"The influence of social media marketing on customer knowledge management: The role of confidentiality in UAE public banks"

AUTHORS

Abdelrehim Awad (iD)
Ⓡ
Ahmed Moustafa Aldabousi (iD)
Seham Albatal (iD)

NUMBER OF REFERENCES	NUMBER OF FIGURES	NUMBER OF TABLES
33	1	7

BUSINESS PERSPECTIVES

LLC "CPC "Business Perspectives"
Hryhorii Skovoroda lane, 10,
Sumy, 40022, Ukraine
www.businessperspectives.org

Abdelrehim Awad, Ph.D.,
Assistant Professor, College of Business, Department of Business Administration, University of Bisha, Bisha 61922, Saudi Arabia; Department of Business Administration, Faculty of Commerce, Al-Azhar University, Egypt. (Corresponding author)

Ahmed Moustafa Aldabousi, Ph.D., Associate Professor of Commercial Law and Maritime, Umm Al Quwain University, United Arab Emirates.

Seham Albatal, Ph.D., Assistant Professor, College of Business, University of Bisha, Bisha 61922, Saudi Arabia; Department of Business Administration, Faculty of Commerce, Benha University, Egypt.

Abdelrehim Awad (Saudi Arabia, Egypt),
Ahmed Moustafa Aldabousi (United Arab Emirates), **Seham Albatal** (Saudi Arabia, Egypt)

THE INFLUENCE OF SOCIAL MEDIA MARKETING ON CUSTOMER KNOWLEDGE MANAGEMENT: THE ROLE OF CONFIDENTIALITY IN UAE PUBLIC BANKS

Abstract

Social media facilitates banks' interaction with consumers and provides critical information about their behaviors and preferences. Nevertheless, given the sensitive nature of financial information, maintaining stringent confidentiality is of paramount importance. This study aims to examine the impact of social media marketing (SMM) dimensions on customer knowledge management (CKM) in UAE public banks, focusing on the moderating role of banking confidentiality. The study utilized a quantitative methodology with a correlational framework; data were collected from 283 respondents, who are active customers of First Abu Dhabi Bank, Emirates NBD, and Abu Dhabi Commercial Bank, through a structured questionnaire. These customers were surveyed to understand their interaction with social media campaigns, the information banks request from them, their willingness to share personal data, and their perceptions of safety and legal protections. The results revealed a strong positive relationship between SMM dimensions and CKM, with SMM explaining 65.9% of the variance in CKM outcomes ($R^2 = 0.659$, $p < 0.01$). Among the SMM dimensions, customization had the highest impact ($R^2 = 0.766$), followed by word-of-mouth ($R^2 = 0.697$) and aesthetics ($R^2 = 0.651$). Additionally, confidentiality was found to significantly enhance the effectiveness of SMM, with a moderating effect increasing explained variance by 6.5% ($\Delta R^2 = 0.065$, $\beta = 0.25$, $p < 0.01$). These findings suggest that public banks in the UAE should integrate personalized SMM strategies with stringent confidentiality measures to optimize CKM. This approach not only enhances customer engagement but also builds trust, fostering sustainable growth in the digital era.

Keywords	confidentiality, customer engagement, personalization, financial data, data protection, privacy, digital marketing, social networks, trust, banking sector
JEL Classification	M31, G21, O33, K15

INTRODUCTION

In recent years, the swift advancement of digital technologies and the increasing impact of social media have profoundly transformed the way industries engage with customers. The banking sector is no exception, with public banks increasingly using social media platforms to gather insights, foster relationships, and enhance service delivery. However, the sensitive nature of financial information requires banks to balance customer engagement with stringent confidentiality obligations. In the context of the United Arab Emirates (UAE), where public banks operate under strict data protection regulations, the challenge of leveraging social media without compromising customer privacy becomes particularly significant.

The scientific problem this study addresses is identifying how public banks can maximize the effectiveness of social media marketing (SMM) for customer knowledge management (CKM) while maintain-

ing robust confidentiality practices. Despite the transformative potential of social media in shaping customer behavior and expectations, there remains a critical gap in understanding the dynamic between CKM and privacy in highly regulated environments.

