The effects of personalisation on advertising value and attitude in the case of Indonesian e-marketplace

Prima Andriani, Sahid Susilo Nugroho

The effects of personalisation on advertising value and attitude in the case of Indonesian e-marketplace

Prima Andriani*

Undergraduate Program of Business Education,
Faculty Economics and Management,
Jakarta State University,
Jakarta, Indonesia
Email: prima.andriani@unj.ac.id
*Corresponding author

Sahid Susilo Nugroho

Faculty of Economics and Business,
Universitas Gadjah Mada,
Yogyakarta, Indonesia
Email: primaandriani157@gmail.com
Email: sahid@mail.ugm.ac.id

Abstract: This study aimed to examine perceptions of personalisation, incentives, timeliness, advertising value, and attitude in Indonesian e-marketplaces. It also investigated the roles of incentives and timeliness in mediating the relationship between personalisation and advertising value. Moreover, it examined the role of advertising value in mediating the relationship between personalisation and attitude. The sample in this study is the users of e-marketplaces, with a total of 376 respondents selected by the purposive sampling method. This study used structural equations modelling (SEM) to test the hypotheses proposed. The findings indicate that for personalisation in advertising to have value, a communication strategy is needed that involves incentives and timeliness in delivering advertisements so that the advertisement gets a good response from customers. This research contributes to the understanding that data profiles and track records of product searches by customers become big data to map personalised product offering strategies.

Keywords: advertising value; attitude; incentives; personalisation; timeliness.

Biographical notes: Prima Andriani completed her Master of Science degree in Management from the Faculty of Economics and Business, Universitas Gadjah Mada, Indonesia. She currently serves as a Marketing Lecturer at the Faculty of Economics and Business, Universitas Negeri Jakarta, Indonesia. Her research interests include online advertising, e-commerce, and digital marketing.

Sahid Susilo Nugroho completed his Master of Science at the University of Groningen, The Netherlands, and Doctor of Business Administration at Maastricht School of Management, The Netherlands. He currently serves as a Marketing Lecturer at the Faculty of Economics and Business, Universitas Gadjah Mada, Indonesia. His research interests are online shopping, mobile payment, influencer marketing and gamification.

1   Introduction

The development of information and communication technology has a significant influence on various activities of human life. Mutimukwe et al. (2020) stated that advances in information technology provide support for organisations since the internet has become a practical and effective means of providing services electronically. In the business context, the role of online boards in supporting marketing activities is very important (Alalwan, 2018; Chen and Lin, 2019) because they can reach customers anytime and anywhere. The most significant advantage of selling through e-marketplaces is that the company can get more detailed and accurate customer information. Li (2016) stated that it enables broad access to big data that record time by time concerning consumer interests, purchasing habits, and product or brand preferences. The available data can be analysed to find customer patterns tailored to their profile.

According to Tran (2017) and Rosenthal et al. (2019), information and communication technology developments have created new opportunities to collect and analyse customer data and implement personalised marketing programmes. Maslowska et al. (2016) stated that when customers share large amounts of personal data during their online transactions, marketers will use it as valuable material to create a personalisation scheme. Personalisation of advertising closely relates to big data analysis, which brings a new wave in the development of customer relationship management strategies and sales and services customisation (Anshari et al., 2019; Xie and Karan, 2019).

Personalisation of advertising is expected to ease marketers in targeting their potential customers precisely, to which individuals will pay more attention (Bang and Wojdynski, 2016). McCoy et al. (2017) and Nguyen et al. (2022) found that customers want personalised but non-intrusive advertising since it sometimes suddenly appears on the screen when consumers browse the internet. Tran (2017) revealed that the personalisation of advertising sometimes makes customers unhappy or uncomfortable. Thus, it leads to a negative response towards advertising, such as advertising avoidance and scepticism. It indicates that the personalisation of advertising should consider several important factors to get a positive response from customers.

In addition to a customised communication strategy, marketers also need to pay attention to the value of the advertisements sent to customers. Value comes in many forms and from many sources, such as product utility, quality, image formed by advertising or promotion, product availability, and additional services (Chen and Lin, 2019) that marketers can provide. The advertising value from the advertiser's point of view is based on its ability to achieve marketing and communication objectives. It should also be a concern for marketers that the advertising value is based on their ability to achieve marketing and communication objectives (Karamchandani et al., 2021).

The ability of marketers to design communication strategies with customers by considering the value of advertising aims to get a good response from customers. Attitudes towards advertising are formed when consumers express the visual and verbal substance of the claims and advertising content (Sander et al., 2021) they receive. Therefore, marketers need to pay attention to advertising value. Empirical research from Liu et al. (2012) proves that the response shown through a favourable attitude towards advertising is assumed to occur when users associate value with advertising. In addition, to form a positive attitude toward online advertising, it is recommended that advertisements provide helpful information, save time, and provide entertaining content (Nasution et al., 2021). Attitude is also an advertising person's evaluation (Arora and Agarwal, 2019). Thus, attitudes toward advertising become the focus of marketers because attitudes are seen as predictors of consumer behaviour (Gaber et al., 2019).

This study interestingly contributes to the literature on the use of big data in the personalisation of online advertising to reach customers through the role of e-marketplaces. In addition, the application of timeliness and incentive constructs to mediating relationships in this study is a new finding that can be used as a reference for marketers in sending personalised advertisements to get a good response from customers. According to several previous studies, it is suggested to research personalisation in the era of big data. Rust (2020) mentioned that the most attractive aspect of personalisation is that it emphasises the use of data. Liu-Thompkins (2019) also recommended that relevant personalisation topics should be studied in the digital era. Wedel and Kannan (2016) stated that one of the topics that will become a trend for future research is personalisation. Furthermore, in the context of e-marketplace, personalisation of advertising is still rare to be studied (Mou et al., 2019). So, to the best of our knowledge, supported by several review studies, research on advertising personalisation in e-marketplaces is still sparse.

