

Paper 21

Generation Z Consumer Attitudes towards Video Advertisement of TikTok in the E-Commerce Industry

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Abstract - Through decades of the technological era, online advertisements have become one of the most prevalent tactics for many marketers, especially for E-Commerce corporations. Therefore, this research examines the impact of online video advertising of the E-Commerce industries on Indonesians aged 18-25, particularly on the TikTok social media platform.

This research is based on Yang et al. [91] and Burhan [12] studies of YouTube Advertising Attitudes Model. This study explores essential factors influencing online consumers' attitudes: entertainment, informativeness, irritation, and credibility. In addition, the research also explores elements that affect consumer intentions and behaviour of E-Commerce ads on TikTok.

The discoveries of this study demonstrate that entertainment, irritation and credibility have a significant influence on attitudes towards E-Commerce companies' ads on TikTok, while Informativeness doesn't. Additionally, Attitude toward the video ads also significantly affects consumer intention to watch the ads. Lastly, the flow of using TikTok does not significantly affect both intention and behaviour of watching the ads. Furthermore, managerial implications are discussed further in this research

Keywords - Attitudes, Behaviour, Flow, Intention, Online Video Advertisement, Theory of Reasoned Action, TikTok

I. INTRODUCTION

A. Research Background

Through decades of the technological era, humans began to develop many ways to fulfil their needs. Business worldwide has competed and developed many innovations to satisfy customer needs, with technology being their most significant asset. One of the most popular business models in the modern world is E-Commerce. E-commerce was founded in the 1960s as corporations enforced the usage of EDI or Electronic Data Interchange as an instrument to swap data with other institutions. Furthermore, corporations' electronic networks continued to rise in the 1980s until they grew exponentially in the 1990s, with eBay and Amazon surging in North America. Electronic commerce or e-commerce is now regarded as a very influential concept that has transformed the present business environment.

E-Commerce then claims its popularity in the 21st century globally; it was estimated in 2021 that 2.14 billion individuals were shopping online to buy both services and goods, with Indonesia being one of the biggest markets. In 2021, Indonesia was the ninth most abundant market for E-Commerce [27]. With a 32% growth, the country's E-Commerce market has contributed to the global expansion rate of 29% last year [27.

However, even the biggest E-Commerce companies are beginning to struggle to keep their market share as more and more corporations are entering the market. With such a fast-growing and competitive market, E-Commerce companies are getting more challenged every day, so new brilliant marketing strategies are necessary. One of the marketers' most prevalent marketing techniques is by using advertising, especially online advertising. But, of course, making good and effective online advertising is already a big challenge for many corporations. Internet as a medium of communication is peculiarly distinct from other mediums on many dimensions; for example, command, interactivity, dynamic content, and profundity of content available to the customer [40].

Online ads have a variety of formats, including buttons, banners, interstitials, hot corners, and portals [39]. Nowadays, online advertisement has many more forms as technology and mediums change over time, such as video format ads. Nevertheless, all online advertising formats share typical characteristics that customers have to initiate some action to be disclosed to the transmission. According to Law and Braun-LaTour [58], more positive ad and brand attitudes are associated with a more powerful purchase intention. Therefore, in developing an excellent online ad, it is essential for companies to understand their consumer attitudes towards their promotion, as designers and marketers can better strategise their advertising designs [91].

With more than 58.4% of the globe's inhabitants presently operating social network sites [81, social media has become one the most integral part of online users' day-to-day life. Moreover, social media itself is expressed as all web-based applications constructed on the ideological and technical bases of Web 2.0, which let the result and exchange of User Generated Content' [51]. Being very vastly used, it is now prevalent for marketers all over the globe to use a variety of social media as their advertising channels, such as Facebook and YouTube. However, one

social media has stood up the most compared to the pandemic's beginning, a short-form video social media named TikTok.

TikTok was also the world's most downloaded app in 2020 [21], and there are approximately 92.1 million active TikTok users in Indonesia [21]. With such a substantial number and rapid growth, TikTok has become one of the most popular social media platforms for online advertisements globally, including in Indonesia.

However, unlike other popular video-based social media like YouTube, TikTok has quite a different audience because of its unique platform characteristics, being the platform that provides short video platforms. A recent study indicates that the convenience of content creation, immediate content transmission, and focus on sociality are the distinguishing attributes of a short-video platform [62]. Also, with different features in video length. businesses will have different challenges in advertising their video on TikTok as it is much more compact than YouTube Advertisement. For instance. YouTube ads in terms of length are recommended to be beneath 3 minutes [41]. Whereas TikTok ads, video ads are advised to be as short as 21-34 seconds, with the best-performing one highlighting the critical message within the first 3 seconds of the video [16].