1. LITERATURE REVIEW AND HYPOTHESES

The digital revolution has brought about a profound transformation in marketing, fundamentally altering how businesses connect with their audiences and driving the extensive adoption of e-marketing technologies (Sofiane, 2022; Ho & Chen, 2022). These advancements have provided organizations with tools to better understand their customers, personalize their approaches, and achieve more strategic goals. Researchers have extensively examined the role of e-marketing, emphasizing its pivotal importance in achieving competitive advantages (Nashma & Abdul Qadir, 2022), strengthening customer loyalty through lasting relationships (Latrach, 2023; Shallabi et al., 2023; Awad & Mahmoud, 2024), and enhancing brand reputation alongside customer perceptions (Bharti & Kumar, 2020). Among the many tools enabled by e-marketing, social media has emerged as one of the most influential. Its ability to connect with both broad, generalized audiences and highly specific target segments gives it unparalleled reach and flexibility (Alaverdian & Romanenko, 2020; Mohamed, 2020; Yerpude, 2020). Social media platforms enable organizations to engage directly with consumers in real time, responding to feedback, addressing concerns, and strengthening trust. This capacity to drive engagement, build brand awareness, and contribute to organizational success has been well-established in recent studies (Ali & Al-Sammaraee, 2023; Lavanya & Radhikamani, 2021). Furthermore, social media's dynamic nature supports continuous interaction, facilitating the dissemination of information and the creation of communities that nurture customer loyalty and trust (Purwanto, 2022; Calsum et al., 2023; Yu et al., 2015).

The application of Customer Knowledge Management (CKM) has become increasingly significant in the modern data-driven environment. In this context, organizations are focusing on understanding customer preferences, behaviors, and expectations to create personalized experiences and foster deeper, longer-lasting relationships (Balducci & Marinova, 2018; D'Annunzio & Russo, 2023; Alyasari & Genaibi, 2023; Henderson, 2020). Social media platforms, with their vast troves of user-generated content, provide unparalleled opportunities for gathering customer insights. These platforms enable businesses to collect, analyze, and act on customer data to optimize engagement and deliver tailored experiences. The integration of artificial intelligence (AI) into social media marketing has further enhanced CKM capabilities. AI systems can process extensive datasets generated from social media interactions, identify meaningful patterns and trends, and produce actionable insights that inform and refine marketing strategies (Rollins et al., 2011; Sedighi et al., 2012; Seranmadevia & Kumara, 2019). By leveraging AI, companies can automate key aspects of customer interaction and improve their ability to meet individual needs with precision (Bag et al., 2021; Nguyen & Sidorova, 2018; Zhang & Yue, 2020; Awad, 2024).

Nevertheless, the integration of AI into CKM demands stringent oversight to ensure its ethical application. Transparency, accountability, and fairness are critical factors, especially when handling sensitive customer information (Sestino et al., 2020). Paschen et al. (2019) highlighted the ethical implications of AI in B2B marketing, emphasizing the need to maintain customer trust by ensuring the responsible use of AI in generating market knowledge. The sustainability of CKM initiatives hinges on the responsible and ethical application of AI, as this directly influences customer perceptions and loyalty. Despite the advantages of social media marketing, the banking sector faces unique challenges when it comes to balancing customer engagement with strict data confidentiality requirements. Banks must implement robust security measures, establish comprehensive governance protocols, and maintain transparent communication with their customers to navigate the complexities of data protection (Mansour et al., 2017). As digi-
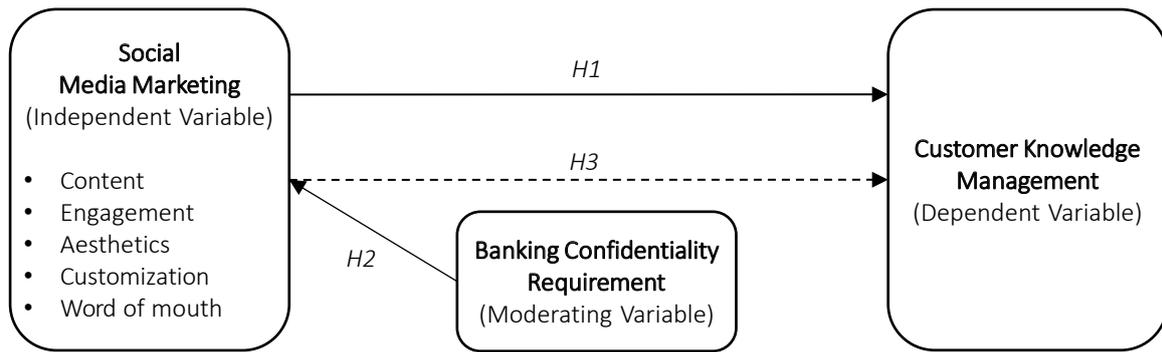
Figure 1. Research model

tal platforms become central to operations, ensuring the security of customer information is more critical than ever. Purtova (2011) emphasized the need for enhanced privacy protections in the digital age, particularly in cloud computing and other emerging technologies.

