisfaction in online shopping behavior.

Hypothesis

- H0₁: There is no effect of digital marketing e- quality service on consumer satisfaction in online shopping.
- H1₁: There is an effect of digital marketing e- quality service on consumer satisfaction in online shopping.
- H0₂: There is no effect of digital marketing e- quality service on consumer trust in online shopping.
- H1₂: There is an effect of digital marketing e- quality service on the consumer trust in online shopping.
- H0₃: There is no effect of consumer trust on consumer satisfaction in online shopping.
- H1₃: There is an effect of consumer trust on consumer satisfaction in online shopping.

Pilot Study

The pilot study is conducted on 34 respondents (which is 10%) of the total sample size. The reliability and validity are checked in the pilot study stage.

Reliability and Validity

The reliability is checked using Cronbach's alpha tools. The minimum acceptable value of Cronbach's Alpha is 0.700 for the scale items of the different constructs. The acceptable value of Corrected item-total Correlation (CITC) is 0.300 for the finalization of items (observed variables) under different constructs. The content validity is checked by showing the structured questionnaire to the experienced professional of digital marketing and online shopping behavior. The three constructs that are Digital Marketing E-Quality Service, Customer Trust, and Customer Satisfaction are checked under reliability analysis. The reliability analysis is performed one by one on each construct. The SPSS 23.0 outputs are as follows:

Table 1: Case Processing Summary

		N	%
Cases	Valid	34	100.0
	Excluded ^a	0	.0

	Total	34	100.0
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From the case processing summary table 1, it is clear that in the pilot study; only 34 respondents are selected, and after checking the reliability of the construct, the full data are collected.

Scale: Digital Marketing E- Quality Service (DMEQS)

Table 2: Reliability Statistics-Digital Marketing E- Quality Service

Cronbach's Alpha	N of Items
.890	5

From the Reliability Statistics table 2, it is clear that the Cronbach’s Alpha value is (0.890) which is much better than the acceptable range (0.700), hence the digital marketing e-quality service construct is a reliable scale for further statistical data collection and data analysis.

Table 3: Item-Total Statistics-Digital Marketing E- Quality Service

	SMID	SVID	(CITC)	CAID
1 DMEQS	12.59	18.492	.785	.854
2 DMEQS	12.47	19.651	.649	.887
3 DMEQS	12.76	20.004	.792	.856
4 DMEQS	12.68	21.013	.613	.892
4 DMEQS	12.56	17.890	.845	.839

Where Scale Mean if Item Deleted(SMID), Scale Variance if Item Deleted (SVID), Corrected Item-Total Correlation (CITC), and Cronbach's Alpha if Item Deleted (CAID), From the Item-Total Statistics table 3, it is clear that all the CITC values are above 0.300, hence all five items are retained for the next level of analysis. There is no need to delete any item because the Cronbach’s Alpha value will not be further improved, therefore it can be concluded that the digital marketing e-quality service construct is a reliable scale for further statistical analysis. The five observed variables under digital marketing e-quality service are 1 Digital marketing is a new trend in the online shopping, 2 The low cost of digital marketing gain the importance by the e-commerce companies, 3 Digital marketing, and e-quality service are interlinked, 4 Digital marketing uses the artificial intelligence technologies, and 5 Smartphones and digital marketing are complementary to each other.

Scale: Customer Trust(CT)

Table 4: Reliability Statistics-Customer Trust

Cronbach's Alpha	N of Items
.913	5

From the Reliability Statistics table 4, it is clear that the Cronbach’s Alpha value is (0.913)

which is much better than the acceptable range (0.700), hence the customer trust construct is a reliable scale for further statistical data collection and data analysis.

