



## RESEARCH ARTICLE

## How Do Digital Marketing Solutions Impact Social Media? Examining the Mediating Role of Information Sharing in the Banking Sector in Saudi Arabia"

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**ARTICLE INFO****ABSTRACT**

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This study aims to examine the effects of digital marketing solutions on social media dynamics, particularly on mediating information sharing in Saudi banks. This study examined the relationships between digital marketing Solutions, information dissemination, and customer engagement with social media platforms by analyzing data from multiple banking institutions in KSA. Results show that sharing information is crucial because you can reach out to your customers in a digital way much more effectively, connect to your customers, and retain them. Banks can use the information provided about consumer needs to fine-tune their marketing approach and promote closer bonds between banks and their clients. The universities, policies, academicians concerned with managing and enhancing digital marketing strategies, social media focusing in a competitive marketplace, and banking institutions can benefit from this research.

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**1. INTRODUCTION**

The banking sector of Saudi Arabia is witnessing a transformation streak aided by fast-changing digital marketing solutions (Fakhar Manesh et al., 2021). As the most critical part of the economy, banks must adapt to the changing landscape where digital engagement and innovation are the need of the hour (Sohail et al., 2024). Considering that digital marketing solutions tweak up customer outreach and engagement by a huge margin, the significance of social media (Arshad et al., 2024). Social media are essential tools banks can use to communicate with customers, providing a means to interact with customers, disseminate information, and contribute to brand loyalty (Hendrawan, 2023). While banks have the opportunity to leverage these platforms, they often don't do it effectively, which takes a toll on their overall performance and customer satisfaction (Levrant & Wulansari, 2024). The objective of this research is to explore the effects of social media engagement on digital marketing solutions in the banking sector, taking information sharing as a mediator (Waheed & Zhang, 2022). Dividing digital marketing strategies into levels of content marketing, social media engagement, and data analytics, we aim to improve our understanding of value co-creation from banks and consumer engagement perspectives (Gansser & Reich, 2021). Information Sharing Integral to this process, information sharing is an avenue through which transparency and trust are established between the banks and their customers, resulting in improved customer experience (Sari et al., 2024). With Saudi Arabia driving forward its Vision 2030 initiative,

the banking sector must immediately look to broaden its marketing strategy beyond its traditional roots (Alhawsawi & Jawhar, 2023). This fits into the greater national strategy to increase productivity and innovation in multiple industries (Sharabati et al., 2024). However, in this fast-changing scenario, utilizing the power of digital marketing solutions that propagate information is vital for the banks to stay relevant and address the tech-savvy consumers' evolving needs (Markus & Buijs, 2022). The primary inquiries driving this investigation include:

- **RO1:** How do digital marketing solutions influence social media engagement in the banking sector in Saudi Arabia?
- **RO2:** What is the mediating role of information sharing in enhancing the effectiveness of digital marketing strategies on social media?

This study seeks to empirically analyze this phenomenon in the banking sector, which is the engine of a nation, with an upshot that can help companies understand the contribution of these digital marketing solutions to drive social media engagement (Awawdeh et al., 2024). Our analysis will focus on the implications of digital marketing, information dissemination, and customer engagement so that banks can act to boost their digital presence and engagement with customers. In summary, this study adds to the growth and innovativeness related to digital marketing dynamics in Saudi Arabia's banking sector and offers implications for both practice and policy.

## 2. LITERATURE REVIEW

### 2.1 Digital marketing solutions in Saudi Arabia

With the growing digitalization of business, digital marketing solutions have become an imperative instrument for engaging with customers for banks in Saudi Arabia (Hermawan et al., 2024). This includes everything from search engine optimization (SEO), social media marketing, and targeted content marketing that enables banks to target larger audiences and interact in real time. With such data-driven insights, banks can personalize their marketing campaigns with regard to their customers, which is a key factor for better brand recall and loyalty (Olson et al., 2021). New studies reveal that digital marketing, in the right way, can also benefit customers and banking enterprises to increase customer and operational performance (Hakim, 2024).