This study aims to examine the effect of personalisation on incentives, timeliness, advertising value, and attitudes towards online advertising in the context of e-marketplaces in Indonesia. Furthermore, this study investigates the role of incentives and timeliness in mediating the relationship between personalisation and advertising value. A similar examination was also used for advertising value mediating the relationship between personalisation and attitudes towards online advertising. This study uses the theory of elaboration likelihood model (ELM) to explain the conceptual model. Previous research conducted by De Keyzer et al. (2015) and Lee et al. (2017) studied the personalisation of advertising and attitudes towards advertising using ELM. It can describe how someone will think critically when receiving a personalised advertisement, which leads to the great attention and directs his or her attitude to elaborate further to become convinced (Bright and Daugherty, 2012).

The arrangement of the sections in this paper is as follows: first, the introduction explains the background of this research. Second, the literature review presents the theory used in explaining the conceptual model and the construction of hypotheses that will be tested empirically in this study. Third, the research methodology describes sample design, measurements and methods. Fourth, the research findings describe the demographics of the respondents and the results of statistical tests in analysing hypotheses. Fifth, the discussion and conclusions describe the explanation of the research results and conclude the paper as a whole, equipped with the limitations of this research and the agenda for future research.

2   Literature review

This section aims to describe the theory used in the study to explain the conceptual model and development hypotheses tested in this study. The theory used to explain the conceptual model in this study is ELM. Furthermore, this study has eight hypotheses.

2.1   ELM

ELM, developed by Petty and Cacioppo (1986), offers a valuable framework for understanding attitude formation and the changing behaviour of the information recipients. ELM divides the information processing into two routes that are central route and the peripheral route. Central processing is generally considered the preferred route of persuasion over peripheral ones, as attitude change occurs long-term because when individuals decipher information via the central route, they invest time and cognitive effort in evaluating the information (Manca et al., 2019). Conversely, the peripheral route only provides a short-term effect (Aghakhani et al., 2020). When the elaboration condition is high, personalisation can lead to biased information processing because personalised information is considered more powerful than non-personalised information (De Keyzer et al., 2015). Conversely, when the elaboration condition is low, personalisation can be a heuristic cue that leads to a positive attitude (De Keyzer et al., 2015). The central route comprises the actual use of information that requires a person to think critically. The central route tends to have a lasting effect on the attitude and assessment of the received information.

2.2   The relationship between personalisation and incentives

Personalisation can be defined as a communication strategy that refers to each recipient and is based on the recipient's personal characteristics, such as name, gender, domicile and occupation (Li, 2016; Shanahan et al., 2019). Consumers prefer advertisements that are in accordance with their circumstances so that they are more familiar with personalised advertising (Karamchandani et al., 2021), so this is the goal of personalisation. The sophistication of information processing technology enables marketers to focus on the personalisation of advertising to deliver a tailored information to fit individual preferences (Baek and Morimoto, 2012). Marketers often deliver advertising personalisation through sales promotion and coupon programmes, which becomes an effective form of marketing communication with relevant advertising (Chen and Hsieh, 2012). When advertising contains relevant information and a financial benefit, customers tend to respond positively. Therefore, the first hypothesis is developed as follows:

H1   Personalisation has a positive effect on incentives.

2.3   The relationship between incentives and advertising value

Incentives are a powerful tool that has positive results in many areas, including advertising (Miller et al., 2021). Offering incentive programmes is one way for companies to satisfy customer desires in purchasing products (Johnson and Friend, 2015). Varnali et al. (2012) asserted that incentives for customers and permission to access their

data are two main determinants of online advertising programmes. Most studies defined incentives as general monetary gains such as lotteries, discounts, coupons and prizes (Varnali et al., 2012; Gabisch and Milne, 2014; Lee et al., 2015; Chang et al., 2019). Moreover, it is surprising that customers' emotional responses to incentives stimulate their desire to buy premium products (Shaddy and Lee, 2020). When advertising programme offers incentives to customers, they tend to respond very well due to a value in their favour. Therefore, the second hypothesis is developed as follows:

H2   Incentives have a positive effect on advertising value.

2.4   The relationship between personalisation and timeliness

Lee et al. (2017) defined timeliness as the level of awareness that mobile advertising is provided when a person wants it and is appropriate to purchase a product or service. Increased customer satisfaction can be obtained from offering customised and timely promotions, recommending complementary products and sharing various information (Hui et al., 2013). One crucial aspect that marketers must consider is timeliness, which positively affects motivating customers (Feng et al., 2016). They will have a positive response to personalised advertising if the advertising is delivered on time and adapts to customer conditions. Therefore, the third hypothesis is developed as follows:

H3   Personalisation has a positive effect on timeliness.

2.5   The relationship between timeliness and advertising value

Advertising value is defined by Lee et al. (2017) as the extent of the awareness that mobile advertising is valuable, helpful, and important based on subjective assessment. Advertising value offers a comprehensive overview of the value of marketing messages for customers (Wiese et al., 2020). According to Kim and Han (2014), the value of advertisements in cellular and non-cellular advertisements is influenced by awareness of the context based on specific circumstances, such as personalisation, activity, time and location. Kaplan (2012) also argues that advertising is information that needs to be sent to consumers at the right time in order to lead to additional advertising value. Advertising value also becomes an indicator of customer satisfaction with advertising (Zha et al., 2015; Arora and Agarwal, 2019). Therefore, the fourth hypothesis is developed as follows:

H4   Timeliness has a positive effect on advertising value.