In the UAE, the banking sector operates within strict confidentiality laws. Federal Law No. 14/2018 mandates that all customer data remain confidential, even after the termination of the banking relationship. Exceptions to this rule are permitted only under specific circumstances, such as legal disputes, anti-money laundering investigations, or compliance with international agreements (Mansour et al., 2017; Regulation of Financial Institutions and Activities by the UAE Central Bank, 2023). The aggregation and use of customer data for targeted marketing efforts further complicate the confidentiality landscape, requiring banks to establish rigorous cybersecurity measures and conduct regular evaluations of their data protection practices (Purtova, 2011; Mansour et al., 2017; Augasthega et al., 2024). Emerging technologies such as the Internet of Everything (IoE) and smart devices add new dimensions to the challenges faced by banks in managing CKM. These technologies blur the lines between data collection, storage, and usage, creating opportunities for enhanced customer engagement but also introducing new risks (Dijkman et al., 2015; Langley et al., 2021). Addressing these complexities requires a comprehensive understanding of the interplay between technology, governance, and customer trust.

This review highlights the importance of SMM in CKM and identifies the need to address confiden-

tiality as a moderating factor in the UAE's banking sector. This study aims to examine the impact of social media marketing (SMM) dimensions on customer knowledge management (CKM) in UAE public banks, focusing on the moderating role of banking confidentiality. Drawing upon prior research and an extensive literature review, a conceptual framework has been developed to represent the relationships among the study's key variables, as depicted in (Figure 1):

Drawing on the conceptual framework and its elements, the subsequent hypotheses have been formulated:

H1: *A significant positive correlation exists between various aspects of social media marketing – including content, engagement, aesthetics, customization, and word-of-mouth – and the efficiency of customer knowledge management in public banks in the UAE.*

H2: *The successful application of social media marketing strategies in UAE public banks is notably impacted by compliance with banking confidentiality standards.*

H3: *Banking confidentiality requirements significantly enhance the relationship between social media marketing practices and the effectiveness of customer knowledge management within UAE public banks.*

2. METHODS

This study adopts a descriptive and quantitative correlational approach to investigate the influence

of social media marketing (SMM) on customer knowledge management (CKM) in the context of public banks in the United Arab Emirates (UAE). The study examines how the dimensions of SMM – content, engagement, customization, aesthetics, and word-of-mouth – affect CKM effectiveness while also evaluating the moderating role of banking confidentiality requirements. To achieve this, the research was conducted with customers from three leading public banks in the UAE: First Abu Dhabi Bank, Emirates NBD, and Abu Dhabi Commercial Bank. These banks were selected due to their substantial market presence, advanced social media marketing strategies, and their role as prominent representatives of the public banking sector in the UAE.

The survey was specifically designed to explore customers' interactions with social media platforms and their exposure to marketing campaigns by the selected banks. It aimed to assess the extent to which customers engage with these campaigns, their responsiveness to them, and the factors influencing their trust and sense of security when interacting with the banks through digital platforms. The questionnaire also delved into the type of information banks request from customers during social media interactions, whether customers willingly provide this information, and the degree to which legal protections and confidentiality measures influence their sense of safety.

Participants for the study were chosen using a convenience sampling method, enabling practical access to a diverse set of customers actively engaged with the selected banks. A total of 300 customers were approached, and 283 valid responses were collected, achieving a high response rate of 94.3%. The participants represented a wide demographic range, as shown in the profile of respondents. Of the 283 respondents, 71.7% were male (203 individuals), and 28.2% were female (80 individuals). The largest age group consisted of individuals aged 35 to less than 45 years (36%), followed by those aged 25 to less than 35 years (30%), while the smallest representation came from those aged 55 years and above, accounting for 8.1%. Additionally, the respondents were distributed across the three selected banks, as shown in Table 1.

Table 1. Demographic profile and distribution of respondents across banks

Variable	Frequency	Percentage (%)
Gender		
Female	80	28.2
Male	203	71.7
Total	283	100.0
Age		
Less than 25 years old	12	4.2
25 to less than 35	85	30.0
35 to less than 45	102	36.0
45 to less than 55	61	21.5
55 years old and above	23	8.1
Bank		
First Abu Dhabi Bank	110	38.9
Emirates NBD	92	32.5
Abu Dhabi Commercial Bank	81	28.6
Total	283	100.0

A structured questionnaire was used as the primary data collection instrument. The questionnaire consisted of three main sections. The first section gathered demographic information, including gender, age, education, and occupation, to define the sample. The second section focused on SMM dimensions, assessing customers' interaction with social media campaigns and the perceived effectiveness of strategies such as content quality, engagement, customization, aesthetics, and word-of-mouth. The third section evaluated CKM effectiveness by examining customer satisfaction, service personalization, and the overall quality of relationship management. Additionally, the survey inquired about customers' perceptions of security when sharing personal data, their awareness of banking confidentiality regulations, and whether these factors influenced their willingness to engage with banks digitally.

