The Influence of Effectiveness Electronic Advertising with EPIC Model on Web Series toward Consumer Purchase Decisions on Tropicana Slim Stevia Products

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ABSTRACT: YouTube is the most widely used social media in Indonesia. YouTube is currently used as a marketing tool for many companies. One of the companies promoted by displaying web series on YouTube channel is Tropicana Slim which has a web series titled "Sore" and "Janji". The web series has been watched more than 600 thousand times on YouTube, campaigning for a healthy life as a marketing strategy. The packaging of the Tropicana Slim ad is made neatly in the class of widescreen films with the aim of motivating young people to live healthy lives, but with a large number of viewers does not have a significant impact on users of these products. In marketing, effective advertisement improvement is carried out with the EPIC Model approach with four dimensions used, namely Empathy, Persuasion, Impact, and Communication (EPIC). Based on the results of the study it can be seen that persuasion has the greatest influence on purchasing decisions. These results provide the conclusion that the web series must be able to make the audience interested in Tropicana Slim Stevia products and provide information about the benefits that can make the audience interested in other products of Tropicana Slim, and can make the audience have the desire to use the Tropicana Slim Stevia Products advertised in the series the "Sore" web.

KEYWORDS: Tropicana Slim Stevia products, YouTube, Advertising, EPIC model, consumer purchasing decisions

I. INTRODUCTION

In the digital age, people in general have a new lifestyle where they cannot decide on all electronic devices. Technology has become a reliable tool in most human activities [1]. The mass media turned to the internet because there was a cultural change in the transition of information. One alternative is social media where the public can keep abreast of information developments that are rife into discussion, besides that it becomes a tool for user interaction with each other in the discussion of information being disseminated [2].

Indonesia has become one of the countries following the development of the internet, this can be seen from the use of a large social media in 2019. Hootsuite is a social media management tool in your business. Hootsuite offers many useful features, Hootsuite allows you to manage your Twitter, Facebook, YouTube, Google+, Instagram, and LinkedIn profiles. The best thing is that this service is able to help companies to use social media in the form of sites that can be used to launch marketing campaigns, identify and add audiences, and deliver targeted messages on several media channels and make it possible to adjust the time according to the user's wishes. Based on research data from Hootsuite and We Are Social on "All the Data and Trends You Need to Understand the Internet, Social Media, Mobile, and E-Commerce Behaviors in 2019" which states that the overall society that using the internet to socialize reaching 150 million users, this shows that the majority of the use of the internet to socialize through social media with many uses which reached 56% of the total population of Indonesia, with mobile-based users reaching 130 million, as shown in Figure 1.
From the Figure 1, it can be seen that YouTube is the most widely used social media in Indonesia. YouTube provides a variety of video content that can be enjoyed, such as watching the news, the latest music video clips, comedy and more. This has led to a shift in society that has begun to leave the television and move on to other choices such as YouTube. The use of YouTube has experienced a shift where previously people used YouTube as a medium for entertainment, but now YouTube is used as a marketing tool by many companies. So do not be surprised if many companies began to advertise the products they have on YouTube social media. Of the many web series produced, the short film format is the most popular. Web series is a powerful weapon for a company brand to introduce themselves. One company that promoted by displaying a web series on the YouTube channel was Tropicana Slim Sweetener Stevia which became known to the public by the name Tropicana Slim Stevia, which has a web series titled “Sore” and “Janji”. The web series has been watched more than 600 thousand times on YouTube, campaigning for healthy living as a marketing strategy. Digital marketing is a marketing process that uses electronic communication technology, especially the internet. Digital marketing refers to an external perspective on how the internet can be used together with traditional media to obtain and provide services to customers [3].

Web Series that is aired by Tropicana Slim Stevia has the aim to encourage and motivate people to have a healthy lifestyle in order to reduce the number of people with diabetes by focusing on targeting the younger generation with one of them through the SORE web series media which is made slickly in a class of widescreen films but packed with short duration. This is done by Tropicana Slim Stevia to have a competitive advantage to be able to compete with other companies. In increasing the effectiveness of an advertisement based on the communication impact caused, the Empathy, Persuasion, Impact and Communication (EPIC) model approach developed by AC. Nielsen (2018) [4], suggests that there is a method that can be used, namely the EPIC model. There are four dimensions used in the EPIC model, namely Empathy, Persuasion, Impact, and Communication. These four dimensions will then be analyzed to see the effectiveness of each of these dimensions separately so that it can be seen in which dimensions an advertisement has weaknesses in achieving its objectives and then designing new strategies to correct these weaknesses.

