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Effects of digital marketing service components on banks performance with mediating role of customer intention the case of selected Commercial Banks in Moyale and Yabello Town, Ethiopia

Achalu Teshome[1]*, Berhanu Borj[1] and Mohammed Arshad[2]

[1]Department of Marketing Management, College of Business and Economics, Bule Hora University, Ethiopia

[2]Department of Marketing Management, College of Business and Economics, Hawassa University, Ethiopia

*Corresponding author email: achalu2014@gmail.com; ORCID: https://orcid.org/0009-0007-9241-2334

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Abstract

Despite the increasing competition for digital marketing services in the banking sector, many banks continue to struggle with inefficiencies and a lack of adoption of modern technologies. Research on the impact of integrated digital marketing services on Ethiopian banks' performance is still lacking. Thus, the objective of the study was to gain better knowledge of how the key components of digital marketing services impact bank performance, particularly in Ethiopia's banking sector. Responses were gathered by selecting 400 employees and customers of specific commercial banks in Borena, southern Ethiopia, and asking them to fill out both closed-ended and open-ended questionnaires. A pragmatic research philosophy, a mixed-methods technique, a cross-sectional survey conducted at a specific moment in time, and sequential explanatory designs were all employed to achieve the study's objectives. The data was analyzed using structural equation modelling (SEM) with AMOS and SPSS version 26. Demographic variables were analyzed using descriptive statistics. The findings showed that internet banking, mobile banking, point-of-sale machines, and automated teller machines all significantly contribute to operational efficiency and customer engagement, which in turn fosters improved financial outcomes for banks. Moreover, a digital marketing service has a substantial and meaningful impact on both bank performance and customer intention. In order to improve bank performance, this study suggested that digital marketing services be taken into account when providing banking services. Additionally, rather than focusing on banks, it was suggested that future researchers look at how digital marketing affects other service organization organizations. In the banking sector, this study adds to the body of knowledge by concentrating on the mediating function of client intentions in the relationship between digital marketing and bank performance.

Keywords: Digital marketing components, client intention, performance of banks

Introduction

There is a significant access gap to financial services, as more than half of Africans are still unbanked despite technology advancements (World Development Report, 2016). Digital banking has become essential in the 21st century for improving service delivery and reaching customers globally. In order to foster economic growth and financial inclusion, Ethiopia is now attempting to enhance its digital marketing systems in response to the country's expanding population and the demand for better banking services (Digital Financial Inclusion Series, 2016). Setting up effective digital banking systems is challenging due to inadequate infrastructure, particularly in Ethiopia (Ethiopia Digital Strategy Plan, 2020).

The significance of integrated digital marketing services in enhancing bank performance in the contemporary digital era cannot be overstated. In developing countries like Ethiopia, where a strong banking industry is critical to the general health of the national economy, digital services are especially important for promoting economic progress (Taffere et al., 2022; Yaseen et al., 2019). The 2020 Digital Economy Report from Ethiopia shows that just nineteen percent of people use mobile banking and other digital services, despite the potential advantages. This underutilization raises the possibility that the banking sector is not fully able to meet customer needs with efficient digital solutions.

The partial implementation of digitization techniques has led to inefficiencies and subpar customer service in the financial services sector (Fetu, 2019; Dista, 2018). Most of the existing literature focuses on the connection between bank performance and digital marketing services (Gilmore et al., 2007; Barnes, 2003). To improve client relations and bank performance, Ethiopian banks are still realizing how important it is to integrate digital services (Abdulselam, 2019; Shahrokhi, 2017). Without carefully considering the customer's preferences, this is done. As a result, little is known about how customer intent affects the effectiveness of online banking services and banks' overall performance.

Expanding access to automated financial transactions is one of the fundamental goals of Ethiopia's 2020 digital strategy plan. However, a poorly thought-out integrated component of the digital marketing strategy hinders the achievement of these goals (Eden, 2021). Ethiopian banks must therefore understand the importance of how digital marketing services, customer intention, and bank performance interact in order to shift from traditional to digitally oriented banking operations (Patil et al., 2022).

