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The impact of electronic marketing on the purchase behavior of Saudi consumers: An empirical study

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ABSTRACT

This study aimed to investigate how e-marketing and its various aspects affect the buying habits of Saudi consumers in the service industry in the Al-Jouf region. The researchers used the Partial Least Squares Structural Equation Modeling (PLS-SEM) method to analyze the model after collecting data from the service sector in the Al-Jouf region. The statistical results showed a significant correlation between marketing activities and the purchasing behavior of Saudi consumers, consistent with previous studies. Additionally, the study found a statistically significant relationship between individual factors and the purchasing behavior of Saudi consumers, also in line with previous research. Finally, the study demonstrated a statistically significant link between tangible elements and the purchasing behavior of Saudi consumers. This study offers several important insights that will be valuable for future researchers looking to improve this area of study.

1. Introduction

In light of information and communications technology, the world has witnessed tremendous development in the field of marketing after the buying and selling process was carried out directly in a traditional way. Today, the world is facing the emergence of a new concept as an extension of traditional marketing, which is electronic marketing that takes place via the Internet and various digital means. This is the latest method used by institutions to market goods and services with the least possible effort and low costs (Jackson and Ahuja, 2016), which prompted us to try to study electronic marketing and its impact on the purchasing behavior of the Saudi consumer with a field study on the services sector in the Al-Jouf region. The Kingdom of Saudi Arabia, in recognition of the importance of e-commerce, from which e-marketing is a branch, formed the E-Commerce Council with the membership of 13 government agencies and three representatives from the private sector for the purpose of unifying efforts in the areas of logistics services and digital payments.

The marketing process has always been dynamic, evolving significantly over time. While marketing efforts have been present since the onset of buying and selling activities, the formal study and development of marketing theories gained momentum in the 1960s. Philip Kotler, often referred to as the "father of modern marketing," introduced precise concepts and authored numerous books detailing the dimensions and elements of marketing (Kotler, 1988). With the advent of globalization in the early 1990s, particularly after the fall of the Berlin Wall, marketing entered a new phase. This era saw the rise of electronic marketing, which became fundamental to many commercial transactions. It necessitated the use of digital platforms, electronic commerce, and modern

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payment methods, aligning with the globalized trade and services landscape (Sheth and Parvatiyar, 2001).

According to Kannan and Li (2017), many organizations initially relied on traditional marketing methods, such as newspapers, magazines, and television, to inform consumers about a product's benefits, price, and features. However, with the rapid development of digital communication, traditional methods have gradually become less effective. Digital marketing now has the potential to reach a vast audience instantaneously, transforming how organizations connect with consumers. Modern digital marketing strategies have evolved beyond merely meeting consumer needs; they also aim to shape new desires by enhancing customer experience through personalization and real-time engagement.

A study by Chaffey et al. (2009) supports this shift, emphasizing that data-driven and algorithm-based strategies in digital marketing enable a more precise understanding of consumer behavior, allowing companies to create highly targeted marketing messages. These innovations have made it possible for businesses to foster a sense of necessity around their offerings, positioning products and services as essential to customers' well-being. This study highlights the significance of digital marketing, examining its core components and exploring the latest methodologies for maximizing its advantages.

2. Literature review and development of hypotheses

Theories focused on addressing the importance of modern electronic marketing, the importance of consumer purchasing behavior, and consumer needs. The challenges and changes of modern marketing science are accelerating dramatically, and the theory is based on converting advertising from the traditional system to marketing by attracting customers in search engines, through blogs, and providing information and a free resource that benefits the customer (Kannan and Li, 2017). The current study aims to examine the impact of electronic marketing on consumers' purchasing behavior. Many institutions rely on traditional methods to promote their services and sales in the market by relying on their strategies on the promotion element, as it represents, in many cases, the driving force of marketing activity. The study collected data. The secondary study comes from many previous studies, whether from master's and doctoral dissertations or from articles published in peer-reviewed scientific journals.