Table 5: Item-Total Statistics-Customer Trust

	SMID	SVID	(CITC)	CAID
1 CT	12.94	21.512	.752	.899
2 CT	13.09	22.628	.731	.903
3 CT	13.15	21.341	.834	.882
4 CT	12.94	23.209	.658	.917
5 CT	13.18	19.059	.923	.860

From the Item-Total Statistics table 5, it is clear that all the CITC values are above 0.300, hence all the five items are retained for the next level of analysis. There is no need to delete any item because the Cronbach's Alpha value will not be further improved, therefore it can be concluded that the customer trust construct is a reliable scale for further statistical analysis. The five observed variables under customer trust are 1 I prefer to purchase branded products in online shopping, 2 The brand value is very important in online shopping, 3 The e-commerce company's goodwill is important to buy products online, 4 I always do the repeat purchase in online shopping, and 5 I can review/ track/ cancel/ track my order in online shopping.

Scale: Customer Satisfaction (CS)

Table 6: Reliability Statistics-Customer Satisfaction

Cronbach's Alpha	N of Items
.923	5

From the Reliability Statistics table 6, it is clear that the Cronbach's Alpha value is (0.923) which is much better than the acceptable range (0.700), hence the customer satisfaction construct is a reliable scale for further statistical data collection and data analysis.

Table 7: Item-Total Statistics-Customer Satisfaction

	SMID	SVID	(CITC)	CAID
1 CS	12.59	21.037	.798	.907
2 CS	12.85	22.857	.769	.912
3 CS	13.03	21.908	.863	.894
4 CS	12.62	21.758	.765	.913
5 CS	12.79	22.047	.816	.902

From the Item-Total Statistics table 7, it is clear that all the CITC values are above 0.300, hence all five items are retained for the next level of analysis. There is no need to delete

any item because the Cronbach's Alpha value will not be further improved, therefore it can be concluded that the customer satisfaction construct is a reliable scale for further statistical analysis. The five observed variables under customer satisfaction are 1 In online shopping, the product quality helps towards the customer satisfaction, 2 Good replacement policy increase the customer satisfaction in online shopping, 3 Variety of option increase the customer satisfaction in online shopping, 4 Online shopping saves lots of time which result in the customer satisfaction, and 5 Customer satisfaction is more in online shopping because the prices are low as compared to traditional shopping.

Data

Primary and secondary data are collected for the said study. The primary data are collected from 345 respondents through the structured questionnaire. The two main scales are used in the questionnaire. The nominal scale is used for the gender and age questions and 5 points Likert scales are used for the various items of customer's satisfaction in online shopping behavior.

Methodology

The methodology of this research is discussed under the research process and research design. The Research Process involved the observation, literature Review, formulation of the Questionnaire, theory formulation, formulation of hypotheses, data collection, data analysis, and conclusion of the objectives. The research design involved the type of Research, unit of analysis, the time horizon of the study, development of the questionnaire, content validity, pilot study, reliability of measurement instruments, the population of the study sample of the study, data collection, data editing, coding, and data analysis using the various parametric and non-parametric test. The exploratory research design is used for the exploration of new facts, new information, new knowledge which has helped in the formulation of a hypothesis and descriptive cross-sectional research design is used to test the hypothesis in a selected period. The content validity is checked by showing the questionnaire to the expert. The reliability is checked using Cronbach's Alpha. The population of this study was selected as 2500 customers from Uttar Pradesh. The sample size was calculated by Slovin formula $n = N / (1 + Ne^2)$; where, n = sample size, N = Total population, e = Error Tolerance. $n = 2500 / (1 + 2500 * 0.05^2) = 344.8$. (Approximately 345) The non-probability snowball sampling techniques are used in this survey. In this study, correlation and regression are used because there is a cause and effect relationship among the three constructs that is digital marketing e-quality service, customer trust, and customer satisfaction in online shopping behavior. The pie and bar chart is used for the pictorial presentation of the results and findings. The data analysis is performed using statistical software SPSS 23.0 version.

