
E-Service Quality and Customer Loyalty and the Moderating Role of Consumer Demographics- An Empirical Relationship With Specific Reference to the Indian Online Stores

S.G. YOGESH^{1*}, DR. D. SUDHARANI RAVINDRAN²

Institutional Address: PSG Institute of Management, PSG College of Technology, Coimbatore – 641004, Tamilnadu, India.

Abstract:

The Internet plays a vital role in the competitive world of retail as more customers are showing their interest to purchase products from online stores. Such type of stores has been known to provide more offers and discounts in order to attract new customers and retain their returning customers. Therefore, the main intention of this research was to examine the relationship between E-service Quality and its impact on customer loyalty. Such factors assessed included which information storage kept secure and confidential, website performance, customer loyalty, job satisfaction, and more. As such, this study made use of primary and secondary data both in carrying out the research. From the analysis findings, a relationship between information security and confidentiality and loyalty was clearly observed, as well as a correlation between information security and confidentiality, and loyalty and website performance. Accordingly, age was found to strengthen the relationship between informational security and confidentiality, website performance, and loyalty. Similarly, the correlation between information security and confidentiality, website performance, and loyalty was improved by income, as well as the element of gender.

Keywords: *E service Quality, Consumer Demographics, website performance, loyalty.*

Introduction:

The rapid growth of worldwide information and technology communication (ICT) has rendered the extensive internet usage and different kinds of connecting devices in networks such as tablets and smart phones more and more common (Zehiret al., 2014; Yin and Liu, 2012). Concurrently, the rate of unfixed coverage is also spreading intensively, whereby Grameen Bank's revenue has been estimated to increase up to 90 percent in the future (Lee et al., 2014). Therefore, this will allow the general population to retrieve resources, particularly e-commerce (electronic commerce), on the internet freely from anywhere and at any time (Garget al., 2013).

Internet development and its unlimited global effect have been underlined as the basis for an entrepreneurship to succeed and exceed beyond novel spheres (Rose et al., 2012; Sam and Sharma,

2015). It has allowed e-commerce permitted entities to sell goods without the need for traditional brick-and-mortar shops. This has further transformed the way of carrying out global trade (Vinodet al., 2015; Zarco, 2015). Following this, businesses that effectively make use of the internet have reached a new communicative dimension with other organisations and businesses as claimed by Tekinet al.(2014). Furthermore, Downing and Lu (2014) have underlined e-commerce as the current and normal mode of carrying out business; together with the growth of social trust, this combination will result in the growth of the national economy (Quet al., 2015; Chen and Holsapple, 2013). Therefore, the increasingly competitive world of online stores has render edit unavoidable for one to observe the factors influencing any potential customers during their purchasing journey (Wu and Ke, 2015; Erdogmus and Cicek, 2012).

Following this, Pandey and Chawla (2016) have pointed out that customers should be perceptive of the importance of online activities and electronic marketing, as well as enhancing the element of website security. They should avoid any risky behaviours as security is highly significant in the context of e-commerce and online store transactions, as well as in terms of related actions. Therefore, online-based firms and their resulting activities must emphasise on the security of their platforms and customers (Potdar et al., 2018; Pandey and Chawla, 2018). Customers who adopt their preferred online platforms for acquiring specific services and products may find their information potentially stolen from the website databases if left unheeded. Such cases include the potential of the website itself being the viruses' transfer point and hosting other software for intrusion, which may consequently influence customer loyalty (Ahmad et al., 2017). For instance, Ting et al. (2016) have pinpointed that despite offering cheaper services or products, long-term impacts such as the misuse of personal data are highly costly.

In particular, repeated buying intention among customers is important for the purpose of marketing management (Kuo et al., 2013; Limbu et al., 2012; Hsu et al., 2012). Such intention is driven by various elements, such as website reputation, reliability, trust, guarantee of reputation, information safety, reliability of transaction, and price advantage (Yiwen and Jiwei, 2012). In the marketing landscape, the loyalty of a customer is considered as the most significant factors influencing one's business (Momotaz and Hasan, 2018; Jain et al., 2018).

Accordingly, Tam (2012) and Cheng et al. (2014) have described the manner in which loyal customers consistently disseminate positive information about their service providers, as well as introducing new customers to the firm. Toufailyet al. (2013) and Roy et al. (2014) both have elucidated that electronic store loyalty can maximise their customers' readiness to subscribe to a

premium package, carry out repeated purchases, reinforce fellow customers' resistance against their competitors' marketing efforts, and minimise the cost of customer acquisition.

Conceptual Framework:

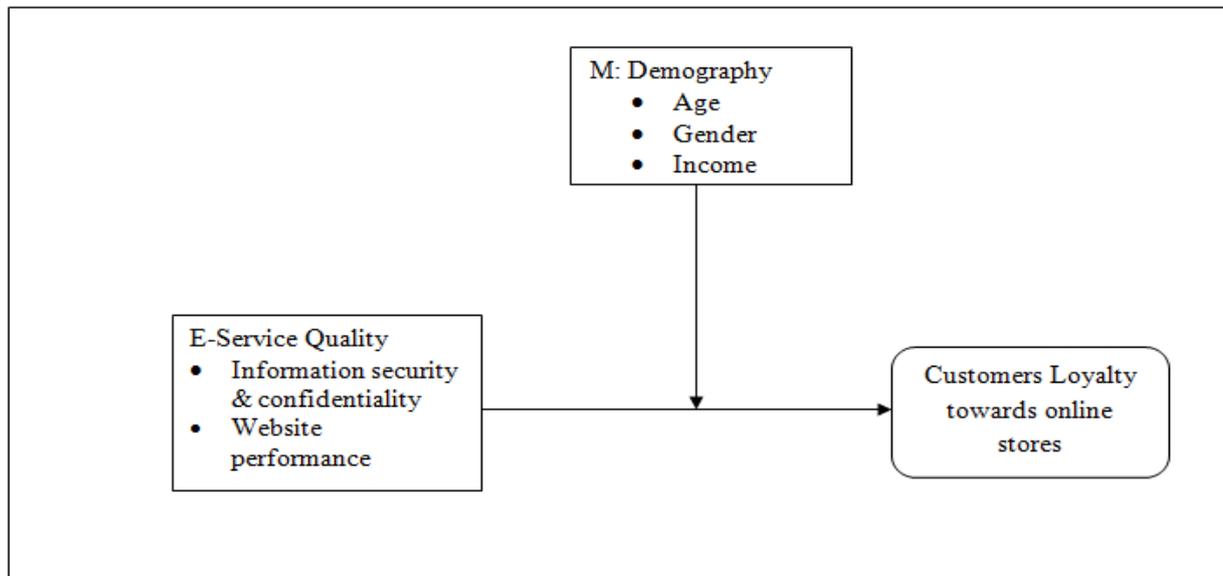


Figure 1: Conceptual framework for factors driving the repeated purchase of customers in online stores and their impact on their loyalty

Source: Author

The following figure illustrates the conceptual framework in assessing the factors driving the repeated purchase of customers in online stores, and their impact on their loyalty.

Minimol (2018) has investigated the perceived value and quality of e-service towards customer loyalty to online stores, thus revealing that certain aspects of e-service quality can significantly impact the perceived value. Ensuring customer's recognition of the perceived value and promoting their loyalty and satisfaction have underlined the need for organisations and businesses to secure their sites (Khadimet al., 2018).

