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## The Influence of Short Message Services (SMS) Advertisements on Purchase Intentions by Mobile Telecommunication Consumers in Tanzania

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### Abstract

*The purpose of this study was to examine the influence of Short Message Services (SMS) advertisements on the purchase intention among mobile telecommunication consumers in Tanzania using the AIDA model. Data were collected in Dar-es-Salaam from 303 mobile telecommunication users using self-administered questionnaires. The collected data were analyzed using descriptive, correlation, and multiple regression analysis techniques. The result concluded that consumers' attention to, interest in and desire for SMS advertisements do positively and significantly influence consumer purchase intention. The sample is constituted of respondents who were first and second-degree holders aged between 20 and 40 years. The results contribute to the existing literature on the influence of Short Message Services (SMS) advertisements on purchase intention among mobile telecommunication consumers in Tanzania. Managerially, the results shed light on possible areas of improvement to enhance the purchase intentions of their customers through short message services. The study expands on the intellectual discourse of the AIDA model by taking Action, one of the model's components, and treating it as a consumer purchase intention variable. One of the key limitations of the study was that the respondents were only those who could fill out online questionnaires. It is strongly recommended that further studies are more inclusive.*

**Keywords:** Purchase intention, Short Messages Services (SMS), Customer desire, Customer interest, Customer attention

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### Introduction

Advances in mobile telecommunications technologies have created a new medium of advertisement for marketers (Dwivedi et al, 2021). Amidst the increased popularity of social media advertising, researchers have pointed out the weaknesses of traditional media of advertising which do not allow marketers to reach their potential consumers in very individual ways (Robins, 2003) and are short of interaction that could foster long-term relationships (Bauer, et al., 2005; Saadeghvaziri & Hosseini, 2011). Through social media technologies, these challenges are addressed by changing the medium of advertisements from traditional to new mobile media platforms which are more interactive and personalized (Breneman & Geuens, 2007). Unlike other modes of advertising, SMS advertising hits every consumer individually and offers a unique opportunity for direct contact with consumers (Welukar & Harichandan, 2011). Nyheim, et al., (2015) established that consumers are more interested in personalized advertisement.

Whether in traditional or modern media, the purpose of advertisement is the same. That is, to create awareness among consumers and shape their perceptions of the products being advertised (Onyinye, 2013). Consumers can perceive the quality of products by the quality and representation of the advertisements. The perception of the quality, awareness of the product, and other consumers' opinions subsequently drive the consumer purchase intention (Sibanda & Wekeza, 2019). The

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introduction of mobile telecommunications services has made marketers customize and design advertisements according to consumers' characteristics through mobile marketing (Dwivedi, et al, 2021). Shankar and Balasubramanian (2009) refer to mobile marketing as the shared or two-way communication of an offer from a firm to consumers using a mobile medium or device.

The most used mobile telecommunications service is SMS with more than 11.9 billion SMS that was sent in the first quarter of 2021 (O'Dea, 2021). According to Kemp (2020), the number of telephone users in Tanzania had increased to 48.5 Million which is equivalent to 86% of the whole population. With the rapid adoption of marketing in developed countries (Mansour, 2016) companies in Tanzania are increasingly using SMS advertisements since it is one of the lowest-cost marketing approaches. Currently, Tanzania boasts 8 mobile telecommunication companies with four of them having the majority market share led by Vodacom, Tigo, Airtel, and Halotel (Kemp, 2020).

Using SMS advertising is beneficial because messages can be sent on both smartphones and basic phones hence enabling advertisers to reach both groups of consumers (Varley, 2014). Likewise, SMS has a fast reply rate of a maximum of 90 seconds since consumers tend to carry their mobile phones with them most of the time (Varley, 2014). It is also argued that SMS has a high potential for loyal customers (Warc, 2016). Despite the advantages of using SMS as a communication channel, it experiences high competition from other mobile advertisements (Open Market, 2016). The introduction of smartphones and the creation of new mobile applications have caused the number of text messages being sent to fail. Therefore, it is crucial to find out whether SMS advertising has any significant influence on consumer purchase intention.