In recent years, TikTok has become a favourite medium for E-Commerce companies to advertise their brand in South-East Asia, as they usually get good results from advertisements through TikTok. As one example, JD.ID, one of the biggest E-Commerce in Indonesia, has increased its app installation number by more than 12 times after their creative advertising on TikTok grabbed the attention of many Indonesian consumers in 2021 [86].

Through many kinds of literature, data, and phenomenon, there is undoubtedly an urgency to explore consumer attitudes toward e-commerce ads on social media, which may help scholars and enterprises benefit from this study's outcomes. Additionally, just like any other technology, social media is rapidly changing over time and has learned to adapt to maintain and satisfy its user. Innovation in social media through software updates is undoubtedly one of the biggest challenges for digital marketers as it also changes the platform's characteristics. Therefore, marketers need to explore the most recent investigation of the problem as it provides more accurate data.

It is worth mentioning that studies exploring Consumer Attitudes toward YouTube Advertisements have already been conducted previously, such as a study by Yang et al. [91] and Burhan [12]. However, unfortunately, no studies are found exploring consumer attitudes towards TikTok Social Media Platform video advertisement, at least not in

Indonesia and not specifically in the E-Commerce Industry. Furthermore, this research is needed to fill the gap in the study. Additionally, this investigation is necessary as the previous research dates three years before this research, in which social media consumer characteristics may differ from recent times. Thus, this study will extend two existing studies with a similar topic by Yang et al. [91] titled "Consumer attitudes toward online video advertisement: YouTube as a platform" and by Burhan [12] titled "Advertisement Characteristics Effect towards Millennial Consumer Behaviour in Response to YouTube Advertisement".

B. Research Questions

- What variables of E-Commerce Companies' video advertisements affect consumer attitudes on TikTok?
- 2. What is the relationship between consumer attitudes towards E-Commerce companies' ads on TikTok on consumer intention to watch the ads?
- 3. What is the relationship between the flow level of using TikTok on consumer intention and behaviour to watch the E-Commerce advertisements displayed?

II. LITERATURE REVIEW

A. Online Advertising and TikTok

Online advertisement is defined as a two-sided market. where an intermediary has a platform that can facilitate relationships between consumers and advertisers [29]. Online activities and programs are specifically designed to engage customers both directly and indirectly, enhance the image, raise awareness or generate sales of products and services [16]. Online advertising can diverge into search, classified, and display advertising [12]. Furthermore, social media occurs to have become one of the newest environments where advertisement takes place [41]. According to Statista [83], in 2021, six of the biggest social media platforms used by marketers worldwide as of January 2021 are; Facebook, Instagram, Linkedln, YouTube, Twitter and TikTok. However, in Indonesia, TikTok has become the most prominent social media platform for advertisers, especially E-Commerce brands.

According to Statista [83], TikTok has the 6th most active social media user globally with approximately a billion users worldwide, just a couple million users more than Facebook messenger at the 7th place. Since its first creation in 2016, TikTok has developed a complex algorithm that can segment its audiences into categories according to its user's geographic, demographic, and psychographic characteristics. This feature gradually helps marketers put their online video advertisements on

TikTok. In addition, TikTok is famous for being a social media that uses short-form video as its main feature. TikTok videos were once limited to 15 seconds; they later raised their maximum length to one minute and again in July 2021 to three minutes [35]. According to HubSpot's latest survey on 2022 marketing trends, short-form video delivers the most significant return on investment of any social media marketing approach.

As a result, TikTok Advertisement saw a very successful run as it is Ranked #1 globally for ad equity. The platform was reported to have 689 million global active users as of July 2020 [4]. In South-East Asia alone, TikTok's growth by users stood at 52.3% in 2020 compared to the previous year [48]. Because of its popularity, businesses have begun to use TikTok as an advertising platform, including In Indonesia. Lastly, four types of short-length advertisement formats that TikTok provides are TopView, In-Feed Ads, Branded Hashtag Challenge and Branded Effects [86].

B. Attitude towards Internet Advertising

Attitude in marketing terms is described as a general evaluation of a product or service developed over time [82]. Therefore, an advertising attitude is expressed as a consumer's reaction to specific ads, either positive or negative, based on the varied attributes of the ad. Attitude toward advertisements and brand is critical for advertisers as those are the standard measures for assessing advertising effectiveness. In addition, advertising attitudes are considered vital for marketers because a study shows that a more positive advertisement attitude and brand attitude correspond to a stronger intention, particularly in purchasing [58].

