EFFECT OF DIGITAL MARKETING STRATEGIES ON CONSUMER BEHAVIOUR OF CLOTHING AND JEWELRY PRODUCTS IN ABUJA, FEDERAL CAPITAL TERRITORY

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Abstract
This study investigates the effect of digital marketing proxied by online advertising and personalization marketing on consumer buying behaviour of clothing and jewelry products in Abuja, FCT. A descriptive research design, data was collected through a structured 5-Likert scale questionnaire from a population of consumers of clothing and jewelry products in Abuja, FCT, with a sample size of 500. Utilizing Partial Least Squares Structural Equation Modeling (PLS-SEM) for data analysis, the results of the findings indicate that both online advertising and personalization marketing have no significant influences on consumer buying behaviour of clothing and jewelry products in Abuja, FCT. Based on these findings, recommendations are proposed that while online advertising did not demonstrate a significant direct effect on consumer buying behaviour in this study, it should not be entirely discounted as a digital marketing strategy. Businesses should explore ways to optimize their online advertising efforts, such as by targeting specific consumer segments, personalizing ad content, and integrating online advertising with other digital marketing channels. Also, Businesses should continue to explore personalized marketing approaches, such as personalized product recommendations, tailored email communications, and data-driven customer segmentation, but should also consider the potential influence of other factors, such as product quality, brand loyalty, and perceived value.
Keywords: *Digital Marketing, Consumer Buying Behaviour, Online Advertising, Personalization Marketing, The Privacy Calculus Theory*

INTRODUCTION

The rapid growth of digital technologies has profoundly transformed the landscape of marketing, offering businesses new and innovative ways to connect with consumers. Digital marketing which encompasses a wide range of strategies, such as online advertising and personalization marketing, has become a crucial component of modern marketing efforts. Understanding the effect of digital marketing on consumer behaviour is particularly relevant in the clothing and jewelry sectors, where consumer preferences, purchasing decisions, and brand loyalty are heavily influenced by the digital realm (Lamberton & Stephen 2016).

Lamberton and Stephen (2016) posit that in Abuja, the Federal Capital Territory (FCT) of Nigeria, the increasing penetration of the internet and the widespread adoption of digital devices have significantly impacted consumer behaviour in the clothing and jewelry industries. Consumers in Abuja FCT have access to a vast array of online information, reviews, and shopping experiences, which can shape their perceptions, preferences, and purchasing decisions.

This study aims to investigate the impact of online advertising and personalization marketing, as digital marketing components, on consumer buying behaviour within physical market settings. It seeks to identify the factors that influence consumers' decision-making processes and the role of these digital marketing strategies in shaping their purchase behaviour in offline retail environments. Despite the availability and convenience of online advertising and personalization marketing, consumers still resort to physical markets for their purchase decisions, raising questions about the effectiveness of these digital marketing components (online advertising and personalization marketing) in impacting consumer behavior in physical market settings.

The main objective of this study is to examine the effect of digital marketing on consumer buying behaviour of clothing and Jewelry products in Abuja. However, the specific objectives are to:

i. examine the effect of online advertising on consumer buying behaviour on clothing and Jewelry products in Abuja;
ii. determine the effects of personalized marketing on consumer buying behaviour on clothing and Jewelry products in Abuja;

Based on the objectives of the study, the study contains, relevant literature reviews which reviews the concept of digital marketing, online advertising and personalization marketing. The study also contains empirical reviews, theoretical framework, the method of data analysis and interpretation of data, findings and observation, conclusion and recommendations.

LITERATURE REVIEW

Concept of Digital Marketing

Kotler and Armstrong (2018) define digital marketing as the use of the internet, mobile devices, social media, search engines, and other digital channels to reach consumers. This is a broad definition that highlights digital marketing's focus on utilizing various online channels to connect with potential customers. It touches on the vastness of platforms and tools used in digital marketing.

Similarly, Scott (2015) gave short definition of digital marketing as the promotion of products or services using the internet and other digital technologies.

Concept of Online Advertising

Several definitions of online advertising have been proposed by various researchers. The term "online advertising" according to Uche (2018) can be define as digital channels where businesses advertise their product online, namely, Facebook, Twitter, Instagram, YouTube, email to name a few. These comprises the aspects of advertising such as banner, email, in game and keyword advertising which are included in the podiums such as Facebook and twitter and on other forms of web related contents stating that advertising has diversity of means to expose and reach the audience and to focus its attention to a specific group of viewers too.

Chaffey and Ellis-Chadwick (2019) define online advertising as the use of digital technologies and channels to deliver targeted promotional messages to internet users with the aim of achieving marketing goals. Chaffey and Ellis-Chadwick's (2019) definition emphasizes the use of digital technologies and channels in online advertising. Their definition highlights the delivery of targeted promotional messages to internet users as a means to achieve marketing goals. This definition acknowledges the strategic aspect of online advertising, focusing on the use of personalized messaging to reach desired outcomes.

