

A STUDY ON ADOPTING ONLINE REVIEW MANAGEMENT AS A NEW STRATEGY BEYOND TRADITIONAL MEDIA MARKETING TOOLS; WITH SPECIAL REFERENCE TO TV ADVERTISEMENTS

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Abstract

Online reviews are virtual messages written by previous users of the product in the space of internet. Development of Web 2.0 can be recognized as the major success factor in line with the increased use of online reviews. By an initial exploratory study researchers found that online review management technique could in return help the company to cut down its television advertisement costs and other traditional marketing costs and stand more effectively. Therefore, this research was carried to examine whether companies can use online review management systems instead of using traditional marketing methods. In order to examine this, the researchers used the Yale attitude change model and developed three independent variables, one mediating variable and one dependent variable namely; Source, Message, Receiver, Credibility of online reviews and Brand image. A quantitative study has been done to reach the conclusion. Initially the researchers carried out a pilot testing with 18 undergraduates to investigate whether the questions are relevant, comprehensive and sensitive. Finally, 123 responses were gathered to test the proposed hypotheses. Finally, with the use of analyzed data and the literature review the researchers successfully conclude that credible online reviews will help in developing a proper Brand image for a company rather than traditional media marketing tools. Further, it can be recommended, for proper online review management, credibility plays an important role. This study may help the marketers and consumers to implement suitable strategies by knowing the main concerns from the consumers towards online review management.

Keywords: *Online Reviews, Credibility of Online Reviews, Brand Image*

1. Introduction

This study focuses on investigating the availability of adopting online review management as a new strategy that goes beyond the traditional media marketing tools which enhances the intended brand image objectivity of an organization.

Kotler (2001) pointed out brand image as “The set of beliefs, ideas, and impressions that a person holds regarding an object”. Brand image is largely a subjective and perceptual phenomenon that is formed through consumer interpretation, whether reasoned or emotional (Dobni and Zinkhan, 1990). Organizations use different marketing strategies in order to create a superior brand image in its customers’ mind set.

It is very important for a company to find out the most appropriate mechanisms to share relevant information and attract the target population in their businesses. Over the time companies have used traditional media marketing tools like; television advertisements, newsletters, newspapers, print advertisements, flyers and other printed media. The main disadvantage of traditional marketing method is that it is very costly and often failing to reach the target group of customers. Due to the failures of traditional media marketing methods most of the companies are now replacing traditional marketing methods with new and innovative marketing methods. Successful brands are using online social media for a sustaining and an interacting relationship with the consumers

(Neirotti et al., 2016). The advantage of this is that they focus on the target group and it is less costly. Using Online Reviews as a new strategy is evaluated in this paper with the scope of measuring credibility of the online reviews due to the impact of credibility of marketing in creating the brand image according to Yale Attitude Change Model (Hovland et al., 1953) (Yale Attitude Change Model further explained below).

Many companies in the modern world face a challenge to attract the target population by using traditional mode of information sharing strategies which are not sufficient to cater the changing need of the society. It is very important for a company to find out the most appropriate mechanisms to share relevant information and attract the target population to their businesses. An exploratory study carried out depicted that the young people do not spend much time watching television, but more addicted with the usage of internet. It showed that they tend to watch even most of the TV series via online screening websites. Therefore, they do not get an opportunity to watch TV advertisements posted by companies which it is a huge barrier for today’s organizations because although they spend a lot of money for television advertisements, they do not reach the expected goal.

1.1 Objectives of the study

Main objective

- To examine the importance of online review management as a new marketing tool.

Secondary objectives

- To examine the impact of online reviews for purchasing decision and brand loyalty of customers.
- Recommend companies to focus on online review management by showing the effectiveness of online review management.

1.2 Research Questions

- I. What is the effect of online reviews on customers' purchasing decision and brand loyalty?
- II. How successful are online reviews than traditional media advertising tools?