According to Deb et al. (2024), their study investigated the role of digital marketing in promoting tourism businesses in the post-pandemic period, emphasizing the sustainable approach to customer engagement through digital platforms. By using a comprehensive framework, the research highlighted that social media marketing significantly enhances tourism visibility and reach, especially among younger demographics. The authors recommended that businesses give greater importance to maintaining a strong online presence to create a consistent and positive brand image. They also advised implementing effective customer relationship management techniques to foster loyalty and retain clientele.

Similarly, Ben Razouk's (2023) research examined the effect of digital marketing within the Moroccan tourism sector during the COVID-19 pandemic. The study focused on the use of social media to sustain connections with customers and promote tourism services despite global travel restrictions. Through a mixed-method approach, Ben Razouk (2023) found that digital marketing contributes significantly to providing valuable information to travel agencies and engaging customers through modern communication channels. The study concluded that digital marketing practices enhance the quality and reach of tourism services, positioning it as an essential tool in the ongoing development of the tourism industry.

In the study by Rzayeva et al. (2023), researchers investigated the role of social media in shaping the consumer behavior of young people, focusing on how platforms like Facebook influence purchasing habits. This study aimed to understand the behaviors and motivations of young consumers when engaging with social media for e-commerce purposes, such as browsing and purchasing products. The research applied a descriptive-analytical approach and utilized survey data to analyze trends among young users.

The findings highlighted that social media platforms significantly impact consumer engagement and encourage online shopping by providing an accessible and convenient shopping experience. Clothing was identified as one of the most frequently purchased product categories. Additionally, the study emphasized that social networks effectively promote consumer interest by saving time and effort, making them a preferred option for young shoppers. The authors recommended that marketers leverage these platforms' wide reach and influence to better connect with the youth demographic and foster higher engagement.

Furthermore, the study by Makrides et al. (2020) aimed to evaluate several electronic channels and practices that have been proven effective, in addition to evaluating the dynamics of digital media to discuss its ability to increase brand awareness on a global level. The study sample consisted of 200 people, and the final sample was of clients who were researched in Cyprus. Among the results of the study is that e-marketing provides tremendous opportunities for medium, small, and emerging companies to rise and excel. The results also showed the rapid rise in electronic marketing methods that serve different markets. In the end, the results showed many possibilities for e-marketing on both the practical and theoretical levels. The study also used the descriptive method to discuss the role of social media platforms such as Facebook, Twitter, Instagram, and LinkedIn in electronic marketing and

increasing brand awareness globally. The study recommended paying attention to electronic marketing, as it is considered the best means of communication between the marketer and the consumer, in addition to its enormous potential for spread and expansion.

Goldman et al. (2021) examined how strategic assets influence e-marketing tactics and, consequently, global business performance for e-retailers in cross-border contexts. Their study involved 446 small businesses across 20 European countries. One key finding was a strong connection between electronic marketing and global business performance, with global market orientation emerging as a significant asset in e-marketing, positively influencing the use of marketing tactics. Notably, growth orientation showed a stronger impact than customer orientation. Based on this, the study recommended prioritizing growth orientation in e-marketing strategies.

Additionally, Singh et al. (2021) investigated the e-marketing practices of small and medium-sized enterprises (SMEs) and assessed the owners' understanding of e-marketing based on factors such as spending levels, budget allocation, management, policies, information sources, return on investment, and owners' willingness to train staff, either formally or informally, in the future. Using a descriptive-analytical approach, they surveyed 235 managers of SMEs from several Indian states. Their findings showed that these companies set aside a dedicated monthly budget for e-marketing, with spending increasing in recent years, accounting for 1–10% of their total marketing budget.

In their study, Lo and Cheng (2020) investigated the impact of virtual reality (VR) marketing on consumer responses within the tourism sector. The research demonstrated that VR marketing significantly enhances customer engagement and satisfaction by providing immersive previews of hotel services, thereby positively influencing booking decisions. The findings suggest that integrating VR into marketing strategies effectively meets customer needs and improves satisfaction levels in the hospitality industry.