2.6   The relationship between personalisation and advertising value is mediated by timeliness

This study exposed the mediating roles of incentives and timeliness in the relationship between personalisation of advertising and advertising value due to the inconsistency of research findings in previous studies by Arora and Agarwal (2019), Aydin (2018), Kim and Han (2014) and Lee et al. (2017). The results of research from Arora and Agarwal (2019) and Kim and Han (2014) state that personalisation of advertising does not affect advertising value, while study findings from Lee et al. (2017) and Aydin (2018) state that personalisation of advertising has a significant positive effect on advertising value.

Online advertising is a flexible communication medium since its content, display and target audience can be customised quickly, adjusting to the changing condition. However, to some extent, online advertising becomes a nuisance for customers when its delivery time is incorrect. McCoy et al. (2017) revealed that customers want personalised but non-intrusive advertising. It makes marketers must consider various factors so that customers do not feel disturbed by the presence of personalised online advertising. It is because time generally affects individual behaviour (Karamchandani et al., 2021). Thus, timeliness is one of the critical factors considered in advertising. Therefore, the fifth hypothesis is developed as follows:

H5   The relationship between personalisation and advertising value is mediated by timeliness.

2.7   The relationship between personalisation and advertising value is mediated by incentives

The difference in the results of studies related to the relationship between personalisation of advertising and advertising value is shown by research conducted by Arora and Agarwal (2019), Aydin (2018), Kim and Han (2014) and Lee et al. (2017). Studies from Arora and Agarwal (2019) and Kim and Han (2014) state that there is no effect of personalisation on advertising value, whereas Lee et al. (2017) and Aydin (2018) state that there is a significant positive effect of personalisation on advertising value. Meanwhile, satisfaction for customers as recipients of advertisements can only be given if their perceived value is high enough to meet their expectations (Aydin, 2018). Thus, according to Kim and Han (2014), one of the things that can increase the value of advertising is the role of incentives that will shape attitudes to support purchase intentions in mobile advertising, so further research is needed to investigate the relationship between incentives, advertising value, attitudes and intentions. Arora and Agarwal (2019) also state that online advertising must be credible, informative, entertaining and incentivising. When personalisation of advertising contains information that offers benefits, then personalisation of advertising has the potential to be responded to better by customers. Therefore, the sixth hypothesis is developed as follows:

H6   The relationship between personalisation and advertising value is mediated by incentive.

2.8   The relationship between advertising value and attitude toward online advertising

Attitude in online advertising is defined as the extent of the awareness that mobile advertising is desirable (Lee et al., 2017). Computer networks, smartphones, satellite broadcasts, television, and social media networks have a significant influence on consumer attitudes and behaviour in the internet era (Oh et al., 2016). Since it is perceived to provide benefits to the consumer, several other researchers have also confirmed that the value obtained from advertising positively influences customer attitudes and behaviour towards that internet advertising (Ha et al., 2014). When customers derive utility from the advertising offer, and then they feel satisfied, then the customer is predicted to show a positive attitude towards online advertising. Therefore, the seventh hypothesis is developed as follows:

H7   Advertising value has a positive effect on attitude toward online advertising.

2.9   *The relationship between personalisation and attitude toward online advertising is mediated by advertising value*

Personalisation of advertising for some people is often overlooked because they may feel that the appearance of the same online advertising in a short period of time is something dull. It triggers a negative response, such as rejecting or ignoring the personalisation of advertising. One of the efforts of marketers so that the advertisements they send are not received negatively by customers is to pay attention to the advertisement's content. Advertising content should be designed with the value it delivers to customers. It is time for marketers to pay more attention to subjective norms and personal relevance regarding online advertising (Nasution et al., 2021). Kim and Han (2014) suggest that advertising personalisation can be an effective solution to reduce feelings of distraction and increase the perceived entertainment value of advertising exposure. When customers find a personalisation of advertising according to their preferences that contain advertising values such as information and entertainment, their attitude towards online advertising will become more positive. Advertising value strengthens the influence of personalisation on attitude toward online advertising. This study revealed the mediating role of advertising value on the relationship between personalisation and attitude toward online advertising due to the inconsistency of research findings in the previous studies (Gaber et al., 2019; Tran, 2017). Therefore, the eighth hypothesis is developed as follows:

H8   The relationship between personalisation and attitude toward online advertising is mediated by advertising value.

3   Research methodology

3.1   *Sample design*

This study used a purposive sampling method with determined criteria in selecting respondents. Respondents must be Indonesian citizens with a minimum age of 16 years. They have made online transactions at least once a year in one of the top-rank e-marketplaces in Indonesia, that are Shopee, Tokopedia, Lazada and Bukalapak.

3.2   *Measurement*

The questionnaire used in this study was adapted from previous studies and was translated into Indonesian. Personalisation in advertising is measured using five indicators adopted from Srinivasan et al. (2002). Incentives are measured using three indicators adopted from Kim and Han (2014). Timeliness is measured using four indicators adopted from Feng et al. (2016). Advertising value is measured using three indicators adopted from Ducoffe (1995). Attitudes towards online advertising are measured using five indicators adopted from Pollay and Mittal (1993). The study used the Likert scale as its measurement scale ranging from 1 (strongly disagree) to 5 (strongly agree).

