ABSTRACT

Pangandaran Beach is one of the fastest growing beach tourist destinations in Indonesia, where the number of foreign tourists visiting is as much as 9.44 million and domestic tourists as many as 251.20 million trips per year. The purpose of this study is to see the effectiveness of publications about Pangandaran Beach carried out in various media. The method used is EPIC model that takes into account the dimensions of Empathy, Persuasion, Impact, and Communication. The sample in this study were tourists who had visited Pangandaran Beach and saw the publication media. The results of this study indicate that the score for the empathy dimension is 3.41; persuasion dimensions of 3.64; impact dimension of 3.59; communication dimension of 3.46. When viewed from the EPIC rate which calculates all dimensions, a score of 3.53 is obtained. These results show three dimensions of empathy, persuasion and effective communication, while impact dimensions are quite effective. The EPIC rate of 3.53 indicates that the Pangandaran beach publication is effective.
Keywords: Pangandaran beach; effectiveness; EPIC model.

1. INTRODUCTION

Tourism is one of the growing fast development sectors. It can be seen from several Main Performance Indicators. In 2017, tourism gives a large contribution to the national gross domestic product (GDP) in the amount of 4.01%, currency exchange up to US$ 11,17, and tourism workers in the amount of 10.32 million people. Meanwhile, in micro, tourism has attracted 9.44 million foreign tourists and 251.20 million domestic tourist [1].

Tourism object development in the millennial era must pay attention to an effective and efficient publication strategy. The most effective media for today generation is through social media which is unlimited [2].

Yohanes et al. [3] found that the continuity of maritime tourism needs to be considered by the people who can increase their residence time at the destination. Hasibuan et al. [2] found that the sustainability of a tourist destination must pay attention to stakeholder participation such as industry, government and community. Consumer preferences also need to be considered in maintaining the sustainability of a tourist destination. Gusdini et al. [4] found that the development of tourist destinations must pay attention to the obstacles and changes expected from stakeholders. Development of tourist destinations is arranged in a structured program involving all stakeholders.

Pangandaran Beach is one of the natural tourism objects that have big potency in a sustainable development perspective which involves economy, ecology, and social functions. Strategic Pangandaran Beach location makes its attractiveness grow higher; especially as a natural object that has complete variation. In Pangandaran Beach, there are several economic activities such as lodge, accessory seller, and fish auction sale. In ecology function, Pangandaran Beach has protected forest, white sand, coastal forest, and lowland forest. The social life of Pangandaran Beach citizen also contributes to economic activities directly or indirectly.

Based on this explanation, research is needed to assess the effectiveness of publications in KWPP.

2. RESEARCH METHODS

Empathy, Persuasion, Impact and Communication or EPIC Model is a tool to measure advertising effectiveness using a communication approach developed by AC Nielsen [5,6,7]. The dimensions contained in EPIC models are: 1) Empathic Dimension (empathy) is a person's mental state for identifying himself or feeling himself in a state of feeling or mind same as other people or groups; 2) The Persuasion dimension changes in beliefs, attitudes, and behavioural desires caused by one promotional communication; 3) Dimensions Impact is what has desired from the results of advertising are product knowledge that can be achieved consumer through the level of involvement (involvement) consumers with the products election process; 4) Communication dimensions provide information about the ability of consumers to remember the main message conveyed, understanding consumers, and the strength of the impression left by the message [5,6,7]. Enhancement Services must still be carried out even though the Effectiveness of Advertising has been effective [8].