Many previous studies have addressed the issue of the impact of e-marketing on purchasing behavior and dealt with it from many different angles. Most studies have varied in developed and developing countries and have shown that the relationship between e-marketing and consumer behavior is still mixed. In addition, the current study will focus on some comments that include aspects of agreement and disagreement and state the scientific gap that the current study addresses. The study would like to point out that the previous studies that will be reviewed came in the time period between 2000 and 2021 and included a number of countries, which indicates their temporal and geographical diversity.

It is clear from the previous presentation that the current study differs from the previous studies that were used in the previous studies section, as the current study targeted the community of the Al-Jouf region, located in the northwest of the Kingdom of Saudi Arabia, in an area that has rarely been paid attention to in previous literature, and the current study has It relied on studying consumer opinion in a broad field, which is the field of services in the Al-Jouf region, and was not limited to one field alone, which expanded the field of study and made it more useful for almost all sectors. The study was also distinguished by providing new dimensions of purchasing behavior that concern the individuals responsible for the marketing process, the tangible aspects of the product, and marketing processes, which are dimensions that have not been used, to the researcher's knowledge, in studying the marketing process. Based on the above explanation, this study proposes the following hypothesis:

H1: there is a significant effect between marketing operations and the purchasing behavior of the Saudi consumer.
H2: there is a significant effect between individuals and the purchasing behavior of Saudi consumers.
H3: there is a significant effect between the tangible aspects and the purchasing behavior of the Saudi consumer.

3. Methodology and research design

The current study aimed to examine the community of beneficiaries within the total services sector in the Al-Jouf region, including approximately half a million Saudi citizens and non-Saudi residents who benefit from educational, health, hotel, and consumer shopping services in this northern area of Saudi Arabia. A random sample of 383 individuals from the services sector beneficiaries in Al-Jouf was selected, and the sample size was determined using the Stephen Thompson equation (Thompson, 1992). The sample achieved a response rate of 65%.

A questionnaire was created using a five-point Likert scale, ranging from "strongly agree" to "strongly disagree," to assess all research dimensions. The Likert scale, as a quantitative tool, is widely used to measure behavioral and psychological attitudes by prompting participants to agree or disagree with specific statements. Although Likert initially proposed both five-point and seven-point scales, the five-point scale has become the most popular choice. In some cases, the "neutral" option is excluded to encourage a definitive stance, thereby reducing ambiguous responses (Joshi et al., 2015).

4. Data analysis and findings

4.1. Demographic variables of the study

The study sample included 234 respondents whose demographic characteristics were reviewed in terms of gender, age group, educational qualification, and average daily internet use. The results (Table 1) indicate that 82.9% of the sample

members are males, while females constituted only 17.1%. As for the age distribution, we find that the age group of 31–40 years old recorded the highest representation with 43.6% of the total sample, followed by the group of 21–30 years old with 28.2%. Bachelor's degree holders ranked first in terms of distribution by qualification at 43.6%. Meanwhile, about 73.5% of the respondents used the Internet at a rate of more than 3 hours per day.

These results indicate that most of the sample members are young people, university graduates, and heavy Internet users, which may increase our confidence in their awareness of the dimensions of the subject of study.

4.2. Evaluation of the psychometric properties of the study scales

In this study, the psychometric properties of the measures of the research variables used were evaluated in terms of reliability and truthfulness based on the criteria known in the literature modeling with structural equations (Hair et al., 2017).

4.3. Reliability

The reliability of the scales was verified by calculating the Cronbach alpha coefficient for measuring internal consistency and composite reliability for measuring stability. As shown in Table 2 and Fig. 1, all study measures achieved high levels of reliability above the recommended minimum of 0.70 (Nunnally and Bernstein, 1994). In this stage, indicators (OM2, OM3, OM6, TAP 3, TAP4, and TAP6) with an outer load of less than 0.70 were excluded.

4.4. Content authenticity

Content truthfulness refers to the degree to which the indicators used in measurement represent the full range of the attribute or concept in question (Nunnally and Bernstein, 1994). To verify the validity of the content of the study measures, the measurement indicators were derived from the relevant literature and previous studies and presented to a group of specialized arbitrators to ensure their suitability.