Purchase Intention refers to the tendency of consumers to purchase a product that is measured by the possibility of consumers making purchases (Belch & Belch, 2009). It is considered one of the components of a consumer's cognitive behavior (Huang & Su, 2011). According to Fandos and Flavian (2006), purchase intention can be used to predict what products consumers are going to purchase. Stroke (1920) explained how advertisement affects an individual by identifying four stages that an individual pass through during the purchase decision. The four stages are attention, interest, desire, and action. A large amount of investment has been spent by companies on advertisements since they want their products to be at the top of consumers' minds (Samar, et al, 2015). Advertising has been a mode of reaching consumers and changing consumers' attitudes and perceptions (Pavlou & Stewart, 2000). Text message advertising is conceptualized as permission-based SMS advertising messages that are focused on sending advertisements to consumers (Dix et al., 2016).

Several studies (e.g. Panie, Ahmed & Kasuma, 2014; Rajesh & Raj, 2019; Hassan, 2015) on SMS advertisements have shown that consumers react differently towards SMS depending on different factors they consider important. For example, Hassan (2015) found that young consumers reacted positively to SMS advertisements, while Rajesh and Raj (2014) revealed that SMS advertisements are informative, entertaining, and credible and have a positive reaction from consumers. Kasuma (2014), on the other hand, showed that permissive advertisement has positive reactions from consumers. There are a limited number of studies in Tanzania on SMS advertising and its effect thereof. Most studies (e.g. Sede, 2019; Sabokwingina, Malima, & Mpogole, 2013) conducted have focused on the attitude and perception of consumers towards SMS advertisements or marketing. The dearth of studies in developing countries on how SMS advertisement influences consumers' purchase intention triggered interest in this current study. In filling the above research gap, the study assessed the effect of SMS advertisements on the purchase intention of mobile telecommunication consumers in Tanzania. Specific objectives are: (1) to examine the effect that attention created by SMS advertisements has on influencing consumers' purchase intention. (ii) To examine the effect that interest developed by the SMS advertisement has on consumers' purchase intention. (iii) To examine the effect that the desire developed by the SMS advertisement has on consumers' purchase intention.

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## Literature Review

### *Empirical Literature Review*

The empirical literature review relates SMS advertisements and consumer purchasing intention in varied environmental contexts. Patsiotis, Marwan, and Toula (2020) conducted a study in Greece on the influence of mobile marketing tools on the consumer buying process. The focus of the study was the dining sector in Greece. The researchers found and concluded that SMS advertisement influence loyal consumers the most. This is so because restaurants that target their clients are satisfied with the adverts as they keep them updated. In contrast, those who targeted third-party databases were not happy with the advert. In a slightly dissimilar context, Sultan, Syed, and Sijar (2021) conducted a study on SMS advertising and its impact on consumer purchase intention in Pakistan. The study found that subscribers accept messages sent by advertisers to inform them about new products and innovations. The acceptance of SMS advertisements is influenced by individuals' preferences, lifestyles, and needs. Other factors affecting acceptance were found to be culture, consumption style, and beliefs.

Tang and Chan (2017) examined the impact of online advertising on Generation Y's purchase decisions. The researchers found that youth remember advertisements that pull to their interest and advantage. Focusing on similar age groups Rajesh and Raj (2019) studied university students in Mauritius and revealed the positive influence of infotainment and credibility in SMS features on consumers' attitudes toward SMS advertisements. Similarly, Almosawi (2014) studied the effectiveness of SMS advertising in Bahrain among 247 young mobile users. The study findings were that consumers have a negative attitude toward SMS advertisements. Haider and Shakib (2017) conducted a study on the influence of advertisements on consumer buying behavior. A sample of 544 consumers was selected and a survey was conducted. Based on multiple linear regression analysis the result shows that advertisement has a significant impact on purchase behavior.