2. Literature Review

Floh et al. (2013) and Lu, W. Chang, & H. Chang (2014) stated that 'online consumer reviews are subjective opinions and summarize experiences, opinions and attitudes, expressed by consumers. Personal opinions and experiences for products and services in the form of online reviews have become one of the most valuable sources of information guiding users when making purchasing decisions (Chua & Banerjee, 2015; Dellarocas, 2003; Henning-Thurau & Walsh, 2003; Huang & Benyoucef, 2013).

According to Cheung et al. (2009), consumers consider the reviews as credible if they tally with their prior knowledge and experience. Chakraborty and Bhat (2017) also confirm this statement. Furthermore, they state that when a customer reads a review, if reviews concur with the existing belief of the customer, he perceives that review as credible. Hovland et al. (1953) have introduced 'Yale Attitude Change Model' to present the evaluation of credibility of online reviews. He presents four factors that affect the credibility of online reviews namely, 'Source of the review', 'Content of the review', 'Receiver of the review' and the 'Medium of the review'. Felbermayr and Nanopoulos (2016) and Lie et al. (2017) also reveal that the reviews which describe consumers' experiences affect credibility of the information. Customers are looking for a review which contains justifications behind that review. This statement was supported by Yang et al. (2016). Furthermore,

Singh et al. (2017) reveals that if the review is described with real life examples it improves the credibility of the review.

Based on the Yale Attitude Change Model; Source, Message and Receiver are analyzed on its impact on Credibility of online reviews.

Effect of Source on Credibility of online reviews

According to Chakraborty and Bhat (2017), Source is the person who writes online reviews. A customer perceives online information if they believe the source is credible. This was confirmed by the study of Li (2015), it reveals that the people generally pursue information if they consider the source of the information as credible. Source credibility can be defined as Source's perceived ability (expertise) or motivation to provide accurate and truthful information (trustworthiness) (Thadani and C. Cheung, 2012). From the study of Luo et al. (2013) they reveal that the source directly affects information credibility.

H1: Source has an effect on credible online reviews.

Effect of Message on Credibility of online reviews

Message here means the information which the source/reviewer provides in the website about the product. The quality and the content of the message are important factors to make the message or the online review credible. Singh et al. (2017) reveals that if the review described with real life examples which are more connected with consumers experiences it improves the consumer's

perception towards the credibility of online reviews and that message is more credible. Felbermayr and Nanopoulos (2016) also had confirmed it. Cheung et al. (2009) also presents that the consumers generally consider reviews as credible if they are consistent with their prior knowledge and experiences. This has also confirmed by Shan (2016).

H2: Message has an effect on credible online reviews.

Effect of Receiver on credibility of online reviews

According to Chakraborty and Bhat (2017) the person who is exposed to online reviews is the Receiver. Chatterjee (2001) reveals that a consumer who is well experienced with a certain brand is not affected by the negative reviews of that brand. So that, we can say if the receiver of the reviews is a well experienced person about the brand, he or she will not consider credibility majorly about the reviews. Zou et al. (2011) and De Valck et al. (2009) report that consumers who search and believe online reviews mostly are consumers with low knowledge about the product.

H3: Receiver has an effect on credible online reviews.

Brand image and effect of Credible online reviews on Brand image

According to Yuan *et al.* (2016), brand image is the brand value in the mind of the consumer. Brand

image can be described as consumers' knowledge and belief about the brand.

For any company the aim of marketers is to influence consumers' perception and attitude towards a brand, establish the brand image in consumers' mind and stimulate consumers' actual purchasing behavior of the product. Zhang (2015) has confirmed above statement in his study. When the confidence of consumers increases for a brand, people are more likely to pay any high price.

Now a day's customer seeks for online reviews before buying any product. But Kaye (2010) states that all the reviews can't be trusted. In the online review environment, there are a massive number of reviews for one product. Therefore, before trusting any review people concern about the credibility of reviews. Otherwise they will not accept that review. Shan (2016) also stated that consumers generally seek the credibility of online reviews before accepting the reviews.

