

Analysis of the Effectiveness of Using Hashtags on B & Y Studio Instagram Accounts with Social Media Analytic

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Abstract— In the digital era as it is today, many information media have emerged to present a variety of information that can be accessed and interacted quickly which we call the internet. Media to get this information is social media. The types of social media that are widely used such as Facebook, Instagram, YouTube, Twitter, and others have even changed the lifestyle of a consumer. This causes the existence of social media to turn out to be a new step for business people to market their products and open up opportunities to use social media as a marketing field. Instagram is one of the social media that has implemented social media analytics or Business analytics in the application of its users' business. Therefore, how Instagram users who will market a product must understand the conditions and strategies that will be carried out. Required a data and information that support in the process. Business analytics is one of the applications that form the foundation and the use of hashtags marked with the # symbol to link and group similar content or information, making it easier for certain searches. Therefore, the author conducted a study to analyze the effectiveness of using hashtags on a B&Y Studio Instagram posting account using social media analytics.

Keywords— Social Media, Marketing Effectiveness, Social Media Analytics, Hashtag Method.

I. INTRODUCTION

In the era of computerization as it is today, various digital information media have emerged to provide various kinds of data that can be accessed and connected quickly which we call the internet. The presence of the internet has influenced social change. With more and more social media platforms that encourage changes in the way people interact today, social media is useful as a communication that can be used as a medium of information in delivering information such as, being used to socialize programs and policies, introducing products and their potential and can be used as a means of community learning. This causes the existence of social media to turn out to be a new step for business people.

To market their products and open up opportunities to use social media as a marketing field. The more information is disseminated, the more data is stored in social media. In helping the dissemination of this unstructured information, there are analytics tools that focus on the business of social media analysis or called social media analytics.

In its use, Instagram is one of the online media that is often used by various groups today. Instagram is one of the social media that has implemented Social Media Analytics (Business analytics) in business use. The Instagram app is a very easy to

use app because it only shows images and recordings of a certain length, offering space for writing and commenting. Thus, users who will market or introduce goods through Instagram must know the condition of the goods and how to upload them. In addition, in social media the use of hashtags has become a culture in categorizing an upload. Hashtags are used to link and group similar content or information. To find out the effectiveness of using Instagram, the researchers analyzed through three stages of analysis, namely: reach analysis, engagement analysis, and virality analysis.

Therefore, the author conducted a study to analyze the effectiveness of using hashtags on a B&Y Studio Instagram posting account using social media analytics.

II. LITERATURE REVIEW

Promotion

Marketing is an element of the marketing mix that focuses on efforts to inform, persuade, and remind consumers of the company's brands and products (Fandy Tjiptono, Dan Anastasia, 2016).

Marketing Effectiveness

Marketing effectiveness is the drive to convince customers directly or indirectly about the goods and brands being sold. Overall, buyers can find out about who made the item and what the goals of the organization and brand are (Muhamad Fitra Alfajri, 2019).

Effectiveness Level Analysis Using B & Y Studio With Instagram Insights

In this analysis, the researcher examines the calculation of this questionnaire through 3 stages of analysis, namely: reach analysis, engagement analysis, and virality analysis. From these 3 stages, the author makes a choice of answers on a 5-point Likert scale, and then the author determines the percentage of using social media analytic Instagram.

Social Media

Social media is a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0, and that enable the creation and exchange of user-generated content. Social media in the broadest sense is online media where users can take part, share and create content including websites, interpersonal organizations or informal communities

used by individuals around the world. Meanwhile, social networking is a site where anyone can create a personal web page, then connect with friends to share information and communicate (Andreas Kaplan & Michael, 2010).

Social Media Analytics

Social media analytics is concerned with the development or evaluation of informatics tools and frameworks for collecting, monitoring, analyzing, summarizing and visualizing social media data, usually driven by the specific requirements of the target application. (Zeng, Chen, Lusch, & Li, 2010).