Ulal and Hawalder (2018) conducted a study in India based on the influence of advertisements on consumers based on the AIDA Model. Data were collected from stores that were part of the supermarket chain. Data were analyzed and the findings revealed that the impact of advertisements on consumers inside the store is very minimal. Zengin (2018) investigated the effects of SMS advertising on the attitudes and purchase intentions of the youth. In this study, data were collected from 47 university students. The results showed when consumers are exposed to an SMS advertisement they create meaning and value towards a brand and form purchase intention. Gever and Olijó (2019) used AIDA Model to study subscribers' responses to unsolicited SMS adverts. After data from 384 subscribers were analyzed using Chi-Square it was concluded that there is a negative response to unsolicited SMS adverts. In the study conducted by Ullal et al., (2018) using the AIDA model among 544 consumers, it was found that SMS adverts affect the number of products sold, although it does not have a big impact on attention and interest stages.

### *AIDA Model*

In early 1898, psychologists and marketers started to identify purchasing behavior from buyer perspectives, and one of the market pioneers Lewis came up with four stages that influence the purchase (Strong, 1920). Lewis identified those four stages as Awareness/Attention, Interest, Desire, and Action which made the model AIDA. This study adopts AIDA Model by Lewis (1898). AIDA model is created to show what behavioral steps consumers have to pass through when exposed to advertising and if the communicating organization can lead the consumer through all these steps, the risk of interfering communication process decreases even more (Mackay, 2005). According to the model, the advertisement should start by drawing the attention of the consumer and raising awareness of the available products (Lancaster & Massingham, 2013). The interesting part can use emotions and feelings to address the fact that the product purchased is a good bargain and was the best decision to make. The third step is to create desire. SMS advertisement must create a strong motivation and generate a need for buying the product even if a need is not thereby communicating the benefits and the offers (Slyke, et al., 2002). The last step is Action; which starts when the consumers thinking of

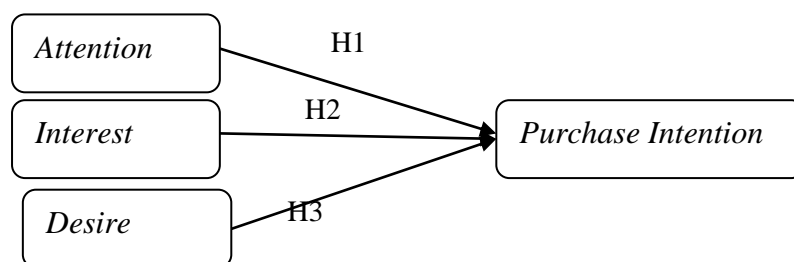
purchase are making the purchase (Kotler & Keller, 2006). The model implies that advertising should inject memorable and believable messages that will make customers triggered to act in a certain way (Brierley, 2002). Two of the major criticisms raised against the AIDA model are that (i) the model does not address post-purchase effects (Egan, 2014) and (ii) its assumption of linearity and hierarchical sequence is erroneous (Huey, 1999). Despite all the criticisms, the AIDA model is certainly still relevant today as it was over a hundred years ago. It obviously may not be adopted and used in digital platforms without consideration; however, it is still widely used as a strategic and simplified formula to garner an in-depth understanding of the consumers' decision-making processes.

### ***Knowledge Gap***

A variation of the findings of the above studies recommends that, despite many organizations using SMS advertisement to enhance marketing activities, more studies need to be conducted in the field, to determine the effective influence on consumer purchasing intention, mainly in developing countries context specifically in Tanzania. Also, there is limited research on how consumers engaged with advertisements. In this regard, the study used the AIDA model to describe what happened when a consumer engages with an SMS advertisement. Therefore, this study will add up to the local literature on the influence of SMS advertisements on consumer behavior among mobile telecommunication consumers in Tanzania.

### ***Conceptual Framework***

This part conceptualizes the main idea of this study on the influence of SMS advertising on telecommunication consumers' purchase intention in Tanzania.