Past research by Ducoffe [26] showed that entertainment value, informativeness, and irritation contribute to consumers' evaluations of advertising values and therefore attitudes toward the advertisement. Ducoffe [26] states that certain ads' content (informativeness) and form (entertainment) are critical to the effectiveness of Web advertising in which they affect them positively. While on the other hand, irritation has adverse effects on the viewer's attitudes. Eighmey [28] further validates Ducoffe's model [26] and extends the framework to include credibility, which has also shown a direct association between advertising value and attitudes toward advertisements

Other research by Yang et al. [91] saw that the four of the previous variables positively influenced attitudes towards advertisements, except irritation, which had a negative effect. Furthermore, Tsang, Ho and Liang [89] also uncovered that entertainment, informativeness, credibility, and irritation directly impact Attitude, with entertainment as the most influential variable. Finally, a more recent study

by Burhan [12] validates the four elements as significantly affected ads attitude. Therefore, these four variables are considered vital in shaping advertisement consumer attitudes, which later determine their behavioural intention according to the Theory of Reasoned Action [95].

Entertainment value lies in its ability to fulfil audiences' needs for escapism, diversion, aesthetic enjoyment or emotional release [65]. Meanwhile, entertainment value in terms leads to the consumer reaction to a pleasurable feeling and joy found in an advertisement that raises a sense of satisfaction [26]. Therefore, entertainment is a vital characteristic of internet marketing where the message that consumers perceive must be concise and funny and instantly captures consumers' attention [53].

On the other hand, informativeness is described as the level of knowledge that advertising provides appropriate information [26].

Unlike the previous two, irritability can divert attention from worthy social goals [31] while exploiting human anxiety and fondly possessing hopes [78]. In the advertising context, irritation is the level of awareness that advertising is considered disturbing or viewed negatively, such as annoying, offensive, or insulting [26]. Thus, many researchers found that perceived irritation negatively impacts the advertisement value perceived by consumers, including Sun et al. [94].

Credibility is as to whether or not the viewer trusts the content of a particular advertisement [9]. It also demonstrates the trustworthiness or usefulness of advertising. In addition, various studies have proven that credibility directly relates to advertising attitude, including a recent study by Burhan [12] that shows credibility positively impacts advertising attitude.

C. Theory of Reasoned Action

The theory of Reasoned action explains the determinants that lead to certain behaviours performed by a person and was developed to understand relationships between attitudes, intentions, and behaviour [7]. According to Webster et al. [95], the Theory of Reasoned Action indicates that behavioural intention determines a person's behaviour. Fishbein & Ajzen [7] divide the beliefs antecedent to behavioural intentions into two theoretically distinct sets: normative and behavioural. While an individual's subjective norm influences normative beliefs, behavioural beliefs are affected by an individual's attitude.

Attitude is expressed as a person's positive or negative feeling about making an action [95]. Attitude also viewed as a construct frequently used to predict individual intention [79], as the TRA emphasizes.

According to a past study, the intention of someone is defined as the amount of action someone is willing to exercise to achieve a goal [6].

Behaviour can be defined as many things, but in simple terms, behaviour is expressed as an individual's overt verbal or physical movement [8]. Meanwhile, according to Doyle [25] in his book "A Dictionary of Marketing", consumer behaviour is described as a process of an identifiable set of consumers making buying decisions.

D. Flow theory

Aside from individual attitudes, a recent study by Yang et al. [91] found that flow level also influences both intention and behaviour of online advertisement consumers. The level flow of a person is considered a significant determinant of intention [46] in the advertising research model. A more recent study by Burhan [12] also discovered that the degree of the flow of someone positively impacts viewer intention in watching advertisements; however, in that research, the flow does not significantly affect viewer behaviour. Additional studies confirm that flow is a decisive predictor of intention, particularly in purchasing in the advertising research model [55].

Csikszentmihalyi [19] defines Flow as a holistic response that people perceive when they act with total involvement. When one is in a flow condition, they will enter a form where they will be intensely absorbed in the activity [91]. People in this state will neglect their surroundings or irrelevant thoughts because they lose self-consciousness. Meanwhile, online Flow can be described by interaction with machines, or digital media devices, enjoyment and reduced self-awareness [20].

E. Theoretical framework

The research in this report will adopt past research models and frameworks by Yang et al. [91] from a Kybernetes titled "Consumer attitudes toward online video advertisement: YouTube as a platform".