Likert Scale

According to the journal (Maryuliana et al., 2016) Likert scale is a psychological scale, usually used in questionnaire surveys, and is also the most commonly used scale in survey research. Respondents determine their level of agreement with the statement by selecting one of the available options. The Likert scale is often used as a rating scale because it gives a value to something. For the purposes of quantitative analysis, the answer scale on the Likert scale can be scored as,

1. "Strongly Disagree" was scored 1
2. "Disagree" is scored 2
3. "Doubtful" is given a score of 3
4. "Agree" is given a score of 4
5. "Strongly Agree" was scored 5

Research instruments using a Likert scale can be made in the form of a checklist or multiple choice.

Computer System Usability Questionnaire (CSUQ)

Computer System Usability Questionnaire (CSUQ) with 5-point Likert scale answer choices. The CSUQ questionnaire was chosen because the questionnaire is relevant to this study entitled Knowing the effectiveness of using hashtags in a post using social media analytics on the B & Y Studio Instagram account. CSUQ has a questionnaire that is universal and can be used to assess all types of products (Ahlem Assila, 2016: 18).

Google Forms

Google Forms is a web application that works with the creation or filling of online forms from Google. In its use, clients who want to create forms are required to have a Google account first. With Google Forms anyone can create forms that can be found by many people. There is no requirement for Google to represent individuals who need to complete the structure that has been created in the Google Form, so it can be said that the form in this Google Form is general in nature.

Hashtag Method

Hashtag is one of the features that can be accessed on Instagram social media to group posts based on similar topics. For this reason, determining the hashtag to be used in a post must coordinate with the points or data contained in the post. Some of the benefits of using hashtags are as follows:

1. Increase Engagement with Followers
2. Opportunity to Build a Brand
3. How To Show Support for Social Issues
4. Helping Target Audience Find Brand.

III. RESEARCH METHODS

Research Flow



Figure 1. Research Flow

In making research, it is necessary to have a research flow how to make this research, there are several things that researchers do to their research, including: First, the researcher determines the title and object to be studied, Second, the researcher conducts a literature study as data collection that contains theories based on books and journals, as well as conducting observations or research testing using *social media analytics* and the hashtag method on Instagram by taking data questionnaire as a material to determine the effectiveness of marketing on the Instagram account B & Y studio, the three researchers made a questionnaire and collected questionnaire data, the four researchers conducted an analysis consisting of three stages of analysis, namely: reach analysis, *engagement analysis*, *Virality analysis*. The five researchers conducted documentation or information collection related to the title of this journal by using a Likert scale which then calculates the average formula in Microsoft excel, then the researcher conducts a validity and reliability test and finally the researcher

conducts an analysis to analyze the effectiveness of using hashtags on an Instagram posting account B&Y Studio using social media analytics.

Study of literature

Literature study is the steps of data collection activities that contain theories with collection methods based on books and research journals via the internet and libraries, in supporting the making of this research.

Research Planning

In the planning process, the author analyzes the effective level of using Instagram for product marketing at the B&Y Studio studio. As for making this research, this research was carried out by observing information collection by distributing questionnaires, determining effectiveness by using Instagram insights as social media analytics, analysis using the hashtag method to link and group similar content or information, making it easier to search for certain and determine hardware. hardware) and software (software) that will be used in writing this research.

This plan as a qualitative research is expected to find out more deeply about the effectiveness of using Instagram on Instagram B & Y Studio using social media analytics and optimizing the use of hashtags on Instagram B & Y Studio.

The method used in this research is a questionnaire and analysis of social media B & Y Studio.

Questionnaire Question Design

The design of the questionnaire was used to be distributed to respondents in order to find out how far the effectiveness of marketing on Instagram through social media analytics as consumers and potential consumers of B & Y Studio.

The design of the questionnaire made consists of: three stages of analysis, namely: reach analysis, *engagement analysis*, *Virality analysis*. With an amount of each, *reach analysis* 10 questions, 10 questions engagement analysis, and 10 questions Virality analysis, as well as 9 statements for respondents' self-data. The design of the questionnaire for the research entitled The Effectiveness of Using Hashtags on B & Y Studio Instagram Accounts with the Social Media Analytic Method as follows:

TABLE 1. Personal Data Questions

No	Pertanyaan
1	Nama / Inisial :
2	Nomer Handphone / Whatssapp
3	Berapakah umur anda ? (Contoh 24 tahun)
4	Status
5	Tingkat Pendidikan
7	Pekerjaan
8	Penghasilan Perbulan
9	Apakah anda menggunakan instagram ?