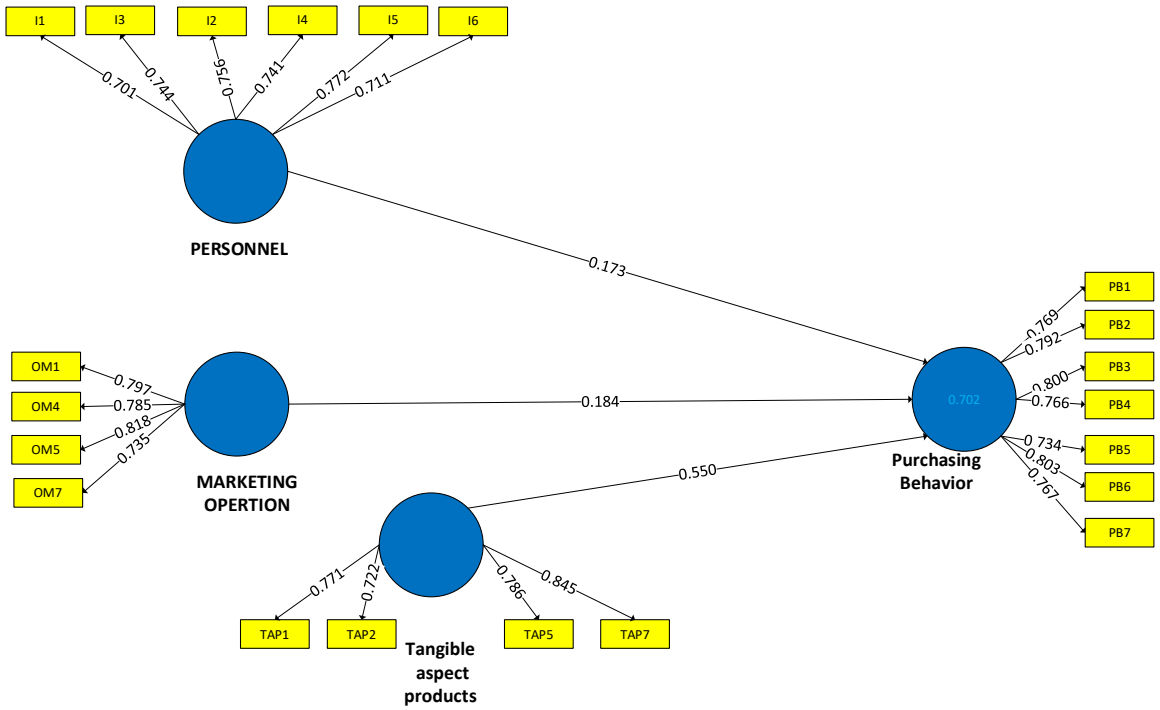

Fig. 1: Modeling of structural equations (measurement model)

Table 1: Demographic variables (n=234)

Variable	Categories	Frequency	Percentage
Gander	Male	194	82.9
	Female	40	17.1
Age	Less than 20 years old	3	1.3
	21-30 years old	66	28.2
	31-40 years old	102	43.6
	41-50 years old	48	20.5
	50 years and above	15	6.4
Qualification	Primary	2	0.9
	Secondary	45	19.2
	Diploma	50	21.4
	Bachelor	102	43.6
	Postgraduate	35	15
Average Internet usage per day	Less than an hour	5	2.1
	From one hour to less than two hours	17	7.3
	From 2 to less than 3 hours	40	17.1
	More than 3 hours	172	73.5

Table 2: Indicators of the reliability of the study scales

Latent variables	Indicators	Outer-loading	Cronbach's alpha	Composite reliability	AVE
Personnel	I1	0.701	0.833	0.878	0.545
	I2	0.744			
	I3	0.756			
	I4	0.741			
	I5	0.772			
	I6	0.711			
Marketing operations	OM1	0.797	0.791	0.865	0.615
	OM4	0.785			
	OM5	0.818			
	OM7	0.735			
Purchasing behavior	PB1	0.769	0.89	0.914	0.602
	PB2	0.792			
	PB3	0.8			
	PB4	0.766			
	PB5	0.734			
	PB6	0.803			
	PB7	0.767			
Tangible aspects of products	TAP1	0.771	0.789	0.863	0.612
	TAP2	0.722			
	TAP5	0.786			
	TAP7	0.845			

TAP: Tangible aspects of products; PB: Purchasing behavior; OM: Marketing operations; AVE: Extracted mean variance

4.5. Construction honesty

Construct validity was also verified by calculating the extracted variance AVE to ensure convergent validity, in addition to evaluating external loadings of outer loadings to verify discriminant validity, and the results were satisfactory, as shown in Table 2. Overall, the results indicate that the study scales have acceptable psychometric properties in terms of reliability and truthfulness.