According to Lee et al. (2020), despite the increasing competition for digital marketing services in the banking sector, many banks continue to struggle with inefficiencies and a lack of adoption of modern technologies. The advent of digital channels, including online services, e-banking, and ATMs, has changed how customers connect with businesses by enabling multi-channel service offerings (Alyahya et al., 2020). Notably, research on the impact of integrated digital marketing services on Ethiopian banks' performance is still lacking. This study aims to bridge this gap by examining how the integrated component of digital marketing services affects overall bank performance. With regard to Ethiopia's evolving banking landscape and the broader implications for digital marketing in developing countries, this study ultimately seeks to offer valuable insights. It addresses and offers useful information on digital marketing service components to assist Ethiopian banks in enhancing their performance with the mediation function of consumer intention.

This study examines how digital marketing services affect bank performance with the mediating role of customer intention in selected commercial banks in Borena, Southern Ethiopia. Its findings are intended to inform stakeholders, including academics and banking institutions, in order to support future research and improve policy implementation and practice.

Hypothesis development

The innovation of digital marketing and its contribution to the growth of bank performance

Compared to traditional marketing, which is profit-driven, product-centric, and short-term focused, digital marketing is more convenient and cost-effective, allowing customers to purchase online from homes. Unlike previous techniques that were geographically restricted and reliant on in-person encounters, the new marketing method is more worldwide accessible and promotes sales (Fute and Lyimo, 2019; Shannak, 2013). Pull marketing and in-depth market research to comprehend rivals are two components of the long-term, strategy-focused approach utilized by digital marketing services, which place a high priority on customer demands and satisfaction (Yemisrach, 2018).

As stated by Banu et al. (2019), the banking sector is driven to incorporate digital marketing services by the digitizing theory of innovation, which emphasizes enhancing client intentions toward digital platforms and banking performance. The emergence of the digital age, characterized by advancements in technical gadgets for communicating and sharing information, has brought about changes in communication, business, and consumer interaction (Szopik and Cheba, 2021; Fadzilah

and Yusoff, 2012). E-commerce uses digitization to boost operational success and efficiency. Essential services like e-banking, mobile banking and online transactions are made possible by it, and they improve customer satisfaction while streamlining operational efficiency (Yang et al., 2018; Ntiana Gjino, 2015). Banks must use innovation in today's dynamic business environment to improve service delivery and efficiently manage resources (Havryliuk, 2021; Ejigu, 2016).

Electronic marketing is an innovative force that greatly improves bank performance and growth by lowering operating expenses, quickening transactions, and offering round-the-clock banking services, claim (Okkonen et al., 2019; Haveman et al., 2018). According to Kumar (2019) and Bang and Roos (2014), by satisfying the demands of tech-savvy customers and reaching a larger audience than can be achieved through conventional marketing strategies, this shift increases banks' profit margins. Because it promotes loyalty and trust, effective client communication is crucial to banks' continued performance (Oksana et al., 2021; Zuo and Strauss, 2021). In this way, using virtual marketing tactics is not merely a recurring phenomenon; rather, it is a crucial part of the banking sector's ongoing innovation and advancement.

The relationship among integrated digital marketing services components (an independent variable), bank performance (a dependent variable), and consumer intention (a mediating variable) is explained within the suggested conceptual framework. The strategy looks at these relationships in order to demonstrate how mobile banking may improve customer engagement, which in turn can improve bank performance (Ajibade, 2018). It is necessary to comprehend these dynamics in order to develop strategies that leverage mobile technology to enhance customer satisfaction and improve financial results for banks.