Strong brand image lead to the creation of a wide range of benefits to organizations including reduced risk, greater profits, cooperation with other parties as well as the opportunity for brand extension. The companies in the market competition are more towards to develop their brand. This statement was confirmed by Hawkins, Best, & Coney (2004). There we can see an impact of credible online reviews to the brand image. From a study of Fianto *et al.* (2014) they reveal that there is a positive relationship between brand image and purchase behavior of customer. That means when

the brand image of a product developed, the customers also tend towards that product.

According to the research done by Berk and Burc (2003), consumers evaluate the information gathered in several platforms throughout their pre-purchase decision process to decide which brand of a product to purchase. The main source of this information is the comparison of perceived self-image and brand image. Consumers tend to choose the brands whose perceived images are similar to the consumers' actual images which in return it creates increased sales for the company followed by high market share and stable financial position. So that we can identify a company with high sales and high market share as a company with good brand image.

By the above analysis of data, we can see that Source, Message and Receiver have an impact on credibility of online reviews and it's further seen that credibility of online reviews has an impact on the brand image. According to the study of Baron and Kenny (1986) on mediating effect of variables we can propose that Credibility of online reviews act as a mediating variable. Thus, the final hypotheses formulated as,

H4 : Credible online reviews mediate the effect of Source, Message and Receiver on the Brand Image.

Theoretical framework

- Yale attitude change model

Yale attitude change model was introduced by Carl Hovland and his colleagues in the year 1953. This

model concentrates on persuasive communication. The model describes factors which makes a message credible. The present study follows Yale attitude change model to examine three of the factors that makes an online review credible, namely, source of the review, content of the review and receiver of the review.

- Attribution theory

Attribution theory was introduced by Heider (1958) in his study on interpersonal relationships. This theory focuses on people's cognitive interpretations of events and their effects on people's behavior (Heider, 2013). Attribution theory deals with how people interpret incidents or behaviors in terms of their causal inferences.

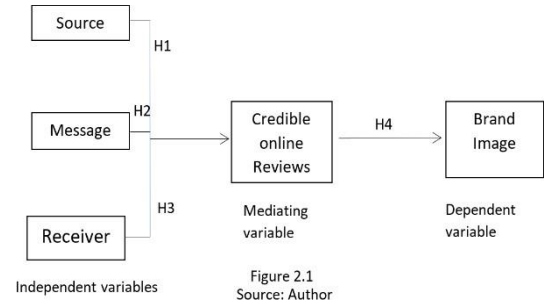
Current study connects credible online reviews and brand image concept through attribution theory. When consumers read various reviews on brands (incidents), it creates an image of a brand in the minds of the consumers (reactions of incidents), which ultimately affects brand image.

Conceptual framework

According to Miles and Huberman (1994) conceptual framework would be a visual presentation that defines the relationship between key factors or variables. Figure 5.0 shows the conceptual framework of our study which the researchers will adhere in their further studies.

Variables used in the framework are defined in the section 5, Literature review.

The following Conceptual framework will be proposed in this current study in order to consider further statistical requirements. Based on the facts of literature review and the theoretical framework the conceptual framework is adopted by the studies of Chakraborty and Bhat (2017).



3. Methodology

Four hypotheses were developed with a mediating effect of credibility by reviewing previous researches and the Yale Attitude Change model. So that, the deductive approach method is used in this study with a positivist research diagram. In deductive approach, the researchers collected data to test the hypotheses in the light of existing theories and principles. Furthermore, the study collected empirical data by conducting a questionnaire to test the existing theory and adapted an existing model instead of generalizing a new theory.

Further, the study adopted the quantitative approach because of quantification in the collection and analysis of the data and the purpose to make a generalization of the data. In specific, the researchers collected responses of the target sample using a questionnaire and quantitatively analyzed them. Thus, the quantitative approach was selected for this study as it acts as a strategy that emphasizes quantification in gathering and analyzing of data which entails a deductive approach.