3.3   Method

This study adopted structural equation modelling based on partial least square (SEM-PLS) to test the hypotheses. Instrument testing is firstly conducted to examine the validity and reliability of the instrument. Hypothesis testing is held by calculating its beta coefficient to determine the direction of the relationship and its p-value to determine its significance. This study sets the significance level at 1% or a p-value < 0.01. In addition, mediating role of the intended variables is examined based on variance extracted for (VAF) value.

4   Research findings

4.1   Respondent demographics

Most respondents are female, with a percentage of 62.76%. The age range of most respondents is in the range of 26 to 35 years, with a percentage of 57.45% who are of productive age. The last education of the respondents was dominated by an undergraduate with a percentage of 63.83%. Most respondents use Shopee's e-marketplace for online transactions, with a percentage of 75%. The majority of respondents' average purchase frequency in a year is about 6 to 10 times, with a percentage of 28.99%. The most purchased products by respondents through e-marketplaces are fashion and beauty, with a percentage of 24.01%. The summary of the demographics of the respondents is shown in Table 1.

4.2   Validity and reliability test

This study examined the questionnaire in terms of validity and reliability tests. The validity tests consist of convergent and discriminant validities in which both tests are evaluated based on average variant extracted (AVE). Table 2 shows that all variables are confirmed to fulfil the convergent validity test due to that their AVE values are greater than 0.5 (Hair et al., 2021). Meanwhile, as shown in Table 3, the discriminant validity tests for all variables are also passed because the square root of the AVE value for each variable is bigger than the correlation value of the related variable in the single column. Table 2 also confirmed the reliability test fulfilment based on the value of composite reliability (CR) and Cronbach's alpha (CA), in which both scores must be greater than 0.7 (Hair et al., 2021).

4.3   Structural model evaluation

Before evaluating the structural model, the study conducted a model fit analysis, as shown in Table 4. After the fit model test was confirmed, the study conducted a structural model evaluation to test the hypotheses by referring to their beta coefficient and p-value.

Table 1 Demographic data of respondents (n = 376)

Description	Number	Percentage (%)
Gender		
Male	140	37.23%
Female	236	62.76%
Age		
16–25	137	36.44%
26–35	216	57.45%
36–45	17	4.5%
46–55	4	1.9%
> 55	2	0.8%
Education background		
Junior high school	3	0.8%
Senior high school	39	10.37%
Vocational	17	4.5%
Bachelor	240	63.83%
Master	73	19.41%
Doctor	4	1.06%
E-marketplace		
Bukalapak	9	2.4%
Lazada	14	3.72%
Shopee	182	75%
Tokopedia	71	18.88%
Purchase frequency in year		
1–5 times	81	21.54%
6–10 times	109	28.99%
11–15 times	51	13.56%
16–20 times	38	10.11%
More than 20 times	97	25.80%
Most frequently purchased products		
Fashion and beauty	243	24.01%
Electronic and physical media	147	14.53%
Food and personal care	172	17%
Furniture and appliances	125	12.35%
Toys, DIY and hobbies	139	13.74%
Travel (including accommodations)	33	3.26%
Digital music	9	0.89%
Video games	11	1.09%
Others	133	13.14%

Table 2   Item statistics constructs

Variables	Indicators	Loading value	AVE	CR	CA
Personalisation	P1	0.848	0.638	0.897	0.856
	P2	0.823			
	P3	0.86			
	P4	0.68			
	P5	0.768			
Incentives	I1	0.827	0.696	0.873	0.782
	I2	0.84			
	I3	0.837			
Timeliness	T1	0.826	0.669	0.890	0.834
	T2	0.857			
	T3	0.79			
	T4	0.795			
Advertising value	AV1	0.918	0.835	0.938	0.902
	AV2	0.907			
	AV3	0.918			
Attitude toward online advertising	ATOA1	0.886	0.786	0.936	0.909
	ATOA2	0.914			
	ATOA3	0.903			
	ATOA4	0.842			

Table 3   The discriminant validity test

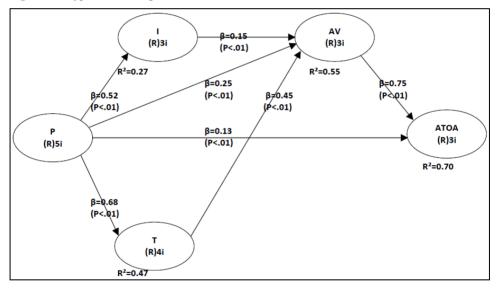| Variables	Personalisation	Incentives	Timeliness	Advertising value	Attitude toward online advertising
Personalisation	*0.799*				
Incentives	0.524	*0.835*			
Timeliness	0.677	0.551	*0.818*		
Advertising value	0.625	0.521	0.699	*0.914*	
Attitude toward online advertising	0.599	0.510	0.669	0.828	*0.887*

4.4   Direct relationship

The direct relationship in the proposed linkage among variables is explored in Hypotheses 1, 2, 3, 4 and 7. As shown in Figure 1 and Table 6, those hypotheses are supported. Hypothesis 1 is supported due to a beta coefficient of 0.52 and a p-value below 0.01. Hypothesis 2 is supported due to a beta coefficient of 0.15 and a p-value below 0.01. Hypothesis 3 is supported due to a beta coefficient of 0.68 and a p-value below 0.01. Hypothesis 4 is supported due to a beta coefficient of 0.45 and a p-value below 0.01. Hypothesis 7 is supported due to a beta coefficient of 0.75 and a p-value below 0.01.