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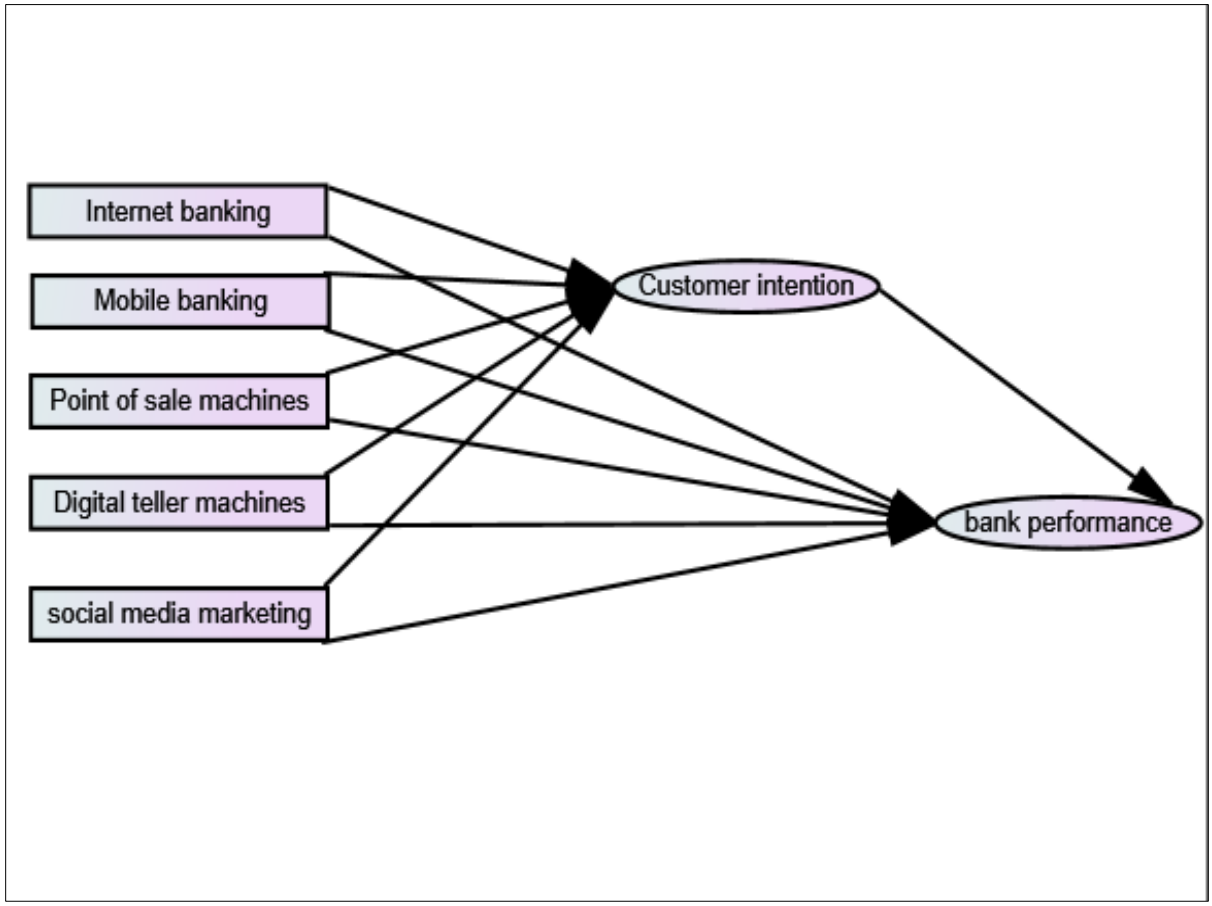

Figure 1. Conceptual Framework (for direct effect only)

Source: Amos output developed for this study, 2022

Social media marketing as integral components

The increasing adoption of social media marketing solutions, which have advantages over traditional marketing strategies, represents a dramatic shift in the way businesses engage with their clientele. Piñeiro-Otero (2016) points out that businesses can use social media to achieve speedier and more extensive brand awareness, while Baquero (2022) emphasizes the almost limitless marketing opportunities resulting from this shift. The increasing adoption of social media marketing solutions, which have advantages over traditional marketing strategies, represents a dramatic shift in the way businesses engage with their clientele. This viewpoint is further supported by recent research that demonstrates how successful social media tactics can increase revenue and customer loyalty (Choudhury et al., 2022; Kumar et al., 2021).

H1: The performance of banks has been greatly influenced by social media marketing solutions.

Internet banking services as integral components

Ikechukwu et al. (2020) have observed that internet banking has become more and more dependent on search engine optimization (SEO) to improve online visibility and increase traffic to banking websites. In order to provide 24/7 service availability that is not limited by conventional office hours, SEO marketers carefully study client search phrases and integrate them into digital content (FDR Ethiopia, 2025; Saleem and Siddik, 2021). There is an unmet requirement for digital adoption because many customers still choose traditional payment methods, such as paying debts in person, despite the growing acceptance of electronic banking (Ntiana Gjino, 2015). Increasing visibility and maintaining client satisfaction are critical functions of digital financial services as the internet market becomes more robust (Veleva and Tsvetanova, 2020; Wisdom, 2015). Banks' dynamic interactions with their customers throughout the service delivery process can lead to variations in perceived service quality, which can have a direct impact on customer satisfaction (Maduku et al., 2014; Dhandayuthapani, 2012). Additionally, banks can adapt new offers to meet evolving needs by recognizing the impact of digital innovation on the customer experience (Hawkins et al., 2019). In the context of modern banking, it is imperative to address the factors influencing the bank's success and customer preferences in greater detail.