4.6. Evaluation of differentiated honesty of the study model

Discriminant validity is one of the basic criteria for evaluating the validity of construct models in research based on structural equation modeling (Kline, 2023). Differential honesty refers to the extent to which underlying variables are independent of each other and their ability to distinguish between abstract concepts that reflect them. This criterion was evaluated in the present study by comparing the correlations between the factors with the square root of the extracted mean variance (AVE) according to the Fornell-Larcker criterion, as shown in Table 3, in addition to calculating the HTMT index and comparing it with the recommended maximum of 0.85 as shown in Table 4. The results in Table 3 showed that the Fornell-Larcker criterion was not fully met, as the correlation of some pairs of variables exceeded the corresponding square root of AVE. The HTMT index value for some variables also exceeded the recommended maximum.

The study confirmed that the variables were valid based on the following reasons:

1. The cross-loadings between indicators of different variables were below the maximum acceptable threshold of 0.9 (Kline, 2023), as shown in Table 5.
2. The main loadings of each indicator were higher than any cross-loadings with other variables, as shown in Table 5.

Some relatively high correlations between variables can be explained by the theoretical framework and the abstract nature of the concepts they represent. These concepts may naturally share certain characteristics, leading to higher correlations.

Accordingly, the current level of differential validity of the study variables was accepted despite not all standard measures being met, as there was sufficient justification to support this in the context of the current analysis.

4.7. Evaluation of the problem of multiple regression in the study model

We made sure there was no multiple correlation (collinearity) between the study model's independent variables by finding the variance inflation factor (VIF) for each variable indicator. Table 5 shows the values of the VIF coefficients calculated for the indicators of the study variables. The low values of this coefficient (less than 5) indicate no significantly high linear correlation between the independent variables included in the model (Hair et al., 2017). This confirms that the assumption of no multicollinearity among variables in the current study is valid. Therefore, the results from the pathway and effects analysis will be correct, precise, and unbiased.

Table 3: Fornell-Larcker standard

Latent variables	Tangible aspects of products	Personnel	Purchasing behavior	Marketing operations
Tangible aspects of products	0.782			
Personnel	0.767	0.738		
Purchasing behavior	0.811	0.735	0.776	
Marketing operations	0.694	0.762	0.698	0.784

Table 4: HTMT results

Latent variables	Tangible aspects of products	Personnel	Purchasing behavior	Marketing operations
Tangible aspects of products				
Personnel	0.938			
Purchasing behavior	0.957	0.845		
Marketing operations	0.878	0.939	0.826	

Table 5: Cross-loads between variable indicators and VIF

Indicator	Tangible aspects of products	Personnel	Purchasing behavior	Marketing operations	VIF
I1	0.481	0.701	0.494	0.549	1.61
I2	0.502	0.744	0.501	0.596	1.77
I3	0.63	0.756	0.56	0.594	1.73
I4	0.541	0.741	0.541	0.507	1.65
I5	0.695	0.772	0.651	0.611	1.74
I6	0.506	0.711	0.48	0.509	1.6
OM1	0.526	0.599	0.583	0.797	1.64
OM4	0.585	0.635	0.562	0.785	1.62
OM5	0.58	0.551	0.554	0.818	1.81
OM7	0.484	0.61	0.485	0.735	1.47
PB1	0.604	0.575	0.769	0.52	2.02
PB2	0.634	0.573	0.792	0.542	2.26
PB3	0.639	0.622	0.8	0.62	2.11
PB4	0.631	0.541	0.766	0.557	1.87
PB5	0.612	0.524	0.734	0.424	1.73
PB6	0.662	0.604	0.803	0.571	2.26
PB7	0.622	0.549	0.767	0.541	2.01
TAP1	0.771	0.555	0.665	0.537	1.49
TAP2	0.722	0.61	0.54	0.54	1.44
TAP5	0.786	0.604	0.562	0.513	1.79
TAP7	0.845	0.639	0.739	0.582	1.91