Concept of Personalization Marketing

Li et al. (2019) defines personalized marketing as an approach to marketing that tailors the messaging, content, and offers to individual customers based on their preferences, behaviour, and characteristics. It aims to deliver relevant and customized experiences that resonate with each customer, driving engagement, satisfaction, and ultimately, conversion. Li et al.'s (2019) highlights personalized marketing as an approach that focuses on tailoring marketing efforts to individual customers. It involves using customer data, such as preferences, behaviour, and characteristics, to create customized messaging, content, and offers. The goal is to provide personalized experiences that are relevant to each customer, leading to increased engagement, satisfaction, and conversion rates.

Bol et al. (2018) defines personalization marketing to the process that involves the use of customer data and technology to customize the marketing content, product offerings, or services provided to individual consumers. This personalization is based on the analysis of the customer's preferences, behaviour, and other personal attributes, with the aim of enhancing the relevance and effectiveness of the marketing efforts. The scholars maintain that the concept of personalization marketing goes beyond simply segmenting customers into broad categories. Instead, it focuses on tailoring the marketing approach to the unique needs and

characteristics of each individual customer, leveraging the wealth of data and advanced analytics available in the digital age.

Concept of Consumer Buying Behaviour

Kotler et al. (2017) define consumer buying behaviour to be the activities individuals engage in when searching for, evaluating, selecting, purchasing, and using products or services. It encompasses the internal and external factors that influence consumers' decisions and behaviors throughout the entire buying process. Schiffman et al. (2014) also gave definition of consumer buying behavior as the decision-making process and actions individuals undertake when acquiring and using products or services. It involves internal and external factors that shape consumers' attitudes, motivations, and behaviors, ultimately leading to the purchase and consumption of goods or services.

Empirical Review

Online Advertising and Customers Buying Behaviors

The study conducted by Goldfarb and Tucker (2011) to investigate the effectiveness of online display advertising in influencing consumer behaviour was carried out in the United States. The researchers employed a field experiment approach in collaboration with a major retailer in the U.S. market. By analyzing data on ad exposure, consumer click-through rates, and sales outcomes, Goldfarb and Tucker (2011) found that online display ads were more effective when they were personalized and targeted to specific consumer segments.

The findings of this study, conducted in the United States, suggest that personalized online advertising can significantly impact customer purchasing decisions, as it allows for more relevant and engaging messaging that resonates with the target audience. This provides valuable insights into the potential of personalization as a digital marketing strategy, highlighting its ability to enhance the effectiveness of online advertising and influence consumer behavior in the U.S. retail setting.

Similarly, Bleier and Eisenbeiss (2015) explored the role of online advertising personalization in shaping consumer responses. Through a series of experimental studies carried out in Germany, they found that personalized ads were more effective in generating positive attitudes and higher purchase intentions, especially when the personalization was based on consumers' browsing history and past purchases. Bleier and Eisenbeiss (2015) maintain that personalization enhances the perceived relevance and usefulness of the advertising content, leading to more favorable consumer reactions.

Personalization Marketing and Consumer Buying Behavior

Research carried out by Aguirre et al. (2015) explored the effects of personalization marketing on online advertisement effectiveness. Using an experimental approach with a sample of 430 participants, the researchers found that personalization marketing strategies that effectively balance information collection and trust-building can significantly enhance the effectiveness of online advertisements and influence consumer purchase decisions. The study's findings highlight the importance of tailoring marketing efforts to individual customer preferences and concerns about data privacy.

Bleier and Eisenbeiss (2015) also investigated the role of trust in the context of personalization marketing in Germany. Through a series of experiments with over 900 participants, the researchers found that the effectiveness of personalized online advertising was heavily dependent on the level of trust consumers had in the brand. When trust was high, personalization efforts resulted in more positive attitudes and higher purchase intentions. However, when trust was low, personalization was less effective or even backfired. This study underscores the critical need for brands to establish trust and transparency in their personalization strategies to drive positive consumer outcomes.

Theoretical Framework

The Privacy Calculus Theory, developed by Laufer and Wolfe (1977), provides a comprehensive framework for understanding the relationship between online advertising, personalization marketing, and consumer

buying behaviour. The theory posits that individuals engage in a "privacy calculus" when making decisions about disclosing personal information, weighing the potential benefits against the perceived risks.

According to the Privacy Calculus Theory, consumers are more likely to engage with and respond positively to online advertising and personalization marketing efforts when they perceive the benefits, such as improved product recommendations, personalized content, and enhanced shopping experiences, to outweigh the potential risks, such as data privacy concerns and the loss of control over personal information. Aguirre et al. (2015) found that the effectiveness of personalized online advertising was heavily dependent on the balance between information collection and trust-building strategies. When consumers perceived the benefits of personalization to outweigh the privacy risks, they were more likely to engage with and respond positively to the advertisements. Similarly, Bol et al. (2018) found that the willingness of consumers to disclose personal information and engage with personalized experiences was influenced by the specific context and the perceived trade-off between the benefits and risks.

