Abstract

Currently, one of the fastest-growing platforms for advertisement is Instagram stories. With this relatively new format, Studio Hikari is having difficulties in developing an effective advertisement for its Instagram stories. This research aims to understand factors that influence viewer preferences toward Instagram stories advertisement, assess the Instagram story advertising effectiveness, and give recommendations to Studio Hikari regarding their upcoming advertisement in an Instagram story. This study was conducted with an online survey method, to test the advertising preferences and effectiveness of 7 different planned Instagram story advertisements from Studio Hikari that has a unique combination of three variables (duration, color of background, level of informativeness). The result of this study shows that the most preferred combination is the Instagram story with a duration of 15 seconds, yellow background color, and a medium level of informativeness. For advertising effectiveness, it is found that there is a significant difference between ad effectiveness and the 7 Instagram stories advertisement. The limitations of this research are that the number of variables tested are limited, which is only 3 variables, and all of the respondents are Studio Hikari's target market.

Key words: advertising effectiveness; conjoint analysis; consumer preference; digital advertisements; Instagram stories

1. Introduction

Digital Advertisements has been increasing in importance for businesses as more consumers adopted the internet and have become a part of their daily life. Consumers are being exposed to hundreds of advertisements every day through social media, email, search engines, websites, and other digital marketing channels. Companies have reacted with this change in consumer behavior by spending more on digital advertisements. One of the fastest developing social media platforms is Instagram; they have reached 1 million monthly active users in 2018, which is 5 times more than in 2014 (Facebook Inc, 2018). Newsfeed posts and Instagram stories are the 2 main ways to post content on Instagram. Instagram stories are a relatively new format released
in August 2016 in which the post will disappear in 24 hours. With over 500 million users using Instagram Stories every day, it has become one of the most popular types of digital advertisements that marketers use. One of the reasons Instagram stories are gaining popularity is because Instagram stories have a lower cost compared to regular posts on Instagram, making it one of the most cost-effective ad formats. Brands which is defined as (consumer-related product, service brands, events, or locations) in 2019 posts an average of 2.5 Stories per week (Facebook Inc, 2018).

Film photography business is one of the businesses that heavily uses Instagram to market their product. According to an Ilford Photo Global survey in 2019, 50% of the film photographer respondents digitize and share their images online (Ilford Photo, 2019).

One of the brands in the film photography business that is using Instagram as their main way to advertise their product is Studio Hikari. They sell film cameras, process film rolls, and digitizes the film negatives so that people can share it through the internet. Its main product is Hikari Cam, which is a 35mm film camera. Studio Hikari has been advertising its product using Instagram Stories Advertisements since 2019.

Studio Hikari has been experiencing a decline of 2.86% in the number of people who visited our online store compared to the last period. This decline is due to a decrease in people who visited Studio Hikari's Instagram page since the online store traffic comes from Instagram. This decrease in online traffic on Instagram, according to Studio Hikari, is the ineffectiveness of some of the content by Studio Hikari. To increase the number of people who visit our online store, Studio Hikari will release an Advertisement through Instagram Stories Advertisement. However, from the previous advertisements done by Studio Hikari, the performance from the Instagram Stories Advertisement was inconsistent. Since there is currently no specific research done on Instagram Stories to determine which factors contribute the most to the advertisement effectiveness, Studio Hikari is having difficulty in determining the type of content they should use in their Instagram Stories advertisement.

This situation leads this study to analyze what kind of Instagram Stories Advertisement that most effective for Studio Hikari. To test this, Studio Hikari will provide 7 planned advertisements, which then will be analyzed to determine which advertisement they should use. Therefore, this study intends to understand consumer’s preferences when looking at an Instagram Stories Advertisement and to measure Advertising effectiveness from Studio Hikari’s upcoming Instagram Story advertisement.

From the problems mentioned above, the researcher made it into 4 Research Questions:

1. What are the factors that influence viewer preferences towards Studio Hikari Instagram story ads?

2. What are the viewer's preferences of Studio Hikari Instagram story ads?

3. Which Studio Hikari Instagram Story Advertisement has the highest advertisement effectiveness?

4. What recommendations for Studio Hikari's upcoming Instagram Story advertisement?
2. Literature Review

According to the IAB Broadband Committee, online video advertising can be defined as video advertisement which can occur before, during, or after an assortment of content including animation, video streaming, gaming, and music video content in a player environment (Interactive Advertising Bureau, 2008). With the increased video content viewers online, this has led to an increase in advertising on video content on the internet. According to a forecast done by Blake Droesch, social media advertising spending in the United States will reach $14.89 billion in 2021, growing 44% from 2019; this number will account for 30.4% of total video ad spending (Droesch, 2019). Even though the utilization of online video promoting has become popular in advertising industries, advertisers and agencies are still confused about the effective use of online video advertising (Interactive Advertising Bureau, 2008). In Marketing, one of the most important issues is understanding how consumers form a preference for something. This is because preference will highly influence the customers' decision. The term preference can be defined as an option that has the greatest value among several options (Schiffman & Kanuk, 2007). Consumers react based on their perception, not based on objective reality. Consumers take action based on what they perceive to be the reality. Therefore, understanding factors that influence consumer for buying a product are important for a marketer (Saikat, 2016). Consumers also tend to show their identities through brands. Therefore, when there is a brand that is aligned with their preference, the customer is more likely to refer to this brand (Bijmolt & Verhoef, 2017). Advertising effectiveness has been one of the ways to measure advertising performance and has been a goal for advertisers to achieve (Martín-Santana & Beerli-Palacio, 2012). According to previous literature in this subject, it has been discovered that consumer's attitudes towards an ad, intrusiveness, and loyalty are the three key variables that correspond to advertising effectiveness in the digital context (Belanche et al., 2019).

2.1 Ad Attitude

Attitude is considered to be the major driver of consumer volitional behavior (Scott B. MacKenzie et al., 1986). Attitude toward the advertisement is "An effective construct representing consumers' feelings of favourability/unfavorability toward the ad itself" (MacKenzie & Lutz, 1989).

2.2 Ad Intrusiveness

Ad intrusiveness is defined as "the degree to which advertisements in a media vehicle interrupt the flow of an editorial unit" (Goodrich et al., 2015). For the advertiser, higher intrusiveness will lead to greater abandonment by the customer seeing the advertisement.

2.3 Ad Loyalty Intentions

Marketers are currently focussing their efforts on digital advertising to increase consumer's loyalty to their brands or product. Customer loyalty is seen as a very good forecaster of actual customer behavior (Chi & Qu, 2008). While there are different ways to measure customer loyalty. In general, they cover these 3 measures, which are "likelihood to repurchase the product or service"," likelihood to recommend a product or service to others" and " overall satisfaction" (Puccinelli et al., 2009).

Compiling all of the literature reviews found by researchers, the study constructs these hypotheses:
H1: There's significance difference in ad effectiveness between planned Advertisement 1,2,3,4,5,6,7
H1a: There's significance difference in ad attitude between planned Advertisement 1,2,3,4,5,6,7
H1b: There's significance difference in ad Intrusiveness between Advertisement 1,2,3,4,5,6,7
H1c: There's significance difference in ad Loyalty Intentions between Advertisement 1,2,3,4,5,6,7

3. Methodology of Research

The researcher used a quantitative approach to the study. The approach was used because of its ability to generate numerical data that could be used to change to statistical data and solve the research question. Quantitative research is also defined as the method to account for an issue or phenomenon through gathering data in the form of numerical data (Malhotra, 2010).

The population for this research will follow Studio Hikari's target market, which is:

1. The Age of the respondent is 18-27 years old
2. The respondent must live in DKI Jakarta, Banten or West Java

The respondent must also be Active Users of Instagram, which according to Facebook, is defined as a registered Instagram user who logged in and visited Instagram through the website or a mobile device in the last 30 days as of the date of the measurement. Since it is unfeasible to survey all members of the population for the research, the sample and sampling technique is important. The sampling technique used is judgemental sampling, where the elements int the sample (target market criteria) us believed to be representative of the population of interest. The minimum sample size to be included in an advertising study should be 150 (Malhotra, 2010). This research was conducted with 188 respondents.

Four variables were assessed in the survey: demographic, behavioral, advertising effectiveness, and consumer preferences towards the ad. The variables will be measured by demographic and behavioral measured with fill out choices from the researcher. Advertising Effectiveness will be measured using Ad effectiveness adapted from (Belanche et al., 2019). To test ad effectiveness, there will be 9 questions regarding ad attitude. Ad intrusiveness and ad loyalty intentions. The 9 questions are seen on the table 1.