The security process include phases, such as data storage and data authorisation will reassure them and elicit higher trust in the website performance, thus encouraging them to carry out services and products obtainment from the platform (Ahmad et al., 2017). Additionally, this remarkable

experience can result in higher revenues, whereas a negative experience will lead to permanent loss of customers (Bucko et al., 2018).

Shafiee and Bazargan (2018) have found that website performance and information security can notably and directly influence the quality of e-services, such as security and confidentiality. This will subsequently maximise their intention to purchase again in the online interface, yielding long-term profits, which is consistent with the findings described by Kim et al. (2009), Giovanis and Athanasopoulou (2014), Ha and Stoel (2012), and Sur (2015). Developing their trust to online stores can influence their readiness to buy and engage in an efficient purchase behaviour, encompassing the elements of confidentiality and information security, preference, cost, and frequency of visit, as well as the profitability level of every customer (Gupta and Dubey, 2016).

Meanwhile, Pratminingsih et al. (2013) have investigated the factors influencing customer loyalty towards online shopping, whereby satisfaction is found to have a notable link with loyalty, commitment, and trust. In particular, this is attained from a satisfactory first transaction, which then maximises the likelihood of a repeated purchase in the same online shop (Toufaily et al., 2013; Yoon et al., 2013). Moreover, Pee et al. (2018) and Abdallah and Jaleel (2015) have pointed out that customer loyalty is important towards ensuring a continuous existence of online shops.

Hypotheses of the Research:

The hypotheses derived for the purpose of this research are as follows:

H0.1: There is no relationship between information security & confidentiality and loyalty

H1.1: There is a relationship between information security & confidentiality and loyalty

H0.2: There is no relationship between information security & confidentiality and website performance

H2.2: There is a relationship between information security & confidentiality and website performance

H0.3 Age strengthens the relationship between information security & confidentiality, website performance, and loyalty

H3.3 Age does not strengthen the relationship between information security & confidentiality, website performance, and loyalty

H0.4: Income strengthens the relationship between information security & confidentiality, website performance, and loyalty

H4.4: Income does not strengthen the relationship between information security & confidentiality, website performance, and loyalty

H0.5: Gender strengthens the relationship between information security & confidentiality, website performance, and loyalty

H5.5: Gender does not strengthen the relationship between information security & confidentiality, website performance, and loyalty

Research paradigm and approach:

This particular study made use of the positivism paradigm due to it proposing the factors driving the repeated purchase of customers in online stores and their impact towards loyalty. Therefore, the positivism paradigm was deemed as suitable and reasonable due to the study design implementing and examining quantitative data obtained via deduction towards identifying the customers' loyalty for online stores. Besides, the paradigm was adopted as it offered the use of useful tools to gauge such events and facts as information.

Research Design:

This research implemented a descriptive research design. Prior to this, Unrau and Grinnel (2008) have underlined this design's role in assisting the process of gathering and presenting facts or evidence through the use of charts and graphs. Therefore, the descriptive research design adopted allowed the use of a quantitative research method, thus yielding numerical outcomes accordingly.

Sampling Methods:

This research utilised the method of simple random sampling, whereby its adoption allowed the selection of individuals from a large population. Here, every sample is selected randomly based on chance, thereby being referred to as probability sampling (McLeod, 2014).

Data collection:

This study made use of primary and secondary data accordingly. First, the primary data were gathered from 292 respondents in order to assess the factors driving the repeated purchase of customers in online stores and their impact on loyalty. Meanwhile, the secondary data were obtained from prior sources, such as books, company publications, newsletters, articles, internet sources, government publications, magazines, and more.

Reliability and validity:

S.No	Construct	ITEMS	Alpha
1	Information security and Confidentiality	4	.790
2	Website Performance	4	.847
3	Loyalty	6	.927

Table 1 Constructs and Cronbach’s Alpha value

Table 1 depicts the constructs employed and their resulting Cronbach’s Alpha values. Items included in the constructs of informational security& confidentiality and website performance were four in total each, whereas the loyalty construct contained six items. Meanwhile, the respective alpha values for informational security and confidentiality, website performance, and loyalty were 0.790, 0.847, and 0.927.

	N		Mean	Median	Std. Deviation
	Valid	Missing			
Age	293	0	2.6041	3	1.08866
Gender	293	0	1.2423	1	0.42922
Educated	293	0	1.2423	1	0.42922
Highest education	293	0	1.0648	1	0.24668
Occupation	293	0	2.2082	2	0.97626
Income	293	0	3.6007	4	1.4024
Online purchase	293	0	2.9181	3	0.86411
Frequency	293	0	2.2935	2	1.2202
Information Security and Confidentiality 1	293	0	3.7304	4	0.72551
Information Security and Confidentiality 2	293	0	3.9181	4	0.78521
Information Security and Confidentiality 3	293	0	3.8157	4	0.74034
Information Security and Confidentiality 4	293	0	3.2321	3	0.92199
Website Performance 1	293	0	3.9863	4	0.64091
Website Performance 2	293	0	3.8567	4	0.66718
Website Performance 3	293	0	4.1024	4	0.61635
Website Performance 4	293	0	3.9044	4	0.7006

Loyalty1	293	0	3.4744	4	0.91983
Loyalty2	293	0	3.4846	4	0.91258
Loyalty3	293	0	3.5427	4	0.90037
Loyalty4	293	0	3.7338	4	0.79216
Loyalty5	293	0	3.4027	3	0.92987
Loyalty6	293	0	3.6519	4	0.84499
Satisfied	293	0	3.9966	4	0.70467

Table 2 Frequencies of constructs

Table 2 above depicts the frequencies of constructs. The table concisely illustrated the mean, median and standard deviation values for the elements of age, gender, educated, highest education, occupation, income, and online purchase, as well as for the constructs of information security and confidentiality, website performance, constructs of loyalty accordingly. The mean, median, and standard deviation for the element age was 2.6041, 3, and 1.08866, respectively. Next, the mean, median, and standard deviation for the element gender was 1.2423, 1 and 0.42922, respectively. Meanwhile, the mean, median, and standard deviation for the element educated was 1.2423, 1, and 1.2423, respectively. Then, the mean, median, and standard deviation for the element highest education was 1.0648, 1, and 0.24668, respectively.

Following this, the mean, median, and standard deviation for the element occupation was 2.2082, 2, and 0.97626, respectively. After that, the mean, median, and standard deviation for the element income was 3.6007, 4, and 1.4024, respectively. Furthermore, the mean, median, and standard deviation for the element online purchase was 2.9181, 3, and 0.86411, respectively. Next, the mean, median, and standard deviation for the element frequency was 2.2935, 2, and 1.2202, respectively.

In the context of the constructs of information security and confidentiality, the mean, median, and standard deviation for the construct Information Security and Confidentiality1 was 3.7304, 4, and 0.72551, respectively. Then, the mean, median and standard deviation for the construct Information Security and Confidentiality2 was 3.9181, 4, and 0.78521, respectively. Meanwhile, the mean, median and standard deviation for the construct Information Security and Confidentiality3 was 3.8157, 4 and 0.74034, respectively. Next, the mean, median and standard deviation for the construct Information Security and Confidentiality4 was 3.2321, 3, and 0.92199, respectively.