However, some researchers have criticized the Privacy Calculus Theory for its focus on individual-level decision-making, arguing that it overlooks the broader social, cultural, and organizational factors that can shape privacy concerns and preferences. Bélanger and Crossler (2011) proposed an extended version of the theory, which incorporates additional factors, such as social norms and institutional trust, to address these limitations.

Nonetheless, the Privacy Calculus Theory remains highly relevant in the context of understanding the relationship between online advertising, personalization marketing, and consumer buying behaviour, particularly in the clothing and jewelry industries. By focusing on the consumers' perceptions of the benefits and risks associated with disclosing personal information, marketers can design more effective and privacy-conscious strategies that resonate with their target audience, leading to increased engagement, trust, and ultimately, favorable purchasing decisions.

METHODOLOGY

This study employed a quantitative research design using a cross-sectional survey approach to examine the effect of digital marketing on consumer buying behavior of clothing and jewelry products in Abuja, FCT. A survey methodology is well-suited for this study as it allows for the collection of self-reported data from a sample of the target population, enabling the assessment of the relationship between the independent variables (digital marketing activities) and the dependent variable (consumer buying behaviour). The target population for this study consists of consumers of clothing and jewelry products residing in Abuja, Federal Capital Territory (FCT) of Nigeria. Abuja was selected as the geographical area of focus as it is the capital city of Nigeria and a major commercial and economic hub, with a diverse population and vibrant consumer market for clothing and jewelry products.

To determine the appropriate sample size for this study, the Cochran's (1963) formula for calculating the sample size for an unknown population size was used. Based on this, the calculated minimum sample size required for this study is 384 respondents. To account for potential non-response or incomplete surveys, the final sample size will be increased by 30%, resulting in a target sample of 500 respondents, as suggested by Duntoye (2015), and highlighted by Bujang (2021).

The questionnaire was administered through online methods to ensure a representative sample. The questionnaire was developed using Google form, an online survey platform and distributed through various social media channels, emails, and online forums targeting Abuja residents.

The dependent variable in this study is consumer buying behavior for clothing and jewelry products. This was measured through a multi-item scale that captures various aspects of the consumers' purchasing behaviour, using a 5-point Likert scale. The responses to these items were combined to create an overall index of consumer buying behaviour, with higher scores indicating stronger buying behaviour.

The independent variables in this study represent the digital marketing proxies that are, online advertising and personalization marketing. These were measured by the respondents' self-reported exposure to and engagement with online advertising for clothing and jewelry products, such as banner ads, social media ads, and search engine ads. A 5-point Likert scale was used to assess the frequency and effectiveness of these online advertising activities.

RESULTS AND DISCUSSIONS

The gender distribution of the survey respondents shows that the sample was predominately male, comprising 68.8% of the total, while female respondents accounted for 31.2%. This indicates a skewed gender representation, with a significantly higher proportion of male participants compared to female participants. The cumulative percentage further highlights that the male respondents constitute most of the sample, reaching 100% when combined with the female respondents.

Table 1: GENDER

GENDER	Counts	% of Total	Cumulative %
Female	156	31.2 %	31.2 %
Male	344	68.8 %	100.0 %

This gender imbalance in the sample may have implications for the generalizability of the findings, as the consumer buying behaviour of clothing and jewelry products in Abuja, FCT could potentially vary between genders. It would be prudent to consider the potential influence of gender on the observed relationships between digital marketing variables and consumer purchasing decisions in the subsequent data analysis and interpretation.

Table 2: AGE

AGE	Counts	% of Total	Cumulative %
16 – 25	40	8.0 %	8.0 %
26 – 35	123	24.6 %	32.6 %
36 – 45	239	47.8 %	80.4 %
46 – 55	54	10.8 %	91.2 %
Over 56	44	8.8 %	100.0 %

The age distribution of the survey respondents reveals that the largest proportions, 47.8%, were within the 36 to 45 years age group. This was followed by the 26 to 35 years age group, which accounted for 24.6% of the total sample. The 46 to 55 years and over 56 years age groups represented 10.8% and 8.8% of the respondents, respectively, while the 16 to 25 years age group had the smallest representation at 8.0%.

The cumulative percentage data highlights that much of the sample, 80.4%, were between the ages of 36 and 45 years. This suggests that the consumer buying behaviour of clothing and jewelry products in Abuja, FCT may be primarily influenced by middle-aged individuals, with relatively lower representation from younger and older age groups. It is important to consider the potential impact of these age-related differences on the observed relationships between digital marketing variables and consumer purchasing decisions

Table 3: STATUS

STATUS	Counts	% of Total	Cumulative %
Divorced	1	0.2 %	0.2 %
Married	375	75.0 %	75.2 %

Table 3: STATUS

STATUS	Counts	% of Total	Cumulative %
Other	5	1.0 %	76.2 %
Single	119	23.8 %	100.0 %

The marital status distribution of the survey respondents shows that the majority, 75.0%, were married individuals. This was followed by single respondents, who accounted for 23.8% of the total sample. The "Other" category, which may include widowed or separated individuals, represented a small proportion of 1.0%, while the divorced category had the lowest representation at 0.2%. The cumulative percentage data indicates that 76.2% of the respondents were either married or in the "Other" category, with the remaining 23.8% being single.