The framework is based on several studies conducted by past researchers and discussed in the literature review part of this research. The research model adopts the theory of reasoned action, which examines the factors that influence a person's behavioural intention as determined by the person's attitude or the norms that apply to Behaviour [95]. This theory is the basis of erratic Behaviour, intentions, and attitudes. Because this research focuses on advertisements' Behaviour, it is vital to understand the factors affecting a person's attitude regarding ads. Therefore, according to Ducoffe [26], they are entertainment, informativeness, irritation, and credibility [28]. In addition, the flow variable, which

influences a person's intention and a person's behaviour [91], is also used in this research.

III. METHODOLOGY

A. Research Philosophy

In conducting a study, Research philosophy is crucial. It ascribes to how assumptions influence the research strategies and the methods chosen for research [77]. Furthermore, this research will take positivism as its research philosophy as this philosophy considers the presence of objective facts for phenomena that are investigated by calculating the relationship between variables. Moreover, the philosophy concentrates on "causality and law-like generalisations, reducing phenomena to the simplest" [77] and aims to determine causes and effects [93]. Thus, positivism is the most suitable approach for this particular study as it focuses on statistical analysis for determining the cause-effect relationships between constructs in an enormous number of samples [74].

B. Research Design

Research designs have a crucial role in navigating researchers during the research completion process and are also a technique to achieve the research objectives that have been previously determined [76]. Therefore, this research can be categorised as causal explanatory research as the predecessor uses the same design. Furthermore, this type of research intends to identify the influence of a variable on other variables [11]. Moreover, this study will examine eight different variables.

Positivist studies adopt a deductive approach as a general practice [18]. Thus, this research will use a deductive approach to explore a known theory or phenomenon and test if that Theory is accurate under other circumstances. Furthermore, this research will use a mono-method quantitative methodological approach as it is reflected through the data collection, which uses a structured questionnaire and statistical analysis for the analysis method. Additionally, this survey can also be categorised as cross-sectional research as respondents are collected only at a particular time.

C. Research Sample

This research will use probability sampling as its sampling method, where there is selection in terms of criteria while also randomly choosing a sample of people. One type of probability sampling used is simple random sampling, in which everyone has an equal chance of being selected for this research.

In terms of the sample criteria, this study will collect samples of Generation Z aged 18-and 25. The choice of the requirements is since there are approximately 884.9 million TikTok users globally, and 43.7% are between 18-and 24 years old, making them the biggest age group on the platform [24].

Additionally, all the test subjects will have to be located in Indonesia or originated in Indonesia. It is reported that there are 158 million e-commerce users [68] and just above 90 million active TikTok users aged 18 and above [24] in Indonesia. Additionally, the TikTok Ads setting will differ according to its region, and Indonesia is seen as one of the most prominent regions in the platform that shows E-Commerce advertisements.

This research will investigate samples that viewed any E-Commerce Ads on TikTok starting from 2020, as that year, TikTok was the world's most downloaded app 2020 [21] until the first quarter of 2022.

D. Data Collection Method

Two types of data collection are conducted in this research: primary and secondary data. Primary data are collected through a structured questionnaire. The questionnaire will be distributed online through the google forms platform, and only the valid questionnaires will be processed further. The data taken from the subject are only the essential information necessary for the research, such as respondents' demographic data and primary questions related to the study. The main questions will be scaled questions ranging from 1-to 6 to measure all eight variables about to be investigated.

In this research, secondary data will complement the primary data collected and provide information that can't be found through primary data. In addition, secondary data will provide the theoretical foundation and a deeper understanding of the research problems. The secondary data will be sourced from various online and offline writings such as textbooks, articles, and other literature studies.

The data collection of this research follows the Research Ethics Form term and conditions. Accordingly, the questionnaire uses a consent form & information sheet for the survey to collect data. Finally, responses have been collected anonymously with no trace of name or email address in the questionnaire.

E. Data Analysis Method

This research will mainly use two types of analysis: Frequency Distribution and Structural Equation Model (SEM) analysis has advantages in showing the concepts that are not excessive and their associations [37]. This

Method of Analysis was performed by Yang et al. [91] & Burhan [12] to investigate consumer attitudes towards YouTube advertisements. Data analysis is operated by IBM SPSS Statistics 27 software and IBM SPSS AMOS 26 software.

Meanwhile, Frequency Distribution Analysis is defined as a mathematical calculation to measure the number of respondents associated with different values in the variable [63]. This analysis supports a more profound understanding of the survey respondent's profile and characteristics.