This study was categorized under descriptive design which attempted to investigate the relationship of online reviews on brand image. Online reviews were measured by the three variables; Source, Message, Receiver through the mediation of Credibility of online reviews. The investigation expects to see positive or negative behaviors among the relationships.

In this study, primary data were collected by the researchers originally with the purpose of solving research questions. However, as this study follows a deductive approach the first-hand data would expect to be applied to increase the credibility of research findings since all the data were lately collected and specifically tailored the research questions. Since the researchers have adopted a descriptive research design the most suitable research strategy to use is survey. The study adopted a cross sectional survey design as it collects data on a wide range of variables at a given time using structured questionnaires. The sample was chosen among the Internet users in the Western province with non-probabilistic sampling techniques.

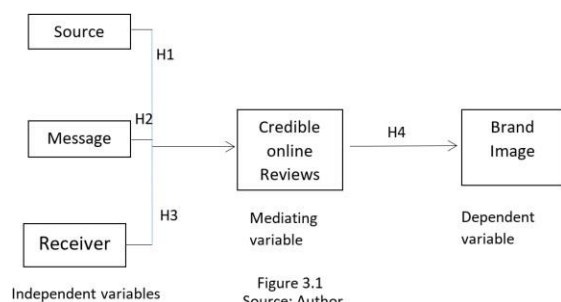
Western Province of Sri Lanka was the researchers' target population which lead the researchers to Non-probabilistic sampling techniques because the population is not significant. Western Province is the Sri Lankan province which has the highest rate of computer literacy, undoubtedly the highest rate of internet usage (Computer Literacy Statistics, 2017).

Sampling element is the unit of analysis or case in a population can be a person, a group, an organization (Dumais and Gough, 2012). In the present study researchers presented a questionnaire to more than 120 Web 2.0 users in the selected sample.

Probability sampling is used when every element of the population has a known, non-zero probability of

selection (Zikmund, 2003). Present research population has no significant sampling frame so that convenient sampling has been used under non-probabilistic sampling. According to that the selected sample is the lecturers and undergraduates of General Sir John Kotelawala Defence University (KDU) Ratmalana which the questionnaire was sent using online platforms.

3.1 Hypotheses and Framework



According to the conceptual framework; Source, Message, Receiver will be the independent variables which are expected to have an impact on Credibility of online reviews which is a mediating variable. Dependent variable will be affected by independent variables through Credibility of online reviews (Baron et al., 1986). According to the framework research will be discussed under following hypotheses,

H1: Source has an effect on credible online reviews.

H2: Message has an effect on credible online reviews.

H3: Receiver has an effect on credible online reviews.

H4: Credible online reviews mediate the effect of Source, Message and Receiver on the Brand Image

The table given below shows the connection between secondary data with the proposed conceptual model for formulating research questions used for the questionnaire; which is the primary source for the collection of empirical data for this research.

Table 3.1: Operationalization

Variables	Indicator	Reference
Source	1. Tendency	(Ledesman,2018)
	2. Reputation/professionals/expertise	(Nan Hu, 2007)
	3. Exposure	(Na Hu, 2007;Liu & Zhang)
	4. Prior use	(Chakraborty & Bhat, 2017)
	5. Emotional status	(Ledesman,2018)
	6. Sex	(Awad and Ragowsky, 2008)
	7. Age	(Statista, Global internet users posting reviews online 2017, by age)

Source: Author

Message	1. Review quality/content	(Chakraborty & Bhat, 2017), (Li, 2015)
	2. Review consistency	(Cheung <i>et al.</i> , 2009), (Thadani C.Cheun <i>et al.</i> , 2012)
	3. Review sidedness	(Chakraborty & Bhat, 2017)
	4. Real life examples.	(Singh <i>et al.</i> , 2017)
	5. Platform	(Wenzl, n.d.)
	6. Tone, valence	(Keyzer <i>et al.</i> , 2017), Valence (Nicky Somohardjo's)
	7. Negative vs positive	Menfors and Femstedt, 2015
	8. Quantitative(star method) or Qualitative(text review)	(Agnihotri & Bhattacharya, 2016)
Credibility of online review	1. Platform	(Wenzl, n.d.)
	2. Characteristics of the Source	(Chakraborty and Bhat,2017)
	3. Review consistency	(Chakraborty and Bhat, 2017)
	4. Tone	(Keyzer <i>et al.</i> , 2017)