In contrast, in the context of the constructs of website performance, the mean, median, and standard deviation for the construct Website Performance1 was 3.9863, 4, and 0.64091, respectively. Next, the mean, median, and standard deviation for the construct Website Performance2 was 3.8567, 4, and 0.66718, respectively. Following this, the mean, median, and standard deviation for the construct Website Performance3 was 4.1024, 4, and 0.61635, respectively. Finally, the mean,

median, and standard deviation for the construct Website Performance₄ was 4.1024, 4, and 0.61635.

Meanwhile, in the context of the constructs of loyalty, the mean, median, and standard deviation for the construct loyalty₁ was 3.4744, 4, and 0.91983, respectively. Moreover, the mean, median, and standard deviation for the construct loyalty₂ was 3.4846, 4, and 0.91258, respectively. After this, the mean, median, and standard deviation for the construct loyalty₃ was 3.5427, 4, and 0.90037, respectively. Following this, the mean, median, and standard deviation for the construct loyalty₄ was 3.4744, 4, and 0.79216, respectively. Next, the mean, median, and standard deviation for the construct loyalty₅ was 3.4027, 3, and 0.92987, respectively. Finally, the mean, median, and standard deviation for the construct loyalty₆ was 3.6519, 4, and 0.84499, respectively. Last but not least, the mean, median, and standard deviation for the construct satisfied was 3.9966, 4, and 0.70467.

Age				
	Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid	Below 20	60	20.5	20.5
	20-30	74	25.3	45.7
	30-40	81	27.6	73.4
	40 and above	78	26.6	100.0
	Total	293	100.0	100.0

Table 3 Frequency of Age

Table 3 depicts the frequency of age. It was noted that 20.5 percent of the respondents were below 20 years of age, while 25.3 percent of them were between the age range of 20-30 years. Similarly, 27.6 percent of the respondents were in the age range of 30-40 years, whereas 26.6 percent of them were 40 years and older.

Gender				
	Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid	Male	222	75.8	75.8
	Female	71	24.2	100.0
	Total	293	100.0	100.0

Table 4 Frequency of gender

Table 4 illustrates the frequency of gender. In particular, a majority or 75.8 percent of the respondents were male, whereas the remaining 24.2 percent of them were female.

Educated

	Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid Yes	222	75.8	75.8	75.8
No	71	24.2	24.2	100.0
Total	293	100.0	100.0	

Table 5 Frequency of educated

Table 5 depicts the frequency of education received. In general, 75.8 percent of the respondents were educated, while the remaining 24.2 percent were not privy to education.

Highest education

	Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid High school	274	93.5	93.5	93.5
Diploma	19	6.5	6.5	100.0
Total	293	100.0	100.0	

Table 6 Frequency of highest education

Table 6 above illustrates the frequency of highest education. It was observed that a majority or 93.5 percent of the respondents had completed their high school, while the remaining 6.5 percent them had attained a diploma.

Occupation

	Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid .00	8	2.7	2.7	2.7
Student	42	14.3	14.3	17.1
Self-employed	149	50.9	50.9	67.9
Salaried	78	26.6	26.6	94.5
Housewife	12	4.1	4.1	98.6
Working	3	1.0	1.0	99.7
10.00	1	.3	.3	100.0
Total	293	100.0	100.0	

Table 7 Frequency of occupation

Table 7 depicts the frequency of occupation. Firstly, 14.3 percent of the respondents were students, whereas the remaining were non-students. In particular, a majority or 50.9 percent of them were self-employed, 26.6 percent were salaried, 4.1 percent were housewives, and 1.0 percent of the respondents identified themselves as working.

Income

	Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid	Less than 200000	14	4.8	4.8
	Between Rs. 200,000 andRs. 500,000	58	19.8	24.6
	Between Rs. 500,000 andRs. 1, 000,000	72	24.6	49.1
	More than Rs. 1,000,000	67	22.9	72.0
	5.00	59	20.1	92.2
	6.00	15	5.1	97.3
	7.00	8	2.7	100.0
	Total	293	100.0	100.0

Table 8 Frequency of income

Table 8above depicts the frequency of income. First, 4.8 percent of the respondents were earning less than Rs. 200,000. Following this, 19.8 percent of them were earning between Rs.200,000 and Rs 500,000; 24.6 percent were earning between Rs. 500,0000 and 1,000,000; and 22.9 percent were earning more than Rs 1,000,000.

Online purchase

	Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid	0 – 6 months	9	3.1	3.1
	6 months – 1 year	95	32.4	35.5
	1 – 3 years	100	34.1	69.6
	3 years and above	89	30.4	100.0
	Total	293	100.0	100.0

Table 9 Frequency of online purchase

Table 9 illustrates the frequency of online purchases made accordingly. In general, 3.1 percent of the respondents made online purchases once within 0-6 months. Meanwhile, 32.4 per cent of them made online purchases once within 6 months to 1 year, 34.1 percent of them made online purchases once in 1.3 years, and 30.4 percent of them made online purchases once within 3 years and more.

Frequency

	Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid	Daily	91	31.1	31.1
	More than two times in a week	97	33.1	64.2
	Once per week	57	19.5	83.6
	Once per month	24	8.2	91.8
	5.00	24	8.2	100.0

Total	293	100.0	100.0
-------	-----	-------	-------

Table 10 Frequency of buying online

Table 10above shows the frequency of buying online accordingly. In general, 31.1 percent of the respondents made daily purchases online, whereas 33.1 percent of them made purchases online more than two times in a week. Meanwhile, 19.5 percent of the respondents made purchases online once per week, whereas the remaining 8.2 percent made purchases online once per month.

Information Security and Confidentiality1

	Frequency	Percentage	Valid Percentage	Cumulative Percentage
SD	1	.3	.3	.3
D	16	5.5	5.5	5.8
N	73	24.9	24.9	30.7
A	174	59.4	59.4	90.1
SA	29	9.9	9.9	100.0
Total	293	100.0	100.0	

Table 11 Frequency of Information Security and Confidentiality1

Table 11 depicts the frequency of Information Security and Confidentiality1 accordingly. Firstly, only 0.3 percent of the respondents strongly disagreed that keeping information about online shopping behaviours secure, whereas 5.5 percent of them just disagreed that keeping information about online shopping behaviours secure. In contrast, 24.9 percent of the respondents were neutral that keeping information about online shopping behaviours secure, while 59.4 percent of them agreed that keeping information about online shopping behaviours secure. The remaining 9.9 percent of respondents strongly agreed that keeping information about online shopping behaviours secure.

Information Security and Confidentiality2

	Frequency	Percentage	Valid Percentage	Cumulative Percentage
SD	1	.3	.3	.3
D	16	5.5	5.5	5.8
N	49	16.7	16.7	22.5
A	167	57.0	57.0	79.5
SA	60	20.5	20.5	100.0
Total	293	100.0	100.0	

Table 12 Frequency of Information Security and Confidentiality2

Table 12above illustrates the frequency of Information Security and Confidentiality2 SC2 accordingly. In general, merely 0.3 percent of the respondents strongly disagreed that keeping customer banking information secure, whereas 5.5 percent of them disagreed that keeping customer banking information secure. In contrast, 16.7 percent of the respondents were neutral about keeping

customer banking information secure, while 57.0 percent of them agreed about keeping customer banking information secure. The remaining 20.5 percent of respondents strongly agreed about keeping customer banking information secure.