On the other hand, Structural Equation Model Analysis is used to simultaneously perform measurement analysis or confirmatory factor analysis (Validity, reliability, goodness-of-fit) and structural model analysis (goodness-of-fit, Causal Relationships). A measurement model measures latent or composite [44], while the structural model tests all hypothetical dependencies based on path analysis [44]. The validity of a research instrument assesses how the device measures what it is designed to measure [54]. Meanwhile, reliability concerns how a measurement of a phenomenon provides stable and consistent results [14]. Testing for reliability is crucial as it refers to the consistency across the parts of a measuring instrument [47].

Furthermore, the Goodness-of-Fit of data is necessary as it helps determine if observed data aligns with what is expected. Some of the fit indices for structural equation modelling that is used in this study are Statistic Chi-Square, Root Mean Square of Approximation (RMSEA), Normed Fit Index (NFI) and Comparative Fit Index (CFI). Finally, the test of the causal relationship is vital as it is used to investigate nomological network relationships between variables in the model where all hypotheses can get their answer.

F. Hypothesis Development

Ducoffe [26] demonstrated that entertainment, informativeness and irritation influenced attitudes toward Web advertisements. In addition, the credibility of an ad also shows that it directly relates to advertising attitudes toward ads [28]. Finally, in recent times, Yang et al. [91] found that the four variables do indeed affect advertising attitudes, particularly on the YouTube platform. Thus, the first hypothesis composed as follows: H1. Perceived entertainment, informativeness, irritation and credibility of the E-Commerce Companies' video advertisements displayed affect consumer attitudes.

In the Theory of Reasoned Action, Fishbein & Ajzen [7] divide the behavioural intention ancestor into theoretically distinct sets: normative and behavioural. While a person's

subjective norm impacts normative beliefs, behavioural beliefs are affected by an individual's attitude. A recent study by Yang et al. [91] and Burhan [12] further links the theory with attitude and intention towards YouTube advertisements. They then found a significant impact on consumer attitude towards online advertisements on the consumer's intention. Consequently, the second hypothesis is cultivated as follows: H2. Consumer attitudes towards E-Commerce Companies' video ads on TikTok affect consumer intention to watch those advertisements.

Liu et al. [61] investigated online e-learning users' acceptance behaviours in three contexts: text-audio, text-audio-video, and audio-video. They found that flow was positively correlated with the intention to use the technology in the text-audio-video and audio-video. In addition, Koufaris [57] confirms that the flow of an online environment is the precursor variable of intention to return to websites. Finally, Yang et al. [91] further validated the influence of a flow on consumer intention and extended it to influence consumer behaviour towards YouTube ads. Therefore, the third hypothesis is cultivated as follows: H3. The flow level of using TikTok affects consumer intention and behaviour to watch the E-Commerce advertisements displayed.

G. Variable Operationalisation

This research is benchmarked through two journal articles entitled "Consumer attitudes toward online video advertisement: YouTube as a platform" by Yang et al. [91] and "Advertisement Characteristics Effect towards Millennial Consumer Behaviour in Response to YouTube Advertisement" by Burhan [12] and adopted nearly all of the indicators contained in the journal in this study. As a result, eight latent variables are observed in this research: entertainment, informativeness, irritation, credibility, attitude, intention, flow, and behaviour.

Measurements for the eight variables in this study used a scale range of 1 - 6, where a scale of 1 represents the state of "Strongly Disagree", 2 as "Disagree", and 3 as "Somewhat Disagree". In contrast, scale 6 represents "Strongly Agree", scale 5 as "Somewhat Agree", and 6 as "Agree". Thus, the operationalisation of the variables in this study is as follows:

III. RESULTS

A. Respondents Profile

Table I below shows the characteristics or profiles of the 220 filtered respondents willing to participate in the questionnaire. Initially, 249 respondents were filling the survey. However, there are 29 unusable responses due to the invalidness of participants' criteria, requiring them to see E-commerce ads on TikTok at least once. Furthermore, some of the data that this study collects contains the respondent's age, domicile, the reason for using TikTok and the number and duration of accessing TikTok per day.