### 2.2 Educational resources

That is where educational resources come into play empowering banking customers with information to make well-based financial decisions (Kłodawski et al., 2017). Banks can use digital marketing channels to promote all the useful information related to their services, products, and financial literacy programs (Al-Ahmadi, 2011). Content marketing can drive banks to pontificate blogs, videos, webinars, etc., support customer understanding, and encourage the use of services. Research indicates that a higher level of customer awareness driven by accessible educational content promotes satisfaction and trust in financial institutions (Allahham et al., 2023).

### 2.3 Interactive content

Interactive content is an essential aspect of banks revolutionizing the way they interact with their customers (Al Mawahreh et al., 2024). Banks are able to include tools like quizzes, polls, and interactive infographics to promote user engagement and inspire customer participation (Almustafa, n.d.). This not only offers invaluable perspectives on customer tastes and behaviors but also helps build a user community. Interactive content can lead to higher customer engagement and maximum perceived experience and research shows that it is an important aspect of digital marketing in the banking industry (Atta et al., 2023).

### 2.4 Customer interaction

Banks and their customers must connect repeatedly to develop healthy relationships. Digital marketing solutions ensure effortless communication between different channels of connection, such as social media applications and chatbots, which provide instant replies to customers (Bahrami et al., 2022). Studies confirm that by moving proactively to the customers, customer loyalty and retention rates start to increase, which means that not only the banks that are capable of engagement through

digital platforms are able to better understand and fulfill their customer needs(Rosenfeld et al., 2016).

### 2.5 Social media

From platforms of engagement to brand promotion channels, banks have found a way to connect with their customer through social media like never before(Khalaf, 2023). Banks can use social network marketing to provide updates, replies to questions, and community interactions. Research takes social media as a dynamic that indirectly enhances the social presence of a company, hence promoting brand reputation, customer trust, and also user involvement(Aljabari et al., 2024). In a Saudi banking landscape home to a predominantly young and tech-savvy population, tapping into the freedom of social media is critical to achieving customer loyalty and satisfaction(Kurdi et al., 2022).

### 2.6 Information sharing

This establishes an important mediating effect of information sharing in the association between customers and a digital marketing approach for the customers to engage in the purchase process(Dubey et al., 2020). Digital channels serve as a means for banks to forge trust and deepen customers' relationships by providing more transparent and timely information. Studies show that proper information sharing helps create an improved customer experience, boosting loyalty and advocacy(Budler et al., 2024). While banks are adopting digital marketing solutions, building an environment of collaboration will be necessary to improve consumer experiences and long-term growth(Kudirat Bukola Adeusi et al., 2024).