Information Security and Confidentiality3

	Frequency	Percentage	Valid Percentage	Cumulative Percentage
SD	1	.3	.3	.3
D	10	3.4	3.4	3.8
N	76	25.9	25.9	29.7
A	161	54.9	54.9	84.6
SA	45	15.4	15.4	100.0
Total	293	100.0	100.0	

Table 13 Frequency of Information Security and Confidentiality3

Table 13 above illustrates the frequency of Information Security and Confidentiality3 accordingly. In general, only 0.3 per cent of the respondents strongly disagreed that strong commitment to on-time delivery, whereas 3.4 percent of them disagreed that strong commitment to on-time delivery. In contrast, 25.7 percent of respondents were neutral about a strong commitment to on-time delivery, while a whopping 54.9 percent agreed about a strong commitment to on-time delivery. Meanwhile, the remaining 15.4 percent of respondents strongly agreed about a strong commitment to on-time delivery.

Information Security and Confidentiality4

	Frequency	Percentage	Valid Percentage	Cumulative Percentage
SD	5	1.7	1.7	1.7
D	60	20.5	20.5	22.2
N	113	38.6	38.6	60.8
A	92	31.4	31.4	92.2
SA	23	7.8	7.8	100.0
Total	293	100.0	100.0	

Table 14 Frequency of Information Security and Confidentiality4

Next, Table 14 illustrates the frequency of Information Security and Confidentiality 4. Firstly, merely 1.7 percent of the respondents strongly disagreed that preventing customer information from being shared with other websites, while 20.5 percent disagreed that preventing customer information from being shared with other websites. In contrast, 38.6 percent of the respondents were neutral about preventing customer information from being shared with other websites, while 31.4 percent agreed about preventing customer information from being shared with other websites. The remaining 7.8 percent of respondents strongly agreed about preventing customer information from being shared with other websites.

Website Performance1

	Frequency	Percentage	Valid Percentage	Cumulative Percentage
D	11	3.8	3.8	3.8
N	29	9.9	9.9	13.7
Valid A	206	70.3	70.3	84.0
SA	47	16.0	16.0	100.0
Total	293	100.0	100.0	

Table 15 Frequency of Website Performance1

Table 15 above illustrates the frequency of Website Performance1. In general, 3.8 percent of the respondents disagreed that simplifying the process of finding products on the website, while 9.9 percent were neutral that simplifying the process of finding products on the website. In contrast, a whopping 70.3 percent of the respondents agreed about simplifying the process of finding products on the website, while 16.0 percent strongly agreed about simplifying the process of finding products on the website.

Website Performance2

	Frequency	Percentage	Valid Percentage	Cumulative Percentage
D	11	3.8	3.8	3.8
N	56	19.1	19.1	22.9
Valid A	190	64.8	64.8	87.7
SA	36	12.3	12.3	100.0
Total	293	100.0	100.0	

Table 16 Frequency of Website Performance2

Next, Table 16 illustrates the frequency of WP2. Firstly, only 3.8 percent of the respondents disagreed that the ability to quickly conduct a transaction, while 19.1 percent were neutral that the ability to quickly conduct a transaction. In contrast, a whopping 64.8 percent of the respondents agreed about the ability to quickly conduct a transaction, while 12.3 percent strongly agreed about the ability to quickly conduct a transaction.

Website Performance3

	Frequency	Percentage	Valid Percentage	Cumulative Percentage
D	8	2.7	2.7	2.7
N	18	6.1	6.1	8.9
Valid A	203	69.3	69.3	78.2
SA	64	21.8	21.8	100.0
Total	293	100.0	100.0	

Table 17 Frequency of Website Performance3

Table 17 above illustrates the frequency of Website Performance 3. Firstly, merely 2.7 percent of the respondents disagreed that the ability to easily browse a website, while only 6.1 per cent were

neutral that the ability to easily browse a website. In contrast, a whopping majority of 69.3 percent of the respondents agreed about the ability to easily browse a website, whereas the remaining 21.8 percent strongly agreed about the ability to easily browse a website.

Website Performance 4

	Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid SD	1	.3	.3	.3
D	12	4.1	4.1	4.4
N	45	15.4	15.4	19.8
A	191	65.2	65.2	85.0
SA	44	15.0	15.0	100.0
Total	293	100.0	100.0	

Table 18 Frequency of Website Performance 4

Table 18 illustrates the frequency of Website Performance 4 accordingly. In general, only 0.3 percent of the respondents strongly disagreed that structure and organisation of information on the website, whereas a small 4.1 percent disagreed that structure and organisation of information on the website. In contrast, 15.4 per cent of the respondents were neutral that structure and organisation of information on the website, where as a whopping majority of 65.2 percent agreed about the structure and organisation of information on the website. The remaining 15.2 percent of respondents strongly agreed about the structure and organisation of information on the website.

Loyalty1

	Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid SD	5	1.7	1.7	1.7
D	40	13.7	13.7	15.4
N	91	31.1	31.1	46.4
A	125	42.7	42.7	89.1
SA	32	10.9	10.9	100.0
Total	293	100.0	100.0	

Table 19 Frequency of loyalty1

Table 19above depicts the frequency of loyalty1 accordingly. Firstly, only 1.7 percent of the respondents strongly disagreed that saying positive things about the organisation to other people, while a larger proportion of 13.7 percent disagreed that saying positive things about the organisation to other people. Contrastingly, 31.1 percent of the respondents were neutral that saying positive things about the organisation to other people, whereas a majority or 42.7 percent agreed about saying positive things about the organisation to other people. Meanwhile, the remaining 10.9 percent of respondents strongly agreed about saying positive things about the organisation to other people.

Loyalty2

	Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid SD	6	2.0	2.0	2.0
D	38	13.0	13.0	15.0
N	86	29.4	29.4	44.4
A	134	45.7	45.7	90.1
SA	29	9.9	9.9	100.0
Total	293	100.0	100.0	

Table 20 Frequency of loyalty2

Table 20 above shows the frequency of loyalty2. In particular, only 2.0 percent of the respondents strongly disagreed that recommend the organisation to those who seek my advice about such matters, while a larger proportion or 13.0 percent disagreed that recommend the organisation to those who seek my advice about such matters. In contrast, 29.4 percent of the respondents were neutral that recommend the organisation to those who seek my advice about such matters, while a majority or 45.7 percent agreed to recommend the organisation to those who seek my advice about such matters. Meanwhile, the remaining 9.9 per cent of respondents strongly agreed about recommend the organisation to those who seek my advice about such matters.

Loyalty3

	Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid SD	8	2.7	2.7	2.7
D	27	9.2	9.2	11.9
N	87	29.7	29.7	41.6
A	140	47.8	47.8	89.4
SA	31	10.6	10.6	100.0
Total	293	100.0	100.0	

Table 21 Frequency of loyalty3

Next, Table 21 above depicts the frequency of loyalty3. Firstly, only 2.7 per cent of the respondents strongly disagreed that encourage friends and relatives to use the organisation, where as a bigger percentage or 9.2 per cent disagreed that encourage friends and relatives to use the organisation. Meanwhile, 29.7 per cent of the respondents were neutral that encourage friends and relatives to use the organisation, whereas a majority or 47.8 per cent agreed about encourage friends and relatives to use the organisation. The remaining 10.6 per cent encouraged friends and relatives to use the organisation.