Table 1 - INTERNAL CONSISTENCY RELIABILITY RESULT

Category	Frequency (n = 220)	(%)	
Age			
18-21	191	86.8	
22-25	29	13.2	
Residence			
Aceh	1	0.5	
Bali	1	0.5	
Banten	37	16.8	
DI Yogyakarta	3	1.4	
DKI Jakarta	54	24.5	
Jambi	2	0.9	
Central Java	3	1.4	
East Java	11	5.0	
West Java	102	46.4	
West Kalimantan	2	0.9	
Sumatera (Riau / Riau Islands / North	4	1.8	
Sumatera / South Sumatera)			
Reason playing TikTok			
Entertainment	86	39.1	
Information & Knowledge	7	3.2	
Entertainment, Information & Knowledge	108	49.1	
Entertainment, Profession	1	0.5	
Entertainment, Information & Knowledge,	18	8.2	
Profession			
Online time per day			
Less than 1 hour	69	69	
1 < hours < 3	31.4	31.4	
3 or more hours	109	109	

B. Measurement Model Analysis

In this study, Confirmatory Factor Analysis is performed to validate the psychometric properties of the instruments. Data are analysed with IBM SPSS Statistics 27 and IBM SPSS AMOS 26 software thorough examination. The measurement model had an acceptable fit through the chi-square test while also examining its convergent Validity, discriminant validity and Reliability. Goodnessof-fit for the model was confirmed as the model has x/ df of 1.475, where according to Ullman [90], the value is less than two. RMSEA of the model is accepted where the value is less than 0.08 [10], with 0.047 being the result. Both CFI and NFI of the model are higher than the desired threshold value, which is acceptable [30] for CFI and for the NFI [13]. Furthermore, every goodness-of-fit statistic is past its cut-off values, and the model satisfactorily fits the data.

According to Fornell and Larcker [1], Convergent Validity was assessed using three criteria:

- 1. Indicator factor loadings have to be significant at p < 0.05 and surpass 0.7
- 2. Composite Reliabilities must exceed 0.7
- The average variance extracted or AVE per construct should transcend the variance due to measurement error for that construct.

As shown in Table II, all factor loadings surpassed 0.7 and were significant at p < 0.001. All Composite reliabilities are higher than 0.7 except for Behaviour (0.639), and AVE were not all above the cut-off value of 0.50. It is also seen that the Composite Reliability and AVE of our data do not meet the convergent validity value criteria [1]. However, in the same study, they also said that if AVE is less than 0.5 but composite reliability is higher than 0.6, the convergent validity of the construct is still adequate [1]. Therefore, the data shows an appropriate Convergent Validity.

Table 2 - MEASUREMENT MODEL ANALYSIS RESULT

Variable	Indicator	Loadings	Cronbach's a	CR	AVE
	ENT1	0.91			
Entertainment	ENT2	0.922	0.901	0.926	0.579
	ENT3	0.91			
	INF1	0.839			
Informativeness	INF2	0.895	0.804	0.883	0.485
	INF3	0.81			
Irritation	IRR1	0.943	0.874	0.898	0.669
	IRR2	0.943	0.874	0.898	
Credibility	CRE1	0.887		0.956	0.682
	CRE2	0.907	0.86		
	CRE2	0.859			
Attitude	Attitude ATT1 0.	0.893		0.845	
	ATT2	0.886	0.832		0.363
	ATT2	0.817			
Intention	INT1	0.958			
	INT2	0.959	0.959	0.955	0.716
	INT3	0.966			
Behaviour	BE1	0.867	0.663	0.639	0.333
	BE2	0.867	0.003	0.039	0.333
Flow	FLO1	0.883		0.965	
	FLO2	0.92	0.879		0.754
	FLO3	0.889			

Discriminant validity was evaluated by comparing the use of the square root value of AVE with inter-construct correlation values. In determining a discriminant validity, the square root of AVE must be bigger than the interconstruct correlation [38]. As seen below (Table III), all of the square roots of AVE are higher than its inter-construct correlation, implying a proper discriminant Validity of the data.

Finally, data reliability is examined by using Cronbach's alpha. Churchill and Peter [17] proposed a sufficient level for the alpha coefficient in which a Cronbach's alpha value below 0.60 is undesirable, whereas above that is desirable. Another research stated that Cronbach's alpha coefficient values of more than 0.7 are deemed suitable; however, greater than 0.5 are still acceptable [71]. As seen above (Table II), Cronbach's alpha in all variables showed a value over 0.6, with the smallest being 0.663, indicating the appropriate Reliability of items used for each construct [64].

