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The Effect of Social Media Advertisement Features on the Online Purchase Intention: A Case Study in Sri Lanka

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ABSTRACT

With the development of technology, most people got the chance to engage in digital marketing activities. Online shopping is a trending facility that improves day by day and social media advertisements play a major role in customers' online purchase intention. The purpose of this study was to observe how the features of social media advertisements affect the online purchase intention of customers in Sri Lanka when purchasing products including agricultural products. The social media advertisement features that affect online purchase intention (creativity, customer feedback, entertainment and information in advertisements) were considered in this study. A google form questionnaire was used to gather data and 312 responses were collected. Confirmatory Factor Analysis and Structural Equation Modeling were used for the data analysis. After analyzing the gathered data, it was found that informative advertisements and creative advertisements on social media platforms have a direct impact on online purchasing intention. Also, the results indicated that customer feedback affects purchase intention through information. Entertaining online advertisements have an impact on purchase intention through their creativity. This study focused on only four features in social media advertisements. Therefore, future researchers should address the other advertisement features as well. The findings of this research can be used to make advertisements more useful and profitable for advertisers as well as sellers..

Keywords: Confirmatory factor analysis, Online advertisements, Purchase intention, Social Media, Structural equation model

1 Introduction

With the rapid development of the internet and other online facilities, marketing strategies in the business world also have stepped up to a new stage. Nowadays there are several online stores/websites e.g. “Kapruka.com, daraz.lk, and ebay.com” where people can have an online purchasing experience. Online as well as offline shopping activities are highly promoted with the help of social media advertising facilities. In Sri Lanka, most people have access to the internet and often they use at least one social media type. Therefore, it is inevitable to stop them from exposing themselves to online advertisements. That gives great support to companies to manage their customer base online. Firms can motivate their customers to purchase goods and build the customers awareness and knowledge with the help of social media advertisements (Duffett, 2015; Alalwan et al., 2017). Advertisements should have the ability to grab new customers as well as maintain the customers they already have. Therefore, it is important to think wisely before making an online advertisement and releasing it on a social media site since it is costly to work.

Attractiveness in an advertisement has a positive impact on customers’ sense of psychic connection alongside online trademarks (Müller and Chandon, 2004). The ability to catch the eyes of a customer is a basic quality of a good advertisement. The extent of the message that a customer could grab highly depends on it. The attractiveness and creativity of social media advertisements pay a high commitment to attracting customers to the advertisement and it can be found in several studies (Jung et al., 2016; Lee and Hong, 2016; Wamba et al., 2017). Also, the influence of creativity and information in advertisements on clients’ expressions of empathy has been validated (Lee and Hong, 2016).

Since advertisements on social media allow customers to put comments, likes, and even post or share them, they can have good and mere experiences interacting with the advertisements (Laroche et al., 2013). Social Network comments related to issues in usage and business practices, product developments and other information can be considered the most influential (Boon-Long and Wongsurawat, 2015). Also, customers can get a brief idea about the product by just reading some comments before purchasing. Attitudes are influenced by both social media advertisements and customer responses and that has been statistically confirmed (Boateng and Okoe, 2015). Interactivity is the ability of a social media site to come up with appropriate responses (Rafaeli, 1988). Also, interactivity on a social media site has a strong correlation with employment (Yang et al., 2013).

In the case of information contained in social media advertisements, the usefulness and the adequacy of the information have a huge impact on customers (Jung et al., 2016; Lee and Hong, 2016). The attitudes of the customer have a positive association with informativeness (Taylor et al., 2011). Therefore when it comes to purchasing things from advertisements on social media sites, customers’ buying intention is positively influenced by the information

in the advertisement (Lee and Hong, 2016). The e-loyalty intent of the customer and the information quality on the website have a considerable positive association (Kim and Niehm, 2009).

Social media advertisements have a considerable impact on entertainment too (Saxena and Khanna, 2013). A robust correlation between the attitudes of the customers and the entertainment regarding advertisements on social media has been found (Jung et al., 2016). Habit is very important in online purchasing activities. It does a great job of defining the customer's behaviour, perception, and intention toward online purchasing. It has been considered in many studies (Wu et al., 2016).