**Figure 1:** Conceptual framework for consumer purchase intention

Source: The conceptual framework was adopted and modified from Ullal, et al., (2018)

### ***Hypothesis Development***

The first step of the AIDA model is grabbing the attention of the consumer (Sellers, 2021). The first consumer needs to pay attention to the advertising message before being affected by the adverts. The attention of the consumer toward an advert is a necessary element in determining consumer behavior. Teixeira (2014) defines attention as the allocation of mental resources, visual or cognitive, to visible or conceptual objects. Pieters and Wedel (2004) explained further that attention or awareness is little knowledge a consumer has of a brand or product. At this stage is the duty of marketers to ensure that consumers are getting familiar with the product. Hence, as suggested by Baca, Holguin, and Stratemeyer (2005) the marketer's goal at this stage is to introduce and communicate the product to the consumers. Attention must contain three components explained by Kotler and Armstrong (2001) state that attention components are meaningful, believable, and distinctive.

According to Lee (2016), the use of visual effect elements such as color, brightness, size, and shapes can have an impact on consumer attention. The character of the SMS like the capitalization of

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words, and the use of emojis and pictures can have positive or negative effects on the consumer. A consumer can choose to ignore the SMS or to read the content depending on the first impression. According to Ehteshami (2013), mobile advertising is a great tool to create a great awareness of the targeted audience which was not possible with traditional mediums. Mobile marketing made it possible to create greater awareness in the target area which was not possible earlier. Therefore, SMS adverts with visual appeal attract the attention of subscribers, and thus the following hypothesis was formulated in this study:

*H1: Attention to SMS Advertisement positively affects consumers' Purchase Intention.*

The second stage is developing consumers' interest in the product (Broeckelmann, 2010). After getting the attention of the consumer a need for more information about the product raises and formulates an interest in the product (Ghirvu, 2013). Hence adverts should be designed to create consumer interest in the product being advertised. In this section, marketers can design an emotional advert to address the facts about the product's benefits and features. In addition, the adverts need to show the consumer what he/she is missing for not purchasing a product (Rawal, 2013). According to Aybar and Gokaliler (2011) mobile marketing cost-effectively platforms for an integrated message with unique characteristics whereby consumers may interact with an advertiser and share their perceptions. Due to the uniqueness of SMS marketers are using the medium for marketing campaigns. Thus, an SMS advert is more likely to create a positive interest in consumers hence the following proposition is stated:

*H2: Interest in SMS Advertisement positively influences consumers' purchase intention.*

Desire is the third part of the AIDA model which shows the aspiration about a particular product. (Ghirvu, 2013) defines "Desire is the state of motivation where feelings obligate to take action". At this stage, advertisements tend to answer questions like the cost, affordability, and accessibility of the product (Kumar, et al., 2013). By providing answers to the above questions a prospective consumer can be convinced about the offering (Bradely, 2003). Marketers effectively create desire by creating adverts that explain the product characteristics, features, and benefits in a way that solves consumers' problems (Richardson, 2013). Advertisers at this stage need to develop a strong feeling of wanting a product to consumers (Rowley, 1998). By creating and presenting correct and exact information an advert will be able to create a desire for consumers. Advertisers use short videos and MMS to create desire through mobile marketing (Barutcu, 2007).

*H3: Desire for SMS advertisement positively influences consumers' purchase intentions.*