EPIC Model measurement is conducted by giving the question to respondents and asking them to give an answer from five choice options. Each option has a different value. This research uses close question with a range of rating scale as follows:

- Strongly Disagree: 1
- Disagree: 2
- Quite Agree: 3
- Agree: 4
- Strongly Agree: 5

Based on respondents' answer, advertisement effectiveness can be seen through several stages as follow:

1. Simple Tabulation Analysis

The obtained data are processed in form of percentage with the formula:

$$ P = \frac{f_i}{\Sigma f_i} \times 100\% $$

Where

- \( P \) : percentage of respondents who choose a certain category
fi : the number of respondents who choose a certain category
Σfi : the number of respondents

2. Average Score

Every answer by the respondents is weighed. The method to calculate the score is by summing up all of the multiplication results of each weight and then divided it with the total of frequency, the formula would be:

\[
X = \frac{\sum fi \cdot wi}{\sum fi}
\]

Where

X : average weight
fi : frequency
wi : weight

Afterwards, a range of rating scale is used to determine the position of respondents' answer by using the score value of each variable. The value of the answer which formed from scale rating technique consists of range one until five which represent not effective until effective position. The range of scale is calculated by using a formula as follows:

\[
Rs = \frac{R(\text{bobot})}{M}
\]

Where

R (bobot) : the biggest weight– the smaller weight
M : the number of weight category

Likert range scale which used in this research is one until five; thus, the obtained range of rating scale is:

\[
Rs = \frac{5 - 1}{5} = 0.8
\]

Thus, the position of the determination should be:

1.00< x ≤ 1.80 : Strongly ineffective (SI)
1.81< x ≤ 2.60 : Ineffective. (I)
2.61< x ≤ 3.40 : Quite effective. (QE)
3.41< x ≤ 4.20 : Effective. (E)
4.21< x ≤ 5.00 : Strongly Effective. (SE)

Every dimension of EPIC model will be analyzed separately by using the average score method in order to know the effectiveness of each dimension. Later, the average score value will be inserted on a range of rating scale from strongly ineffective until strongly effective.

3. EPIC Rate Calculation

\[
\text{EPIC Rate} = \frac{(X \cdot \text{Empathy} + X \cdot \text{Persuasion} + X \cdot \text{Impact} + X \cdot \text{Communication})}{4}
\]

The result of EPIC rate will represent publication position of a product or service in respondents' perception in accordance with scale range which has been determined before.

3. RESULTS

3.1 Empathy Dimension

The question about empathy dimension functions is to know whether tourists like the publication of Pangandaran Beach or not and represent how tourists see the relationship between the publication and themselves.

Table 1. Empathy dimension

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Score</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>E1</td>
<td>3,44</td>
<td></td>
</tr>
<tr>
<td>E2</td>
<td>3,47</td>
<td>3,41</td>
</tr>
<tr>
<td>E3</td>
<td>3,33</td>
<td></td>
</tr>
</tbody>
</table>

Source: Processed questionnaire data (2018)

Based on the result of the calculation above, it can be seen that:

1. The first question about interesting of Pangandaran Beach publication draws an average score in the amount of 3.44. It means Pangandaran Beach visitors have a good response to the publication.
2. In the second and third question about liking of Pangandaran Beach publication and more creative than the publication of other tourism objects draw average score in the amount of 3.47 and 3.33, accordingly. It means that Pangandaran Beach visitors like the publication of Pangandaran Beach.

Based on the average of empathy dimension in the amount of 3.41; thus, it is entered in scale range in Fig. 1.
The measurement of empathy dimension of Pangandaran Beach publication shows that the publication is considered as effective with an average weight in the amount of 3.41. It means the publication gets a positive reaction from the respondents by the publication message. In addition, it is able to create a correlation through personally relevant messages. It indicates that the publication capable to give interesting information and message.

3.2 Persuasion Dimension

This dimension of altering attitude informs about the variance level of tourists involvement which influences different cognitive process when a message is received. The cognitive process will form various feeling and evaluation that will influence tourists’ attitude towards publication and their trust towards the product of the publication.