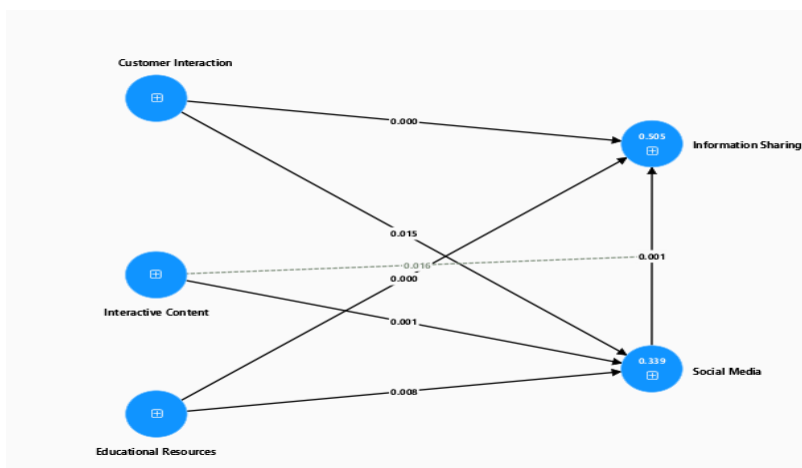


Figure 1: Research model

## 3. RESEARCH METHODOLOGY

### 3.1 Research design

The purpose of this study is to examine the impact of digital marketing solutions on social media in the banking sector of Saudi Arabia with the mediating role of information sharing(Ahmed & MacCarthy, 2023). AI facilitates marketing and customer interaction of the bank to the data-driven decision-making aspect of the banks. It uses a mixed-method approach, involving secondary and primary data sources. Secondary data is obtained from a wide range of academic literature, industry reports, and government publications that provide a contextual background of knowledge related to digital marketing and social media dynamics in the banking sector, how this theoretical framework guides data collection and analysis of primary data in addressing the subject(Moshood et al., 2024).

### 3.2 Data analysis

The statistical methods for analyzing the primary data include descriptive and inferential statistics. It involves measuring their characteristics such as name, age, sex, and occupation and how their reactions to these questions relate to the study's goal. Data is then illustrated with the help of statistical tables, graphs, and charts to show the relationships and patterns that have been

discovered. The discussion, conclusion, and recommendations sections are outlined before the data analysis to allow for the interpretation of results (Jawabreh et al., 2023). This study collects data through structured questionnaires, where responses are quantitatively evaluated using a five-point Likert scale to measure agreement (Gaudenzi & Qazi, 2021). This study also uses Partial Least Squares Structural Equation Modeling (PLS-SEM 4), a powerful statistical approach capable of examining intricate relationships and testing theoretical frameworks (Sharabati et al., 2023). The above-mentioned method is well used to answer the design hypotheses regarding digital marketing solutions, AI adoption, and the impact on social media in the banking sector in KSA (Sharabati & Izzat, 2024). This research included the organization and collection of primary data based on demographic characteristics and response to the study objectives of the participants involved descriptive and inferential statistical methods. These methods were used because they enabled effective interpretation of the data collected. The results were presented using statistical tables, graphs, and charts to make it easier to digest and get a quick snapshot of the findings. The following sections discussion, conclusion, and recommendations, were formulated from the analysis of all variables in the present study that have been measured from the return responses to the questionnaire. The study applied well-established measurement techniques. In addition, the tool used for data analysis directly was Smart PLS 4, which shows specific relationships among the variables and also serves digital marketing-based solutions as well as social media engagement solutions in the Saudi banking sector.

### **3.3 Conceptual model of the study: Information sharing and social media engagement**

The premise of this study lies in the conceptual framework of digital marketing solutions and social media engagement in the Saudi Arabian banking sector, highlighting information sharing as a mediator. This model suggests that the execution of effective digital marketing strategies positively affects social media engagement and customer engagement, which, in turn, increases organizational performance (Allahham, Sharabati, Al-Sager, et al., 2024). Digital Marketing Solutions are the set of channels and tools banks employ to connect with customers in the digital space, from social media advertisement to content marketing and customized communication efforts (Allahham, Sharabati, Almazaydeh, et al., 2024). Information Sharing is considered to be the vital mediator in this relationship. It leads to better communication between banks and customers, allows specific information to get more coverage, and aids confidence and loyalty (Alkhazaleh, n.d.). Social Media engagement includes all customer interactions with bank content on Facebook, Twitter, and Instagram and how often they liked, shared, commented, and sentiment. This study seeks to highlight the role of information-sharing-based psychology in influencing consumers' social media engagement with digital marketing solutions (Shehadeh et al., 2024). The analysis aims to shed light on how Saudi banks can utilize digital marketing to develop and improve customer interactions and satisfaction in a competitive banking environment through a better understanding of relationships (Atieh Ali et al., 2024).

## **4. HYPOTHESIS DEVELOPMENT**

### **4.1 Primary data presentation**

The use of secondary data mainly acts as a preliminary stage in the capture of real-world experiences and the search for interactions in the domain of Saudi banking. This allowed me to specifically gain insights into the interaction of digital marketing and social media as a measure of success. So I distributed a mail survey to the top management, and managerial professionals in banks, and collected the required data.