TABLE 2. Reach Analysis Questions

No	Pertanyaan
1	Selanjutnya 4 arca menggunakan instagram ?
2	Sebelum menggunakan instagram apakah hal yang dilakukan anda di instagram ?
3	Apakah anda tahu metode hashtag pada instagram ?
4	Apakah anda tahu akun instagram bisnis B & Y studio ?
5	Sebelum menfollow instagram B & Y Studio apakah yang anda lakukan pada akun instagram B & Y Studio ?
6	Apakah Caption setiap unggahan B & Y studio mudah dimengerti ?
7	Apakah setiap Caption pada unggahan B & Y studio selalu mengaiti jasa/produk dari ritelannya ?
8	Saya mendapatkan informasi unggahan instagram B & Y Studio apakah mendapatkan informasi diskon, laporan, dll?!
9	Apakah Saya pernah mencari informasi di media sosialitas mengahungz pitak B & Y Studio untuk menanyakan harga produk ?
10	Apakah anda pernah mencari tahu produk B & Y Studio dengan metode hashtag dan mencak unggahan B & Y Studio ? (Misal #tiktokbestof)

TABLE 3. Engagement Analysis Questions

No	Pertanyaan
1	Apakah Saya pernah memberikan komentar pada postingan B & Y Studio ?
2	Saya pernah mencari informasi di media sosialitas mengahungz pitak B & Y Studio untuk menanyakan produk / Harga menanyakan harga
3	Apakah anda pernah mencari tahu produk B & Y Studio dengan metode hashtag dan mencak unggahan B & Y Studio ? (Misal #tiktokbestof)
4	Sebelum melihat akun instagram B & Y Studio apakah anda memiliki keinginan untuk beli produk B&Y Studio ?
5	Apakah anda melakukan direct message / pesan langsung pada akun instagram B & Y Studio untuk menanyakan harga ?
6	Saya pernah memberikan like pada unggahan B & Y Studio ?
7	Saya mendapatkan informasi unggahan instagram B & Y Studio apakah mendapatkan informasi diskon, laporan, dll? (Misal menggunakan #Promobestof)
8	Saya mendapatkan informasi news marketing like pada unggahan instagram B & Y Studio apakah mendapatkan informasi diskon, laporan, dll?!
9	Apakah ada kaitan link Anda untuk pengantaran media promosi Produk B & Y Studio ?
10	Berikan alasan jika ada saran dan kritik Anda pada proses media instagram B & Y Studio

TABLE 4. Virality Analysis Questions

No	Pertanyaan
1	Apakah instagram B & Y Studio lebih mudah untuk diakses oleh pengguna media sosial? (Promobestof)
2	Apakah instagram B & Y Studio lebih mudah diakses oleh pengguna media sosial? (Promobestof)
3	Apakah instagram B & Y Studio lebih mudah diakses oleh pengguna media sosial? (Promobestof)
4	Apakah instagram B & Y Studio lebih mudah diakses oleh pengguna media sosial? (Promobestof)
5	Apakah instagram B & Y Studio lebih mudah diakses oleh pengguna media sosial? (Promobestof)
6	Apakah instagram B & Y Studio lebih mudah diakses oleh pengguna media sosial? (Promobestof)
7	Apakah instagram B & Y Studio lebih mudah diakses oleh pengguna media sosial? (Promobestof)
8	Apakah instagram B & Y Studio lebih mudah diakses oleh pengguna media sosial? (Promobestof)
9	Apakah instagram B & Y Studio lebih mudah diakses oleh pengguna media sosial? (Promobestof)
10	Apakah instagram B & Y Studio lebih mudah diakses oleh pengguna media sosial? (Promobestof)

Research Instruments

The instrument in this study used the questionnaire method, Instagram insight on the B & Y Studio account. Questionnaire method is a data collection technique by asking a number of written questions that are used to obtain information on respondents in the form of things they know. The questionnaire method in this study is closed (close-ended question) in order to obtain complex and accurate results from this questionnaire method.

B & Y Studio account's Instagram insights are also used as social media analytics as well as a hashtag method which will later link and group similar content or information, making it easier for certain searches.