The question about persuasion dimension functions is to know whether publication may raise or strengthen a brand which is capable to draw tourists’ interest in buying the product of the brand. Persuasion dimension is represented by several questions, such as:

1. Publication media influences my perspective of Pangandaran Beach.
2. I am interested to travel to Pangandaran Beach after seeing the publication of the place
3. I go to Pangandaran Beach after I see the publication of its tourism object

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Score</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>P₁</td>
<td>3.64</td>
<td></td>
</tr>
<tr>
<td>P₂</td>
<td>3.62</td>
<td>3.64</td>
</tr>
<tr>
<td>P₃</td>
<td>3.67</td>
<td></td>
</tr>
</tbody>
</table>

Source: Processed questionnaire data (2018)

Based on Table 2, it is known the frequency level of each question which identifies value from persuasion dimension. The value of each frequency is calculated to know the position of the publication, in which:

Based on the calculation above, it can be seen that:

1. On the first question about getting complete information of KWPP, has an average score in the amount of 3.64. It means that Pangandaran Beach publication is able to give a positive response to tourists.
2. On the second question about interest to visit Pangandaran Beach after seeing the publication, has an average score in the amount of 3.62. By means the publication of Pangandaran Beach capable to influence respondents to visit Pangandaran Beach.

The calculation of persuasion dimension average in the amount of 3.64 is inserted in the scale range of determination in Fig. 2.

The effectiveness calculation above shows that the publication value of Pangandaran Beach in
the amount of 3.44 is included in an effective scale range. It means this publication may increase and strengthen a product in tourists mind. The publication influences tourists desire to visit Pangandaran Beach.

### 3.3 Impact Dimension

This dimension shows if a brand can be shown off against another brand in the same category and does a publication capable to draw tourists' attention through the delivered message.

The question about impact dimension functions is to know the publication effect and how far is the tourists knowledge about the published product. Impact dimension is represented by several questions as follow:

1. I know the objects of Pangandaran Beach very well from the publication.
2. I decide to visit Pangandaran Beach after discovering the tourism object.
3. I will/have come to Pangandaran Beach again after seeing Pangandaran Beach development through its publication.

#### Table 3. Impact dimension

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Score</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>$I_1$</td>
<td>3.57</td>
<td></td>
</tr>
<tr>
<td>$I_2$</td>
<td>3.60</td>
<td>3.59</td>
</tr>
<tr>
<td>$I_3$</td>
<td>3.61</td>
<td></td>
</tr>
</tbody>
</table>

*Source: Processed questionnaire data (2018)*

Based on Table 2, frequency level of each question that identifies impact dimension value is obtained. Afterwards, each frequency value is calculated to establish the position of the impact dimension.

Based on the calculation above, it is known that:

1. The first question, knowing Pangandaran Beach object very well from the publication, has an average score in the amount of 3.57. It means Pangandaran Beach publication is able to give a better knowledge for tourists.
2. The second question, increasing specific Pangandaran Beach product understanding, has an average score in the amount of 3.60. It means Pangandaran Beach publication is able to give more knowledge about the tourism object of Pangandaran to tourists.
3. The third question, visiting Pangandaran Beach after discovering information from Pangandaran Beach publication, has an average score in the amount of 3.61. It means that the publication is able to encourage respondents to visit Pangandaran Beach.

Based on the calculation of impact dimension average in which 3.64, the average then inserted in the scale range of determination in Fig. 3.

The result of impact dimension effectiveness analysis in Pangandaran Beach publication shows that the publication is included in a quite effective scale range with 3.59 score. It indicates that Pangandaran Beach publication is less giving knowledge about Pangandaran tourism object and less giving influence to the respondents to visit Pangandaran.

### 3.4 Communication Dimension

Communication dimension gives information about tourists' capability in remembering the main message, understand the information, and the impression that left. Moderately, publication duty is communicating information and framework which stimulates tourists' action. The success and the failure of publication depend on how publication delivers the desired information and action.
The question about communication dimension functions to discover if the publication is able to deliver its message well to the tourists. Communication dimension is represented by several questions, such as:

1. I know the icon/symbol/characteristic of Pangandaran Beach after seeing Pangandaran Beach publication.
2. I understand the message in Pangandaran Beach publication.
3. The message in Pangandaran Beach publication left an impression.