Receiver	1. Prior knowledge	(Chatterjee, 2001)
	2. Personal brand loyalty	(Karakaya and Barnes, 2010)
	3. Amount of knowledge about the product	(Zou <i>et al.</i> , 2011)
	4. Role of trust	Awad and Ragowsky (2008)
	5. Age	(Statista, Global internet users who use reviews online 2017, by age)
	6. Price of the product	Henning-Thurau and Walsh, 2003

Brand image	1. Sales	(Ataman, 2003)
	2. Word of mouth(WOM), e-WOM	(Sweeney <i>et al.</i> , 2008)
	3. Financial position	(Ataman, 2003)
	4. Market share	(Ataman, 2003)
	5. Awards	Bruhn <i>et al.</i> , (2012)

4.Data Analysis

Along with the purpose of measuring indicators of respective variables some general questions and demographic questions were studied through the questionnaire as an attempt to screen the responses of the right population and right respondents.

Regarding gender, majority of the respondents were females (64%) as well as around 36% of the male contributed in this survey.

As the researchers have selected KDU as the sample, the highest level of education of respondents have distributed as, 36% of respondents passed Advanced level examination, 11% of respondents have professional qualifications, 50% of respondents have bachelor's degrees and 3% of respondents have master's degrees.

The 101 respondents were categorized into two groups under age levels of 16-25 and 26-35. Among them age group 16-25 accounted for the majority as 94 and 7 were at age level 26-35.

As the population of this study is Western province, the respondents were from Colombo district (52%), Gampaha district (22%) and Kalutara district (26%).

General characteristics of the respondents were also checked in the descriptive analysis,

71% of respondents have written online reviews at some point of their life and 97% of them have read online reviews prior purchasing a product.

Respondents have shown a higher rate on viewing online reviews on electronic products, clothing & apparel and restaurants and food.

The most important finding is that 22% of respondents 'always' view online reviews prior purchasing a critical product, 35% check reviews 'sometimes' and 24% check 'often'. Only a 1% of the respondents 'never' check reviews.

Reliability ensures that data which is used for further analysis are measured consistently and accurately. Cronbach's Alpha can determine the reliability of a study and according to Flynn, *et al.* (1994) if the value is greater than or equal to 0.6 it means that the data collected is well reliable and acceptable. When this alpha value is close to 1 it is accepted highly reliable. The Cronbach's alpha of the current study is as below.

Table 4.1: Reliability test

	Cronbach's Alpha	N of items
Source	0.721	10
Message	0.685	19
Receiver	0.692	7
Credibility	0.735	6
Brand image	0.733	5

Source: Author

The variables of the current study can be considered reliable according to Cronbach's alpha so the data set can be proceeded further.

According to Bryman & Bell (2007), researches should be scientifically viable for it to be used as a measure to take decisions, i.e. Valid.

To determine the validity, Kaiser-Meyer-Olkin (KMO) test can be used and generally KMO should lie between 0 - 1. If the KMO value is closer to 1, it means that collected data set is acceptable (Kim and Mueller, 1978). The value 0.90 in KMO test shows excellent while 0.8, 0.7, 0.6 and 0.5 are define as meritorious, middling, mediocre and miserable respectively. According to the table the result of the KMO test of the study is middling so that it can be considered as data set is scientifically valid.