Table 4 Fit model

Criteria	Value	Standard	Result
Average path coefficient (APC)	0.419, p < 0.001	p < 0.01	Accepted
Average R-squared (ARS)	0.498, p < 0.001	p < 0.01	Accepted
Average adjusted R-squared (AARS)	0.496, p < 0.001	p < 0.01	Accepted
Average block VIF (AVIF)	1.748	Accepted if ≤ 5, ideal ≤ 3.3	Ideal
Average full collinearity VIF (AFVIF)	2.677	Accepted if ≤ 5, ideal ≤ 3.3	Ideal
Tenenhaus goodness of fit (GoF)	0.601	Weak ≥ 0.1 Medium ≥ 0.25 Strong ≥ 0.36	Strong
Sympson's paradox ration (SPR)	1.000	Accepted if ≥ 0.7, ideal = 1	Ideal

Figure 1 Hypothesis testing results

4.5 Mediation test

The mediation relationship in the proposed linkage among variables is explored in Hypotheses 5, 6 and 8. The study calculated the VAF value to evaluate those hypotheses. VAF value results from dividing the indirect effect value by the total effect value based on the beta coefficient value. Hair et al. (2021) classified the mediation results into three categories. First, if the VAF value is more than 80%, then it is the indicator of a full mediation. Second, if the VAF value is between 20% and 80%, then it is evidence of a partial mediation. Third, if the VAF value is less than 20%, then it means no mediation at all. Table 5 shows that Hypotheses 5, 6 and 8 are supported due to that their VAF value is

more than 20%. Partial mediations are also confirmed by referring to their VAF value, which is between 20% and 80%.

Table 5   Mediating relationship

Paths	VAF	Mediation category
Personalisation → timeliness → advertising value	0.550	Partial mediation
Personalisation → incentives → advertising value	0.240	Partial mediation
Personalisation → advertising value → attitude toward online advertising	0.591	Partial mediation

All hypothesis testing is summarised in Table 6, which shows that all hypotheses are accepted in a positive direction at the 1% significance level. In addition, all tests of mediation relationships are included in the category of partial mediation.

Table 6   Summary of hypothesis test results

Hypothesis	Paths	Direction	Estimated value	Sig.	Decision
H1	Personalisation → incentives	Positive	0.524	p < 0.001	Supported
H2	Incentives → advertising value	Positive	0.146	p < 0.002	Supported
H3	Personalisation → timeliness	Positive	0.684	p < 0.001	Supported
H4	Timeliness → advertising value	Positive	0.452	p < 0.001	Supported
H5	Personalisation → timeliness → advertising value	Positive	0.550	p < 0.001	Supported
H6	Personalisation → incentives → advertising value	Positive	0.240	p < 0.001	Supported
H7	Advertising value → attitude toward online advertising	Positive	0.746	p < 0.001	Supported
H8	Personalisation → advertising value → attitude toward online advertising	Positive	0.591	p < 0.001	Supported

5   Discussion and conclusions

5.1   Discussion

The relationship between personalisation and incentives has been confirmed, this finding by Chen and Hsieh (2012) revealing that personalisation of advertising delivered through incentive programmes such as giving a coupon becomes an effective communication. When the commercial information is sent in a customised manner according to customers' preferences and browsing history through e-marketplaces, the customers' desire to get incentives is even greater.

Due to that, the relationship between incentives and advertising value has been affirmed. This finding supports previous studies from Arora and Agarwal (2019), Kim and Han (2014) and Martins et al. (2019), clarifying that incentives affect advertising

value. Incentives embedded in the advertising programme's personalisation attract customers' attention to explore any offers in e-marketplaces because they think it is valuable to provide more benefits to them.

As a result that the relationship between personalisation and timeliness has been verified, this finding supports Zhang et al. (2020) conceding that online advertising will be more effective if it pays more attention to the timeliness of information delivery. The best time to deliver the information is when a customer is doing a shopping transaction or a product information search.

Because of that, the relationship between timeliness and advertising value has been confirmed. This finding support (Lee et al., 2017) if online advertising is delivered at the right time, consumers will perceive a higher context awareness value in the advertising received. Since it provides information in a customised way according to their preferences at the right time when they need that information.

As the relationship between personalisation and advertising value is mediated by timeliness has been supported, this study's findings support previous studies by Feng et al. (2016) and Lee et al. (2017) that timeliness can increase consumers' positive response toward advertisements. Timeliness appears as a strong trigger in forming a positive response from users (Zhang et al., 2020) so that users can have a good perception of advertising. Timeliness is an essential aspect since the value of an advertisement can decrease drastically if it is sent to customers at the wrong time. The right time is when consumers do their browsing activities through an e-marketplace. It will be considered valuable since it supports their shopping activities by providing helpful information related to the product.

As the relationship between personalisation and advertising value is mediated by incentives has been confirmed, this study finding clarifies the inconsistency of results in previous studies from Arora and Agarwal (2019), Aydin (2018), Kim and Han (2014) and Lee et al. (2017). Personalisation of advertising for some people is considered distractive since it may create boredom due to similar repetitive information, which can reduce the advertising value. The existence of incentives is expected to compensate the consumer by providing certain benefits. Therefore, since incentives can create an advertising value from an advertisement, consumers perceive the personalisation of advertising as a piece of valuable information.

Because of that, the relationship between advertising value and attitude toward online advertising has been affirmed. This study finding is in line with previous studies by Arora and Agarwal (2019), Ha et al. (2014), Hamouda (2018), Lee et al. (2017) and Wiese et al. (2020). When consumers feel easy to find needed product information from an advertisement, they will consider it a valuable information source. This positive attitude reduces the potential for customer rejection or abandonment of the advertising. It also can increase their possibility of making purchases.