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Score</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>C₁</td>
<td>3.44</td>
<td></td>
</tr>
<tr>
<td>C₂</td>
<td>3.45</td>
<td>3.46</td>
</tr>
<tr>
<td>C₃</td>
<td>3.50</td>
<td></td>
</tr>
</tbody>
</table>

Source: Processed questionnaire data (2018)

Based on Table 4, the frequency level from each question that identifies communication dimension value is discovered. The frequency then calculated to obtain the position of the dimension.

Based on the calculation above, it can be seen that:

1. The first and the second question in which knowing Pangandaran Beach icon and understand the message that delivered in Pangandaran Beach publication have the average score 3.44 and 3.45, accordingly. It means that Pangandaran Beach publication is clear in interpreting icon and able to make the message easy to remember.
2. The third question, the message in Pangandaran Beach publication gives an impression, has an average score in the amount of 3.50. It means that Pangandaran Beach publication has been effective entirely in giving a positive impression.

Based on the communication dimension calculation in the amount of 3.45, the value then inserted in scale range of determination in Fig 4.

The result of communication dimension effectiveness on Pangandaran Beach publication shows that the publication is included in an effective scale range with the value of 3.45. It means that the tourists can recognize and remember the main message in the publication. Besides, the publication also leaves a strong impression of tourists understanding about the message in the publication. It indicates that the publication has effectively delivered the message to the tourists.

3.5 EPIC Rate

After each dimension generates a result, then EPIC rate is calculated. All four dimension values are added to get the average value in order to obtain EPIC rate. Overall, score tables from all four dimensions can be seen in Table 5.

![Fig. 4. Communication dimension value](image)

<table>
<thead>
<tr>
<th>EPIC Model</th>
<th>Score</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Empathy</td>
<td>3.52</td>
<td>Effective</td>
</tr>
<tr>
<td>Persuasion</td>
<td>3.44</td>
<td>Effective</td>
</tr>
<tr>
<td>Impact</td>
<td>3.39</td>
<td>Quite Effective</td>
</tr>
<tr>
<td>Communication</td>
<td>3.45</td>
<td>Effective</td>
</tr>
</tbody>
</table>

\[
\text{EPIC Rate} = \frac{X \text{ Empathy} + X \text{ Persuasion} + X \text{ Impact} + X \text{ Communication}}{4}
\]
\[
EPIC \text{ Rate} = \frac{3.41 + 3.64 + 3.59 + 3.46}{4} = 3.53
\]

Calculation Scale:

- \(1.00 < x \leq 1.80\): Strongly ineffective.
- \(1.81 < x \leq 2.60\): Ineffective.
- \(2.61 < x \leq 3.40\): Quite effective.
- \(3.41 < x \leq 4.20\): Effective.
- \(4.21 < x \leq 5.00\): Strongly effective.

According to the calculation, EPIC rate value is obtained at the amount of 3.53 and if it is entered in rating scale, it included as effective. It shows that Pangandaran Beach publication is already effective in communicating their product to the tourists. Entire graphic of effectiveness analysis of Pangandaran Beach publication by using the EPIC model can be seen in Fig. 5.

![Fig. 5. EPIC model publication of pangandaran beach](image_url)

Based on Fig. 5, the dimension with the highest and the lowest effectiveness are persuasion dimension with 3.64 average value and empathy dimension with 3.41 average value. The closer average value or rectangular angle intersection points to zero, the lower publication effectiveness value. In contrast, if the rectangular angle intersection points are away from 0 and closer to point 5, the higher publication effectiveness value.

### 4. CONCLUSION

The results of this study show that three effective dimensions are empathy, persuasion and communication; while the impact dimensions are quite effective. Together the EPIC Rate was found to be 3.53 meaning that the Pangandaran Beach publication was effective. This finding indicates that Pangandaran Beach publications have been effective in the process of persuasive communication and empathy building, but have not made an impact or decision to visit Pangandaran Beach. Need to add more information about various interesting things, such as challenging attraction, complete and comfort facility, and traditional culture.

### ACKNOWLEDGEMENT

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### COMPETING INTERESTS

Authors have declared that no competing interests exist.

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