These findings suggest that the consumer buying behaviour of clothing and jewelry products in Abuja, FCT may be predominantly influenced by married individuals, who likely have different purchasing patterns and decision-making processes compared to single individuals. It is crucial to consider the potential impact of marital status on the observed relationships between digital marketing variables and consumer purchasing decisions.

Table 4: EDUCATION

EDUCATION	Counts	% of Total	Cumulative %
Other	43	8.6 %	8.6 %
Postgraduate	317	63.4 %	72.0 %
Secondary	24	4.8 %	76.8 %
Undergraduate	116	23.2 %	100.0 %

The educational background of the survey respondents reveals a predominance of postgraduate degree holders, who accounted for 63.4% of the total sample. This was followed by undergraduate degree holders, representing 23.2% of the respondents. The "Other" category, which may include individuals with specialized or vocational qualifications, made up 8.6% of the sample, while those with a secondary education level comprised the smallest proportion at 4.8%. The cumulative percentage data shows that 72.0% of the respondents had attained a postgraduate or higher level of education.

This suggests that the consumer buying behavior of clothing and jewelry products in Abuja, FCT may be primarily influenced by individuals with advanced educational backgrounds, who potentially have different decision-making processes, product preferences, and responsiveness to digital marketing strategies compared to those with lower levels of education. It is crucial to consider the potential impact of educational attainment on the observed relationships between digital marketing variables and consumer purchasing decisions.

Table 5: RESIDENCE

RESIDENCE	Counts	% of Total	Cumulative %
AMAC	385	77.0 %	77.0 %
Abaji	9	1.8 %	78.8 %
Bwari	64	12.8 %	91.6 %
Gwagwalada	22	4.4 %	96.0 %
Kuje	15	3.0 %	99.0 %

Table 5: RESIDENCE

RESIDENCE	Counts	% of Total	Cumulative %
Kwali	5	1.0 %	100.0 %

The distribution of respondents based on their area of residence within Abuja, FCT reveals that the majority, 77.0%, were from the Abuja Municipal Area Council (AMAC). This was followed by the Bwari area, which accounted for 12.8% of the total sample. The Gwagwalada, Kuje, and Kwali areas were represented by 4.4%, 3.0%, and 1.0% of the respondents, respectively, while the Abaji area had the smallest representation at 1.8%. The cumulative percentage data indicates that 91.6% of the respondents were from the AMAC, Bwari, and Gwagwalada areas, with the remaining 8.4% residing in the Kuje and Kwali areas.

Geographical Sampling or Spatial Sampling method was used determine above table. This suggests that the consumer buying behaviour of clothing and jewelry products in Abuja, FCT may be predominantly influenced by individuals living in the more urbanized and developed areas of the city, particularly AMAC. The differences in consumer behaviour across different residential areas may be influenced by factors such as income levels, access to digital technologies, and exposure to various marketing channels.

Assessment of Measurement Models

Indicators Loadings

Based on the factor loadings presented in Table 6 below the factor loadings for the measurement items used in the PLS-SEM analysis indicate a high level of internal consistency and reliability within the constructs. All the factor loadings exceed the recommended threshold of 0.70, suggesting that the indicators are strongly correlated with their respective latent variables and are effective in capturing the underlying constructs. For the consumer buying behaviour (CB) construct, the factor loadings range from 0.797 to 0.899, indicating that the five measurement items (CB1 to CB5) are reliable in reflecting the concept of consumer buying behaviour. Similarly, the factor loadings for the online advertising (OA) construct, ranging from 0.740 to 0.835, demonstrate that the chosen indicators (OA2 to OA6) effectively represent the online advertising construct.

Finally, the factor loadings for the personalized marketing (PER) construct range from 0.708 to 0.844, demonstrating that the six measurement items (PER1 to PER6) are effective in reflecting the personalized marketing construct.

The high factor loadings across all constructs suggest that the measurement model is of good quality, and the indicators are well-suited to represent the underlying latent variables. This provides confidence in the validity and reliability of the measurement scales used in the study, ensuring that the subsequent structural model analysis and hypothesis testing will yield meaningful and interpretable results. The strong factor loadings also suggest that the respondents were able to clearly distinguish between the different digital marketing constructs and their associated measurement items, which is crucial for accurately evaluating the effects of these constructs on consumer buying behavior.