Due to the relationship between, this study finding clears up inconsistencies in previous studies from Gaber et al. (2019) and Tran (2017). Marketers serving online advertisements should provide useful information to save time and money based on the situation, location, and customer personal profile as well as the concept of advertising personalisation (Nasution et al., 2021). So, the personalisation of advertising presents information that refers to consumers' preferences and their recent product search history. Although it triggers consumers' negative responses because of boredom, it can create

advertising value when it can support the consumer decision-making process by providing useful product information.

5.2 Conclusions

Personalisation of advertising is the information of product offerings designed and delivered according to customer needs and preferences. However, to some extent, the personalisation of advertising is probably rejected or ignored because of repeated submissions. Therefore, it is necessary to consider incentives and timeliness to ensure that consumers can accept them well. Personalisation of advertising should be able to deliver advertising to get good consumer responses. The study findings have some implications. First, the study focused on the personalisation of advertising practised in e-marketplaces. It contributes a new perspective to online advertising research contexts in which previous studies primarily studied in the context of social media and mobile applications. Second, the study highlighted the role of mediator variables that successfully clarify an inconsistency issue in previous studies. Third, the study expanded the use of the ELM to explain the personalisation of advertising in the era of big data. Fourth, the study confirmed that personalisation of advertising utilises big data as a base to target specific customers in setting-up customised promotions tailored to customer preferences or needs.

5.3 Limitations

This study has several limitations. First, this study examines only the attitudes of customers' advertising so that it has not yet reached customer behaviour that can be observed. Second, this research only examines one context of e-marketplace, so it cannot be generalised more broadly to customers' perspectives on other platforms or media. Third, this study only examines two mediation constructs as links for personalisation to advertising value: timeliness and incentives. There are perhaps still many other factors that might serve as mediating variables. Fourth, this research was conducted using Indonesian citizens as the sample so that it may not reflect the attitude of customers in other countries.

5.4 Future research agenda

Based on the results of this study, the researchers provide direction for future research. First, to examine the research model that has been developed using the Hayes approach as a guideline for the use of the mediating role by using the SPPS Process analysis tool. Second, researching personalisation of advertising to the stage of customer behaviour as a consequent variable so that the customer's perspective can be observed more clearly because customers are considered to have shown concrete actions. Third, researching personalisation in the context of entertainment media such as digital music services or video streaming services and others to analyse the concept of personalisation is not only applied to the context of products but also the context of services. Fourth, examine the role of other mediators, such as location-based advertising (LBA), which is closely related to the use of information about customer presence in the big data era. Fifth, the types of e-marketplaces that are the object of this research, some of which have a more global scope, especially in Southeast Asia, so it is recommended for further research to

take samples in several countries with several e-marketplaces also operate to capture customer behaviour more broadly.

References

Aghakhani, N. et al. (2020) 'Online review consistency matters: an elaboration likelihood model perspective', *Information Systems Frontiers*, DOI: 10.1007/s10796-020-10030-7.

Alalwan, A.A. (2018) 'Investigating the impact of social media advertising features on customer purchase intention', *International Journal of Information Management*, June, Vol. 42, pp.65–77, DOI: 10.1016/j.ijinfomgt.2018.06.001.

Anshari, M. et al. (2019) 'Customer relationship management and big data enabled: personalisation & customisation of services', *Applied Computing and Informatics*, Vol. 15, No. 2, pp.94–101, DOI: 10.1016/j.aci.2018.05.004.

Arora, T. and Agarwal, B. (2019) 'Empirical study on perceived value and attitude of millennials towards social media advertising: a structural equation modelling approach', *Vision*, Vol. 23, No. 1, pp.56–69, DOI: 10.1177/0972262918821248.

Aydin, G. (2018) 'Role of personalisation in shaping attitudes towards social media ads', *International Journal of e-Business Research*, Vol. 14, No. 3, pp.54–76, DOI: 10.4018/IJEBR.2018070104.

Baek, T. and Morimoto, M. (2012) 'Stay away from me', *Journal of Advertising*, Vol. 41, No. 1, pp.59–76, DOI: 10.2753/JOA0091-3367410105.

Bang, H. and Wojdynski, B.W. (2016) 'Tracking users' visual attention and responses to personalised advertising based on task cognitive demand', *Computers in Human Behavior*, Vol. 55, pp.867–876, DOI: 10.1016/j.chb.2015.10.025.

Bright, L.F. and Daugherty, T. (2012) 'Does customisation impact advertising effectiveness? An exploratory study of consumer perceptions of advertising in customised online environments', *Journal of Marketing Communications*, Vol. 18, No. 1, pp.19–37, DOI: 10.1080/13527266.2011.620767.

Chang, K.C. et al. (2019) 'How green marketing, perceived motives and incentives influence behavioral intentions', *Journal of Retailing and Consumer Services*, April, Vol. 49, pp.336–345, DOI: 10.1016/j.jretconser.2019.04.012.

Chen, P.T. and Hsieh, H.P. (2012) 'Personalised mobile advertising: its key attributes, trends, and social impact', *Technological Forecasting and Social Change*, Vol. 79, No. 3, pp.543–557, DOI: 10.1016/j.techfore.2011.08.011.

Chen, S.C. and Lin, C.P. (2019) 'Understanding the effect of social media marketing activities: the mediation of social identification, perceived value, and satisfaction', *Technological Forecasting and Social Change*, July 2018, Vol. 140, pp.22–32, DOI: 10.1016/j.techfore.2018.11.025.