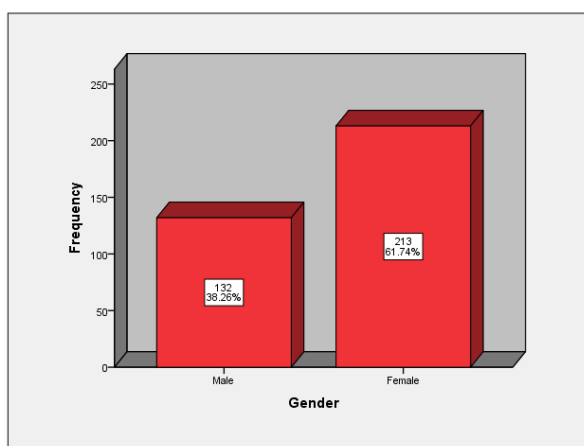
Results

After creating the variables in variable view and entering the data in data view in the SPSS software, the data are analyzed using two main statistical tools that are correlation and

regression. In correlation and regression analysis, the effect of the independent variable (x) is checked on the dependent variable (y). In this study, the digital marketing e-quality service is an independent variable whereas customer trust and customer satisfaction are treated as dependent variables. In another case, customer trust is taken as the independent variable and customer satisfaction is considered as the dependent variable. Both the independent and dependent variables are measured on 5 points Likert scale stating as 1 strongly disagree and 5 strongly agree. The SPSS 23.0 version outputs are as follows:

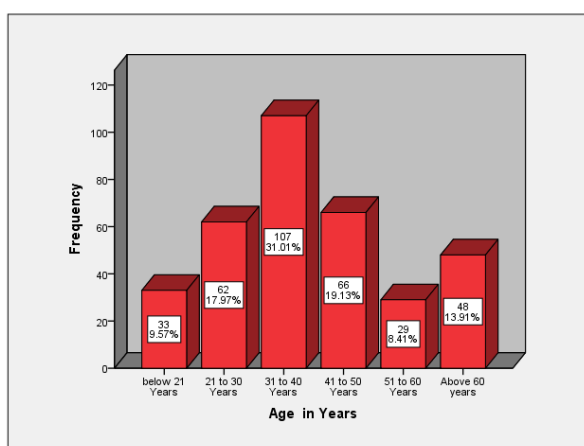
Demographic Profile

Figure 1: Gender



From bar chart 1, it is clear that 61.74% of respondents are female whereas 38.26% of respondents are male customers in online shopping, therefore it can be concluded that most of the respondents are female and hence said that female customers are more attracted towards online shopping.

Figure 2: Age



From bar chart 2, it is clear that that 9.57% of respondents belong below 21 years of age,

17.97% belong to the 21 to 30 years of age group, 31.01% belong to 31 to 40 years, 19.13% belong to 41 to 50 years, 8.41% belong to 51 to 60 years, and 13.91% belong to above 60 years of age, therefore it can be concluded that most of the respondents are 31 to 40 years of age group. The age group between 31 to 40 years is more technology savvy and comfortable to handle the features of smartphones and can easily do online shopping.

Correlation & Regression

In correlation and regression analysis, the effect of the independent variable (x) is checked on the dependent variable (y). The enter method is used in the correlation and regression analysis.

Case I: Regression Model, Y (Digital Marketing E-Quality Service) = a+ bX(Customer Satisfaction)

Table 8: Correlations between Digital Marketing E-Service Quality & Customer Satisfaction

		CS	DMEQS
Pearson Correlation	CS	1.000	.628
	DMEQS	.628	1.000

From the correlations table 8, it is clear that the Pearson correlation coefficient is 0.628 between Digital Marketing E-Service Quality and Customer Satisfaction, hence it can be said that there is a positive and more than moderate coloration between both the variables. The sig. value is 0.000, hence the relationship is significant between Digital Marketing E-Service Quality and Customer Satisfaction.

Table 9: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.628 ^a	.394	.392	.83320	.394	222.809	1	343	.000
a. Predictors: (Constant), Digital Marketing E-Service Quality									

Table 10: ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	154.679	1	154.679	222.809	.000 ^b
	Residual	238.118	343	.694		
	Total	392.797	344			
a. Dependent Variable: Customer Satisfaction						
b. Predictors: (Constant), Digital Marketing E-Service Quality						