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.752
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Source: Author

A situation in which there is an exact or nearly exact linear relationship among two or more of the input variables is multicollinearity (Hawking, 1983). This situation can affect regression analysis and

subsequent conclusions. The variation Inflation Factor (VIF) can be used to detect whether there is

any effect of multicollinearity exists among the explanatory variables or not. The VIF represents how much the variance or the standard error is inflated when multicollinearity exists. The table given below shows the tolerance levels and VIF of each variable.

Table 4.3: Multicollinearity Test

Model	Tolerance	VIF
Source	0.674	1.484
Message	0.599	1.670
Receiver	0.744	1.345
Credibility	0.874	1.144

Source: Author

Normally the tolerance value should be greater than 0.1 and if the tolerance level is "0" it indicates a perfect multicollinearity while the tolerance "1" indicates no multicollinearity. Field (2005) has stated that VIF should less than 10. When considering the above table all the tolerance levels are greater than 0.1 and all the VIF values of predictor variables are less than 10 which denote

that there is no multicollinearity.

Regression is a statistical tool which is used to study relationships between variables. When there are situations more than one independent variable multiple regression is carried out. Multiple regression is carried out by completing linear regression considering the set of linear relationships at a given time. In the current conceptual framework, where a mediating variable is proposed; according to Baron *et al.* (1986) the regression analysis should be completed considering three linear regressions in three steps as it is mentioned in the Chapter three.

The linear relationship between Online reviews and Credibility of online reviews will be analyzed initially. Source, Message and Receiver were identified as the independent variables which represents Online reviews. In order to analyze the linear regression following tables were generated using SPSS,

Table 4.4: Model Summary

Model	R	R Square	Adjusted Square	Std. Error of the Estimate
1	.595 ^a	.354	.323	.478

a. Predictors: (Constant), Source, Message, Source
Source: Author

According to the Model Summary table R value indicates a positive linear relationship with the dependent variable because it is a positive value which is 0.595. R square (R²) indicated the proportion of explained variance between 0 and 1, it can be interpreted as a percentage. The higher the value is, association is better proved. In multiple regression analysis adjusted R square

is considered as the modified version of R squared that has be adjusted for several predictors in the model. The adjusted R square which is 0.323, is statistically significant and it suggests that the variance of source, message and receiver determines 32.3% of the variance of credibility of online reviews. The overall standard error of the estimate in the above table indicates how far the sample mean deviates from the population mean. According to Nolan and Heinzen (2011) the smaller number in std. error of the estimate represent the more sample of the overall population. Reflecting to the value of standard error is .478 which indicates that the sample (n= 101) could be representative of the Western Province of Sri Lanka.

Table 4.5: ANOVA^a

Model	Sum Squares	df	Mean Square	F	Sig.
1 Regression	13.157	6	2.631	11.515	.000 ^b
Residual	23.995	105	.229		
Total	37.152	110			

a. Dependent Variable: Credibility of online reviews

b. Predictors: (Constant), Message, Receiver, Source
Source: Author

According to the above table it can be observed that the overall regression model is significant where F=11.515 and p<0.05 under 95% of confidence level. So that it can be concluded that the linear regression in the above case is significant.

The next output of regression analysis is the following table which depicts the standardized beta coefficient which the researchers can use it to determine the relative importance of independent variables on the dependent variable.

Table 4.6: Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.601	.455		.167	.867
Source	.306	.097	.313	3.149	.002
Receiver	.242	.098	.242	2.470	.015
Message	.383	.106	.323	3.612	.001

a. Dependent Variable: Credibility of Online reviews
Source: Author

So that by using beta coefficient we can conclude the following equation,

$$\text{Credibility of online reviews} = 0.313(\text{Source}) + 0.323(\text{Message}) + 0.242(\text{Receiver})$$

According to the above equation, if source increases by one unit while holding all the other factors constant, credibility of online reviews will increase by .313 units on average. Likewise, when Message increases by one unit while holding the other factors constant, credibility of online reviews will increase by .323 units on average and when receiver increases by one unit the credibility of online reviews will increase by 0.242 units.