Responses were measured using a five-point Likert scale to gauge participants' levels of agreement with statements regarding their exposure to SMM campaigns, their response behavior, and their perceptions of security and confidentiality.

Data analysis was conducted using SPSS statistical software. Descriptive statistics were applied to summarize demographic data and survey responses. Correlation analysis was employed to determine the relationships between SMM dimensions and CKM effectiveness. Furthermore, regression analyses, including simple linear regression and stepwise mul-

tiple regression, were performed to predict CKM effectiveness based on SMM dimensions. Moderated regression analysis was used to examine the role of banking confidentiality requirements in influencing the relationship between SMM and CKM.

The selection of these specific banks and the focus on their customers provide an in-depth understanding of how public banks in the UAE utilize social media to enhance CKM while maintaining stringent confidentiality standards. By exploring customers' experiences with social media marketing campaigns, their responses to banks' data requests, and the factors influencing their trust in digital interactions, this study offers actionable insights into optimizing SMM strategies within the regulatory and cultural context of the UAE banking sector. This approach ensures the relevance and applicability of the findings, highlighting the interplay between advanced marketing techniques and the critical importance of data security and legal protections.

3. RESULTS

The hypothesis testing was performed with a statistical significance level set at $p < 0.01$. The research instrument's reliability was assessed using Cronbach's alpha coefficient, resulting in a total score of 0.818, indicating a strong level of internal consistency. The reliability coefficients for individual dimensions ranged from 0.705 to 0.902, demonstrating the strength of the measurement scales used. Comprehensive outcomes are outlined in Table 2.

Testing H1: A significant positive correlation exists between various aspects of social media marketing – including content, engagement, aesthetics, customization, and word-of-mouth – and the efficiency of customer knowledge management in public banks in the UAE.

A straightforward linear regression analysis was conducted to evaluate this relationship, as outlined in Table 3.

The regression analysis shows a clear and meaningful positive relationship ($p = 0.001$) between social media marketing practices and CKM. A correlation coefficient (R) of 0.812 signifies a strong relationship, while the coefficient of determination (R^2) reveals that social media marketing accounts for 65% of the variance in CKM outcomes. These results strongly support the validity of *H1*.

To delve deeper into the association between various social media dimensions – such as content, engagement, aesthetics, customization, and word-of-mouth – and their impact on customer knowledge management (CKM) in UAE public banks, a stepwise multiple regression analysis was performed. Table 4 provides a summary of the findings.

The findings in Table 4 demonstrate a significant positive association ($p < 0.01$) between social media practices and CKM, with a correlation coefficient (R) of 0.79, indicating a strong connection. Furthermore, the coefficient of determination (R^2)

Table 2. Trustworthiness and cohesion metrics for research variables

Study Dimensions	N Items	Reliability Coefficient	Validity Coefficient
Social Media (Independent Variable)			
Content	4	0.775	0.880
Engagement	4	0.705	0.839
Aesthetics	4	0.800	0.894
Customization	4	0.902	0.949
Word-of-mouth	4	0.890	0.943
Total Social Media Dimensions	20	0.814	0.902
Banking Confidentiality Requirements (Moderator)	8	0.870	0.932
Customer Knowledge Management (Dependent Variable)			
Customer Knowledge Management	10	0.770	0.877
Aggregate Dimensions (Independent, Moderating, Dependent)	38	0.818	0.903

Table 3. Findings of the simple linear regression analysis

Correlation Coefficient (R)	Coefficient of Determination (R²)	t-value	Significance Level
0.812	0.659	19.770	0.001

Table 4. Relationship between social media dimensions and CKM

No.	Dimensions of Social Media	Correlation Coefficient (R)	Coefficient of Determination (R²)
1	Content	0.770	0.592
2	Engagement	0.675	0.456
3	Aesthetics	0.807	0.651
4	Customization	0.875	0.766
5	Word-of-mouth	0.835	0.697
-	Aggregate Dimensions	0.792	0.627
-	F-test Value	**17.403**	

of 0.62 indicates that social media dimensions together account for 62% of the variation in CKM outcomes. The findings confirm the strength of H1, emphasizing that social media usage greatly improves the effectiveness of CKM in public banks.