### **4.2 Demographic information**

This research follows a rigorous methodology, utilizing the appropriate data collection and analysis for studying the banking sector in Saudi Arabia. The research is on a very wide scope of the banking industry with numerous institutions and a large workforce. This study is empirical research based on primary data through a properly structured questionnaire spread to around 150 target groups from different banks in Saudi Arabia. Results: Out of 150 questionnaires mailed out, 45 were returned, giving a 30% return rate. Data was scheduled circle using basic random sampling, which made data collection efficient and economical to acquire banking professionals' opinions on the representation level. Moreover, primary data sources were complemented with gray literature,

contextualizing and accentuating the results. These secondary sources were industry reports, financial statements and proprietary databases, which had more detail about banking processes. In a study on the banking sector, demographic variables, such as age, gender, and job, generated valuable information to balance with other factors identified as variables. To get a genuine sense of the challenges and opportunities that banks are navigating in a rapidly evolving digital landscape, it was paramount that responses remain candid without compromising data integrity.

**Table 1: Factor loadings**

Constructs	Items	Factor Loadings	Cronbach's Alpha	C.R.	(AVE)
Customer Interaction	AL1	0.831	0.899	0.923	0.665
	AL3	0.89			
	AL4	0.858			
Educational Resources	QI1	0.829	0.871	0.911	0.72
	QI2	0.823			
	QI3	0.845			
	QI4	0.897			
Information Sharing	IS1	0.86	0.825	0.895	0.74
	IS2	0.879			
	IS3	0.863			
Interactive Content	IC1	0.869	0.894	0.922	0.703
	IC2	0.849			
	IC3	0.836			
	IC4	0.815			
Social Media	SM1	0.843	0.868	0.91	0.717
	SM2	0.888			
	SM3	0.847			
	SM4	0.807			

The table displays the factor loading, Cronbach's Alpha, C. R., and AVE of the construct used in the study against the construct representing digital marketing solutions and social media engagement. This represents factor loadings or the correlation between items and their respective constructs, so any loading above 0.70 can be deemed acceptable. Looking at this table, all the items have strong loadings from 0.807 to 0.897 in all constructs, showing that all the items capture the right construct. Cronbach's Alpha measures internal consistency, where values over 0.70 demonstrate acceptable reliability. The value of Cronbach's Alpha for all constructs ranges between 0.825 and 0.899, indicating that the items within each construct have a high level of internal consistency and measure the same related concept consistently. Composite Reliability is another measure of internal consistency and is preferred in structural equations modeling hence, the C.R. values in the table; all C.R. values viewed in the table are between 0.911 and 0.923 and are higher than the threshold value of 0.70. Together, the constructs represent the items with very high reliability. AVE assesses the degree to which a latent construct captures variance relative to measurement error variance. AVE values vary between 0.665 and 0.740, indicating more than half of the variance explained by constructs. So this overall support for the validity of such constructs means we can conclude they appear to represent the dimensions of measurement well. Overall, the results suggest that the constructs involved are consistent and stable with considerable factor loadings as well as C.R. and AVE below 0.70 with C.R. and AVE remaining high, confirming that items provided are significant in measuring the different aspects of customer interaction, educational resources, information sharing, interactive content, and social media engagement concerning the study. The strength of this measurement framework increases the credibility of the research and facilitates the analysis of the influence of digital marketing solutions on social media dynamics.