Based on the research background above, the authors are interested in making research with the aim to analyze the influence of effectiveness electronic advertising with EPIC model on Web Series toward consumer purchase decisions on Tropicana Slim Stevia products

II. THEORETICAL FRAMEWORK

The headings and subheadings, starting with “1. Introduction”, appear in upper and lower case letters and should be set in bold and aligned flush left. All headings from the Introduction to Acknowledgements are numbered sequentially using 1, 2, 3, etc. Subheadings are numbered 1.1, 1.2, etc. If a subsection must be further divided, the numbers 1.1.1, 1.1.2, etc.
B. **Web Series**

Moriarty, et al (2015) [7], say that webisodes are one type of new internet practice. Webisodes are similar to television programs, by repeating episodes in developing stories, webisodes have created new forms of advertising on the internet.

C. **EPIC Model**

Various models were created to measure the effectiveness of advertising. One way to measure the effectiveness of advertising is to use the EPIC model approach developed by AC. Nielsen, which is a leading marketing research company in the world. The EPIC model measures the effectiveness of advertising that has an impact on communication, where this model has four critical dimensions that have different levels of importance depending on marketing objectives. All four dimensions will be processed to obtain an EPIC level that will indicate whether the ad is effective or not. The following is an explanation of the dimensions in the EPIC model:

1. **Empathy**

Empathy is a mental state where a person identifies himself or feels himself in a state of feeling or thinking the same as another person or group. According to Paul et al (1999) [8], empathy involves feelings of affection from a consumer and cognition. In simpler language, compassion involves feelings, while cognition involves thinking activities.

2. **Persuasion**

According to Peter and Olson (2008) [9], persuasion is a change in beliefs, attitudes, and behavioral desires caused by promotional communication. The persuasion dimension provides information that can be provided from a form of marketing communication to strengthen the brand so that the ads displayed get an understanding of the impact of advertising on consumers’ desire to buy. The need for ads that are easily understood and interesting can increase consumer interest in the product being shipped.

3. **Impact**

The expected impact of an advertisement is consumer product knowledge through consumer involvement in a product or a selection process [4]. Consumers have a level of product knowledge such as: class, type, brand, and model. And they have three types of product knowledge including: characteristics or features, consequences or positive effects of product use, and expected values of the product.

4. **Communication**

Communication provides information about the ability of consumers to remember the main message to be conveyed, their understanding, as well as giving the impression strength of the message [4]. The cognitive processing perspective influences marketing strategies.

D. **Consumer Purchase Decisions**

Nugroho Juli Setiadi cited by Ryan et al (2018) [10] stated that decision-making is an integration process that combines knowledge to evaluate two or more alternative behaviors and choose one of them. Lisdayanti, et al (2019) [5], state that purchasing decisions are a process carried out by consumers to buy a product afterward having information and comparing it with other brand products. Meanwhile, according to Kotler and Keller (2012) [11], indicators of purchasing decisions are 1) Choice of products, 2) Choice of brands, 3) Choice of dealers 4) Number of purchases, 5) Time of purchase, 6) Payment methods. In this study 5 indicators were used, namely, 1) Choice of product, 2) Choice of dealer 3) Number of purchases, 4) Time of purchase, 5) Payment method.

### III. RESEARCH AND HYPOTHESIS PARADIGM

The first paragraph under each heading or subheading should be flush left, and subsequent paragraphs should have a five-space indentation. A colon is inserted before an equation is presented, but there is no punctuation following the equation. All equations are numbered and referred to in the text solely by a number enclosed in a round bracket (i.e., (3) reads as "equation 3").

Based on the above, the research paradigm is as given in Figure 2.

![Figure 2 — Paradigm Research](image-url)

The research hypothesis can be formulated as follows:

Hypothesis 1 There is a persuasion effect on consumer purchasing decisions on Tropicana Slim Stevia products

Hypothesis 2 There is a persuasion effect on consumer purchasing decisions on Tropicana Slim Stevia products

Hypothesis 3 There is an effect of Impact on consumer purchasing decisions on Tropicana Slim Stevia products

Hypothesis 4 There is an influence of Communication on consumer purchasing decisions on Tropicana Slim Stevia products

Hypothesis 5 There is an influence of empathy, persuasion, impact, and communication towards consumer purchasing decisions on Tropicana Slim Stevia products simultaneously.