Data Collection Stages

In this study, the data collection stage is the stage that determines the process and results of the research. The data collection techniques used are as follows below:

1. Data Questionnaire
2. Creating a Questionnaire with Google Forms
3. Distributing Questionnaires to B & Y Studio Consumers and Prospective Consumers / the public.

Data Processing Stages

In this study, two methods are used, namely the quantitative method that uses a questionnaire as a tool to measure marketing effectiveness in B & Y Studio's Instagram social media and qualitative research based on the determination of hashtags and seen from the 3 matrix stages of media analysis, namely: Reach Analysis, Engagement Analysis, Virality Analysis. From the results of the combination of qualitative and quantitative methods, researchers can find out more deeply about the effectiveness of using Instagram B&Y Studio in promotional media.

The quantitative method in this study uses a questionnaire and uses the mean formula (average) to determine the effectiveness of using Instagram B & Y Studio in promotional media as well as drawing conclusions from the public, and potential customers of B & Y Studio. Here's the formula mean:

$$M = \frac{\sum fx}{N}$$

Information:

M : mean / Average

$\sum fx$: Number of Data Elements
 N : Amount of Data

Research Analysis

This research was made so that it can be known to the outside community in posting content on Instagram, either in the form of photos or videos without using hashtags, making the scope of information dissemination limited, the scope of distribution is small and not directed. Hashtags are useful for sorting posts into a certain object, so that when people search for that object it will be easy to find.

IV. RESULTS AND DISCUSSION

Validity test

In this study, validity testing performs data processing based on the profile of the respondent's google form as a consumer of B & Y Studio namely by classifying age, education level, occupation, Instagram user, and each question criteria Reach Analysis, Engagement Analysis, Virality Analysis using google form using the excel program in tabulation with the mean / average formula.

Reliability Test

In this study, reliability testing uses the excel program in data tabulation and reliability tests to measure the consistency of a questionnaire and the use of social media analytic methods using Instagram insights. Reliability test after testing the validity of the instrument that has been declared valid. In explaining that decision making in reliability testing is as follows:

1. The stage of calculating the average level of satisfaction with a Likert scale. With a Likert scale rating table to find outmarketing effectiveness by using hashtags with consumers from B & Y Studio consisting of choices (optional) and their scores as shown in Table 5.

Table 5. Likert Scale Table

Keterangan	Penilaian
Sangat Tidak Setuju	1
Tidak Setuju	2
Ragu-ragu	3
Setuju	4
Sangat Setuju	5

2. To calculate the average satisfaction with the formula Mean / average And later the average results from three three analyzes, namely: Reach Analysis, Engagement Analysis, Virality Analysis which is calculated using the formula.

Distribution of Questionnaires for Research Test

At this stage, this test is carried out using CSUQ to determine the effectiveness of marketing on Instagram through social media analytics as consumers and potential consumers of B & Y Studio, and using the hashtag method to link and group similar content or information, making it easier for certain searches. This stage will make it easier for researchers to find

out how effective the use of Instagram for product marketing at B&Y Studio is

Respondents Overview

The questionnaire distributed from 23 May 2021 – 17 July 2021 was filled out by 82 respondents. Most of the respondents in this research are in the age range of 20-30 years with a total of 43 respondents, the age range of 41-60 years as many as 22, the age range of 31-40 years as many as 16 and the age range of less than 20 years as many as 1. The number of respondents is based on the age can be seen in table 6.

TABLE 6. Age Range of Respondents

Umur	Total
< 20 Tahun	1
20-30 Tahun	43
31-40 Tahun	16
41-60 Tahun	22
Total	82

The majority of respondents have the latest educational background S1 as many as 50 respondents, educational background D3 as many as 8 respondents, high school as many as 19 respondents, and educational background S2 as many as 5 respondents. The number of respondents based on educational background can be seen in table 7.