### 4.3 Structural model assessment

The validation of the research outcomes requires to be necessarily performed step by step whereby its first step includes the assessment of the structural model, especially in concern to scrutinizing the effects of digital marketing solutions on social media engagement in the banking domain. In this sense, Prior studies indicated that the HTMT values should be smaller than the threshold of 1. Nevertheless, it should be noted that these recommendations were developed under previous standards, and methodological advances have recently sharpened these criteria for discriminant validity. The results (Table 2) provide evidence of adequate discriminant validity among the constructs, as the HTMT values in this study are well below the threshold as revised. Such in-depth analysis of discriminant validity proves the integrity of our measurement model and supports the constructs as reliable and valid. The significant discriminant validity, as evidenced, supports the analysis of correlations among variables aimed particularly at how DM influences the social media landscape with the banking sector of Saudi Arabia. This thorough review provides a foundation for further examination of information sharing as a mediating variable. It lays the groundwork for a holistic view of the relationships between digital marketing solutions and social media engagement.

**Table 2: HTMT**

	<b>Customer Interaction</b>	<b>Educational Resources</b>	<b>Information Sharing</b>	<b>Interactive Content</b>	<b>Social Media</b>
Customer Interaction					
Educational Resources	0.797				
Information Sharing	0.673	0.747			
Interactive Content	0.663	0.582	0.463		
Social Media	0.582	0.579	0.288	0.546	

Table 2 covers the analysis of the Heterotrait-Monotrait ratio (HTMT) values, which are relevant when considering the discriminant validity of the constructs in this study. A greater extent of the construct discrimination can be observable by the HTMT values, which serve as an important factor for the validity of the measurement model. While the value of 0.797 recorded for Customer Interaction and Educational Resources indicates a moderate correlation, it is still below the threshold, therefore a clear distinction between these constructs is sound. Likewise, the HTMT value of 0.673 between Customer Interaction and Information Sharing supports their discriminant validity. In addition, the HTMT values of 0.747 for educational Resources and Information Sharing and 0.582 for Interactive Content and Educational Resources are also lower than the most stringent threshold and suggest sufficient discriminant validity. Given an absence of overlap, the most compelling evidence for discriminant validity is the smallest number, like 0.463, between Information Sharing and Interactive Content. For Social Media, the ratios are lower overall, with the strongest similarity of 0.582 with Customer Interaction, indicating weak associations with this construct. Meanwhile, 0.579 with Educational Resources and 0.546 with Interactive Content reinforce its idiosyncratic contribution (Al-Nsour, 2024). This is best illustrated with the lowest kappa value, 0.288, between Social Media and Information Sharing. HTMT Overall, these HTMT values offer strong support for the discriminant validity of the constructs. Each construct is sufficiently distinct and provides further support for the robustness of the measurement model in examining the impact of digital marketing solutions on social media engagement in the Saudi Arabian banking sector (Al-Nsour, 2022).

**Table 3: Fornell-Larcker**

	<b>Customer Interaction</b>	<b>Educational Resources</b>	<b>Information Sharing</b>	<b>Interactive Content</b>	<b>Social Media</b>
<b>Customer Interaction</b>	0.816				
<b>Educational Resources</b>	0.711	0.849			
<b>Information Sharing</b>	0.578	0.654	0.86		
<b>Interactive Content</b>	0.596	0.522	0.396	0.839	
<b>Social Media</b>	0.515	0.505	0.246	0.482	0.847

The interpretation of Table 3, which illustrates the Fornell -Larcker Criterion for assessing discriminant validity among constructs of the digital marketing solution and their influence on social media in the banking sector of Saudi Arabia, therefore provides significant indications of the relationship between various factors. Under this criterion, a confirmation of discriminant validity requires that the square root of the Average Variance Extracted (AVE) for each construct be greater than the correlations with other constructs. As depicted in the table, the Fornell-Larcker criterion for the square root of the AVE for each construct of Customer Interaction (0.816), Educational Resources (0.849), Information Sharing (0.860), Interactive Content (0.839), and Social Media (0.847). Such values indicate a high degree of explained variance by each respective construct. Of particular note is information sharing, which has the highest AVE (0.860) and, consequently, the highest proportion of shared variance with its indicators, reinforcing the notion that it is a central mediator of this study. Analyzing the relationships between constructs revealed that the correlation between Customer Interaction and Educational resources is strong (0.711), indicating that better customer interaction is associated with better educational resources provided by the banking companies. This is important because educational resources and information sharing correlate well (0.654) and highlight the need for education to convey effective information. On the contrary, the correlations for Interactive Content and Social Media are weak, 0.482 and 0.396, respectively. This suggests an attenuated relationship between these constructs, indicating that while it could be that interactive content is necessarily part of stimulating customer engagement, whether that direct translation into social media effectiveness is more questionable. Further, the Information Sharing with correlation value (0.246) in relation to Social Media value also entails more research into how social media can be further leveraged by banking customers to share inside information with each other. In general, the Fornell-Larcker analysis shows adequate discriminant validity of constructs, with each representing a strong ability because digital marketing strategies and their effects must be created around the distinct social media dynamics faced by the banking sector. This validity supports the framework for future hypothesis testing and the role that information sharing plays as a mediator in effective social media engagement.