The next linear regression required to analyze the mediating effect is the relationship between Source, Message and Receiver with Brand image. Source, Message, Receiver will be considered as the independent variables and the Brand image will be measured accordingly as the dependent variable.

Table 4.7
Model Summary

Model	R	R Square	Adjusted Square	Std. Error of the Estimate
1	.492 ^a	.242	.234	.68181

a. Predictors: (Constant), Source, Message, Receiver
Source: Author

According to the table above R value is 0.492 and it suggests that the relationship is a positive moderate linear relationship.

Adjusted R2 has a value of 0.234, which it means that 23% of the variance of Brand image can be determined by the changes of Source, Message, Receiver. Value of standard error is also minimum so that it can be concluded that the deviation of mean in KDU (sample) with Western province is less deviated.

Table 4.8 ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	14.554	1	14.554	31.308	.000 ^b
	Residual	45.556	98	.465		
	Total	60.110	99			

a. Dependent Variable: Brand

b. Predictors: (Constant), Source, Message, Receiver

ANOVA table confirms the significance of the linear relationship by carrying an F value of 31.3. Significance of the relationship is also proven by the ANOVA table where $p < 0.05$ at a confidence level 95%.

Table 4.9 Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.076	.455		.167	.867
Source	.389	.074	.368	5.252	.000
Receiver	.229	.094	.122	2.434	.016
Message	.335	.073	.347	4.607	.000

a. Dependent Variable: Brand Image

According to the beta values in the above table following equation can be derived which it states, a change of one unit in Source results a change of .368 units in the Brand image keeping other variables constant. And a change of one unit in Message results a change of 0.347 units in the brand image when other variables held constant. A change of one unit in Receiver results a change of 0.122 units in the brand image when other variables held constant. The equation can be derived as follows.

$$\text{Brand image} = 0.368(\text{Source}) + 0.347(\text{Message}) + 0.122(\text{Receiver})$$

The last regression test to check the mediating effect would be understanding the effect of Source, message, receiver on Brand image when credibility of online review is included. The most important SPSS output in regression to conclude the mediating effect in this situation is the Coefficient table of the linear relationship which Credibility of online reviews are added as an independent variable.

Table 4.10 Coefficients*

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error			
1 (Constant)	.142	.684		.201	.667
Credibility	.407	.098	.344	4.164	.000
Source	.165	.063	.276	2.633	.010
Receiver	.383	.106	.097	3.612	.026
Message	.130	.055	.159	2.118	.021

a. Dependent Variable: Brand

According to the table the significance value of the independent variables namely; Source, Message, Receiver has increased which it means the significance of independent variables has been reduced and at the same time the beta values of source, message and receiver has decreased in the presence of credibility of online reviews. So that according to Baron and Kenny (1986) it can be concluded that there is a mediating effect in the above discussed behavior of variables.

The ANOVA table and the Model summary table are as follows. ANOVA suggests that the model is significant, and it helps to conclude the significance of the mediating effect of Credibility of online reviews on Brand image.

Table 4.11 ANOVA*

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	26.119	4	6.530	18.250	.000 ^b
Residual	33.991	95	.358		
Total	60.110	99			

a. Dependent Variable: Brand

b. Predictors: (Constant), Message, Credibility, Receiver, Source

Table 4.12 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.659 ^a	.435	.411	.59816

a. Predictors: (Constant), Message, Credibility, Receiver, Source

R2 value also has increased in the regression in the presence of the mediating variable which is Credibility of online reviews.

The equation for the regression can be denoted as follows which gives an idea on the significant impact from the mediator and it can be concluded that the Credibility of online review has a partial mediation on the relationship between Brand image and Online reviews.

$$\text{Brand image} = 0.276 (\text{Source}) + .159 (\text{Message}) + 0.097 (\text{Receiver}) + \underline{0.344 (\text{Credibility of OR})}$$

To further confirm the mediating effect Sobel's test will also be carried.