Although many studies regarding online purchase intention can be found in other countries, there is a lack of studies in the Sri Lankan context. Therefore, the objective of this study was to check whether Creativity, customer feedback, entertainment and information have a direct positive influence on the purchase intention of Sri Lankan customers.

2 Methodology

The selected advertisement features and their hypothetical correlations are shown in the following proposed conceptual framework (Figure 1).

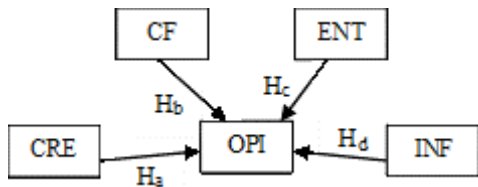


Fig. 1: The conceptual model for social media advertisement features and online purchase intention.

- Ha: Creativity in social media advertisements has a direct positive effect on online purchase intention (Lee and Hong, 2016)
- Hb: Customer feedback in social media advertisements has a direct positive effect on the online purchase intention
- Hc: Entertainment in social media advertisements has a direct positive effect on online purchase intention.
- Hd: Information in social media advertisements has a direct positive effect on online purchase intention (Lee and Hong, 2016)

2.1 Research Instrument

A Google form questionnaire was used to gather data. Key areas, general information, information on online purchasing, social media usage, social media advertisements and features of social media advertisements were addressed in the paper. The impact of selected social media advertisement features (Creativity, Customer feedback, Information and Entertainment) on customers' online purchasing intention on the products including agricultural products, apparel and cosmetics etc. were observed using this questionnaire. Consumer purchasing intention on features of social media advertisement was assessed using five-point Likert scale questions created to assess the relationship between online purchase intention and social media features. There were 2 general statements regarding online purchase intention, 6 statements regarding creativity, 4 statements regarding customer feedback, 7 statements regarding entertainment and 10 statements regarding information in social media advertisements. Each statement was presented on a 5-point Likert scale and the respondents were allowed to mark their preference among strongly agree, agree, neutral, disagree, and strongly disagree giving 5 to 1 respectively. Multiple-choice and short-answer questions were used to collect general information.

2.2 Data Collection

This research was conducted as a web-based survey. By clearly stating the research purpose and the assurance of confidentiality in the google form, this research was carried out as a web-based survey. Participants for this survey were selected representing all nine provinces in Sri Lanka. Both male and female participants were categorized into age categories (18-30 years, 30-50 years, and over 50 years). The data were collected according to the snowball sampling method. The questionnaires were distributed through WhatsApp, Messenger, and Facebook among more than 400 online users and non-users and 312 responses were collected. In the collected set of 312 respondents, other than some missing values in the income category and some other categories, there were no missing values in variables related to the factors which were analyzed with the confirmatory factor analysis technique. Since this study was mainly focused on the effect of Social Media advertisement features, only the answers from respondents who had social media accounts (290) were considered in CFA and SEM fitting. Therefore the sample size is 290.

2.3 Statistical Analysis

The data were assessed using IBM SPSS Statistics 21. By using the principal components analysis (PCA) alongside varimax rotation, screen 25 measurement items were screened and the elemental dimensions of features in social media advertisements that affect the online purchasing intention of customers in Sri Lanka were found. Since the number 1 was applied as the minimum Eigenvalue, five factors were produced by the principal component analysis.

Table 1: Demographic factors

Demographic Factors	%
Gender: Male	32.7%
Female	67.3%
Age Category: 18-30 years	95.2%
30-50 years	4.5%
More than 50 years	0.3%
Job sector/ Student: Student	70.2%
Government sector	10.3%
Private sector	15.7%
Other	3.8%

Then the Confirmatory Factor Analysis was carried out to check how well the constructs are represented by the measured variables. The good fit between the latent variables (factors) and the observed variables was assessed by a measurement model and the proposed relationships among the constructs were assessed by a structural model using AMOS 21.