### **Consumer Purchase Intention**

The final step of the AIDA model is action. Action usually creates the final step a consumer can take toward the product whether an intention to purchase or an actual purchase (Wekeza & Sibanda, 2019). This is bringing out the dependent variable which is consumer purchase intention. Under this study, consumer purchase intention is the dependent variable that will be affected by the above independent variables which are attention, interest, and desire. Purchase intention is developed from the word intention which is a behavioral concept (Garcia, Saura & Augusto, 2020). Purchase intention can be considered a component of a consumer's cognitive behavior revealing an individual intention of purchasing a specific product or brand (Huang & Su, 2011). Consumer purchasing behavior is affected when a consumer is exposed to advertising that has an important message for him (Verma, 2009). Purchase intention can be used to predict what products or brands consumers will buy the next time when they do shopping (Fandos & Flavian, 2006). Consumers require reliable and good information to make a purchase decision because they cannot touch and test the product (Li & Suoni 2009). As a result, when a consumer can easily access product and service information through SMS advertisements, it can affect their purchasing intentions. According to Morwitz (2014), the best way to predict a consumer's purchase behavior is through consumer purchase intention. Purchase intention is a concept that helps a marketer to understand what it takes for a consumer to purchase a certain brand.

Huang (2011) study explored consumer purchase intention by focusing on a psychological perspective. The study examines whether it is experiential stimuli or information processing that motivated consumers to purchase.

### ***SMS Advertisement***

SMS advertising is a term generated from the adoption and widespread use of mobile phones and SMS as a marketing platform (Van der Waldt, Rebbello & Brown, 2009). Involve Mobile (2010) recommended that for an effective modern marketing strategy a company should have three mobile channels: SMS SMS/text messaging for short adverts, mobile websites for detailed information, and mobile applications for purchases and transactions. Involve Mobile (2010) recommends the use of SMS advertising since it is universal, easy to use, and allows interaction between companies and consumers at any time and anywhere. SMS advertisement is more SMS advertisement advantageous compared to other traditional mediums for firms as it allows marketers to connect with the consumers, helps to develop special offers to meet specific targets, and helps to customize messages to each consumer based on demographic characteristics and purchase history (Berman, 2016). The study has focused more on SMS advertisements sent out by mobile operators since they are the most common SMS advertisers and secondly the future of marketing is SMS advertisement due to the rapid adoption of mobile technology.

### **Methods**

#### ***Survey measurement and data analysis***

This is an explanatory study that adopted a cross-sectional survey. Primary data for the study were collected from 302 respondents using standardized and close-ended questionnaires. The questionnaires were divided into two parts. The first part of the questionnaire explored the demographic characteristics and personal experience with SMS advertisements. The second part adopted the variables from the AIDA model which formed the objective of the study. Primary data were collected using the self-administered questionnaire through trusted online platforms. The items were anchored from 5 -Strongly Agree to 1 -Strongly Disagree. Descriptive and multiple regression techniques were used to analyze data.

#### ***Sampling Design and Size***

A non-probability convenience sampling was applied to select respondents for the study from an estimated population of 48.5 million telephone subscribers in Tanzania (TCRA, 2021). The sample size relates to the number of items to be selected from the wide population. The size should be optimal, and it can neither be excessively large nor too small (Cooper & Schindler, 2008). As suggested by Sivo et al., (2006) that, for statistical analysis, with a large population, a sample size of at least 200 should be involved to control for bias. By considering the margin of error (5%) and confidence interval (95%), a sample of 385 subscribers was surveyed.

#### ***Validity and Reliability***

According to Patton (2002), reliability and validity are the two most important quality control objects as ethical considerations in research design. For external validity, a pilot test was carried out on ten telephone subscribers before the full-fledged survey. According to Saunders et al., (2012) reliability measures the consistency of the responses for different questions and the correlation among the questions. The study used Cronbach's alpha to determine reliability. Cronbach's Alpha values more than or equal to 0.7 are deemed reliable (Taber, 2018, Hair et al., 2000). All variables were found to fulfill the decision criteria (see Table 1)

**Table 1: Cronbach Alpha**

Variable Description	Cronbach Alpha
Consumer Purchase Intention	0.816
Attention	0.785
Interest	0.793
Desire	0.752

## Findings

### *Demographic characteristics of the respondents*

Descriptive statistics were used to summarize the respondent demographic characteristics as shown in table 2. The sample was dominated by females (63 percent) and 37 percent were males. Table 2 shows that 41.9% of the respondents fell in the group of 21-30. A majority (36.1%) of the participants had Bachelor's degrees while 35.1% had acquired postgraduate education level.