Testing H2: The successful application of social media marketing strategies in UAE public banks is notably impacted by compliance with banking confidentiality standards.

A simple linear regression analysis was conducted to investigate how banking confidentiality requirements influence social media marketing practices in UAE public banks. Table 5 presents the findings of this analysis.

The findings shown in Table 5 demonstrate a statistically significant positive relationship (p = 0.000) between banking confidentiality requirements and social media marketing efforts. A correlation coefficient (R) of 0.72 indicates a moderate relationship, and a coefficient of determination (R²) of 0.52 shows that banking confidentiality requirements explain 48% of the variation in social media marketing activities. These outcomes affirm the hypothesis that adherence to banking confidentiality significantly enhances the implementation of social media marketing strategies in public banks, thereby supporting *H2*.

Testing H3: Banking confidentiality requirements significantly enhance the relationship between social media marketing practices and the effectiveness of customer knowledge management within UAE public banks.

A moderated regression analysis was conducted to explore this moderating role. The outcomes are outlined in Table 6.

As shown in Table 6, adding the interaction term (SMM * Confidentiality) in Model 2 increased the R² by 6.5% (ΔR² = 0.065), confirming the moderating effect of banking confidentiality. The significant interaction coefficient (β = 0.25, p < 0.01) indicates that the relationship between SMM and CKM becomes stronger when banks maintain high levels of confidentiality. These findings support *H3*.

The findings suggest that UAE public banks must focus on personalization and customer advocacy through social media to maximize CKM effectiveness. Customization emerged as the strongest predictor, indicating that tailored services significantly enhance knowledge management efforts. However, banks must complement these efforts with robust confidentiality practices to build and maintain trust.

The moderating effect of confidentiality confirms that customers are more likely to engage with

Table 5. Simple linear regression results for banking confidentiality and social media marketing

Correlation Coefficient (R)	Coefficient of Determination (R²)	t-value	Significance Level
0.725	0.525	15.580	0.000

Table 6. Moderated regression analysis

Model	R²	ΔR²	β (SMM)	β (Confidentiality)	β (SMM * Confidentiality)	p-value
Model 1: Without Interaction	0.659	–	0.75**	0.45**	–	< 0.01
Model 2: With Interaction	0.724	0.065	0.68**	0.38**	0.25**	< 0.01

Table 7. Summary of hypothesis testing results

Hypothesis	Description	R	R²	ΔR²	β	Significance
H1	Positive correlation between SMM dimensions and CKM effectiveness	0.812	0.659	–	–	p < 0.01
H2	Banking confidentiality enhances the application of SMM strategies	0.725	0.525	–	–	p < 0.01
H3	Banking confidentiality moderates the relationship between SMM and CKM effectiveness	0.724	0.659	0.065	0.25	p < 0.01

banks on social media when they feel their data is secure. This implies that banks should adopt a balanced strategy – leveraging social media while ensuring compliance with data privacy regulations – to foster deeper customer engagement and better knowledge management outcomes.

To provide a concise overview of the statistical findings from the hypothesis testing, a summary table (Table 7) has been created. This table outlines the key outcomes for each hypothesis, including regression results and statistical significance. It serves as a clear and accessible reference for readers.

The findings summarized in Table 7 provide robust support for the study's hypotheses. Hypothesis *H1* confirms a strong positive correlation between SMM practices and CKM effectiveness, with SMM dimensions accounting for 65.9% of the variance in CKM outcomes. Hypothesis *H2* demonstrates that compliance with banking confidentiality significantly improves the implementation of SMM strategies, accounting for 52.5% of the variance. Finally, Hypothesis *H3* highlights the moderating role of banking confidentiality, with the interaction effect increasing the explained variance in CKM by 6.5%. These results collectively emphasize the importance of integrating social media marketing with confidentiality measures to optimize CKM in the UAE's public banking sector.

Table 7 illustrates the statistical evidence supporting the hypotheses. The findings underline the necessity for public banks to balance their use of social media marketing with robust confidentiality policies to enhance CKM and build customer trust.

4. DISCUSSION

This study provides critical insights into how social media marketing (SMM) influences customer knowledge management (CKM) with-

in UAE public banks, while underscoring the role of banking confidentiality as a moderating factor. With its diverse components – such as customization, content quality, and word-of-mouth – SMM significantly contributes to enhancing CKM by promoting customer engagement and delivering tailored experiences. The analysis revealed that SMM accounts for 65.9% of the variability in CKM outcomes (R^2 = 0.659). Among the dimensions explored, customization emerged as the most impactful (R^2 = 0.766), followed by word-of-mouth (R^2 = 0.697) and aesthetics (R^2 = 0.651). These results highlight the growing necessity for personalized customer services and advocacy in improving CKM within the public banking sector. Furthermore, the study underscores the importance of trust, demonstrating that banking confidentiality strengthens the connection between SMM and CKM, with robust privacy measures enhancing the benefits derived from social media engagement.