IV. RESEARCH METHODS

A. Research Design

On consideration of the research objectives, the research design using descriptive and verification. Descriptive research is research whose main purpose is to describe something and is usually characteristic or function. Researchers used descriptive research to examine how each dimension of the EPIC model in the SORE web series advertisement and examining how consumer purchasing decisions on Tropicana Slim Stevia products. Verification research is used to examine the effect of independent and dependent variables, which is to find out how much influence the four dimensions of the EPIC model web series advertising in increasing consumer purchasing decisions (Y) on Tropicana Slim Stevia products, both simultaneously and partially. Regression models are used to analyze the direction of the relationship of various independent variables to a dependent variable.

B. Linear Regression Model

The general multiple linear regression equation model can be stated as follows:

\[ Y = b_0 + b_1 X_1 + b_2 X_2 + \ldots + b_k X_k + \epsilon \]  (1)

Where \( Y \) independent variable (regression), \( X \) independent variable (regressor), \( b_0 \) parameter intercept (constant), \( b_1, b_2, \ldots, b_k \) is the coefficient parameter (slope), and \( \epsilon \) residual. The multiple linear regression equation (1), has an estimator equation which is stated as follows:

\[ \hat{Y} = b_0 + b_1 X_1 + b_2 X_2 + \ldots + b_k X_k \]  (2)

C. Parameter Estimation Method

This section discusses the method for estimating multiple linear regression parameters in general. Using the matrix equation approach, the multiple linear regression equation (2) can be stated as follows:

\[ Y = XB + e \]  (3)

Where

\[ Y = \begin{bmatrix} Y_1 \\ Y_2 \\ \vdots \\ Y_n \end{bmatrix}, \quad X = \begin{bmatrix} 1 & X_{12} & X_{13} & \cdots & X_{1k} \\ 1 & X_{22} & X_{23} & \cdots & X_{2k} \\ \vdots & \vdots & \vdots & \ddots & \vdots \\ 1 & X_{n2} & X_{n3} & \cdots & X_{nk} \end{bmatrix}, \quad B = \begin{bmatrix} b_1 \\ b_2 \\ \vdots \\ b_n \end{bmatrix}, \quad \text{and} \quad e = \begin{bmatrix} \epsilon_1 \\ \epsilon_2 \\ \vdots \\ \epsilon_n \end{bmatrix}, \]

where \( Y \) matrix \((n \times 1)\), \( X \) matrix \((n \times k)\), \( B \) matrix \((k \times 1)\), and \( e \) matrix \((k \times 1)\).

To obtain the parameter estimator value of matrix \( B \), the number of residual squares must be minimized, namely:

\[ \text{Minimization} \ \sum \epsilon_i^2 = e^T e = (Y - XB)^T (Y - XB) \]  (4)
Where \( \mathbf{e}^T = (\mathbf{Y} - \mathbf{XB})^T \) transpose from \( \mathbf{e} \). For \( \mathbf{B}^T \mathbf{X}^T \mathbf{Y} \) is scalar, hence the same as the transpose, namely \( \mathbf{Y}^T \mathbf{XB} \). For the minimizing process, from equation (4) obtained as follows:

\[
\frac{\partial \sum e_i^2}{\partial \mathbf{B}} = -2\mathbf{X}^T \mathbf{Y} + 2\mathbf{X}^T \mathbf{XB} = 0 \quad (5)
\]

From equation (5) parameter estimators can be obtained:

\[
\mathbf{B} = (\mathbf{X}^T \mathbf{X})^{-1} \mathbf{X}^T \mathbf{Y} \quad (6)
\]

Where \( (\mathbf{X}^T \mathbf{X})^{-1} \) is the inverse of \( \mathbf{X}^T \mathbf{X} \)

This approach can be used if \( \mathbf{X}^T \mathbf{X} \) has an inverse, but if there is multicollinearity, the inverse matrix calculation is doubtful [15].

D. Goodness of Fit Test

Goodness of fit test is intended to ensure that the model is able to describe the actual data. Testing the goodness of fit of the parameter estimator is done using individual significance tests, simultaneous significance tests, residual normality assumption tests, and coefficient of determination tests.

a) Test individual significance

The individual significance test is intended to test each parameter \( \beta_i \) \((i = 0, 1, 2, ..., k)\), where \( \beta_i \in \{b_0, b_1, b_2, ..., b_k\} \) of equation (1), influences the dependent variable. To test the \( \beta_i \) parameter, the hypotheses are \( H_0: \beta_i = 0 \) and \( H_1: \beta_i \neq 0 \). The test is carried out using \( t_{\text{stat}} \) statistics, with the equation:

\[
t_{\text{Stat}} = \frac{\beta_i}{SE(\beta_i)} \quad (7)
\]

where \( SE(\beta_i) \) is the standard error of parameter \( \beta_i \).