**Table 2: Demographic Characteristics of the Respondents**

Description/Variables	Number(n)	Percentage (%)
Gender	Male	112
	Female	191
Age (Years)	15 – 20	12
	21 – 30	127
	31 – 40	113
	41 – 50	42
	50 +	9
Education level	Primary Education	2
	Ordinary level	10
	Advanced level	25
	Diploma	42
	Bachelor Degree	109
	Master's Degree	106
	Doctoral Degree	8
Total	302	100.0

## Results for the Specific Objectives

### *Correlation Analysis*

The study was analyzed to identify the variables among the predicting ones which best correlate with other variables in the data as presented in Table 3.

**Table 3: Pearson's Correlation Coefficients**

	Purchase Intention	Attention	Interest	Desire
Purchase Intention	1			
Attention	.542**	1		
Interest	.250**	.320**	1	
Desire	.240**	.192**	.592**	1

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Table 3 shows the correlation coefficients which help to quantify the linear association between variables of the study. Cohen (1988), Pearson's correlation shows the relationship among variables of a given assessment. As shown in Table 4.3, the results were statistically significant, strong positive

correlation between consumers' purchase intention and attention ( $r = .542, p < .000$ ), also the results show that there is a low but positive correlation between purchase intention and interest ( $r = .250, p < .000$ ). Desire has a low positive correlation with purchase intention ( $r = .240, p < .000$ ). Therefore, from correlation analysis, the researcher concludes that there is a positive significant linear association between an independent variable and dependent variables.

*Multiple Regression Analysis Regression Results*

To determine the relationship between awareness, interest, and desire toward consumer purchase intention multiple linear regression analysis was conducted. All four variables were tested and the results are presented in table 4 with a significant level of 0.05.

*Model Summary*

Table 4 of the model summary presents the data on the regression line's ability to account for the total variation in the dependent variable.

**Table 4:** Model Summary

Model	R	R Square	Adj – R Square	Std. Error of the Estimate	Sig. F
1	.603 <sup>a</sup>	.363	.357	.2371	<.001

Table 4 shows the regression model which presents the coefficient of determination ( $R^2$ ) as .363. This indicates that 36.5% of consumer purchase intention can be explained by the three variables attention, interest, and desire while the remaining 63.7% can be explained by other variables which are not in the study. The adjusted R square value is .357 which means that 35.7% of consumer purchase intention can be explained by attention, interest, and desire while other variables are held constant. The regression model summary also explores the accuracy of the sample selected if it represents the population through a standard error of estimation. Pallant (2020) stated that the smaller the standard error the population representation of the study becomes higher. The Model summary reveals that the sample selected represents the population with a standard error of the study of .2371.

*Presentation and Interpretation of Regression Results*

The influence of each predicting variable as shown in the hypothesis on the dependent variable was tested through Multiple Regression Analysis as well as correcting the multi-collinearity error. The findings are well described in Table 5.

**Table 5.** Multiple Regression Results

Model	Unstandardized Betta ( $\beta$ )	Std. Error	t-value	p-value
(Constant)	3.275	.939	3.489	<0.05
Attention	.195	.070	2.770	.006
Interest	.097	.065	2.934	.004
Desire	.635	.055	11.482	<.001

Table 5 describes the tested hypotheses of the study through multiple regression analysis results. The study's first hypothesis state that “*Attention to SMS advertising positively influences consumers' purchase intention*”. The analysis results show that attention to SMS advertising positively and statistically significantly influences consumer purchase intention with a coefficient of 0.195 and a p-value of 0.006. The results show that a 1 percent increase in consumer attention to SMS advertisements tends to increase their purchase intention by 0.195 percent. The p-value of 0.006 is less than 0.01 showing that the attention effect on purchase intention is significant at a 1 percent level of significance; thus, the researcher can accept this hypothesis with a 99 percent level of confidence.