The alignment of these findings with previous research underscores the growing significance of digital marketing and customer engagement in the financial services industry. Latrach (2023) demonstrated the importance of social media in building strong customer relationships, and Nashma and Abdul Qadir (2022) emphasized that e-marketing contributes to competitive advantage. These parallels suggest that effective social media strategies not only enhance customer engagement but also provide competitive leverage in a highly regulated industry such as banking. However, this study extends the literature by focusing on the delicate trade-off between customer engagement and data confidentiality, a critical issue in public banking contexts. Prior studies, such as Purtova (2011), focused primarily on the role of privacy as a legal obligation, whereas our findings reveal that privacy also serves as an enabler of customer engagement by

building trust. This distinction highlights the need for a strategic balance between leveraging social media to improve CKM and ensuring compliance with confidentiality standards to sustain customer trust.

The effectiveness of social media marketing in enhancing CKM stems from multiple factors. Customization plays a pivotal role, as customers increasingly seek personalized banking solutions tailored to their specific needs and preferences. Financial institutions that successfully adapt their offerings are better positioned to cultivate long-term relationships with customers, thereby fostering deeper knowledge exchanges. Word-of-mouth has also proven to be a vital element, as it reflects the power of customer advocacy in shaping perceptions and encouraging active participation. Furthermore, aesthetics significantly influences CKM effectiveness, emphasizing the importance of visually appealing and well-designed content that aligns with customer preferences. These insights suggest that public banks in the UAE should focus on integrating personalization, advocacy, and aesthetic elements into their social media strategies to enhance CKM and achieve greater customer satisfaction.

This study emphasizes the essential importance of confidentiality in maximizing the effectiveness of social media marketing. Customers are more inclined to interact with banks when they trust that their data is securely protected. The moderating role of confidentiality aligns with prior research, such as Paschen et al. (2019), which underscores the importance of trust in building stronger customer relationships in digital environments. This study further demonstrates that banking confidentiality not only safeguards sensitive information but also amplifies the effectiveness of social media engagement in driving CKM. These findings highlight the value of compliance with privacy regulations as a strategic advantage, fostering increased customer involvement and knowledge-sharing activities.

The implementation of social media strategies in the banking industry presents several challenges. Adhering to regulatory confidentiality requirements can limit the breadth of social media campaigns and constrain certain CKM initiatives. Public banks must carefully navigate the intricate landscape of privacy laws to ensure that their strategies remain effective and compliant with legal standards. Moreover, cultural nuances specific to the UAE may shape customer interactions on social media, potentially restricting the applicability of the findings to other regions. These challenges emphasize the need for public banks to continuously refine their marketing approaches to meet evolving customer needs and adhere to regulatory requirements.

CONCLUSION

This study aims to examine the impact of social media marketing (SMM) dimensions on customer knowledge management (CKM) in UAE public banks, with a focus on the moderating role of banking confidentiality.

The results confirm that SMM significantly improves CKM, with customization identified as the most influential factor. Banks that prioritize personalized interactions and customer advocacy through social media experience better knowledge management outcomes. Additionally, the study demonstrates that confidentiality amplifies the positive effect of SMM on CKM, highlighting that data privacy is not just a compliance requirement but also a critical enabler of customer engagement. Considering these findings, it is evident that UAE public banks should embrace a balanced strategy that integrates social media to strengthen customer relationships while maintaining stringent confidentiality measures. Trust and data privacy are critical components of personalized marketing strategies, which are essential for maximizing CKM effectiveness. By achieving this balance, banks can improve customer satisfaction, foster deeper engagement, and drive sustainable growth in a progressively digital landscape.

AUTHORS CONTRIBUTIONS

Conceptualization: Abdelrehim Awad, Ahmed Moustafa Aldabousi, Seham Albatal.
Data curation: Abdelrehim Awad, Ahmed Moustafa Aldabousi, Seham Albatal.
Formal analysis: Abdelrehim Awad.
Funding acquisition: Abdelrehim Awad.
Investigation: Abdelrehim Awad
Methodology: Abdelrehim Awad.
Project administration: Abdelrehim Awad.
Resources: Abdelrehim Awad.
Writing – original draft: Abdelrehim Awad, Ahmed Moustafa Aldabousi, Seham Albatal.
Writing – reviewing & editing: Abdelrehim Awad, Ahmed Moustafa Aldabousi, Seham Albatal.