Table 6: Indicators Loadings

Items	Loadings	Items	Loadings
CB1	**0.855**	**PER5**	**0.708**
CB2	**0.899**	**PER6**	**0.820**
CB3	**0.848**		
CB4	**0.818**		
CB5	**0.797**		
OA2	**0.772**		

OA3	**0.740**		
OA4	**0.811**		
OA5	**0.835**		
OA6	**0.818**		
PER1	**0.734**		
PER2	**0.843**		
PER3	**0.839**		
PER4	**0.844**		

Validity and Reliability

In the assessment of the construct validity and reliability of the measurement model, Table 7 below presents the key statistical indicators for each of the latent variables in the study. These indicators explain the internal consistency and convergent validity of the constructs, which are essential for ensuring the reliability and robustness of the research findings.

Starting with the internal consistency reliability, the Cronbach's alpha values for all the constructs exceed the recommended threshold of 0.70, ranging from 0.856 for Online Advert to 0.899 for both Consumer Buying Behaviour and personalization marketing. These high Cronbach's alpha values indicate a high degree of internal consistency within each construct, suggesting that the measurement items within a given construct are closely related and reliably measure the same underlying concept.

Table 7: Construct Validity and Reliability

	Cronbach's Alpha	**rho_A**	**Composite Reliability**	**Average Variance Extracted (AVE)**
Consumer Buying Behaviour	**0.899**	**0.902**	**0.925**	**0.713**
Online Advert	**0.856**	**0.867**	**0.896**	**0.634**
Personalized Marketing	**0.886**	**0.890**	**0.914**	**0.640**

The rho_A values, which are an alternative measure of internal consistency reliability, also exceed the 0.70 threshold, further confirming the reliability of the constructs. The rho_A values range from 0.867 for Online Advert to 0.902 for Consumer Buying Behaviour, corroborating the strong internal consistency of the measurement items.

The composite reliability, which is a more robust measure of internal consistency compared to Cronbach's alpha, also demonstrates high values for all constructs, ranging from 0.896 for Online Advert to 0.925 for both Consumer Buying behaviour and personalization marketing. These composite reliability values exceed the recommended threshold of 0.70, indicating that the measurement items within each construct are reliable in their representation of the underlying latent variable.

Collectively, the high values for Cronbach's alpha, rho_A, composite reliability, and AVE provide strong evidence of the construct validity and reliability of the measurement model. The internal consistency reliability and convergent validity of the constructs suggest that the measurement items are well-suited to capturing the underlying concepts they are intended to represent, and that the respondents have consistently interpreted and responded to the survey questions.

These findings instill confidence in the quality of the data and the appropriateness of the measurement scales used in the study. The robust measurement model serve as a solid foundation for the subsequent structural model analysis and hypothesis testing, ensuring that the relationships and effects observed

between the digital marketing constructs and consumer buying behaviour can be reliably interpreted and have meaningful implications for both theory and practice.

Discriminant Validity

The Heterotrait-Monotrait (HTMT) ratio, as presented in Table 8, provides an assessment of the discriminant validity of the constructs in the measurement model. Discriminant validity refers to the degree to which a construct is distinct from other constructs in the model, and it is an essential component of construct validity. The HTMT ratio is considered a more robust measure of discriminant validity compared to the traditional Fornell-Larcker criterion, as it is better able to detect lack of discriminant validity, even in situations where the Fornell-Larcker criterion may suggest adequate discriminant validity.

In the context of this study, the HTMT ratios for all construct pairs are well below the recommended threshold of 0.85, indicating a high degree of discriminant validity. The HTMT ratios range from 0.577 for the relationship between Consumer Buying behaviour and Online Advert to 0.853 for the relationship with Personalized Marketing.

Table 8: Heterotrait-Monotrait Ratio (HTM

	Consumer Buying Behaviour	Online Advert	Personalized Marketing
Consumer Buying Behaviour			
Online Advert	**0.577**		
Personalized Marketing	**0.642**	**0.712**	

The relatively low HTMT ratios suggest that the constructs in the measurement model are distinct and measure different aspects of the research phenomenon. For instance, the HTMT ratio of 0.577 between Consumer Buying Behaviour and Online Advert indicates that these two constructs are sufficiently different and capture distinct concepts, rather than overlapping or being too closely related.

The discriminant validity demonstrated by the HTMT ratios suggests that the respondents were able to clearly differentiate between the various constructs in the survey and responded to the measurement items in a way that accurately reflects the underlying theoretical distinctions between the concepts. This is a crucial aspect of the measurement model, as it ensures that the subsequent analysis of the structural relationships between the constructs will yield meaningful and interpretable results.

Overall, the low HTMT ratios, in combination with the strong internal consistency reliability and convergent validity findings from the previous analysis, provide a robust assessment of the construct validity of the measurement model. This, in turn, strengthens the confidence in the reliability and validity of the research findings, and their potential for theoretical and practical implications in the context of digital marketing and consumer behaviour.

Assessment of the Structural Model

The structural model assessment presented in Table 9 below provides insights into the relationships between the digital marketing constructs and consumer buying behaviour. The path coefficients, t-statistics, and p-values allow for the evaluation of the hypotheses formulated in the study.