**Table 4: R2 Adjusted**

<b>Variable</b>	<b>R2</b>	<b>R2 Adjusted</b>
Information Sharing	0.505	0.496
Social Media	0.339	0.332

The R<sup>2</sup> value for Information Sharing is 0.505, which indicates that a little more than half, 50.5%, of the variance in information sharing can be predicted by the independent variables in the model. This is a huge number and shows that they drive the digital marketing solutions that help improve information sharing between banks, which is the main component that plays a role in building better relationships with customers and increasing customer engagement in banking. This reinforces that idea with an adjusted R<sup>2</sup> of 0.496, which punishes the number of predictors while showing the robustness of the model. On the other hand, the Social Media construct has an R<sup>2</sup> value of 0.339, which means that the model explains 33.9% of its variance. The adjusted R<sup>2</sup> of 0.332 is only slightly lower, which suggests this model is robust against extra predictors entering the model. Hence, these results show the evident role that information sharing plays as a mediating factor in influencing social media engagement. Banks adopting digital marketing strategies will probably improve information delivery

and social media engagement. Today, it is essential to establish information exchange between the banking sector in order to increase the effectiveness of digital marketing tools in social media engagement, which is the focus of the study.

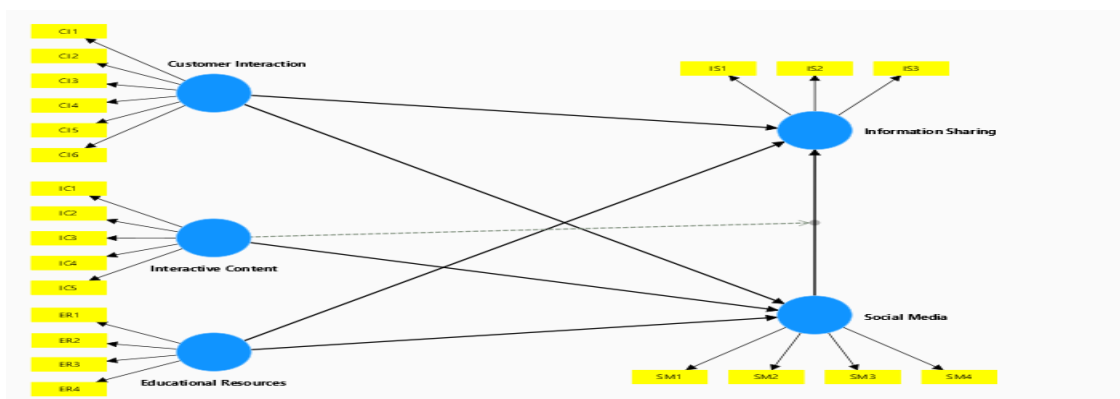


Figure 2: Research model

**Hypotheses testing:**

This study, therefore, examines hypotheses about the effect of digital marketing solutions on the engagement of social media, focusing on informational mediation in the banking sector in Saudi Arabia. This research investigates digital marketing strategies by testing some propositions about the relationships between digital marketing strategies and social media dynamics, measuring the