3 Results and Discussion

The demographic factors of the sample are mentioned in table 1. There is a visible difference between the participation of people who are older than 50 years and other age groups in this online survey. Some of the major reasons behind the lower participation of people who are older than 50 years in this data collection were lack of electronic devices like laptops or mobile phones usage, lack of awareness of web-based surveys and lack of fluency in the English language. Regarding the online purchase experience, 81.4% have purchased online and 18.6% were not within the ones who have done online purchasing, most of them (57.5%) have purchased very rarely, 14.2% have purchased more than once a month and only 28.3% have purchased once a month. Also, 97.8% liked to purchase in the future too, and 2.2% were not interested in future online purchasing. It was found that 92.9% of the respondents use social media sites. Among them, 36.6% stated that they interested in social media advertisements "sometimes" and 11.4% were stated that they are always interested. Also, 25.9% mentioned that their interest depends on their mood, and 26.2% mentioned that they were not interested at all in social media advertisements. Other than that, 80% of the social media users have visited the relevant page after watching the social media advertisement and only 49% of online users have purchased a product after visiting the page. The Chi-Square test revealed significant associations between some of the variables. They were, previous online purchasing experience and future purchasing engagement (Chi-Square value = 21.319, p-value = 0.000), Interest in social media advertisements and visiting a product page after watching an advertisement (Chi-Square value = 12.235, p-value = 0.007), and page visit after watching

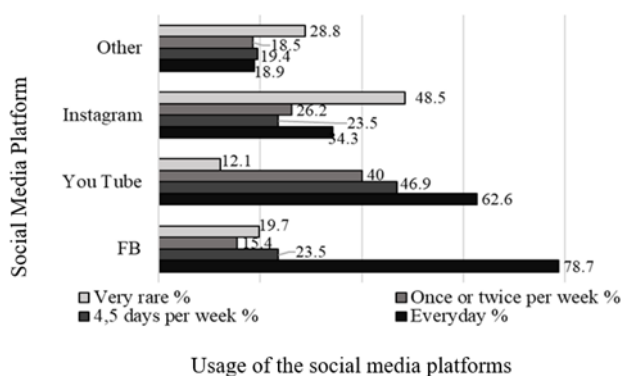


Fig. 2: Social media platforms and their usage

an advertisement and purchasing that product (Chi-Square value=15.486, p value= 0.000).

Multiple response analysis indicated that most of the respondents (36.5%) have marked easiness as their reason for online purchasing and the second-best reason (26%) was the efficiency in online shopping. Only 1.3% of the respondents have marked that they do not have online facilities to do shopping. Among lack of time, lack of interest, and other reasons, most of the respondents (64.3%) reason for not use any social media type was lack of interest in social media. Also, it was found that among Facebook, YouTube, Instagram, and other social media types, most of the respondents (84.7%) mentioned that they use Facebook and 77.2% mentioned YouTube. Instagram was mentioned by 51.9% and 23.1% of the respondents mentioned that they use other social media types. Among the respondents who used social media platforms, 60.3% marked that Facebook is the social media type where they are mostly exposed to advertisements, 54.0% selected YouTube, 20.7% selected Instagram and only 5.2% selected the option “other SM types”. Percentages of social media usage are given in Figure 2.

The value obtained from the Kaiser-Meyer-Olkin (KMO) test was 0.914 and the sample was considered adequate for Confirmatory Factor Analysis (CFA). Also, the significant value for Bartlett’s test of sphericity was 0.000. That value was less than 0.05 and that confirmed the data have an adequate correlation to perform CFA.

3.1 Measurement model

Average Variance Extracted (AVE) values for all the factors were calculated and all of them were higher than 0.5 and all the Composite Reliability (CR) values were also greater than 0.7. All the factors’ Cronbach’s alpha values were also greater than 0.7. Therefore, they were all considered reliable (Table 2).

Table 2: AVE (Average Variance Extracted), CR (Composite Reliability) and Cronbach's alpha values.