De Keyzer, F., Dens, N. and De Pelsmacker, P. (2015) 'Is this for me? How consumers respond to personalized advertising on social network sites', *Journal of Interactive Advertising*, Vol. 15, No. 2, pp.124–134, DOI: 10.1080/15252019.2015.1082450.

Ducoffe, R.H. (1995) 'How consumers assess the value of advertising', *Journal of Current Issues and Research in Advertising*, Vol. 17, No. 1, pp.1–18, DOI: 10.1080/10641734.1995.10505022.

Feng, X., Fu, S. and Qin, J. (2016) 'Determinants of consumers' attitudes toward mobile advertising: the mediating roles of intrinsic and extrinsic motivations', *Computers in Human Behavior*, Vol. 63, pp.334–341, DOI: 10.1016/j.chb.2016.05.024.

Gaber, H.R., Wright, L.T. and Kooli, K. (2019) 'Consumer attitudes towards Instagram advertisements in Egypt: the role of the perceived advertising value and personalisation', *Cogent Business and Management*, Vol. 6, No. 1, DOI: 10.1080/23311975.2019.1618431.

Gabisch, J.A. and Milne, G.R. (2014) 'The impact of compensation on information ownership and privacy control', *Journal of Consumer Marketing*, Vol. 31, No. 1, pp.13–26, DOI: 10.1108/JCM-10-2013-0737.

Ha, Y.W., Park, M.C. and Lee, E. (2014) 'A framework for mobile SNS advertising effectiveness: user perceptions and behaviour perspective', *Behaviour and Information Technology*, Vol. 33, No. 12, pp.1333–1346, DOI: 10.1080/0144929X.2014.928906.

Hair Jr., J.F., Hult, G.T.M., Ringle, C.M. and Sarstedt, M. (2021) *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*, Sage publications.

Hamouda, M. (2018) 'Understanding social media advertising effect on consumers' responses: an empirical investigation of tourism advertising on Facebook', *Journal of Enterprise Information Management*, Vol. 31, No. 3, pp.426–445, DOI: 10.1108/JEIM-07-2017-0101.

Hui, S.K. et al. (2013) 'Deconstructing the "first moment of truth": understanding unplanned consideration and purchase conversion using in-store video tracking', *Journal of Marketing Research*, August, Vol. 50, No. 4, pp.445–462.

Johnson, J.S. and Friend, S.B. (2015) 'Contingent cross-selling and up-selling relationships with performance and job satisfaction: an MOA-theoretic examination', *Journal of Personal Selling and Sales Management*, Vol. 35, No. 1, pp.51–71, DOI: 10.1080/08853134.2014.940962.

Kaplan, A.M. (2012) 'If you love something, let it go mobile: mobile marketing and mobile social media 4x4', *Business Horizons*, Vol. 55, No. 2, pp.129–139, DOI: 10.1016/j.bushor.2011.10.009.

Karamchandani, S., Karani, A. and Jayswal, M. (2021) 'Linkages between advertising value perception, context awareness value, brand attitude and purchase intention of hygiene products during COVID-19: a two wave study', *Vision*, pp.1–14, DOI: 10.1177/09722629211043954.

Kim, Y. and Han, J. (2014) 'Why smartphone advertising attracts customers: a model of web advertising, flow, and personalisation', *Computers in Human Behavior*, Vol. 33, pp.256–269, DOI: 10.1016/j.chb.2014.01.015.

Lee, E.B., Lee, S.G. and Yang, C.G. (2017) 'The influences of advertisement attitude and brand attitude on purchase intention of smartphone advertising', *Industrial Management and Data Systems*, Vol. 117, No. 6, pp.1011–1036, DOI: 10.1108/IMDS-06-2016-0229.

Lee, H. et al. (2015) 'Compensation paradox: the influence of monetary rewards on user behaviour', *Behaviour and Information Technology*, Vol. 34, No. 1, pp.45–56, DOI: 10.1080/0144929X.2013.805244.

Li, C. (2016) 'When does web-based personalisation really work? The distinction between actual personalisation and perceived personalisation', *Computers in Human Behavior*, Vol. 54, pp.25–33, DOI: 10.1016/j.chb.2015.07.049.

Liu, C.L.E. et al. (2012) 'Determinants of consumer perceptions toward mobile advertising – a comparison between Japan and Austria', *Journal of Interactive Marketing*, Vol. 26, No. 1, pp.21–32, DOI: 10.1016/j.intmar.2011.07.002.

Liu-Thompkins, Y. (2019) 'A decade of online advertising research: what we learned and what we need to know', *Journal of Advertising*, Vol. 48, No. 1, pp.1–13, DOI: 10.1080/00913367.2018.1556138.

Manca, S. et al. (2019) 'The persuasive route to sustainable mobility: elaboration likelihood model and emotions predict implicit attitudes', *Environment and Behavior*, pp.1–31, DOI: 10.1177/0013916518820898.

Martins, J. et al. (2019) 'How smartphone advertising influences consumers' purchase intention', *Journal of Business Research*, August 2017, Vol. 94, pp.378–387, DOI: 10.1016/j.jbusres.2017.12.047.

Maslowska, E., Smit, E.G. and van den Putte, B. (2016) 'It is all in the name: a study of consumers' responses to personalized communication', *Journal of Interactive Advertising*, Vol. 16, No. 1, pp.74–85, DOI: 10.1080/15252019.2016.1161568.

McCoy, S. et al. (2017) 'Here we go again! The impact of website ad repetition on recall, intrusiveness, attitudes, and site revisit intentions', *Information and Management*, Vol. 54, No. 1, pp.14–24, DOI: 10.1016/j.im.2016.03.005.