mediation effects of information sharing on the relationships. Hypotheses are directed to the relationship between digital marketing and the impact of social media engagement metrics among Saudi banks. By conducting rigorous statistical tests, we are attempting to clarify the type and the strength of these relations when and how digital marketing strategies improve social media interaction and engagement in the banking sector, giving proof that effective implementation of digital marketing strategies leads to higher levels of social media interaction and engagement in the banking. As banks drive their social strategy with data-driven insights and automation made possible by information sharing between channels, the opportunities for engagement can only grow to be more compelling and impactful. This circular process, which includes digital marketing, information sharing, and interaction through social media, identifies the potential of digital solutions that can achieve further development and innovation in the banking industry.

Table 5: Hypotheses testing estimates “Total Effect “

Relationships	Beta	(STDEV)	T statistics	P values	
Customer Interaction -> Information Sharing	0.201	0.071	2.825	0.005	Supported
Customer Interaction -> Social Media	0.209	0.086	2.436	0.015	Supported
Educational Resources -> Information Sharing	0.467	0.058	8.113	0	Supported
Educational Resources -> Social Media	0.233	0.087	2.667	0.008	Supported
Interactive Content -> Information Sharing	-0.013	0.071	0.19	0.849	Unsupported
Interactive Content -> Social Media	0.236	0.072	3.279	0.001	Supported
Social Media -> Information Sharing	-0.18	0.054	3.364	0.001	Supported
Interactive Content x Social Media -> Information Sharing	-0.12	0.05	2.405	0.016	Supported



In Table 4. Results show that customer interaction is positively associated with information sharing and social media engagement, with statistically significant relations supported by p-values equal to 0.005 and 0.015, respectively. This indicates that companies can increase their banks' information sharing and social media utilization by increasing customer engagement. An equally strong positive impact on information sharing appears to be that of the educational resources ( $\beta = 0.467$ ) and ( $p = 0$ ), as providing educational resources is vital to motivating information sharing. In addition, education reflects positively on social media, with a beta of 0.233 and a p-value of 0.008, indicating that the audience interacts more as the knowledgeable consumer is born. Nonetheless, the link between interactive content and information sharing is not supported by beta =  $-0.013$ , p-value = 0.849, indicating that interactive content does not directly affect information sharing in the banking. In contrast, interactive content is found to have a positive and significant impact on social media engagement beta=0.236, p=0.001, suggesting that while interactive content does not develop general information sharing, it does contribute to customer engagement on social media. The analysis shows a negative association between social media usage and information dissemination, beta =  $-0.18$ ,  $p < 0.05$ . This information-allowing hypothesis is not what it seems, as more social media activity might potentially mean less effective information sharing, indicating the possibility for future studies investigating either or both the coupling of these variables in more aggregated or investigating more specific aspects of different forms of social media use. Lastly, the interaction term of interactive content and engagement in social media results in a positive significant but negative effect regarding information sharing beta =  $-0.12$ ,  $p = 0.016$ , which indicates that interactive content is positively high on social media engagement but negative on information sharing process.

**Table 6. Hypotheses testing estimates “Indirect Effect “**

Relationships	Beta	(STDEV)	T statistics	P values	
Customer Interaction -> Information Sharing	-0.038	0.019	1.971	0.049	Supported
Educational Resources -> Information Sharing	-0.042	0.023	1.823	0.068	Unsupported
Interactive Content -> Information Sharing	-0.043	0.019	2.261	0.024	Supported