Factor	AVE	CR	Cronbach's α
Online Purchase Intention	0.5770	0.7314	0.728
Creativity	0.6172	0.8656	0.865
Customer feedback	0.5843	0.8078	0.807
Entertainment	0.5337	0.8881	0.889
Information	0.5020	0.8997	0.901

The p-values of the factors were less than 0.05. Therefore, the factors were considered statistically significant and satisfied the convergence requirement. All the values of factor loading exceeded 0.50(acceptable value) and lay in the 0.565 to 0.824 range.

To measure the goodness of the model fit, several tests were done (Table 3).

Table 3: Application of model fit indices for the measurement model

Indices	Acceptable Range	Measurement Model
Chi-Square		401.873
Chi-Square/Degrees of freedom	≤ 3.000	1.546
Goodness of Fit	≥ 0.90	0.902
Adjusted Goodness of Fit	≥ 0.80	0.878
Normed Fit Index	≥ 0.90	0.901
Comparative Fit Index	≥ 0.90	0.962
Root Mean Square Error of Approximation	≤ 0.08	0.043

Since all values except the chi-square value were at an acceptable level, the model was considered for further analysis purposes.

3.2 Structural model

After testing the measurement model, the structural model was tested. In that model, all the p-values for the regression weights were less than 0.05 except the p-values for customer feedback (0.952) and entertainment (0.549) in the prediction of their influence on online purchasing intention. Therefore, H_a and H_d hypotheses were accepted and H_b and H_c hypotheses were rejected. Then the relationship between entertainment and customer feedback regarding online purchase intention was removed and the structural model was changed to check whether there were any indirect relationships between customer feedback, entertainment, and online purchase intention through other factors. (Figure 3).

To measure the goodness of the model fit, several tests were done (Table 4). Since the Chi-Square test is highly sensitive to the size of the sample, it was not considered. Then the p-values for all relationships were less than 0.05 and

they were considered significant. Therefore, it can be taken as both customer feedback and entertainment have indirect positive relationships with online purchase intention (Table 5).

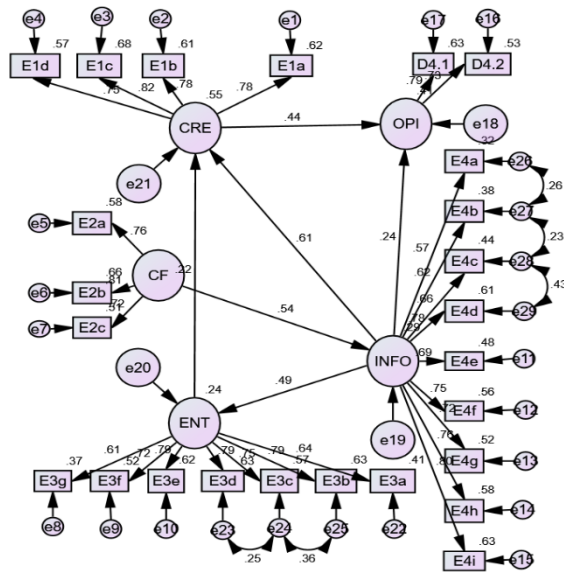


Fig. 3: Structural model (The indicators used for the structural model are provided in the appendix)

Table 4: Application of model fit indices for structural model

Indices	Acceptable Value	Structural Model
Chi-Square		404.317
Chi-Square/Degrees of freedom	≤ 3.000	1.532
Goodness of Fit	≥ 0.90	0.902
Adjusted Goodness of Fit	≥ 0.80	0.879
Normed Fit Index	≥ 0.90	0.901
Comparative Fit Index	≥ 0.90	0.963
Root Mean Square Error of Approximation	≤ 0.08	0.043

According to the model, among creativity and Information, creativity highly affects (0.44) the online purchasing intention more than information (0.24). The information has a higher impact on entertainment (0.49) than its impact on online purchasing intention. Customer feedback also has an impact on information (0.54) on online purchase intention. Also, creativity in social media advertisements is affected by both information and entertainment towards on-line purchasing intention. But the impact of information (0.61) is higher than the impact of entertainment (0.22). The standardized regression weights are mentioned in Table 6 in the appendix.