Miller, C.J. et al. (2021) 'Advertising, incentives, and the upsell: how advertising differentially moderates customer- vs. retailer-directed price incentives' impact on consumers' preferences for premium products', *Journal of the Academy of Marketing Science*, Vol. 49, No. 6, pp.1043–1064, DOI: 10.1007/s11747-021-00791-1.

Mou, J., Cui, Y. and Kurcz, K. (2019) 'Bibliometric and visualised analysis of research on major e-commerce journals using citespace', *Journal of Electronic Commerce Research*, Vol. 20, No. 4, pp.219–237.

Mutimukwe, C., Kolkowska, E. and Grönlund, Å. (2020) 'Information privacy in e-service: effect of organisational privacy assurances on individual privacy concerns, perceptions, trust and self-disclosure behavior', *Government Information Quarterly*, Vol. 37, No. 1, p.101413, DOI: 10.1016/j.giq.2019.101413.

Nasution, R.A., Arnita, D. and Aghniadi (2021) 'The acceptance of mobile advertising: a social or personal matter?', *International Journal of Internet Marketing and Advertising*, Vol. 15, No. 1, pp.84–103, DOI: 10.1504/ijima.2021.112789.

Nguyen, H.H. et al. (2022) 'Understanding online purchase intention: the mediating role of attitude towards advertising', *Cogent Business & Management*, Vol. 9, No. 1, DOI: 10.1080/23311975.2022.2095950.

Oh, Y.M. et al. (2016) 'The effect of culture on attitude towards online advertising and online brands: applying Hofstede's cultural factors to internet marketing', *International Journal of Internet Marketing and Advertising*, Vol. 10, No. 4, p.270, DOI: 10.1504/ijima.2016.10002253.

Petty, R.E. and Cacioppo, J.T. (1986) 'The elaboration likelihood model of persuasion', *Advances in Experimental Social Psychology*, Vol. 19, pp.22–37, DOI: 10.4324/9781315624365-2.

Pollay, R.W. and Mittal, B. (1993) 'Here's the beef: factors, determinants, and segments in consumer criticism of advertising', *Journal of Marketing*, Vol. 57, No. 3, p.99, DOI: 10.2307/1251857.

Rosenthal, S. et al. (2019) 'A tripartite model of trust in Facebook: acceptance of information personalisation, privacy concern, and privacy literacy', *Media Psychology*, pp.1–25, DOI: 10.1080/15213269.2019.1648218.

Rust, R.T. (2020) 'The future of marketing', *International Journal of Research in Marketing*, Vol. 37, No. 1, pp.15–26, DOI: 10.1016/j.ijresmar.2019.08.002.

Sander, F. et al. (2021) 'Green or social? An analysis of environmental and social sustainability advertising and its impact on brand personality, credibility and attitude', *Journal of Brand Management*, Vol. 28, No. 4, pp.429–445, DOI: 10.1057/s41262-021-00236-8.

Shaddy, F. and Lee, L. (2020) 'Price promotions cause impatience', *Journal of Marketing Research*, Vol. 57, No. 1, pp.118–133, DOI: 10.1177/0022243719871946.

Shanahan, T., Tran, T.P. and Taylor, E.C. (2019) 'Getting to know you: social media personalisation as a means of enhancing brand loyalty and perceived quality', *Journal of Retailing and Consumer Services*, January 2018, Vol. 47, pp.57–65, DOI: 10.1016/j.jretconser.2018.10.007.

Srinivasan, S.S., Anderson, R. and Ponnavolu, K. (2002) 'Customer loyalty in e-commerce: an exploration of its antecedents and consequences', *Journal of Retailing*, Vol. 78, No. 1, pp.41–50.

Tran, T.P. (2017) 'Personalised ads on Facebook: an effective marketing tool for online marketers', *Journal of Retailing and Consumer Services*, August, Vol. 39, pp.230–242, DOI: 10.1016/j.jretconser.2017.06.010.

Varnali, K., Yilmaz, C. and Toker, A. (2012) 'Electronic commerce research and applications predictors of attitudinal and behavioral outcomes in mobile advertising: a field experiment', *Electronic Commerce Research and Applications*, Vol. 11, No. 6, pp.570–581, DOI: 10.1016/j.elerap.2012.08.002.

Wedel, M. and Kannan, P.K. (2016) 'Marketing analytics for data-rich environments', *Journal of Marketing*, Vol. 80, No. 6, pp.97–121, DOI: 10.1509/jm.15.0413.

Wiese, M., Martínez-Climent, C. and Botella-Carrubi, D. (2020) 'A framework for Facebook advertising effectiveness: a behavioral perspective', *Journal of Business Research*, June 2019, Vol. 109, pp.76–87, DOI: 10.1016/j.jbusres.2019.11.041.

Xie, W. and Karan, K. (2019) 'Consumers' privacy concern and privacy protection on social network sites in the era of big data: empirical evidence from college students', *Journal of Interactive Advertising*, Vol. 19, No. 3, pp.187–201, DOI: 10.1080/15252019.2019.1651681.

Zha, X., Li, J. and Yan, Y. (2015) 'Advertising value and credibility transfer: attitude towards web advertising and online information acquisition', *Behaviour and Information Technology*, Vol. 34, No. 5, pp.520–532, DOI: 10.1080/0144929X.2014.978380.

Zhang, S. et al. (2020) 'Exploring determinants of consumers' attitudes toward real-time bidding (RTB) advertising', *Information Technology and People*, DOI: 10.1108/ITP-09-2019-0480.