ACKNOWLEDGEMENTS

REFERENCES

1. Alaverdian, L., & Romanenko, O. (2020). Modern marketing tools and internet technologies in Ukrainian business in the formation of marketing strategies. *Marketing and Digital Technologies, 4*(4), 93-102. https://doi.org/10.15276/mdt.4.4.2020.7

2. Ali, H. H. H., & Al-Sammaraee, F. A. (2023). Employing digital marketing through communication means promoting commercial products. *Al-Akademy Journal, 109,* 377-396. https://doi.org/10.35560/jcofarts1135

3. Alyasari, R., & Genaibi, T. (2023). The impact consumer culture on sales: Analytical study from the point of view of customers in Hilla City Center. *Journal of University of Babylon for Pure and Applied Sciences, 31,* 237-252. https://doi.org/10.29196/jubpas.v31i2.4681

4. Augasthega, R., Akshatha, S., & Sabu, J. M. (2024). *CSRF: Web Security Shield.* SSRN. Retrieved from http://dx.doi.org/10.2139/ssrn.4782339

5. Awad, A. (2024). Artificial intelligence and marketing innovation: The mediating role of organizational culture. *Innovative Marketing, 20*(3), 170-181. http://dx.doi.org/10.21511/im.20(3).2024.14

6. Awad, A., Mahmoud, M. (2024). Impact of electronic customer relationship management on competitive advantage: Mediating role of customer satisfaction in EgyptAir. *Problems and Perspectives in Management, 22*(3), 276-286. https://doi.org/10.21511/ppm.22(3).2024.22

7. Bag, S., Gupta, S., Kumar, A., & Sivarajah, U. (2021). An integrated artificial intelligence framework for knowledge creation and B2B marketing rational decision making for improving firm performance. *Industrial Marketing Management, 92,* 178-189. https://doi.org/10.1016/j.indmarman.2020.12.001

8. Bharti, P. K., & Kumar, A. (2020). Traditional vs. digital marketing: A comparative study. *ZENITH International Journal of Multidisciplinary Research, 10*(12), 16-26. https://journals.ijramt.com/index.php/ijramt/article/view/1830

9. Calsum, U., Brasit, N., & Amar, M. (2023). Among marketing mix and customer satisfaction: Does brand image have intervening effect? *Asian Journal of Education and Social Studies, 48,* 114-122. https://doi.org/10.9734/ajess/2023/v48i21056

10. Central Bank of the UAE. (2023). *UAE Central Banks Regulations of Financial Institutions and Activities.* Retrieved from https://rulebook.centralbank.ae/en/rulebook/all-licensed-financial-institutions

11. D'Annunzio, A., & Russo, A. (2023). *Intermediaries in the online advertising market* (CESifo Working Paper No. 9199). https://doi.org/10.2139/ssrn.3892623

12. Dijkman, R. M., Sprenkels, B., Peeters, T., & Janssen, A. (2015). Business models for the Internet of Things. *International Journal of Information Management, 35*(6), 672-678. https://doi.org/10.1016/j.ijinfomgt.2015.07.008

13. Henderson, G. (2020). The importance of social media marketing. *Journal of Digital Marketing, 20*(1), 320-365. Retrieved from https://www.casablancaconnect.com/post/the-importance-of-social-media-marketing

14. Ho, C., Liu, Y., & Chen, M. (2022). Factors influencing watching and purchase intentions on live streaming platforms: From a 7Ps marketing mix perspective. *Information, 13*(5), 239. https://doi.org/10.3390/info13050239

15. Langley, D. J., van Doorn, J., Ng, I. C. L., Stieglitz, S., Lazovik, A., & Boonstra, A. (2021). The internet of everything: Smart things and their impact on business models. *Journal of Business Research, 122,*

853-863. https://doi.org/10.1016/j.jbusres.2019.12.035

16. Latrach, S. (2023). The use of digital marketing tools and its impact on building customer relationships: A case study of a sample of Mobilis mobile phone customers in Skikda. *Journal of Human Sciences, 10*(1), 890-914. Retrieved from https://search.mandumah.com/Record/1394463/Details

17. Lavanya, A., & Radhikamani, M. (2021). A study on digital marketing and its impacts. *International Journal of Creative Research Thoughts (IJCRT), 9*(5), 677-684. Retrieved from https://ijcrt.org/papers/IJCRT2105810.pdf

18. Mansour, E., AL Salamat, W., & Masadeh, W. (2017). The Impact of Reliability Elements on Performance Indicators of Jordanian Commercial Banks. *The International Journal of Business and Finance Research*, 11(1), 87-107. Retrieved from https://ssrn.com/abstract=3025792