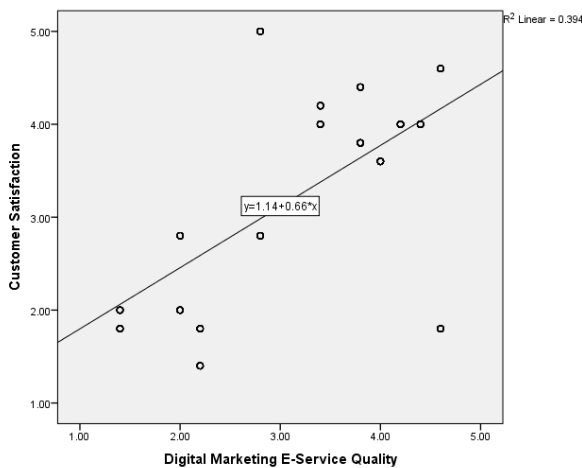
Table 11: Model Summary

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	1.140	.151		7.548	.000	.843	1.438
	Digital Marketing E-Service Quality	.658	.044	.628	14.927	.000	.571	.745

a. Dependent Variable: Customer Satisfaction

From the model summary table 9, the R² was 0.392 means it explained 39.2 % of the variance that means good enough to select the model. From the ANOVA table 10, F=222.809 & Sig Value p value=0.000 less than 0.05 hence the model was highly significant. From the coefficient table 11, Digital Marketing E-Service Quality (Sig value 0.000) was less than 0.05 was significant at a 5% significance level or a 95% confidence interval. Therefore the regression equation would be in this case is Y (Customer Satisfaction) = 1.140 + (0.658)(Digital Marketing E-Service Quality) and it can be concluded that if there is an increase of one unit in the parameters of Digital Marketing E-Service Quality then there is an increase of 0.658 unit in the Customer Satisfaction provided other variables are constant. This is also confirmed by the mean plots. (See Figure 3)

Figure 3: Regression Line between Digital Marketing E-Service Quality and Customer Satisfaction



Case II: Regression Model, $Y(\text{Customer Trust}) = a + bX(\text{Digital Marketing E-Quality Service})$

Table 12: Correlations between Digital Marketing E-Service Quality & Customer Trust

		CT	DMEQS
Pearson Correlation	CT	1.000	.875
	DMEQS	.875	1.000

From the correlations table 12, it is clear that the Pearson correlation coefficient is 0.875 between Digital Marketing E-Service Quality and Customer Trust, hence it can be said that there is a positive and high correlation between both the variables. The sig. value is 0.000, hence the relationship is significant between Digital Marketing E-Service Quality and Customer Trust.

Table 13: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.875 ^a	.765	.764	.52688	.765	1116.776	1	343	.000

a. Predictors: (Constant), Digital Marketing E-Service Quality

Table 14: ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	310.017	1	310.017	1116.776	.000 ^b
	Residual	95.217	343	.278		
	Total	405.234	344			

a. Dependent Variable: Customer Trust
b. Predictors: (Constant), Digital Marketing E-Service Quality

Table 15: Coefficients^a

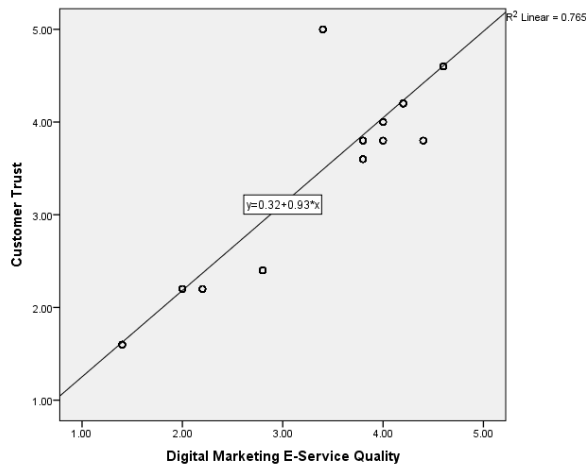
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	.321	.096		3.355	.001	.133	.508
	Digital Marketing E-Service Quality	.932	.028	.875	33.418	.000	.877	.986

a. Dependent Variable: Customer Trust

From the model summary table 13, the R² was 0.765 means it explained 76.5 % of the variance that means good enough to select the model. From the ANOVA table 14, F=1116.776 & Sig Value p value=0.000 less than 0.05 hence the model was highly

significant. From the coefficient table 15, Digital Marketing E-Service Quality (Sig value 0.000) was less than 0.05 was significant at a 5% significance level or a 95% confidence interval. Therefore the regression equation would be in this case is Y (Customer Trust) $= 0.321 + (0.932)(\text{Digital Marketing E-Service Quality})$ and it can be concluded that if there is an increase of one unit in the parameters of Digital Marketing E-Service Quality then there is an increase of 0.932 unit in the Customer Trust provided other variables are constant. This is also confirmed by the mean plots.(See Figure 4)