Table 5: Regression Weights

Relationship	Estimate	S.E.	C.R.	p-value
CRE to OPI	0.497	0.119	4.157	***
CF to INFO	0.497	0.078	6.37	***
ENT to CRE	0.211	0.06	3.504	***
INFO to ENT	0.53	0.089	5.972	***
INFO to CRE	0.633	0.089	7.081	***
INF to OPI	0.282	0.119	2.373	0.018

*** indicate the p-values that are less than 0.001.

4 Conclusion

The results of this study show new intuitions in social media advertising that is very important for both academics as well as industry practitioners as well. It can be concluded that creativity and information have a direct positive impact on online purchasing and among those two factors, creativity has the highest impact on purchase intention. Customer feedback and entertainment have indirect positive relationships with online purchase intention. Consumers consider consumer feedback as a source of information and that affects the purchase intention. While the information in social media advertising has an impact on Creativity, entertainment, and online purchase intention, its' highest impact goes toward the Creativity of the advertisement.

When creating a social media advertisement, more attention should be paid to creativity. Also, there must be an adequate amount of clear, updated and truthful information in a creative way. The comments section should be managed properly since a lot of customers consider the content on it when taking a buying decision. Also, it should be updated frequently and the customers' feedback should be considered when doing further developments in commodities as well. According to the obtained results, Facebook can be recommended as the best social media platform for advertising. It can bring the message to a lot of customers at once as it has more daily users than YouTube or Instagram.

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References

- Alalwan, A.A., Rana, N.P., Dwivedi, Y.K. and Algharabat, R. (2017) Social media in marketing: A review and analysis of the existing literature. *Telematics and Informatics*, 34,(7), 1177–1190. <https://doi.org/10.1016/j.tele.2017.05.008>

- Boateng, H. and Okoe, A. F. (2015) Consumers' attitude towards social media advertising and their behavioural response. *Journal of Research in Interactive Marketing*, 9,(4), 299–312. <https://doi.org/10.1108/JRIM-01-2015-0012>
- Boon-Long, S., and Wongsurawat, W. (2015) Social media marketing evaluation using social network comments as an indicator for identifying consumer purchasing decision effectiveness. *Journal of Direct, Data and Digital Marketing Practice*, 17, 130-149.
- Duffett, R. G. (2015) Facebook advertising's influence on intention-to-purchase and purchase amongst millennials. *Internet Research*. <https://doi.org/10.1108/IntR-01-2014-0020>
- Jung, J., Shim, S.W., Jin, H.S. and Khang, H. (2016) *Factors affecting attitudes and behavioural intention towards social networking advertising: A case of Facebook users in South Korea*. *International Journal of Advertising*, 35,(2), 248–265. <https://doi.org/10.1080/02650487.2015.1014777>
- Kim, H. and Niehm, L. S. (2009) The Impact of Website Quality on Information Quality, Value, and Loyalty Intentions in Apparel Retailing. *Journal of Interactive Marketing*, 23,(3), 221–233. <https://doi.org/10.1016/j.intmar.2009.04.009>
- Laroche, M., Habibi, M. R. and Richard, M. O. (2013) *To be or not to be in social media: How brand loyalty is affected by social media?* *International Journal of Information Management*, 33,(1), 76–82. <https://doi.org/10.1016/j.ijinfomgt.2012.07.003>
- Lee, J. and Hong, I. B. (2016) Predicting positive user responses to social media advertising: The roles of emotional appeal, informativeness, and creativity. *International Journal of Information Management*, 36,(3), 360–373. <https://doi.org/10.1016/j.ijinfomgt.2016.01.001>
- Müller, B. and Chandon, J. L. (2004) The impact of a World Wide Web site visit on brand image in the motor vehicle and mobile telephone industries. *Journal of Marketing Communications*, 10,(2), 153–165. <https://doi.org/10.1080/13527260410001693820>
- Rafaeli, S. (1988) From new media to communication. Sage annual review of communication research: Advancing communication science, 16, 110-134. Retrieved from <https://www.academia.edu/download/44162252/Rafaeli-interactivity.pdf>
- Saxena, A. and Khanna, U. (2013) Advertising on Social Network Sites: A Structural Equation Modelling Approach. *Vision: The Journal of Business Perspective*, 17,(1), 17–25. <https://doi.org/10.1177/0972262912469560>