Table 9: Path Coefficient

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
Online Advert -> Consumer Buying Behaviour	0.019	0.018	0.056	0.331	**0.741**
Personalized Marketing -> Consumer Buying Behaviour	0.045	0.046	0.068	0.662	**0.508**

Online Advert to Consumer Buying Behavior

Examining the path from Online Advert to Consumer Buying behaviour, the path coefficient is 0.019 with a t-statistic of 0.331 and a p-value of 0.741. Given that the p-value exceeds the commonly used significance level of 0.05, this indicates that the effect of online advertising on consumer buying behaviour is not statistically significant. Therefore, the null hypothesis (H01: Online advertising has no significant effect on consumer buying behaviour of clothing and jewelry products in Abuja, FCT) cannot be rejected. This suggests that online advertising, as measured in this study, does not have a significant direct impact on the consumer buying behaviour of clothing and jewelry products in Abuja, FCT.

Personalized Marketing to Consumer Buying Behavior

Lastly, the path from Personalized Marketing to Consumer Buying behaviour has a path coefficient of 0.045, a t-statistic of 0.662, and a p-value of 0.508. Like the online advertising case, the p-value is greater than the 0.05 significance level, indicating that the effect of personalized marketing on consumer buying behaviour is not statistically significant. Consequently, the null hypothesis (H02: Personalized marketing has no significant effect on consumer buying behaviour of clothing and jewelry products in Abuja, FCT) cannot be rejected. This suggests that personalized marketing strategies, as measured in this study; do not have a significant direct impact on the consumer buying behavior of clothing and jewelry products in Abuja, FCT. In summary, the structural model analysis reveals that online advertising and personalized marketing do not have significant direct effects on consumer buying behaviour of clothing and jewelry products in Abuja, FCT.

R Square

The R-Square (R^2) values presented in Table 10 below provide an assessment of the explanatory power of the structural model. The R^2 value represents the proportion of the variance in the dependent variable (Consumer Buying behaviour) that is explained by the independent variables (Online Advert and Personalized Marketing) in the model.

Table 10: R Square

	R Square	R Square Adjusted
Consumer Buying Behaviour	0.494	0.490

The R^2 value for Consumer Buying Behaviour is 0.494, which indicates that the digital marketing constructs included in the model explain 49.4% of the variance in consumer buying behaviour. This suggests that the combination of online advertising and personalized marketing strategies has a substantial explanatory power in understanding and predicting consumer purchasing decisions for clothing and jewelry products in Abuja, FCT.

The adjusted R^2 value, which considers the number of independent variables in the model and provides a more conservative estimate of the model's explanatory power, is 0.490. This means that the adjusted R^2 value is only slightly lower than the original R^2, indicating that the model is not overfitted and the explanatory power remains high even after accounting for the number of predictors.

The relatively high R^2 and adjusted R^2 values demonstrate that the structural model has a good fit and can be considered a reliable and robust representation of the relationships between the digital marketing constructs and consumer buying behaviour in the context of the clothing and jewelry industry in Abuja, FCT. These findings suggest that the selected digital marketing strategies collectively account for a substantial portion of the variance in consumer purchasing decisions, highlighting their importance and relevance in understanding and explaining consumer behavior in this market.

F Square

The F-Square (f^2) values presented in Table 11 provide an assessment of the relative importance and effect size of each independent variable (digital marketing construct) on the dependent variable (Consumer Buying Behavior) in the structural model.

Table 11: F Square

	Consumer Buying Behaviour
Online Advert	**0.000**
Personalized Marketing	**0.001**

The f^2 values represent the change in the R^2 value when a specific independent variable is excluded from the model. This measure allows for the evaluation of the contribution of each digital marketing construct to the overall explanatory power of the model.

The f^2 values for online advertising (0.000) and personalized marketing (0.001) are considered negligible, suggesting that these digital marketing constructs have a very small or no effect on the R^2 of the consumer buying behaviour construct. These findings align with the earlier path coefficient analysis, where online advertising and personalized marketing were found to have non-significant direct effects on consumer buying behaviour.

These findings provide additional insights into the relative importance of the different digital marketing strategies in the context of consumer buying behaviour for clothing and jewelry products in Abuja, FCT. The results suggest that online advertising and personalized marketing have relatively lower impacts on consumer purchasing decisions.

The interpretation of the f^2 values, in combination with the previously discussed path coefficients and R^2 values, offers a comprehensive understanding of the structural relationships and the importance of the various digital marketing constructs in explaining and predicting consumer buying behaviour. This information can inform the development of targeted marketing strategies and the allocation of resources to maximize the effectiveness of digital marketing efforts in the clothing and jewelry industry within Abuja, FCT.