Loyalty4

	Frequency	Percentage	Valid Percentage	Cumulative Percentage
SD	4	1.4	1.4	1.4
D	19	6.5	6.5	7.8
N	60	20.5	20.5	28.3
A	178	60.8	60.8	89.1
SA	32	10.9	10.9	100.0
Total	293	100.0	100.0	

Table 22 Frequency of loyalty4

Table 22 depicts the frequency of loyalty4 accordingly. In general, only 1.4 per cent of the respondents strongly disagreed that post positive messages about the organisation on some Internet message board, whereas 6.5 per cent disagreed that post positive messages about the organisation on some Internet message board. In contrast, 20.5 per cent of the respondents were neutral that post positive messages about the organisation on some Internet message board, while a whopping majority or 60.8 per cent agreed about post positive messages about the organisation on some Internet message board. The remaining 10.9 per cent of respondents strongly agreed about posting positive messages about the organisation on some Internet message board.

Loyalty5

	Frequency	Percentage	Valid Percentage	Cumulative Percentage
SD	5	1.7	1.7	1.7
D	47	16.0	16.0	17.7
N	95	32.4	32.4	50.2
A	117	39.9	39.9	90.1
SA	29	9.9	9.9	100.0
Total	293	100.0	100.0	

Table 23 Frequency of loyalty5

Table 23 depicts the frequency of loyalty5 accordingly. In general, only 1.7 per cent of the respondents strongly disagreed that continue to do business with the present organisation, while 16.0 per cent disagreed that continue to do business with the present organisation. In contrast, 32.4 per cent of the respondents were neutral that continue to do business with the present organisation, while 39.9 per cent similarly agreed to continue to do business with the present organisation. Meanwhile, the remaining 9.9 per cent of respondents strongly agreed about continue to do business with the present organisation.

Loyalty6

	Frequency	Percentage	Valid Percentage	Cumulative Percentage
SD	2	.7	.7	.7
D	30	10.2	10.2	10.9
N	71	24.2	24.2	35.2
A	155	52.9	52.9	88.1
SA	35	11.9	11.9	100.0
Total	293	100.0	100.0	

Table 24 Frequency of loyalty6

Table 24 above depicts the frequency of loyalty6 accordingly. In general, merely 0.7 per cent of the respondents strongly disagreed that do more business with the present organisation, while a healthy 10.2 per cent disagreed that do more business with the present organisation. Contrastingly, 24.2 per cent of the respondents were neutral that do more business with the present organisation, while a whopping majority or 52.9 per cent agreed about to do more business with the present organisation. The remaining 11.9 per cent of respondents strongly agreed about do more business with the present organisation.

Satisfied

	Frequency	Percentage	Valid Percentage	Cumulative Percentage
VS	1	.3	.3	.3
S	6	2.0	2.0	2.4
N	49	16.7	16.7	19.1
US	174	59.4	59.4	78.5
VUS	63	21.5	21.5	100.0
Total	293	100.0	100.0	

Table 25 Frequency of satisfied

Finally, Table 25 above depicts the frequency of the satisfied construct. Firstly, only 0.3 per cent of the respondents were very satisfied, while merely 2.0 per cent were satisfied. In contrast, 16.7 per cent of the respondents were neutral, whereas a whopping majority or 59.4 per cent were unsatisfied. The remaining large proportion of 21.5 per cent were also very unsatisfied.

Statistical tools:

Regression:

Descriptive Statistics

	Mean	Std. Deviation	N
meanloyalty	3.5485	.76264	293
meanwp	3.9560	.57655	293
meandp	3.8132	.54771	293

Table 26 Descriptive statistics

Table 26 shows descriptive statistics conducted and the regression model. The mean value for loyalty, website performance, and information security and confidentiality with the regression method was 3.5485, 3.9560, and 3.8132, respectively. Meanwhile, the standard deviation value for loyalty, website performance, and information security and confidentiality with the regression method was 0.76264, 0.57655, and 0.54771, respectively.

Correlations

		Mean loyalty	meanwp	meandp
Pearson Correlation	meanloyalty	1.000	.444	.489
	meanwp	.444	1.000	.897
	meandp	.489	.897	1.000
Sig. (1-tailed)	meanloyalty	.	.000	.000
	meanwp	.000	.	.000
	meandp	.000	.000	.
N	meanloyalty	293	293	293
	meanwp	293	293	293
	meandp	293	293	293

Table 27 Correlations table

Table 27 depicts a correlations table constructed using Pearson’s correlation. The Pearson’s correlation value for loyalty and loyalty was 1.000, for website performance and loyalty was 0.444, and for information security and confidentiality and loyalty was 0.489. Meanwhile, the Pearson’s correlation value for website performance and website performance, website performance and information security and confidentiality, and information security and confidentiality and information security and confidentiality was 1.000, 0.897, and 1.000, respectively.

3.2.2 R table and ANOVA:

Variables Entered/Removed^a

Model	Variables Entered	Variables Removed	Method
1	meandp, meanwp ^b	.	Enter

a. Dependent Variable: meanloyalty

b. All requested variables entered.

Table 28 Variables entered/removed

Table 28 depicts all of the variables entered or removed during the process of analysis. In particular, the entered variables consisted of website performance and information security and confidentiality.

Model Summary^b

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	.489 ^a	.239	.234	.66752	.239	45.570	2	290	.000

a. Predictors: (Constant), meandp, meanwp

b. Dependent Variable: meanloyalty

Table 29 Model Summary

The model summary table above (Table 29) shows the R, R², and adjusted R² values obtained accordingly. In this model, the R-value generated a decent fit of .489, whereas the R² and adjusted R² values were .239 and .234, respectively.

ANOVA^a

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	40.611	2	20.305	45.570	.000 ^b
	Residual	129.221	290	.446		
	Total	169.832	292			

a. Dependent Variable: meanloyalty

b. Predictors: (Constant), meandp, meanwp

Table 30 ANOVA

The ANOVA table above provides the significance value accordingly.

Coefficients^a

Model		Unstandardised Coefficients		Standardised Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.939	.280		3.354	.001
	meanwp	.039	.154	.029	.253	.800
	meandp	.644	.162	.462	3.984	.000

a. Dependent Variable: meanloyalty

Table 31 Coefficients

Table 31 illustrates the tested coefficients accordingly. In general, t value for website performance and information security and confidentiality was 0.253 and 3.984, respectively. Meanwhile, the sig value for website performance and information security and confidentiality was 0.800 and 0.000, respectively.

Residuals Statistics^a

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	1.9107	4.3533	3.5485	.37293	293
Residual	-2.67048	1.67870	.00000	.66523	293
Std. Predicted Value	-4.391	2.158	.000	1.000	293
Std. Residual	-4.001	2.515	.000	.997	293

a. Dependent Variable: meanloyalty

Table 32 Residuals statistics

Table 32 illustrates the residuals statistics obtained in this work. Firstly, the mean and standard deviation values for the predicted value were 3.5485 and 0.37293, respectively. Meanwhile, the mean and standard deviation values for the residual were 0.0000 and 0.66523, respectively. In contrast, the mean and standard deviation values for the standard predicted value were 0.000

and 1.000, respectively. Finally, the mean and standard deviation values for the standard residual were 0.000 and 0.997, respectively.