| Table 1 | Advertising effectiveness indicator |
|---------|-----------------------------------|

| Variables       | Label | Indicator                          | Scale                  |
|-----------------|-------|------------------------------------|------------------------|
| Ad Attitude     | ADATT1| The ad was unpleasant/pleasant     | Interval Likert Scale  |
|                 | ADATT2| The ad was not at all likable/likable | Interval Likert Scale  |
| Ad Intrusiveness| INTRU1| The ad was intrusive              | Interval Likert Scale  |
|                 | INTRU2| The ad was disturbing             | Interval Likert Scale  |
|                 | INTRU3| The ad was distracting            | Interval Likert Scale  |
| Ad Loyalty      | LOY1  | I intend to get more information   | Interval Likert Scale  |
| Intentions      |       | about the advertised product/service |                        |
Ad preference was measured by ranking several advertisements based on their preference. Each advertisement represents a single combination of cues (duration, the color of the background, informativeness) being studied. Duration has 3 preference attribute levels, Color of Background has 2 preference attribute level; informativeness has 3 preference attribute level. The combinations of the 7 advertisements are shown on the Table 2:

| No. | Duration | Colour of Background | Informativeness |
|-----|----------|----------------------|-----------------|
| 1   | 5 Seconds| Dark Blue            | Low             |
| 2   | 5 Seconds| Yellow               | Medium          |
| 3   | 10 Seconds | Yellow              | Medium          |
| 4   | 10 Seconds | Red                 | High            |
| 5   | 15 Seconds | Dark Blue          | Low             |
| 6   | 15 Seconds | Yellow             | Medium          |
| 7   | 15 Seconds | Red                | High            |

For analyzing the quantitative method, the researcher uses MANOVA to know about the relationship between Ad effectiveness (ad attitude, ad intrusiveness, ad loyalty intentions) towards the 7 Instagram stories advertisement and conjoint analysis to know about consumer preference towards Instagram stories advertisement.

4. Result and Discussion

H_1: There's significance difference in ad effectiveness between planned Advertisement 1,2,3,4,5,6,7

Hypothesis 1 is accepted because of F=5165.349b, p<0.05 in all four multivariate tests (Pillai's trace, Wilks' Lambda, Hotelling's Trace, Roy's Largest Root). This indicates that there's a significant difference in ad effectiveness between planned Advertisement 1,2,3,4,5,6,7. This difference can be attributed to the difference in duration, the color of the background, and the informativeness level between the advertisements.

H_{1a}: There's significance difference in ad attitude between planned Advertisement 1,2,3,4,5,6,7

Hypothesis 1a is accepted because of F=15739.933b, p<0.05 in all four multivariate tests (Pillai's trace, Wilks' Lambda, Hotelling's Trace, Roy's Largest Root). This indicates that there's a significant difference in ad effectiveness between planned Advertisement 1,2,3,4,5,6,7.
H₁b: There's significance difference in ad Intrusiveness between Advertisement 1,2,3,4,5,6,7

Hypothesis 1b is accepted because of $F=1666.722$, $p<0.05$ in all four multivariate tests (Pillai's trace, Wilks' Lambda, Hotelling's Trace, Roy's Largest Root). This indicates that there's a significant difference in ad effectiveness between planned Advertisement 1,2,3,4,5,6,7.

H₁c: There's significance difference in ad Loyalty Intentions between Advertisement 1,2,3,4,5,6,7

Hypothesis 1c is accepted because of $F=5928.516$, $p<0.05$ in all four multivariate tests (Pillai's trace, Wilks' Lambda, Hotelling's Trace, Roy's Largest Root). This indicates that there's a significant difference in ad effectiveness between planned Advertisement 1,2,3,4,5,6,7.

To find out which advertisement performs the best at each indicator, the researcher looked at the descriptive statistic. To determine if it has a significant difference, the researcher will be looking at the Tukey HSD post hoc test. The descriptive statistics is presented on Table 3.

| Dependent Variable | AD1  | AD2  | AD3  | AD4  | AD5  | AD6  | AD7  |
|--------------------|------|------|------|------|------|------|------|
| ADATT1             | 5.4096 | 5.7926 | **5.8085** | 5.6702 | 4.75 | 5.5957 | 5.7553 |
| ADATT2             | 5.5213 | 5.8457 | **5.8511** | 5.6809 | 4.7287 | 5.5904 | 5.6915 |
| INTRU1             | 3.1223 | 2.8245 | **2.766** | 2.9628 | 2.9734 | 2.8085 | 2.9255 |
| INTRU2             | **2.1277** | 2.1489 | 2.1436 | 2.2713 | 2.6011 | 2.2553 | 2.2979 |
| INTRU3             | **2.7447** | 2.75 | 2.8191 | 2.8245 | 3.0585 | 2.7979 | 2.8138 |
| LOY1               | 5.1649 | 5.4043 | **5.4309** | 5.2872 | 4.3617 | 5.0479 | 5.266 |
| LOY2               | 4.5106 | 4.9096 | **5.1649** | 5.1543 | 4.1383 | 4.9415 | 5.1543 |
| LOY 3              | 4.8564 | 5.0798 | **5.234** | 5.3032 | 4.2021 | 4.9681 | 5.1436 |
| LOY 4              | 4.4521 | 4.7766 | **4.9468** | 4.9043 | 4.1383 | 4.766 | 4.9468 |