The mediating analysis was conducted ensuring the conditions proposed by Baron and Kenny (1986). Sobel z-statistics (Sobel, 1982) were used to test the significance of the mediating effect and indicate that the mediating effects of all three models are significant at $p < 0.05$.

Table 4.10- Mediating effect of credibility

Models	Sobel test Statistics
Source → Credibility of online reviews	2.015
Message → Credibility of online reviews	1.978
Receiver → Credibility of online reviews	2.039

Source: Author

The mediating effect of Credibility of online reviews was tested with all predictor variables. As shown in the Table, Source, Message and Receiver recorded Sobel z-statistics of 2.015, 1.978 and 2.039 respectively at 95% confidence level (Annexure: 06). As the rule, if calculated value is higher than critical value, it has to reject null hypothesis (Sobel, 1982). Since all the values are higher than 1.96, there is a mediating effect of Credibility of online reviews towards Brand image.

5. Conclusion and Recommendation

- I. How successful are online reviews than traditional media advertising tools?
 - In the era of technology, the traditional advertising tools have been proven less effective for a long time. YouTube advertising, Facebook campaigns, Google ad sense are the new trends of marketing. Among the new tools online reviews are also effective to develop the brand image. In the Literature Review it was shown how online reviews used as a marketing tool and properly managed. The less cost and personalized approach are the advantages which online reviews possess over traditional tools. If online reviews are properly managed by an entity it can fulfill low cost marketing with high effectiveness. Reviews will be available in the internet forever and these online reviews have a global scale audience. If an entity is keen on the reviews posted regarding their business so that they can recognize their mistakes and can easily forecast customer trends. Unlike traditional marketing tools online reviews are a two-way communication channel which is proven globally highly accepted and credible. Finally, with the analyzed data and the literature review the researchers have proven Credible online reviews will help in developing a proper Brand image for a company rather than traditional media marketing tools.
- II. What is the effect of online reviews on customers' purchasing decision and brand loyalty?
 - According to the Yale attitude change model and attribution theory it can be concluded; a personalized message of a user on a product is more credible and found persuasive. According to the findings of the current study it can be depicted that the reviews are more credible when they express true user experiences. Regarding one product or a service many reviews can be found written by different individuals; so that consumers will ultimately look for the most credible online review. In the process of selecting the most credible review, a viewer will consider; review quality, review consistency, review sidedness, timeliness, characteristics of the source and the type of the product as the main indicators of credibility. If a consumer finds a particular review credible, he will accept that online review as a personal suggestion regarding the product which he is going to purchase. Marketers and sales forces of companies are struggling to reach their customers personally because it is the best strategy a sales team would use to increase their sales. Online reviews are proven as the best strategy to give this personalized influence for the purchase decision of the

consumers and it is all about creating the brand loyalty and brand image. Thus, with the analyzed data it can be mentioned that the success of online review management depends with the credibility.

6. Implications

With the conclusion obtained by answering the research questions the current study has contributed to the previous research in the field of online review management process. Correspondingly, based on the results, it can be suggested that the Yale model is a valuable model to understand Credibility of online reviews towards brand image. According to the introduction, there are not many studies have been made about online review management in Sri Lanka. Therefore, this paper has certainly contributed to the research area of online review management in Sri Lanka. To some extent, this result has been similarly mentioned by other studies in other countries but not specifically in Sri Lanka.

This finding will help the marketers and consumers to implement suitable strategies by knowing the main concerns from the consumers towards online review management.

7. Limitations Recommendations

Investigation was limited to analyze the relationship only among three independent and dependent variables neglecting the

possible effect of other factors. Moreover, the sample size and population characteristics might also limit the ability to make broader generalizations from the result. Thus, for further researches it could be an advantage to have much more questions measuring a certain variable and a better model can then be proposed for future research as to provide better insights for manufacturers, marketers and consumers of online review management process. Lastly, in terms of the influence of factors on online review management process; future studies could replicate it in another context such as different geographical location using a larger population with more qualitative sources as information.

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