Table 3 - INTER-CONSTRUCT CORRELATION MATRIX AND SQUARE ROOT AVE

Variable	ENT	INF	IRR	CRE	ATT	INT	BEH	FLO	SQR AVE
ENT	1	0.553	-0.461	0.259	0.659	0.589	0.476	0.278	0.761
INF	0.553	1	-0.275	0.463	0.545	0.497	0.458	0.334	0.697
IRR	-0.461	-0.275	1	-0.061	-0.5	-0.392	-0.498	-0.187	0.818
CRE	0.259	0.463	-0.061	1	0.421	0.341	0.228	0.316	0.826
ATT	0.659	0.545	-0.5	0.421	1	0.613	0.458	0.264	0.602
INT	0.589	0.497	-0.392	0.341	0.613	1	0.504	0.299	0.846
BEH	0.476	0.458	-0.498	0.228	0.458	0.504	1	0.268	0.577
FLO	0.278	0.334	-0.187	0.316	0.264	0.299	0.268	1	0.868

C. Structural Model Analysis

Figure 1 below shows the results of the structural model analysis, including the R and path loadings for all hypothesised relationships. Through the examination from IBM SPSS AMOS 26 software, the x/df = 1.883 is accepted with the criterion for acceptance of less than 2 [90]. In the result, RMSEA is 0.064, which, according to Browne & Cudeck [10], the value should be less than 0.08; therefore, RMSEA shows a good fit. Finally, the CFI of the result presents to be 0.94, which is said to be according to Fan et al. [30], where CFI should be above 0.90; thus, CFI is fit. Furthermore, all goodness-of-fit statistics were above their cut-off values, and the model satisfactorily fits the data.

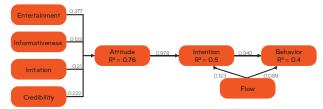


Fig. 1. Structural Model Analysis in Framework

In terms of causal relationships between constructs, analysis shows that all variables influencing attitudes have a significant impact except for perceived informativeness where 0.76 is the R. It shows that Entertainment (I = 0.377, p < 0.001) and Credibility (I = 0.222, p < 0.001) influenced positively Attitudes significantly while Irritation (I = -0.21, p < 0.001) negatively influenced the construct significantly. Meanwhile, Informativeness (I = 0.122, p > 0.05) shows insufficient effect on Attitude where its p-value is greater than 0.05, meaning that it is not statistically significant. Additionally, Attitudes (I = 0.978, p < 0.001) showed significant positive influence on Intention (R = 0.76, p < 0.01) and Intention was also found to have a significant effect on Behaviour (I = 0.340, p < 0.001) positively. Finally, Flow construct displayed no significant relationship towards intention (I = 0.123, p > 0.05) and Behaviour (I= 0.089, p > 0.05) with both of its p-values bigger than 0.005 respectively. A summary of structural model test results is displayed in Table IV.

Table 4 - STRUCTURAL MODEL ANALYSIS RESULT

Path	Estimates	Std. Error	C.R.	P label	Description
Entertainment Attitude	0.377	0.065	5.796	Probability of getting a C.R. in absolute value is less than 0.001	Significant
Informativeness Attitude	0.122	0.074	1.661	The probability of getting a C.R. in absolute value is 0.097	Not Significant
Irritation Attitude	-0.210	0.044	-4.792	Probability of getting a C.R. in absolute value is less than 0.001	Significant
Credibility Attitude	0.222	0.056	3.994	Probability of getting a C.R. in absolute value is less than 0.001	Significant
Attitude Intention	0.978	0.092	10.625	Probability of getting a C.R. in absolute value is less than 0.001	Significant
Intention Behaviour	0.340	0.046	7.443	Probability of getting a C.R. in absolute value is less than 0.001	Significant
Flow Intention	0.123	0.065	1.889	Probability of getting a C.R. in absolute value is 0.059	Not Significant
Flow Behaviour	0.089	0.050	1.786	Probability of getting a CR in absolute value is 0.074	Not Significant

IV. DISCUSSION

A. Discussion of Result

As is seen in the previous part, the results reveal that the model's suitability in the circumstances of online ads in video form is backed by the extent to which the results pursue those of prior studies, particularly in social media advertisements such as YouTube ads [12]. Originally, Ducoffe [26] and later Eighmey [28] indicate that entertainment value, informativeness, irritability, and credibility perceived from ads significantly affect advertising value. However, Three out of four of the first hypothesis's constituent variables, which are entertainment, irritability, and credibility of advertisements, are supported, with informativeness not being supported. Additionally, the entertainment and credibility variable positively show a notable explanatory effect on attitude. At the same time, irritation is demonstrated to influence attitudes negatively. The research discoveries are still inconsistent with earlier recent research by Yang et al. [91] and Burhan [12]. However, these findings are more likely to happen due to the different social media platforms used for the study.