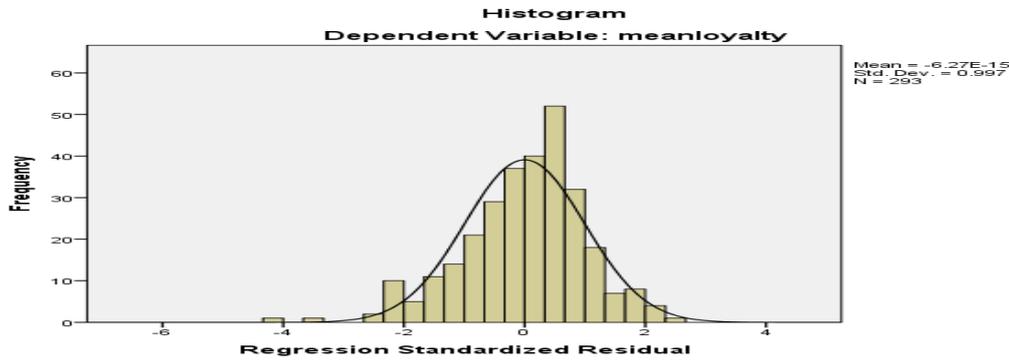


Figure 2 Regression standardised residual

Figure 2 depicts the standardised residual regression obtained in this work. It was found that the mean value was 6.27E-15, while the standard deviation was 0.997.

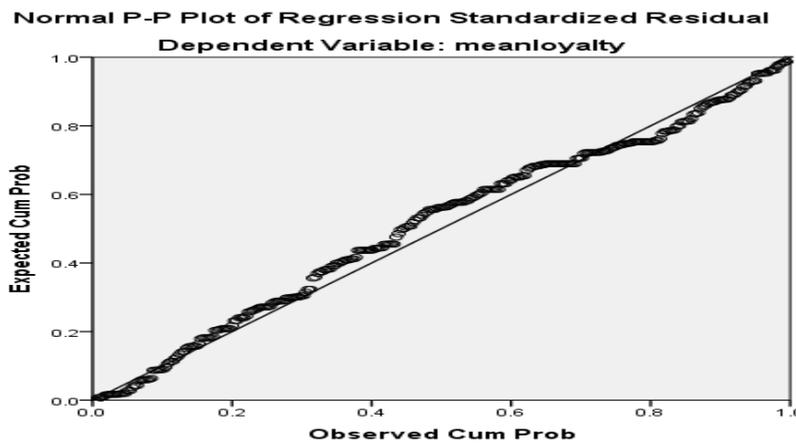


Figure 3 Observed and expected Cum probability

Figure 3 above illustrates the observed cumulative probability and expected cumulative probability, while also reveals the normal P-Plot of standardised residual regression.

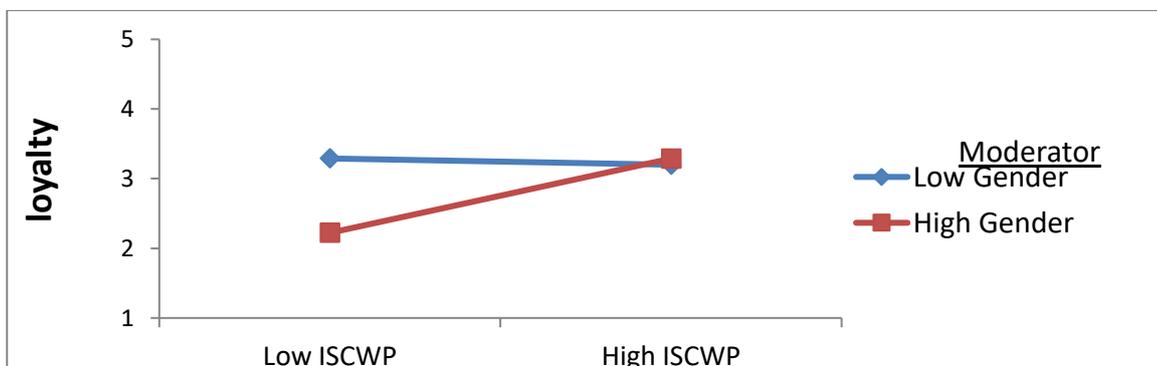


Figure 4 Age mediates information security and confidentiality, website performance, and loyalty

In this work, age was found to strengthen the positive relationship between information security and confidentiality, website performance, and loyalty accordingly.

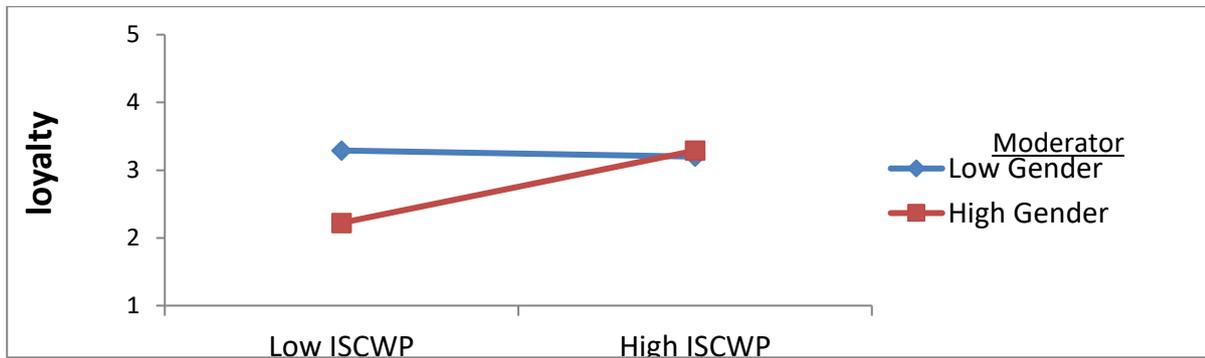


Figure 5 Income mediates information security and confidentiality, website performance and loyalty

Furthermore, income could further strengthen the positive relationship between information security and confidentiality, website performance, and loyalty accordingly.