19. Mohamed, M. A. F. A. (2020). The impact of digital marketing on customer perceived value: An applied study on EgyptAir customers. *Scientific Journal of Commerce and Finance, 40*(1), 53-112. http://search.mandumah.com/Record/1106568

20. Nashma, M. A. M., & Abdul Qadir, S. B. (2022). The role of electronic marketing in achieving competitive advantage in Saudi Telecom Companies: An applied study on Saudi Telecom Company (STC). *International Journal of Humanities and Social Sciences, 31*, 113-129. https://doi.org/10.33193/IJoHSS.31.2022.381

21. Nguyen, Q. N., & Sidorova, A. (2018). Understanding user interactions with a chatbot: A self-determination theory approach. *Human-Computer Interaction (SIGHCI), Americas Conference on Information Systems.* University of North Texas. Retrieved from https://www.semanticscholar.org/paper/Understanding-user-interactions-with-a-chatbot%3A-a-Nguyen-Sidorova/cd1193c8c1a3feb4bad42aee91d50690217cc01b

22. Paschen, J., Kietzmann, J., & Kietzmann, T. C. (2019). Artificial intelligence (AI) and its implications for market knowledge in B2B marketing. *Journal of Business & Industrial Marketing, 34*(7), 1410-1419. https://doi.org/10.1108/JBIM-10-2018-0295

23. Purtova, N. (2011). Property in personal data: Second life of an old idea in the age of cloud computing, chain informatisation, and ambient intelligence. *Computers, Privacy and Data Protection: An Element of Choice* (pp. 39-64). Dordrecht: Springer. https://doi.org/10.1007/978-94-007-0641-5_3

24. Purwanto, A. (2022). How the role of digital marketing and brand image on food product purchase decisions? An empirical study on Indonesian SMEs in the digital era. *Journal of Industrial Engineering & Management Research, 3*(6), 34-41. https://doi.org/10.29099/ijair.v6i1.298

25. Rollins, M., Pekkarinen, S., & Mehtälä, M. (2011). Inter-firm customer knowledge sharing in logistics services: An empirical study. *International Journal of Physical Distribution & Logistics Management, 41*(10), 956-971. https://doi.org/10.1108/09600031111185239

26. Sedighi, M. M., Mokfi, T., & Golrizgashti, S. (2012). Proposing a customer knowledge management model for customer value augmentation: A home appliances case study. *Journal of Database Marketing & Customer Strategy Management, 19*(4), 321-347. Retrieved from https://archive.org/details/0443pdf863

27. Seranmadevia, R., & Kumara, A. S. (2019). Experiencing the AI emergence in Indian retail: Early adopters approach. *Management Science Letters, 9,* 33-42. https://doi.org/10.5267/j.msl.2018.11.002

28. Sestino, A., Prete, M. I., Piper, L., & Guido, G. (2020). Internet of things and big data as enablers for business digitalization strategies. *Technovation, 98.* https://doi.org/10.1016/j.technovation.2020.102173

29. Shallabi, M. M., Abdel Tawab, S., & Mohamed, A. A. A. (2023). The role of digital marketing in making purchasing decisions in the real estate sector: An applied study on real estate companies in Greater Cairo. *Scientific Journal of Commercial Research and Studies, 37*(1), 1019-1059. Retrieved from https://sjrbs.journals.ekb.eg/article_289456.html

30. Sofiane, O. (2022). Inbound marketing: The new generation in the world of digital marketing: From attraction to satisfaction. *Journal of Economic Sciences, Management and Commercial Sciences, 15*(1), 58-73. Retrieved from https://search.mandumah.com/Record/1199753

31. Yerpude, S. (2020). Real-time data analytics: A contemporary approach toward customer relationship management. In Kumari, S., Tripathy, K. K., & Kumbhar, V. (pp. 103-116). Emerald Publishing Limited. https://doi.org/10.1108/978-1-80043-876-720211007

32. Yu, J., Subramanian, N., Ning, K., & Edwards, D. (2015). Product delivery service provider selection and customer satisfaction in the era of internet of things: A Chinese e-retailers' perspective. *International Journal of Production Economics, 159,* 104-116. https://doi.org/10.1016/j.ijpe.2014.09.031

33. Zhang, X., & Yue, W. T. (2020). A 2020 perspective on "Transformative value of the Internet of things and pricing decisions. *Electronic Commerce Research and Applications, 41,* 1-3. https://doi.org/10.1016/j.elerap.2020.100967