TAP: Tangible aspects of products; PB: Purchasing behavior; OM: Marketing operations; VIF: Variance inflation factor

4.8. Evaluation of the structural model

The conformity of the structural model with the study data was assessed, and its quality was examined using a comprehensive set of quantitative measures according to best practices in modeling structural equations (Hair et al., 2017). Evaluation of the coefficient of determination R^2 and the magnitude of the effect f^2 of the model. The researcher calculated the coefficient of determination R^2 to assess the accuracy of the prediction and the percentage of interpreted variance for each internal latent variable, where a high R^2 value indicates an increase in prediction accuracy (Sarstedt et al., 2022). R^2 values of 0.75, 0.50, and 0.25 are acceptable for internal variables in business constructivist models (Hair et al., 2017).

As shown in Fig. 2 and Table 6, the R^2 value of the internal variable "purchasing behavior" was 0.702, which means that the external variables (tangible aspects, individuals, marketing operations) explain 70.2% of the total variation in purchasing behavior. The size of the effect f^2 was also calculated to determine how much each external variable adds to the R^2 value of the internal variable, i.e., the strength of the relationship between the variables. The values of f^2 (0.02 = weak, 0.15 = medium, and 0.35 = large), as shown in Table 6, indicate a significant impact on the tangible aspects, while the other external variables have a weak impact on purchasing behavior.

Table 6: Effect size values f^2 and R^2

Dependent variable	R^2	R^2 adjusted	Effect size f^2		
			Tangible aspects of products	Personnel	Marketing operations
Purchasing behavior	0.702	0.698	0.39	0.031	0.044

4.9. Assessing the predictive ability of a model using the blindfolding test

The researcher used the blindfolding method to assess the predictive ability of the model, a method based on calculating the measured reciprocal variance scale (Q^2) that reflects the model's ability to predict indicators of internal latent variables (Hair et al., 2017). Sarstedt et al. (2022) recommend the use of the orthogonal cross-variance method in calculating the Q^2 value. When the Q^2 value is greater than zero for internal variables, this indicates the reasonableness of the predictive accuracy of the model for those variables (Sarstedt et al., 2022). The results of the opacity test are shown in Table 7.

Table 7: Cross-validated redundancy (Q^2) and model fit

Variable	SSO	SSE	Q^2 (=1-SSE/SSO)	Model fit		
				RMSE	MAE	Q^2_predict
Tangible aspects of products	936	936				
Personnel	1404	1404				
Purchasing behavior	1638	960.951	0.413	0.573	0.419	0.682
Marketing operations	936	936				

SSO: Sum of squares observed; SSE: Sum of squares error; Q^2: Cross-validated redundancy; RMSE: Root mean square error; MAE: Mean absolute error

The results of the blindfolding test in Table 7 show that the value of the extracted mutual variance (Q^2) for the dependent variable "purchasing behavior" was 0.413. This value is greater than zero, indicating that the model has a reasonable predictive ability to predict the indicators of this internal variable. For the "product tangibles" and "marketing processes" variables, Q^2 was zero, which is normal since these two variables are independent, and there are no other variables that explain them in the model.

Therefore, the results of the blindfolding test indicate that the model has an acceptable predictive ability with respect to internal variables, and this increases the researcher's confidence in using this model to test hypotheses and interpret the results.

4.10. Model fit test

The Stone-Geisser test of variance was used to obtain Q^2 for evaluating the model's predictive power, while RMSE and MAE were calculated to assess how well the model outputs aligned with the actual data. The results showed good predictive performance and model fit (Table 7). Overall, the findings suggest that the proposed model has acceptable specifications in terms of explanatory power, predictive ability, and alignment with the study data.