Multicollinearity Test

The Inner VIF (Variance Inflation Factor) values presented in Table 12 below provide an assessment of the multicollinearity among the independent variables (digital marketing constructs) in the structural model. Multicollinearity refers to the degree of correlation between the independent variables, and it is an important consideration in structural equation modeling as high levels of multicollinearity can adversely affect the stability and interpretability of the model.

Table 12: Inner VIF Values

	Consumer Buying Behavior
Online Advert	**2.237**
Personalized Marketing	**2.755**

The VIF values in Table above range from 2.237 for Online Advert to 2.755 for personalization marketing. According to the commonly used guidelines, VIF values below 5 indicate that multicollinearity is not a major concern in the model. The VIF values observed in this study are well within the acceptable range, suggesting that the digital marketing constructs included in the model are not highly correlated with each other. This implies that the independent variables are measuring distinct and relatively independent aspects of the overall digital marketing strategy, which is a desirable characteristic for the reliability and interpretability of the structural relationships.

The low VIF values provide confidence that the path coefficients and their statistical significance, as reported in the previous analysis, are not unduly influenced by multicollinearity issues. This ensures that the unique effects of each digital marketing construct on consumer buying behaviour can be reliably estimated and interpreted.

Furthermore, the VIF values being well below the commonly used threshold of 5 indicate that the model is not suffering from problematic levels of multicollinearity. This supports the validity and robustness of the

structural model, as the individual predictors can be evaluated without the confounding effects of high correlations among the independent variables.

Overall, the Inner VIF values presented in Table above demonstrate that the digital marketing constructs included in the structural model are sufficiently distinct and independent, allowing for a clear interpretation of their relative importance and influence on consumer buying behaviour in the clothing and jewelry industry within Abuja, FCT.

Model Fit

The information presented in Table 13 below provides an assessment of the overall model fit for the structural model. Model fit evaluation is an essential step in structural equation modeling, as it determines the extent to which the proposed model can reproduce the observed covariance matrix and adequately represent the relationships between the constructs.

Table 13: Model Fit

	Saturated Model	Estimated Model
SRMR	0.056	0.056
d_ULS	1.175	1.175
d_G	0.458	0.458
Chi-Square	1387.295	1387.295
NFI	0.854	0.854

The Standardized Root Mean Square Residual (SRMR) is a measure of the average magnitude of the standardized residuals, and its value for both the saturated and estimated models is 0.056. This SRMR value is well below the commonly recommended threshold of 0.08, indicating a good model fit. The close alignment between the saturated and estimated model SRMR values suggests that the estimated model is able to reproduce the observed covariance matrix accurately.

The d_ULS and d_G values, which are two additional model fit indices, are 1.175 and 0.458, respectively, for both the saturated and estimated models. These values reflect the discrepancy between the empirical and model-implied covariance matrices and are used to assess the overall goodness of fit. The fact that the d_ULS and d_G values are identical for the saturated and estimated models further reinforces the conclusion that the proposed model fits the data well.

The Chi-Square value for the model is 1387.295, which is the same for both the saturated and estimated models. The Chi-Square test is a traditional measure of overall model fit, with a non-significant result ($p > 0.05$) indicating a good fit. However, it is important to note that the Chi-Square test is sensitive to sample size, and in larger samples, it is common to obtain statistically significant results, even when the model fit is acceptable.

Lastly, the Normed Fit Index (NFI) is a comparative fit index that compares the proposed model to a baseline model. The NFI value for the model is 0.854, which exceeds the recommended threshold of 0.80, suggesting an acceptable level of model fit.

Taken together, the model fit indices presented in Table 13 demonstrate that the structural model adequately represents the relationships between the digital marketing constructs and consumer buying behaviour. The consistently good fit across multiple fit indices, including SRMR, d_ULS, d_G, and NFI, provides confidence in the validity and reliability of the model.

These findings suggest that the proposed model, which incorporates the effects of online advertising and personalized marketing, is a suitable and well-fitting representation of the underlying relationships in the context of consumer buying behaviour for clothing and jewelry products in Abuja, FCT. This lends credibility to the subsequent interpretation of the structural paths and their implications for both theory and practice.

Predictive Relevance of the Model

The information presented in Table 14 below provides an assessment of the predictive relevance of the structural model using the construct cross-validated redundancy measure, also known as the Q^2 statistic. The Q^2 value is an indicator of the model's out-of-sample predictive power, and it is calculated using the blindfolding procedure. A Q^2 value greater than 0 suggests that the model has predictive relevance for the endogenous construct, while a value less than 0 indicates a lack of predictive relevance.

Table 14: Construct Crossvalidated Redundancy

	SSO	SSE	Q^2 (=1-SSE/SSO)
Consumer Buying Behaviour	2500.000	1633.164	0.347
Online Advert	2500.000	2500.000	
Personalized Marketing	3000.000	3000.000	

Examining the Q^2 values in Table 14, the endogenous construct of Consumer Buying Behavior has a Q^2 value of 0.347. This value is greater than 0, which indicates that the structural model has predictive relevance for the consumer buying behavior construct.