With a notable influence on perceived entertainment value, E-Commerce companies' ads on TikTok may be considered a likeable experience for audiences as they can satisfy viewers' needs for diversion, aesthetic delight or emotional liberation [65]. Moreover, the E-Commerce ads deliver credibility to viewers because they may rely upon the content of these ads [9]. Nevertheless, viewers may regard companies' ads as bothersome, offensive or annoying [26] with their high degree of perceived irritability. E-Commerce ads may also offer a high degree of relevant information [26], despite the outcome

indicating no significant relationship between perceived informativeness and viewer ads attitude.

On the other hand, the research's second hypothesis, backed by recent research on consumer attitudes towards online ads on YouTube by Yang et al. [91] and Burhan [12], is accepted according to the study's findings. This research demonstrates that ad attitudes toward E-Commerce companies' ads on TikTok significantly impact intention to watch the related ads. Customers with positive attitudes toward E-Commerce ads will increase their intention to watch the ads. Thus, the two also affect differently, meaning customers with negative attitudes will also decrease their intention to view the advertisement. The viewers may think that the advertising is trustworthy and pleasant. These attitudes may positively enhance viewers' intention to see the TikTok ads of E-Commerce firms.

Finally, the study rejects the third and last hypothesis. In the findings, flow shows no significant influence on a person's intention and behaviour towards E-Commerce companies' ads on TikTok despite being an essential factor in intention and behaviour towards video ads on YouTube [91]. Individuals that watch TikTok video ads may be immersed in the knowledge they are interested in [91], with descriptive results showing flow variables being the biggest score (4.1 from 6) compared to other variables. However, in TikTok specifically, there is not sufficient impact on the consumer intention and behaviour toward the E-Commerce advertisement, as confirmed by this research's findings.

Table 4 - STRUCTURAL MODEL ANALYSIS RESULT

Hypothesis	Path	Results	
H1	Entertainment Attitude	Supported	
	Informativeness Attitude	Not Supported	
	Irritation Attitude	Supported	
	Credibility Attitude	Supported	
H2	Attitude Intention	Supported	
Н3	Flow Intention	Not Supported	
	Flow Behaviour	Not Supported	

B. Limitation

The limitations of this study are as follows.

- 1. There is no sufficient study that supports the flow level using the platform on intention and behaviour.
- 2. The obtained sample is dominated by Indonesian living on Java Island with an age range of 18-21; therefore, this research may yield biased results.
- As this study explores specifically TikTok as the medium, the result may preclude the possibility of describing perceptions with other online platforms.
- 4. In this study, data is gathered through online surveys, which may result in sampling bias.

V. CONCLUSION

A. Study Conclusion

This study exhibited an online advertising model in video and operated TikTok to examine multiple advertisements elements. The study model is benchmarked on two recent studies from Yang et al. [91] and Burhan [12] for their investigation of operating YouTube as the platform. In addition, this research explored the aspects influencing attitudes toward online ads. The findings imply that entertainment, irritation, and credibility influence attitudes toward E-Commerce companies' ads. In contrast, informativeness does not significantly affect attitude toward those advertisements, which may occur due to consumer from different nation may have different concern on influences including informativeness [96].

It is also examined that Attitude toward E-Commerce company ads significantly influences viewers' intention to watch the ads with a positive relationship. On the other hand, this study uncovers that the TikTok platform's flow level does not significantly influence viewers' intention and behaviour in watching the E-Commerce ads. TikTok viewer have a very different flow experience compared to YouTube's due to the fact that flow may occur at various levels [20] according to each environment. Therefore, E-Commerce firms may use this study's conclusions to better strategize their TikTok video advertisement.

B. Managerial implications

Ideally, online video advertising has four unique objectives under the RACE framework. Therefore, marketers may use different strategies and tactics in displaying their online ads. Utilising this study model, marketing or advertising managers can mature their business strategies to be effective and precise, particularly for E-Commerce companies wishing to use TikTok Ads in Indonesia.

E-Commerce firm marketers may have to review their advertising content and consider actions to improve its credibility and entertainment value, as this study shows a significant impact on consumers' advertising attitude. Alternatively, marketers should also lower the degree of irritability of their ads to their audiences due to the outcome of this study showing irritation with ads has a negative impact on advertising attitudes. Furthermore, according to this study, when viewers carry positive attitudes toward the ads, they may have a greater intention to view that advertisement itself, implying how essential advertising attitudes are for the marketer to consider.

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