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The second hypothesis stated that “*Interest in SMS advertising positively influences consumers’ purchase intention*”. The results established that interest in SMS advertisements positively and significantly influenced consumers’ purchase intention with a coefficient of .097 and a p-value of .004. The results show that a 1 percent increase in consumers' interest in SMS advertisements leads to an increase in their purchase intentions by 0.097 percent. The p-value of .004 is less than .01 which shows the effect of interest is significant at is 1 percent level of significance; thus, the researcher can accept the hypothesis with a 99 percent level of confidence.

The third hypothesis stated that the “*Desire for SMS advertising positively influences consumer purchase intention*”. The results in the table show that desire positively and statistically significantly influences purchase intention with a coefficient of .635 and a p-value which is less than .001. This means that a 1 percent increase in the desire of consumers for SMS advertising tends to increase their purchase intention by 0.635 percent. Also, the effect of desire is significant at 1 percent, thus suggesting that the researcher can accept the null hypothesis with a 99 percent degree of confidence.

## **Discussion of the Findings**

### ***Attention to SMS Advertisement and Purchase Intention***

This finding has been consistent in all three analyses conducted. The correlation analysis and multiple linear regression analysis have all shown that the consumers' attention is a positive and significant influence on consumer purchase intention. This implies that the attention of the consumer to advertisements that come through SMS has an important influence on the intention of that consumer to purchase the commodity being advertised. This finding corresponds with Ullal, et al (2018) results that consumers' attention to the adverts had a moderate effect on the number of products sold. This means that, in the first place, the consumer purchase intention of those products was influenced by the adverts.

The key purpose of an advertisement is to create awareness of the product among the consumers (Usunier & Lee, 2009), hence giving them room to decide whether or not to make purchases (i.e. purchase intention). This is also supported by Roosal et al., (2017) who claimed that the dominance of an advertisement provides awareness about prices, characteristics, quality, ingredients, and other product features to influence consumers’ choice of the product. The study by Lagrosen (2005) found that online marketing is effective through attention, among other dimensions of the AIDA model. Tang & Chan (2017) study establishes that Generation- Y pays adverts to create more attention to the customer who is in line with their hobbies (i.e. fashion, technology, and sports). The online marketing/advertising studied by Lagrosen (2005) and Tang and Chan (2017) are both modern marketing communications, alongside SMS; thus, their results relate to the results of this study. The result is aligned with the AIDA model. The AIDA model predicts that a consumer's attention leads to action, which is similar to the result of this study in that attention significantly influences the purchase intention of the consumers.

### ***Interest in SMS Advertisement and Consumer Purchase Intention***

The finding of the study showed consumers’ interest in SMS advertisements has a significant and positive influence on purchase intention. This suggests that the interest of the consumer in advertisements that comes through SMS has an important contribution to the intention of that consumer to purchase the commodity being advertised.

The results of this study concur with the findings of Ganesh (2020), which the findings show that 53% of the sample population agreed that advertisement creates interest among buyers. Mobile advertisement has a significant impact on the first two stages of the AIDA model; attention and interest while magazines and newspapers influence the action stage of the AIDA model which in the study was purchase (Sama, 2019). Pashootanzadeh and Khalilian (2018)’s findings reveal that based on the four stages of the AIDA model Television programs viewers' attention but fail on other stages of the model. This shows that marketers have to combine more than one medium of advertisement to get the best results. The study of Ganesh (2020) on the promotional offers on Maruti Suzuki draws the

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consumer attention of only 25% of the respondents and influence purchase decisions. Rehman, et al., (2014) found that interest has a weak and positive correlation with a purchase decision. Moreover, the interest of the consumer is bound to the awareness and exposure of the consumer. To create a positive interest among consumers there should be more advertisements aimed at creating awareness. Based on the theories of this study, the findings can be matched with the AIDA model which predicts that consumers' interest stimulates purchase intention.