The analysis of Table 5, which outlines the hypotheses testing estimates for indirect effects, provides significant insights into the mediating relationships between digital marketing strategies and information sharing in the banking sector of Saudi Arabia. The results indicate that customer interaction has a negative indirect effect on information sharing, reflected by a beta value of  $-0.038$  and a p-value of 0.049, which is statistically significant. This finding suggests that while customer interaction may foster a direct relationship with information sharing, its indirect impact is more complex, potentially indicating that increased interaction might inadvertently complicate or dilute the effectiveness of information sharing. In contrast, the indirect effect of educational resources on information sharing is marked by a beta of  $-0.042$  and a p-value of 0.068, suggesting that this relationship is not statistically significant at the conventional levels. This implies that while educational resources are expected to contribute positively to information sharing, the data does not sufficiently support this hypothesis in an indirect capacity, warranting further exploration into how educational initiatives can be structured to enhance information exchange effectively. Finally, the results show that interactive content also exhibits a negative indirect effect on information sharing, with a beta of  $-0.043$  and a significant p-value of 0.024. This supports the idea that while interactive content may enhance user engagement on social media, it may not necessarily promote effective information sharing. The negative coefficients for both customer interaction and interactive content highlight an intriguing aspect of digital marketing strategies: while they can drive engagement, they might simultaneously introduce complexities that hinder information sharing. These findings underscore the need for banking institutions to carefully consider how digital marketing approaches are designed to ensure they facilitate rather than obstruct effective communication and information dissemination among customers.

## 5. CONCLUSION

In conclusion, the findings of this study elucidate the intricate dynamics of how digital marketing solutions impact social media engagement within the banking sector in Saudi Arabia, particularly through the mediating role of information sharing. The hypotheses testing reveals that while certain strategies, such as customer interaction and educational resources, positively influence information sharing and social media engagement, the relationships are not without complexity. Notably, the negative indirect effects of customer interaction and interactive content on information sharing highlight potential challenges that banks face in leveraging these strategies. These results underscore the importance of adopting a nuanced approach to digital marketing initiatives. Banks must ensure that their strategies do not inadvertently complicate information sharing processes, as effective communication is paramount for fostering customer relationships and enhancing overall engagement. Additionally, while educational resources have a significant direct effect on information sharing, their indirect influence suggests that further refinement is necessary to maximize their effectiveness. Ultimately, this research contributes valuable insights for banking institutions aiming to harness digital marketing solutions to bolster their social media presence and improve customer interaction. By strategically aligning marketing efforts with the goal of facilitating open information exchange, banks can enhance customer satisfaction and drive innovation in their services, ensuring that they remain competitive in an increasingly digital marketplace. These findings advocate for a strategic recalibration of digital marketing practices, prioritizing not just engagement but also the quality of information sharing to truly benefit from the opportunities presented by the digital landscape.

## 6. RECOMMENDATION

Based on the findings of this study, several key recommendations can be made to enhance the impact of digital marketing solutions on social media engagement in the banking sector of Saudi Arabia, with a focus on optimizing the mediating role of information sharing. First, banks should invest in developing comprehensive digital marketing strategies that prioritize customer interaction. By fostering genuine engagement through personalized communication and interactive campaigns, banks can enhance the quality of information sharing, which is crucial for building trust and loyalty among customers. Second, educational resources must be effectively utilized to empower customers and employees alike. Training programs that focus on the benefits of digital marketing tools can help both parties understand how to leverage social media for effective communication. This education can improve information sharing, ensuring that customers feel equipped to engage with the bank's offerings actively. Additionally, banks should critically assess the content and methods used in their interactive marketing efforts. Given the negative relationship observed between interactive content and information sharing, it is essential to refine these strategies to ensure they facilitate, rather than hinder, open dialogue with customers. Engaging content that invites feedback and discussion will likely lead to enhanced information sharing and social media interaction, ongoing evaluation and adaptation of digital marketing strategies are vital. By employing analytics to measure the effectiveness of their initiatives, banks can make data-driven decisions that enhance their marketing efforts and improve customer experiences. This iterative approach allows for the continuous refinement of strategies to maximize the benefits of digital marketing solutions and ensure their alignment with evolving customer needs and market trends. Implementing these recommendations will not only strengthen the relationship between digital marketing solutions and social media engagement but also leverage information sharing as a pivotal mechanism for driving innovation and customer satisfaction in the banking sector in Saudi Arabia.

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