TABLE 7. Respondents' Last Educational Background

Tingkat Pendidikan	Jumlah
SMA	19
D3	8
S1	50
S2	5
Total	82

Table 8. Respondents' Occupation

Pekerjaan	Jumlah
Guru	2
Karyawan Swasta	33
TNI / POLRI & PNS	6
Pelajar / Mahasiswa	10
Wiraswasta	17
Ibu Rumah Tangga	8
Karyawan BUMN / BUMD	3
Dan Lain - Lain	3

The majority of respondents have a teacher's last job background as many as 2 respondents, private employees work background as many as 33 respondents, TNI / POLRI and PNS work backgrounds as many as 6 respondents, Student / Student work background as many as 10 respondents, entrepreneurial work background as many as 17 respondents , work background of housewives as many as 8 respondents, employees of BUMN

/ BUMD as many as 3 respondents, as well as medical, freelance, and honorary employees as many as 3 respondents. The number of respondents based on educational background can be seen in table 8.

In this analysis the calculation of this questionnaire goes through 3 stages of analysis, namely: reach analysis, *engagement analysis*, *Virality analysis*. From these 3 stages, the writer makes a choice of 5-point Likert scale answers, then the writer determines the average percentage and the mode of each analysis from the questionnaire questions. The following are the descriptive results of the calculation:

1. That 3% of respondents often access Instagram, as many as 77% of people access Instagram which include: as a promotional / marketing media as many as 22 respondents, 25 respondents to view Instagram stories, 30 respondents only see Instagram's homepage, and 5 Instagram respondents only follow trends or not used. 70% of respondents know the Instagram hashtag method. As many as 3% of people know B & Y Studio's Instagram account, 80% of respondents access B & Y Studio's Instagram account, 3% of captions for each B & Y studio upload are easy to understand, 3% of respondents say that every caption on B & Y studio uploads inviting (persuasive) and informative, as many as 3% of respondents have looked for information on social media and/or contacted B & Y Studio to inquire about product prices,
2. That engagement analysis as many as 2% of respondents have given praise comments on B & Y Studio uploads and an average of 3% of respondents have searched for information on social media and/or contacted B & Y Studio to find out products / Just ask prices, find out products B & Y Studio using the hashtag method, direct message / direct message on B & Y Studio's instagram account to ask for prices, give likes to B & Y Studio uploads, pay attention to B & Y Studio's Instagram upload information whether you get discount information, coupons, etc. .
3. In addition, the authors ask advice to 82 respondents for the development of promotional media for B & Y Studio Products. A total of 29 respondents answered "yes" to give advice, 28 respondents answered "no" to give advice, and 25 respondents answered 'tentatively' not to give advice. The average respondent who wants to give advice to B & Y Studio so that Instagram accounts often upload photos, videos as marketing to increase sales and respondents want info related to prices, packages to be included on the B & Y Studio Instagram account. Following are the respondents' answers.
4. that virality analysis as many as 3% of respondents that have searched for information on social media and/or know about B & Y Studio products, pay attention to B & Y Studio's Instagram upload information, did they get information on discounts, coupons, etc.? (For example using # Photoboothbny), inviting others to visit B & Y Studio's Instagram after viewing B & Y Studio's Instagram, Caption hashtags for each B & Y studio upload that is easy to understand and on target, making it easier to search, find information on social media and/or contact parties. B & Y Studio to know the product / Just ask the price

V. CONCLUSION

- a) The analysis using the Instagram insights of the B & Y Studio account as a tool concluded that the effectiveness of marketing through Instagram B & Y Studio is less effective because the 100% target only gets a range of about 31.4% from the Jakarta area and 47.5% who access it from the age range of 25. -34 years. Then we need a creative hashtag for marketing B & Y Studio products
- b) Judging from the location, it can be concluded that the most access is from Jakarta by 31.4%, then from Depok 7.6%, Bekasi 6.8%, Tangerang 4.2%, Cibinong 2.5%. Judging from the age range, the most accessible is the age range of 25-34 years at 47.5%, the second is in the 18-24 year age range by 25.4%, the third is 35-44 years at 14.4%.
- c) Those who access the B & Y Studio Instagram account that the sexes that access the most are 52.7% and their access time is most often done on Mondays, Tuesdays, Thursdays, Fridays, Saturdays, Sundays, while on Wednesdays less than 100% who access the B & Y Studio instagram account.
- d) It can be concluded from the results of the questionnaire calculations and descriptive results that it is less effective in terms of marketing effectiveness due to the lack of creative hashtags for marketing B & Y Studio products and the access time for uploading photos, videos is not at the right time.

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