Lower ad intrusiveness is preferred because ad intrusiveness negatively impacts ad effectiveness. From the table above, it can be seen that advertisement 3 has the best score in ADATT1, ADATT2, INTRU1, LOY1, LOY2, LOY3, LOY4. From the Tukey HSD post hoc test, there is a significant difference only to advertisement 5 on variable ADATT2, LOY1. There is also a significant difference only to advertisements 1 and 5 on variable ADATT1, LOY2, LOY3, LOY4, While for INTRU2 and INTRU3, advertisement 1 has the best score. Advertisement 1 has a significant difference to advertisement 6,4,7 and 5 on variable INTRU2. For INTRU 3 there is no significant difference between all the advertisements.

In this research, conjoint analysis is used to understand consumer preference toward Instagram Story advertisement made by Studio Hikari. The result from this analysis shows the most important variable is the duration (47.299) followed by Color of Background (27.737), and lastly is informativeness (25.328). Furthermore, the highest utility value score belongs to the duration in 15 seconds (1.308); Yellow color (0.391); and both medium (0.363) and High (0.363) level of informativeness. Utility value determines which factor is most preferred by the respondents.
Furthermore, the total utilities score of each ad shows:

- Advertisement 1 (7.859)
- Advertisement 2 (10.093)
- Advertisement 3 (9.231)
- Advertisement 4 (9.203)
- Advertisement 5 (9.39)
- Advertisement 6 (11.624)
- Advertisement 7 (11.596)

Based on that results, Advertisement 6 (11.624) got the highest total utility score. This advertisement has a duration of 15 seconds, and the background color is yellow. Advertisement 6 consists of information on the product name, image, and brand message (Figure 1). The researcher assumes that respondents prefer a longer duration because, in a short duration, it is hard for the viewer to receive the information about the product.

![Advertisement 6](image)

**Figure 1** Advertisement 6

## 5. Conclusion and Recommendation

### Conclusion

With the increased usage of digital advertisement by marketers, it has become very important to measure ad effectiveness in this relatively new format. The purpose of this research is to help Studio Hikari in developing and determining what kind of advertisement is appropriate for an Instagram Stories advertisement. Studio Hikari has provided 7 different advertisements for the researcher to use. Those 7 advertisements are given to respondents, along with several questions.

3 factors influence viewer preferences towards Studio Hikari Instagram story ads: duration, the color of the background, and level of informativeness.

The consumer preference towards Studio Hikari Instagram story ads is known from the conjoint analysis. The result is that the combination most preferred is advertisement 6 that have combinations of 15 s duration, yellow color, and medium informativeness level. Furthermore, there is a significant difference between Ad effectiveness in 7 Studio Hikari planned advertisements with advertisement 3 is the highest.
After evaluating the ad effectiveness and preferences towards the advertisements, there are several recommendations for Studio Hikari.

**Recommendation**

Studio Hikari should choose advertisement 3 for its upcoming advertisement because it has the highest advertising effectiveness. The researcher did not choose advertisement 6, which is the most preferred according to conjoint analysis because there is not a strong correlation between the estimated preferences with the observed preferences. The differences between advertisement 3 and 6 are only in the duration. The difference between duration in advertisement 3 (10 seconds) and advertisement 6 (15 seconds) will not be too important since the information delivered is still the same. In this research, it is also found that a long advertisement will have higher advertising intrusiveness, which is undesirable. Therefore, the ideal duration, in this case, according to the researcher, is 10 seconds.

In creating an Instagram story advertisement, the duration of the advertisement must be carefully considered. Short duration, for example, 5 seconds, will not be enough time for information to be delivered effectively. A longer duration of 10 or 15 seconds will be more ideal, depending on the information intended to be delivered by the advertisement.

In this research, the researcher only used 3 factors in an advertisement, which are duration, the color of the background, and level of informativeness. For future research, it is suggested to test other factors. More factors tested will result in better data for marketers using Instagram stories advertisements to develop the right advertisement.

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