4.11. Evaluation of the multicollinearity problem in the structural equation model

Hair et al. (2017) suggested that VIF values should not exceed 10 to rule out multiple correlations, and values of 5 to 10 should be considered useful and undesirable. As shown in Table 8, the VIF value for all independent passive variables is less than 5, indicating that there is no multiple correlation problem in the model.

Accordingly, the multiple correlation test proved that there were no issues with the data used and its validity for the structural model test.

Table 8: VIF values

Variable	Tangible aspects of products	Personnel	Purchasing behavior	Marketing operations
Tangible aspects of products	2.61			
Personnel		3.223		
Purchasing behavior				
Marketing Operations				2.564

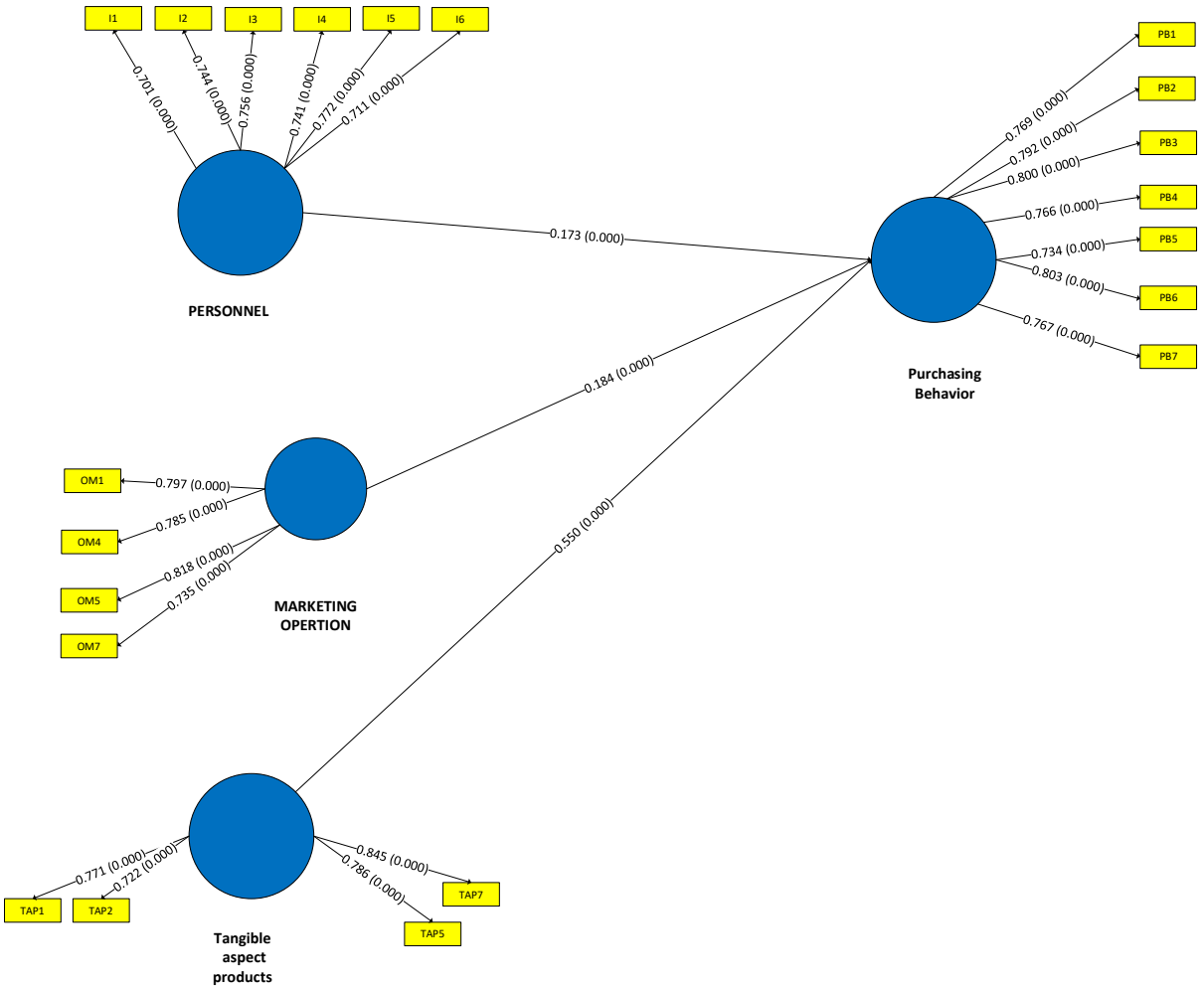

Fig. 2: Modeling of structural equations (path coefficient)