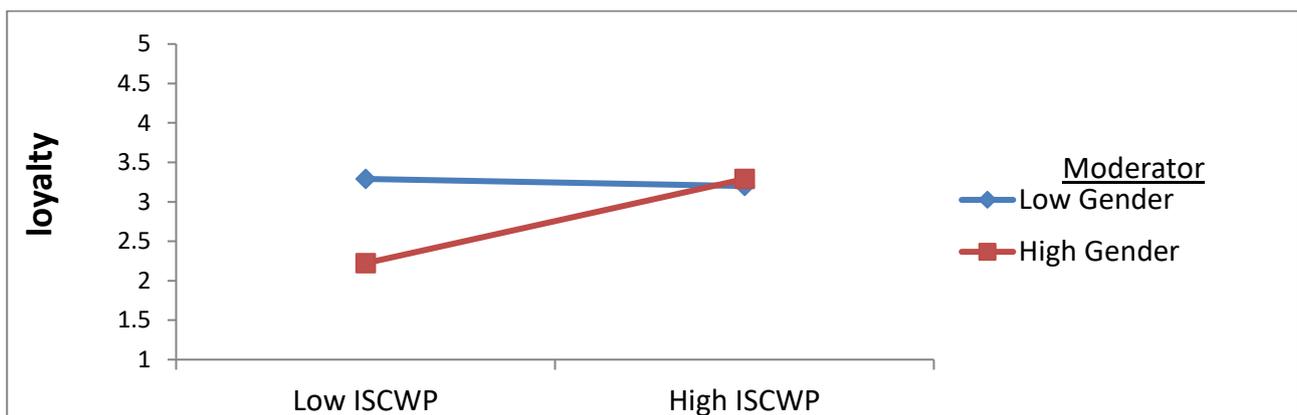


Figure 6 Gender mediates information security and confidentiality, website performance, and loyalty

Finally, gender could also strengthen the positive relationship between information security and confidentiality, website performance, and loyalty.

Finding and Conclusions:

Online buying has become a casual part of individual lives, this work aimed to examine the factors driving the repeated purchase of customers in online stores and their impact on loyalty, which consisted of information security, information confidentiality, website performance, customer loyalty, and satisfaction of a transaction.

From the findings of the analysis conducted, it was clear that a relationship between information security and confidentiality and loyalty was present, as well as a correlation between information security and confidentiality, loyalty, and website performance. Meanwhile, the factors of age, income, and gender further strengthened the relationship between informational security and confidentiality, website performance, and loyalty accordingly.

S.No	Hypothesis	Accepted/Rejected
1	There is a relationship between information security & confidentiality and loyalty	Accepted
2	There is a relationship between information security & confidentiality and website performance	Accepted
3	Age strengthens the relationship between information security & confidentiality, website performance, and loyalty	Accepted
4	Income strengthens the relationship between information security & confidentiality, website performance, and loyalty	Accepted
5	Gender strengthens the relationship between information security & confidentiality, website performance, and loyalty	Accepted

Table 33 Outcomes of hypothesis testing

Table 33 above illustrates the outcomes of hypothesis testing accordingly, which are as follows: all of the hypotheses proposed are accepted. Therefore, a relationship was found between information security and confidentiality and loyalty, as well as a correlation between information security and confidentiality and website performance. Meanwhile, the parameters of age, income, and gender all strengthened the respective relationships between informational security and confidentiality, website performance, and loyalty accordingly.

Information security and confidentiality:

Many factors could be attributed towards influencing a customer to repeatedly purchase from online stores. Furthermore, it was noted that online stores should strongly commit to their customers towards delivering their goods or products at the promised time, while also preventing their customer information from being shared with other websites.

Website performance:

The performance of a website played a vital role as a factor driving the repeated purchase of customers in an online store. Moreover, the customers should feel that the website facilitated them

to easily browse information about their products or goods. Additionally, the organisation and structure of information about the products must be mentioned on the website.

Customer Loyalty:

Customer loyalty is important for any kind of businesses. If a customer is loyal, they will say only positive things about an online store to other people, as well as recommending it to those who seek their advice about such matters. Besides, it was noted that these customers would encourage their relatives and friends to use the particular online store and post positive comments and messages about it on internet message boards online.

Therefore, this study may further assist practitioners and academicians of the field to understand the importance of factors driving the repeated purchase of customers in online stores and their subsequent impact on loyalty. Unfortunately, the current research is not free from restrictions, such as the target size of 293 respondents only and its limitation to online stores and their customers. Thus, the outcomes may not be adopted and generalised across all purchasing stores. Regardless, this study can be expanded in the future by determining the verified hypotheses of the current research by gathering the information and feedback from a diverse group of respondents, potentially of the business sectors, education field, and more.

References:

1. Abdallah S, Jaleel B (2015) Website appeal: development of an assessment tool and evaluation framework of e-marketing. *Journal of theoretical and applied electronic commerce research* **10(3)**, 45–62
2. Ahmad, A., Rahman, O., & Khan, M. N. (2017). Exploring the role of website quality and hedonism in the formation of e-satisfaction and e-loyalty: Evidence from internet users in India. *Journal of Research in Interactive Marketing*, **11(3)**, 246-267.
3. Bucko.J, Kakalejcik.L and Ferencova.M (2018), Online shopping: factors that affect customer purchasing behaviour, *Cogent business and management*, **5(1)**, 1535751.
4. Chen.L and Holsapple.C.W (2013), E-business adoption research: state of the art”, *Journal of electronic commerce research*, **14(3)**, 261-286.
5. Cheng, et.al (2014). Factors Influencing Customers’ Online Purchase Intention: A Study among University Students in Malaysia. *International Journal of Liberal Arts and Social Science*, **2(8)**, 121-133

6. Downing, C.E., Liu, C. (2014). "Assessing Web Site Usability in Retail Electronic Commerce", *Journal of International Technology and Information Management*, **23(1)**, 27-40.
7. Erdogmus.I.E and Cicek.M (2012), The impact of social media marketing on brand loyalty, *procedia-social and behavioural sciences***58**, 1353-1360.
8. Garg, S. K., Versteeg, S., &Buyya, R. (2013). A framework for ranking of cloud computing services. *Future Generation Computer Systems*, **29(4)**,1012-1023
9. Giovanis.A.N and Athanasopoulou.P (2014), Gaining customer loyalty in e-tailing marketplace: the role of e-service quality, e-satisfaction and e-trust, *International journal of technology marketing*, **9(3)**, 288-304.
10. Grinnell, R. M. &Unrau, Y. A. (2008): Social Work research and evaluation: *Foundations of evidence base practice*.New York, NY: Oxford University Press, 153.
11. Gupta.P and Dubey.A (2016), E-Commerce-study of privacy, trust and security from customer's perspective, *International journal of computer science and mobile computing*, **5(6)**, 224-232.
12. Ha.S and Stoel.L (2012), Online apparel retailing: roles of e-shopping quality and experimental e-shopping motives, *Journal of service management*, **23(4)**, 197-215.
13. Hsu, C. L., Chang, K. C., & Chen, M. C. (2012). The impact of website quality on customer satisfaction and purchase intention: Perceived playfulness and perceived flow as mediators. *Information Systems and e-business management*, **10(4)**, 549-570.
14. Jain, N. K., Kamboj, S., Kumar, V., & Rahman, Z. (2018). Examining customer-brand relationships on social media platforms. *Marketing Intelligence & Planning*, **36(1)**, 63-78.
15. Khadim, R. A., Hanan, M. A., Arshad, A., Saleem, N., &Khadim, N. A. (2018). Revisiting Antecedents of Brand Loyalty: Impact of Perceived Social Media Communication with Brand Trust and Brand Equity as Mediators. *Academy of Strategic Management Journal*, **17(1)**, 1-13
16. Kim.J, Jin.B and Swinney.J.L (2009), The role of retail quality, e-satisfaction and e-trust in online loyalty development process, *Journal of retailing and customer services*, **16(4)**, 239-247.
17. Kuo, Y. F., Hu, T. L., & Yang, S. C. (2013). Effects of inertia and satisfaction in female online shoppers on repeat-purchase intention: The moderating roles of word-of-mouth and alternative attraction. *Managing Service quality*, **23(3)**, 168-187.
18. Lee.H.Y, H. Ahn, H. K. Kim (2014) and J. Lee, Comparative analysis of trust in online communities, *Procedia Computer Science*, **31**, 1140-1149.