Figure 4: Regression Line between Digital Marketing E-Service Quality and Customer Trust



Case III: Regression Model, Y (Customer Satisfaction) $= a + bX$ (Customer Trust)

Table 16: Correlations between Customer Trust & Customer Satisfaction

		CS	CT
Pearson Correlation	CS	1.000	.609
	CT	.609	1.000

From the correlations table 16, it is clear that the Pearson correlation coefficient is 0.609 between Customer Satisfaction and Customer Trust, hence it can be said that there is a positive and more than moderate coloration between both the variables. The sig. value is 0.000, hence the relationship is significant between Customer satisfaction and Customer Trust.

Table 17: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.609 ^a	.371	.369	.84891	.371	202.060	1	343	.000

a. Predictors: (Constant), Customer Trust

Table 18: ANOVA^a

4392 | Anchal Singh **A Cause And Effect Study Of Digital Marketing E-Quality Service On The Customers Trust & Consumer In Online Shopping Behavior**

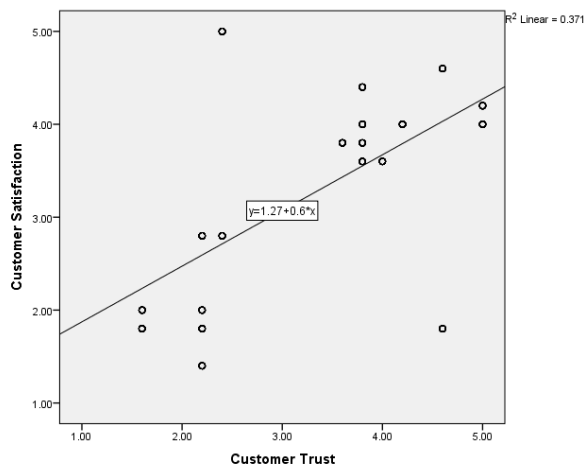
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	145.614	1	145.614	202.060	.000 ^b
	Residual	247.183	343	.721		
	Total	392.797	344			
a. Dependent Variable: Customer Satisfaction						
b. Predictors: (Constant), Customer Trust						

Table 19: Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	1.274	.149		8.537	.000	.981	1.568
	Customer Trust	.599	.042	.609	14.215	.000	.516	.682
a. Dependent Variable: Customer Satisfaction								

From the model summary table 17, the R² was 0.371 means it explained 37.1 % of the variance that means good enough to select the model. From the ANOVA table 18, F=202.060& Sig Value p value=0.000 less than 0.05 hence the model was highly significant. From the coefficient table 19, Customer Trust (Sig value 0.000) was less than 0.05 was significant at a 5% significance level or a 95% confidence interval. Therefore the regression equation would be in this case is Y (Customer Satisfaction) =1.274+(0.599)(Customer Trust) and it can be concluded that if there is an increase of one unit in the parameters of Customer Trust then there is an increase of 0.599 unit in the Customer Satisfaction provided other variables are constant. This is also confirmed by the mean plots. (See Figure 5)

Figure 5: Regression Line between Customer Trust and Customer Satisfaction



Conclusion

After summarizing the three cases or three regression models in this study, it can be concluded that there is an effect of digital marketing e- quality service on consumer trust and customer satisfaction in online shopping. It can also be concluded that there is an effect of customer trust on consumer satisfaction in online shopping, hence the trust and satisfaction are interrelated, therefore e-commerce companies should try to build customer trust to gain the maximum customer satisfaction which can be converted in the profit or wealth maximization in the organization.

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