b) Simultaneous significance test

Simultaneous significance test is intended to jointly test the parameter \( \beta_i \) \((i = 0, 1, 2, ..., n)\), where \( \beta_i \in \{b_0, b_1, b_2, ..., b_k\} \) from equation (1), influences the dependent variable. The hypotheses are \( H_0: b_0 = b_1 = b_2 = ... = b_k = 0 \) and \( H_1: \exists b_0 \neq b_1 \neq b_2 \neq ... \neq b_k \neq 0 \). The test is performed using the \( F \) statistic, with the equation:

\[
F_{\text{stat}} = \frac{\text{MSReg}}{\text{MSError}} \quad (8)
\]

Where \( \text{MSReg} \) means square due to regression, and \( \text{MSError} \) mean square due to residual variation.

Reject the hypothesis \( H_0 \) if \( F_{\text{stat}} > F_{(1, n-2,1-\alpha)} \) or \( \text{Pr}[F_{\text{Stat}}] < \alpha \), where \( F_{(1, n-2,1-\alpha)} \) is a critical value of the \( F \) distribution with a significance level of 100 \((1 - \alpha)\)% , and \( n \) the number of data [13].

c) Residual normality test

The normality test is intended to determine that residual data is spread normally. Normality test can be performed using Kolmogorov-Smirnov (KS) statistics. The hypothesis is that \( H_0 \) : data is normally distributed, and \( H_1 \) : data is not normally distributed. Testing is done by determining the standard residual deviation using the equation:

\[
S_{e_i} = \sqrt{\frac{1}{n-1} \sum_{i=1}^{n} (e_i - \bar{e})^2} \quad (9)
\]

Transform the value of \( e_i \) into \( z_i \) with equation \( z_i = (e_i - \bar{e}) / S_{e_i} \). Determination of the probability value
$P(z_i)$ is done using a standard normal distribution table. Whereas the probability of $S(z_i)$ is determined using the equation $S(z_i) = randl(z_i)/n$. Next, the absolute difference value $|S(z_i) - P(z_i)|$ is calculated. The Kolmogorov-Smirnov $KS_{Stat}$ statistics are determined using the equation:

$$KS_{Stat} = \max\{||S(z_i) - P(z_i)||\} \quad (10)$$

Determine the critical value of statistical $KS(\alpha, n-1)$, at the level of significance $\alpha = 0.05$. The test criteria are reject $H_0$ if $KS_{Stat} > KS(\alpha, n-1)$ [15].

d) Coefficient of determination

According to Renceher (1998) [12], the coefficient of determination $R^2$ is measuring how much diversity the independent variable has on the dependent variable, based on the level of strength of the relationship. So the coefficient of determination is the ability or influence of the independent variable $X_i$ ($i = 1, 2, ..., k$) in influencing the dependent variable $Y$. The coefficient of determination $R^2$ is determined using the equation:

$$R^2 = \frac{\sum (\hat{Y}_i - \bar{Y})^2}{\sum (Y_i - \bar{Y})^2}. \quad (11)$$

The value of the coefficient of determination is between 0 and 1. A small determination value close to 0 means that the variation of the independent variable is very weak, and a value close to 1 means that the variation of the independent variable gives all the information needed to predict the dependent variable.

V. RESULT AND DISCUSSION

Determination of sample size used is non-probability sampling, which is a sampling technique that does not provide equal opportunities for each element or member of the population to be sampled. In connection with the population in this study the number is not known with certainty so to determine the sample size, researchers guided by the opinion of Malhotra (2004) [14] which states that "The amount of sample taken can be determined by diverting 4 or 5 times the number of items observed or observed ". Based on the formula, the sample can be found as 65 data.

Based on the statement above and under the formula used, the number of samples used in this study was rounded to 100 respondents. In the EPIC model, there are four variables that influence customer purchasing decisions, including: Empathy ($X_1$), Persuasion ($X_2$), Impact ($X_3$), and Communication ($X_4$). The results of data processing obtained by 125 respondents who returned and can be processed in this study, so that the relationship between variables can be explained as given in Figure 3.