### ***Desire on SMS Advertising and Consumer Purchase Intention***

The data analysis revealed that consumers' interest has a positive and significant influence on consumer purchase intention. This implies that the interest of the consumer in advertisements that comes through SMS has an important influence on the intention of that consumer to purchase the commodity being advertised. This is similar to Gever and Olijó (2019) who concluded that SMS advertisements create a desire which influences action and leads to a subscription to a telecommunication company. Advertisement motivates consumers to buy a product after seeing it somewhere. (Haider & Shakib, 2017) support that consumer's feel safe purchasing an advertised product. Gharibi, Danesh, and Shahrod (2012) found that all four stages of the AIDA model have a positive and significant relationship with advertisement. Therefore, the results show that SMS advertisement in all four stages of the AIDA model has a positive influence on consumer Purchase Intention. This result corresponds to the Qu and Huang (2014) suggest that SMS advertisement stimulates demand and hence positively influences consumer purchase intention. This study's results match with those of Siraj, et al., (2021) found that SMS advertisements significantly influence consumer purchase behavior based on youth as a sample size. The result can be associated with the AIDA model which asserts that consumers' desire for advertisement stimulates purchase intention.

### **Conclusion**

This study was motivated by a piece of limited knowledge of the influence of SMS advertisements on consumer purchasing intention in the developing world, particularly Tanzania. The study helped to fill the gap in the applicability of the AIDA model in an advertisement–purchase intention nexus in the Tanzanian mobile telecommunication industry. Thus, the study focused on how consumers' attention, interest, and desire for SMS advertisements influence their purchase intentions. It takes effort for marketers to predict whether a consumer will buy the product based on the advertisement. Thus, it was deemed important to identify the factors that influence the purchase intention as each individual has different behavior and is influenced by different factors differently. This study provides valuable insight into the influence SMS advertisement has on consumer purchase intention among telecommunication users in Tanzania. This study has established room for marketers to better understand first consumers' perceptions of SMS advertisements. Secondly to understand the stages a consumer passes through before making a purchase and what message to create at what stage. Lastly, advertising agencies and companies are thereby advised to formulate effective mobile marketing strategies by adding supposed value to SMS advertisements. Other scholars such as Alden et al., (2000) argue that it is important to add amusing features to advertisement to enhance recall and memorability.

### **Theoretical Implications**

The AIDA model guided this study and from a theoretical perspective, the study covered all four aspects of the AIDA model in a modified fashion whereby the action variable was treated as a dependent variable. Through the AIDA model, the buying process that begins with the creation of attention ends when a consumer takes an action or expresses an intention to purchase as was the case in this study. The results of the current study show that as the process goes down the model, the effects of the independent variables are enhanced.

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### Recommendations of the study

*A marketer must make a good first impression to attract consumers' attention.*

To guarantee attention, marketers need to make sure that the text is relevant. Marketers should consider sending timely, useful, entertaining, and accurate information to the targeted consumers to draw their attention.

*Maintain the consumer by creating interest in the product*

Marketers have to break the information into easy-to-read and understandable illustrations. The message should be recent and relevant to the targeted consumers about the product. The advert should convey only the important information to the consumer. SMS advertisements should promote product features and benefits.

*Entice customers to have the desire to try the advertised products*

At this stage, marketers have to provide a solution so the consumer can make a decision. Marketers can use infomercials in creating SMS advertisements that elicit consumers' desires. The intention is to provide the benefit of purchasing the product in a way that will make the consumer wants to try and buy it. The advert can use infomercials by creating the scenario and using the product to convey the value of the product or showing how it can be used in real life.

### Limitations and Areas for Future Research

One of the key limitations of the study was that the respondents were only those who could fill out online questionnaires. It is strongly recommended that further studies are more inclusive. Lastly, further research is needed to try to underscore the reasoning behind the inherent negative attitude of consumers toward SMS advertisements.

### Conflict of Interest

*The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.*

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