- Taylor, D. G., Lewin, J. E. and Strutton, D. (2011) Friends, fans, and followers: Do ads work on social networks? How gender and age shape receptivity. *Journal of Advertising Research*, 51,(1), 258–276. DOI: 10.2501/JAR-51-1-258-275 Published 1 March 2011
- Wamba, S.F., Bhattacharya, M., Trinchera, L. and Ngai, E.W. (2017) Role of intrinsic and extrinsic factors in user social media acceptance within workspace: Assessing unobserved heterogeneity. *International Journal of Information Management*, 37,(2), 1–13. <https://doi.org/10.1016/j.ijinfomgt.2016.11.004>
- Wu, Y. L., Li, E. Y. and Chang, W. L.(2016) Nurturing user creative performance in social media networks: An integration of habit of use with social capital and information exchange theories. *Internet Research*, 26,(4), 869–900. <https://doi.org/10.1108/IntR-10-2014-0239>
- Yang, B., Kim, Y. and Yoo, C. (2013) The integrated mobile advertising model: The effects of technology- and emotion-based evaluations. *Journal of Business Research*, 66,(9), 1345–1352.<https://doi.org/10.1016/j.jbusres.2012.02.035>

Appendix

Indicators used for the model

CRE: Creativity, CF: Customer Feedback, ENT: Entertainment, INFO: Information, OPI: Online Purchase Intention, (D4.1) Easily understandable social media advertisements motivate me in online purchasing, (D4.2) Short and quick social media advertisements do a big help in motivating the on-line purchasing, (E1a) Creative social media advertisements catch viewer attention easily, (E1b) Creative social media advertisements can affect viewer emotions, (E1c) Creative social media advertisements can create new consumer wants, (E1d) Extreme Creativity tricks the viewers, (E2a) I consider likes/comments/ratings in an ad before touch the "shop now" button, (E2b) Comments /likes/ratings affect the purchase decision, (E2c) Comments give a better idea about the product, (E3a) social media advertisements with activities like online games fun items/quizzes etc. grab the viewer's attention easily, (E3b) I like enjoyable social media advertisements, (E3c) I like funny social media advertisements, (E3d) Entertaining social media advertisements, catch my attention first, (E3e) I watch the entire social media advertisement if it is entertaining, (E3f) Music, dancing aesthetic activities makes social media advertisement more attractive, (E3g) I would like to purchase the brands which are endorsed by my favorite celebrity, (E4a) I prefer social media advertisements with a lot of product information, (E4b) I prefer social media advertisements with timely information, (E4c) I prefer social media advertisements with reliable information, (E4d) I prefer social media advertisements

with clearly defined information, (E4e) Social media advertisements make product information immediately accessible, (E4f) Information in social media advertisements motivates us to purchase brands, (E4g) I consider the social media advertisements with product price, (E4h) They contribute to my knowledge about the product, (E4i) Information in makes it easy to make a purchase decision.

Table 6: Standardized Regression Weights

Relationship	Estimate	Relationship	Estimate
OPI to D4.1	0.791	ENT to E3e	0.788
OPI to D4.2	0.726	ENT to E3f	0.720
CRE to OPI	0.444	ENT to E3g	0.606
CRE to E1a	0.784	INFO to ENT	0.487
CRE to E1b	0.781	INFO to CRE	0.606
CRE to E1c	0.825	INFO to OPI	0.241
CRE to E1d	0.752	INFO to E4a	0.565
CF to INFO	0.535	INFO to E4b	0.615
CF to E2a	0.762	INFO to E4c	0.662
CF to E2b	0.812	INFO to E4d	0.779
CF to E2c	0.715	INFO to E4d	0.691
ENT to CRE	0.220	INFO to E4f	0.749
ENT to E3a	0.639	INFO to E4g	0.720
ENT to E3b	0.791	INFO to E4h	0.764
ENT to E3c	0.753	INFO to E4i	0.797
ENT to E3d	0.793		