5. Evaluation of hypotheses

In addition to evaluating indicators of good conformity, hypotheses were tested to verify the significance of the relationships between the variables, as provided in Table 9.

H1: There is a statistically significant effect of concrete aspects on purchasing behavior. The results indicate a significant positive effect of the concrete aspects on purchasing behavior (β = 0.550, t = 7.693, P < 0.001), so H1 was accepted.

H2: There is a statistically significant effect for individuals based on purchasing behavior. The results showed a significant positive effect of the independent variable on the function (β = 0.173, t = 2.156, P < 0.05), which supports the acceptance of H2.

H3: Marketing operations have a statistically significant effect on purchasing behavior. The results also showed a positive and statistically significant effect relationship between the two variables (β = 0.184, t = 2.305, P < 0.05), indicating the acceptance of H3.

Table 9: Hypothesis test results

Hypothesis	β	STDEV	T-statistics	P-value	Decision
Tangible aspects of products -> Purchasing behavior	0.55	0.072	7.693	0.001	Accepted
Individuals based - > purchasing behavior	0.173	0.08	2.156	0.031	Accepted
Marketing operations -> Purchasing behavior	0.184	0.08	2.305	0.021	Accepted

β: Path coefficient; STDEV: Standard deviation

Overall, the results corroborated the validity of the study's three hypotheses.

6. Conclusion

Studying the influence of electronic marketing on the buying habits of Saudi consumers. The Partial Least Squares Structural Equation Modeling (PLS-SEM) was utilized to examine the model developed using data collected from the services sector in the Al-Jouf area. The statistical results confirmed the idea. At a significance level of 0.001, there is a statistically significant relationship between marketing activities and the purchasing behavior of Saudi consumers, with a beta coefficient of 0.55, a t-statistics of 7.693, and a p-value of 0.00. This finding aligns with previous studies. Furthermore, this study identified a statistically significant relationship between persons and the purchasing behavior of Saudi consumers (β = 0.173, t-statistics = 2.156, p-value = 0.031). This outcome was in line with previous studies. The study found a statistically significant relationship between the tangible elements and the purchasing behavior of Saudi consumers (β = 0.184, t-statistics = 2.305, p-value = 0.021). This outcome was in line with previous studies.

It is important to take into account the diverse results from this study and other similar studies. An underappreciated academic contribution is to the investigation of the impact of electronic marketing on the purchasing patterns of Saudi clients. This work may stimulate further investigation into this beneficial impact. There has been a lack of comprehensive and detailed research focused on examining the influence of electronic marketing on the purchasing habits of Saudi consumers. This study is a rare empirical investigation that specifically concentrates on the services sector in the Al-Jouf region.

This study offers valuable insights and interesting data, yet there are specific areas that warrant more exploration. Subsequent studies should explore supplementary factors that could amplify and clarify the connection between electronic marketing and the purchasing patterns of Saudi consumers, namely as moderators and mediators. The current study solely focused on the direct link. Other experts may opt to carry out analogous investigations in alternative developing nations to investigate commonalities and disparities. In conclusion, future research could confirm the results of this study by using a longitudinal research method to investigate how relationships between variables change over time.

This study is comparable to other research that has certain drawbacks. This study clarified the influence of electronic marketing on Saudi consumers' purchase decisions; thus, we propose further research to elucidate this relationship in other Gulf nations. Furthermore, since our study clarified the direct association, we recommend testing this study using a third variable in the future.

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Compliance with ethical standards

Ethical considerations

All participants provided informed consent, and their confidentiality was protected throughout the study. This research adhered to standard ethical guidelines.

Conflict of interest

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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