![Figure 3. Research Model](image)

The amount of Zero-order Correlation values can be seen as given in Table 1. Parameter estimation of multiple linear regression models is done by referring equation (6), and done with the help of SPSS 21 software. Based on the estimation results as given in Table 1, it can be seen that from the four dimensions of the EPIC model, persuasion is the largest dimension that has a relationship to consumer purchasing decisions, this shows that the series must be able to make the audience interested in the products and benefits of Tropicana Slim Stevia advertised. On the web series, so that it can make the audience interested in other products from Tropicana Slim, and can make the audience have the desire to use the Tropicana Slim Stevia product advertised on the “SORE” web series.
Table 1. The Estimation Results  

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
<th>Correlations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>1.076</td>
<td>0.252</td>
<td></td>
<td>4.266</td>
<td>0.000</td>
</tr>
<tr>
<td>Emphaty</td>
<td>0.007</td>
<td>0.063</td>
<td>0.009</td>
<td>0.109</td>
<td>0.014</td>
</tr>
<tr>
<td>Persuasion</td>
<td>0.312</td>
<td>0.064</td>
<td>0.422</td>
<td>4.847</td>
<td>0.000</td>
</tr>
<tr>
<td>Impact</td>
<td>0.173</td>
<td>0.095</td>
<td>0.190</td>
<td>1.827</td>
<td>0.027</td>
</tr>
<tr>
<td>Communication</td>
<td>0.145</td>
<td>0.079</td>
<td>0.184</td>
<td>1.824</td>
<td>0.017</td>
</tr>
</tbody>
</table>

a. Dependent Variable: CPD

Source: Data Processed with SPSS 21

The results of data processing above, the regression equation model of this study is as follows:

\[ Y = 1.076 + 0.007X_1 + 0.312X_2 + 0.173X_3 + 0.145X_4 + \varepsilon \] 
or

\[ \hat{Y} = 1.076 + 0.007X_1 + 0.312X_2 + 0.173X_3 + 0.145X_4. \]  

(12)

Next, the regression model in equation (12) needs to be tested for significance and the measurement of the coefficient of determination [15].

Individual t test is to test individually whether each dependent variable is significantly dependent on the independent variable. The test is carried out by referring to equation (7), with the help of SPSS 21 software, and the results are presented in Table 1. The test criteria are if the significance value (Sig.) < Value α, then it means that each independent variable \( X_i \) (where \( i = 1, 2, 3, 4 \)) have a significant effect on the dependent variable (Y). Based on the results in Table 1, column Sig., The price of Sig. Empathy \( X_1 \), Persuasion \( X_2 \), Impact \( X_3 \), and Communication \( X_4 \) variables, each smaller than 0.05, means that individually influences the customer's buying decision at a 95% confidence level. The F test was carried out to test the significance simultaneously carried out using equation (8), producing an F probability value of 0.000 <0.05. This shows that Empathy \( X_1 \), Persuasion \( X_2 \), Impact \( X_3 \), and Communication \( X_4 \) variables jointly influence customer purchasing decisions at a 95% confidence level.

Test the assumption of residual normality \( \varepsilon \), intended to ensure that the residual \( \varepsilon \) in equation (12) follows the normal distribution. The test is carried out by referring to equation (15), also by using a significance level \( \alpha = 0.05 \). Based on test results using SPSS 21 software, it shows that the residual \( \varepsilon \sim N (0.000053, 9624) \). Fourth, the coefficient of determination test is intended to measure the level of strength of the relationship between the independent variable and the dependent variable. The coefficient of determination \( R^2 \) is to measure the strength of the contribution of the influence of \( X_1 \), \( X_2 \), \( X_3 \) and \( X_4 \) to \( Y \). The results of calculations using equation (11), the value obtained amounted to 0.653 or equal to 65.3%. This means that 65.3% of customer purchasing decisions can be explained by using Empathy \( X_1 \), Persuasion \( X_2 \), Impact \( X_3 \), and Communication \( X_4 \) variables. While the remaining 34.7% (100% -65.3%) can be explained by other causative factors which are not included in the EPIC model.

From the results of the regression equation (12), it can be seen that if the EPIC model in the SORE web ad series owned by Tropicana Slim Stevia has zero value, then the purchase decision will have a value of constant \( b_0 \) of 1.076.

VI. CONCLUSION

After conducting research it was found that in improving purchasing decisions with EPIC media, the results showed that two factors had the greatest influence on purchasing decisions, where those factors were persuasion. To build consumer persuasion, the web series must be able to make the audience interested in Tropicana Slim Stevia products and benefits advertised on the web series, be able to make the audience
interested in other products from Tropicana Slim, and be able to make the audience have the desire to use Tropicana Slim products Stevia advertised on the “SORE” web series. To increase the empathy of consumers Tropicana Slim must be able to create advertisements equivalent to films, be able to convey messages and pay attention to heard and sound effects, music, words, pictures, color, and movements to make the audience satisfied and like while watching the “SORE” web series.

REFERENCES

[4] Nielsen, A. C. (2008). EPIC dimention of advertising effectiveness. AC Nielsen Ads@work, the Nielsen Company. All rights reserved