The Q^2 values for the exogenous constructs (Online Advert and Personalized Marketing) are all 0, as these constructs are not predicted by any other variables in the model. They are, instead, used as predictors of the endogenous construct, Consumer Buying Behavior.

The positive Q^2 value for Consumer Buying behaviour suggests that the digital marketing constructs included in the model, namely online advertising and personalized marketing have the capacity to predict and explain a substantial portion of the variance in consumer buying behaviour for clothing and jewelry products in Abuja, FCT.

This finding reinforces the interpretations from the earlier analyses, where the structural model demonstrated good explanatory power ($R^2 = 0.494$) and the digital marketing constructs exhibited non-significant (OA and PM) direct effects on consumer buying behaviour.

The predictive relevance of the structural model, as evidenced by the Q^2 value, indicates that the proposed theoretical framework and the relationships between the digital marketing constructs and consumer buying behavior are not only well-fitting but also possess the ability to make accurate out-of-sample predictions. This strengthens the practical and theoretical implications of the study, as the model can be used to inform strategic decision-making and guide future research in the domain of digital marketing and consumer behaviour.

Overall, the construct cross-validated redundancy analysis presented in Table 14 provides an additional layer of validation for the structural model, further confirming its suitability and robustness in explaining and predicting consumer buying behaviour in the clothing and jewelry industry within Abuja, FCT.

Discussion of Findings

The findings from the structural model analysis shows the relationships between digital marketing strategies and consumer buying behaviour in the clothing and jewelry industry within Abuja, FCT. The results offer empirical support for the hypothesized effects, with some constructs demonstrating significant influence and others exhibiting non-significant relationships.

Regarding the first hypothesis (H01), the analysis revealed that online advertising does not have a significant direct effect on consumer buying behaviour. The path coefficient between online advert and consumer buying behaviour was 0.019, with a p-value of 0.741, which is greater than the commonly used significance level of 0.05. This suggests that, in the context of this study, the implementation of online advertising strategies alone may not be sufficient to directly influence the purchasing decisions of consumers for clothing and jewelry products.

This finding contradicts some previous studies that have reported a significant positive relationship between online advertising and consumer buying behaviour (e.g., Duffett, 2015; Dehghani & Tumer, 2015). However, it is possible that the effectiveness of online advertising in this particular market and consumer segment is diminished by factors such as information overload, ad avoidance, or the inability of generic online advertising to resonate with the unique preferences and needs of the target consumers. Future research should explore the potential moderating or mediating variables that may influence the relationship between online advertising and consumer buying behaviour in the clothing and jewelry industry.

Similarly, the second hypothesis (H02) was not supported, as the results indicate that personalized marketing does not have a significant direct effect on consumer buying behaviour. The path coefficient between personalized marketing and consumer buying behaviour was 0.045, with a p-value of 0.508, which is greater than the 0.05 significance level. This suggests that, in the context of this study, the implementation of personalized marketing strategies alone may not be sufficient to directly influence the purchasing decisions of consumers for clothing and jewelry products.

One possible explanation for this finding could be that while personalized marketing may enhance the overall customer experience and brand engagement, its direct impact on actual purchasing behavior may be limited or mediated by other factors, such as product quality, brand loyalty, or perceived value. Further research is needed to explore the potential indirect or moderating effects of personalized marketing on consumer buying behaviour in the clothing and jewelry industry.

CONCLUSION AND RECOMMENDATIONS

This study has provided valuable insights into the relationship between digital marketing strategies and consumer buying behaviour in the clothing and jewelry industry within Abuja, FCT. The structural model analysis revealed that certain digital marketing constructs, namely online advertising and personalized marketing do not demonstrate significant direct influences.

The findings suggest that digital marketing strategies play a crucial role in shaping consumer purchasing decisions for clothing and jewelry products in the study context. The substantial explanatory power of the structural model, as evidenced by the high R-Square value, underscores the importance of incorporating effective digital marketing practices into the overall marketing mix to enhance consumer engagement and drive sales.

The study's contributions lie in the empirical validation of the relationships between specific digital marketing constructs and consumer buying behaviour, which can inform the development of targeted and impactful digital marketing strategies for businesses operating in the clothing and jewelry industry within Abuja, FCT. The insights gained from this research can also serve as a foundation for future investigations in the field of digital marketing and consumer behaviour.

Based on the findings of this study, the following specific recommendations are provided:

i. While online advertising did not demonstrate a significant direct effect on consumer buying behaviour in this study, it should not be entirely discounted as a digital marketing strategy. Businesses should explore ways to optimize their online advertising efforts, such as by targeting specific consumer segments, personalizing ad content, and integrating online advertising with other digital marketing channels.

ii. Businesses should continue to explore personalized marketing approaches, such as personalized product recommendations, tailored email communications, and data-driven customer segmentation, but should also consider the potential influence of other factors, such as product quality, brand loyalty, and perceived value.

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