19. Limbu.Y.B, Wolf.M and Lunsford.D (2012), Perceived ethics of online retailers and customer behavioural intentions: the mediating role of trust and attitude, *Journal of research in interactive marketing*, **6(2)**, 133-154.
20. McLeod S, (2014): Sampling Methods, retrieved on 22nd Aug 2019 , Retrieved from:
<http://www.simplypsychology.org/sampling.html>
21. Minimol.M.C (2018), E-service quality and perceived value as predictors of customer loyalty towards online supermarkets, *Asian Social Science*, **14(3)**, 71-77.
22. Momotaz, S. N., &Hasan, M. S. (2018). Exploring the Impact of Service Quality Factors on Customer Satisfaction towards Online Shopping: *Evidence from Bangladesh. World*, **8(1)**, 102-123.
23. Pandey, S., & Chawla, D. (2016). Impact of changing customer lifestyles and website quality on online satisfaction and loyalty-an emerging market framework. *International Journal of Indian Culture and Business Management*, **12(1)**, 50-71.
24. Pandey, S., & Chawla, D. (2018). Online customer experience (OCE) in clothing e-retail: Exploring OCE dimensions and their impact on satisfaction and loyalty–Does gender matter? *International Journal of Retail & Distribution Management*, **46(3)**, 323-346.
25. Pee.L.G, Jiang.J.J and Klein.G (2018) E-store Loyalty: Longitudinal Comparison of Website Usefulness and Satisfaction, *International Journal of Market Research*, **60(1)**, 1-17
26. Potdar, V., Joshi, S., Harish, R., Baskerville, R., &Wongthongtham, P. (2018). A process model for identifying online customer engagement patterns on Facebook brand pages. *Information Technology & People*, **31(2)**, 595-614
27. Pratminingsih.A, Lipuringtyas.C and Rimenta.T (2013), Factors influencing customer loyalty towards online shopping, *International journal of trade, economics and finance*, **4(3)**, 104-110.
28. Qu, W.G., Pinsonneault, Q.A., Tomiuk, D. Liu, S. W. Y. (2014). “The impacts of social trust on open and closed B2B e-commerce: A Europe-based study”, *Information & Management*, **52(2)** , 151-159,
29. Rose, S., Clark, M., Samouel, P., & Hair, N. (2012). Online customer experience in e-retailing: an empirical model of antecedents and outcomes. *Journal of Retailing*, **88(2)**, 308-322.
- 30.Roy, S.K., Lassar, W.M., and Butaney, G.T. (2014). "The mediating impact of stickiness and loyalty on word-of-mouth promotion of retail websites: A customer perspective”, *European Journal of Marketing* (**48:9/10**), 1828-1849.

31. Sam, C. Y., & Sharma, C. (2015). An Exploration into the Factors Driving Customers in Singapore towards or away from the Adoption of Online Shopping. *Global Business & Management Research*, **7(1)**
32. Shafiee.M.M and Bazargan.N.A (2018), Behavioral customer loyalty in online shopping: the role of e-service quality and e-recovery, *Journal of theoretical and applied electronic commerce research*, **13(1)**, 26-28.
33. Sur.S (2015), The role of online trust and satisfaction in building loyalty towards online retailers: difference between heavy and light shopper groups, *Springer*, 489-494.
34. Tam.J, (2012) "Linking perceived service quality to relational outcomes in a Chinese context," *Journal of International marketing*, **24**, 7-23.
35. Tekin.M, Ince.H, Etliloglu.M, Koyuncuoglu.O and Tekin.E (2018), A study about affecting factors of development of e-commerce, in Durakbasa.N, Gencyilmax.M (eds), *Proceedings of the international symposium for production research*, Springer, Cham, 625-642.
36. Ting, O. S., Ariff, M. S. M., Zakuan, N., Sulaiman, Z., &Saman, M. Z. M. (2016). E-Service Quality, E-Satisfaction and E-Loyalty of Online Shoppers in Business to Customer Market; Evidence from Malaysia. In IOP Conference Series: *Materials Science and Engineering*, **131(1)**, 012012.
37. Toufaily, E., Ricard, L., and Perrien, J. (2013) "Customer loyalty to a commercial website : Descriptive met analysis of the empirical literature and proposal of an integrative model," *Journal of Business Research* **66(9)**,1436-1447.
38. Vinod, A., Subhash, D. A., Kumar, T. S., &Shameem, M. (2015). Examining role of perceived customer value in online shopping. *Indian Journal of Economics and Business*, **14(2)**, 235-244.
39. Wu, W. Y., &Ke, C. C. (2015). An online shopping behavior model integrating personality traits, perceived risk, and technology acceptance. *Social Behavior and Personality: an international journal*, **43(1)**, 85-97.
40. Yang.S, Y. Lu, P. Chau, and S. Gupta (2015), Role of channel integration on the service quality, satisfaction, and repurchase intention in a multi-channel (online-cum-mobile) retail environment, *Electronic Commerce Research Journal*, **15(1)**, 1-25.
41. Yin.L and L. Liu, (2012). A conceptual model for investigating online group buying in virtual communities, *Advances in Information Sciences & Service Sciences*, **4(8)**, 231- 257.
42. Yiwen.C, JiweiM (2012), customers' purchase decision-making and its influence factors in e-commerce. *Advances in Psychological Science*, **(1)**, 31-38.

43. Yoon.V.Y, Hostler.R.E, Guo.Z and Guimaraes.T (2013), Assessing the moderating effect of customer product knowledge and online shopping experience on using recommendation agents for customer loyalty, *Decsion support systems*, **55(4)**, 883-893.
44. Zarco, T. H. (2015). Effects of Online Review Valence on Customer Attitudes and Behavioral Intentions. *Philippine Management Review*, **22(1)**.
45. Zehir.C, Y. Sehitoglu, E. Narcikara, and S. Zehir, (2014) ES-Quality, perceived value and loyalty intentions relationships in internet retailers, *Procedia-Social and Behavioral Sciences*, **150**, 1071-1079.
46. Hsu, C. L., Chang, K. C., & Chen, M. C. (2012). The impact of website quality on customer satisfaction and purchase intention: perceived playfulness and perceived flow as mediators. *Information Systems and e-Business Management*, **10(4)**, 549-570.

Acknowledgment:

I would like to thank my Research Guide **Dr. Sudharani Ravindran**, Professor (Marketing), PSG Institute of Management, Coimbatore who taught me more to do this research and develop myself as a researcher in the best possible way.

Also I would wish to express my gratitude to my Mentor **Dr.Rajalakshmi Rahul**, Visiting Professor, School of Management, Hindustan Institute of Technology & Science, Chennai for extended discussions and valuable suggestions which have contributed greatly to the improvement of my research paper work.

Most importantly, I wish to thank my loving Mother **GirijaSureshKumar** and my caring Father **SureshKumar** who have been supportive for my career goals which provides me unending inspiration.