H2: Banking performance has been significantly impacted by virtual marketing services.

Mobile Banking as integral components

Mobile banking has a significant impact on bank profitability and has emerged as a key element of digital marketing due to its ability to enhance customer satisfaction and engagement. Modern smartphone and tablet technologies have made it possible for businesses to offer more convenient and accessible financing choices that not only satisfy the needs of their clients (Nwachukwu, 2022; Alsamydai, 2019). Banks that successfully incorporate mobile banking into their digital marketing strategy can benefit from consumers' preference for mobile platforms for financial services, increasing customer loyalty and operational effectiveness. The idea that mobile banking services enhance performance measures, such as client acquisition and retention rates, is supported by research (Opara and Olajide, 2021; Alalwan et al., 2021). As a result, hypothesis H3 is confirmed, showing that mobile banking has a major impact on bank performance in a digital environment.

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H3: Mobile banking services has significantly influence bank performance.

Point of sale machine as integral components

Points of sale (POS) machines are crucial tools that enable in-person card transactions under the seller's supervision. In retail settings, they are crucial locations for payments. In order to successfully deploy new ICT systems, banks need to fulfil three essential requirements: the infrastructure needs to be able to sustain operations all year long (Ejigu, 2016; Marketing et al., 2015). With the use of advanced information systems, banks may now establish extensive computer networks that greatly accelerate the processing of enormous amounts of data and transactions. Additionally, to improve the effectiveness and dependability of these systems, the successful deployment of cutting-edge networking and communication technologies is essential (Nazifi et al., 2021). In the context of digital banking, these advancements speed up transactions while also enhancing the customer experience.

H4: A point-of-sale terminal service has significantly influence bank performance.

Automatic Teller machine as integral components

Instead of interacting with bank workers face-to-face, customers can conduct financial transactions through digital teller machines, which are computerized communication devices (Eden, 2021). Digital teller terminals now identify individuals using the unique identifying codes found on credit or debit cards. The permission request is processed by the system once the user enters their personal identification number (PIN). The terminals are mainly powered by operating systems like Windows or UNIX, but they have restricted features and software designed especially for banking (Eden, 2021; Dula, 2019; Yemsirach, 2018). The accessibility of banking services for customers is enhanced by the ongoing advancements in digital financial solutions.

H5: Digital teller machines have significantly affected banks' performance.

Methodology

Study area and sampling technique

Five selected Ethiopian banks located in the Borena zone—the Commercial Bank of Ethiopia, Awash Bank, Abyssinia Bank, Oromia Bank and the Cooperative Bank of Oromia—are represented in the research population as key informants, staff members, and clients. Five banks were selected

purposely. A simple random sample process was then used to choose 400 participants from the chosen banks, consisting of 324 clients and 76 professionals. In order to guarantee representation across the different institutions and capture a wide range of viewpoints and experiences pertaining to digital marketing services in the banking industry, the stratified sampling technique was used.

Data collection methods

Both open-ended and Likert scale items were included in the questionnaire used to collect data from participants. The survey questionnaire was crafted with current banking concepts and circumstances in consideration. The Likert scale items were specifically chosen to measure participants' attitudes and perceptions of the selected banks, while the open-ended questions permitted more detailed, qualitative responses. The questionnaire's content validity was assessed by three measurement and evaluation experts to ensure that the questions were relevant, comprehensible, and consistent with the objectives of the study. A pilot study was carried out at each of the chosen banks. The pilot study provided feedback that allowed any necessary adjustments to be made before the primary data collection phase.

Data collectors contacted clients at convenient locations, like their place of employment, and distributed the questionnaires door-to-door as the main technique of gathering data. As a result, it sought to make things more approachable and to increase awareness of active engagement. The data collectors provided support when needed to make sure that customers could easily complete the questionnaires. A high percentage of respondents gave an objective response. The data gathered was verified to be accurate and reflective of the target audience through this painstaking process.

Methods of data analysis

The data analysis employed SPSS AMOS version 26 in addition to descriptive and inferential statistical approaches to ensure a comprehensive understanding of the replies. Descriptive statistics were used to analyze survey results and collect participant demographic information. These metrics enabled the identification of trends and patterns in the data gathering by providing a clear image of the data. The data was assessed using AMOS (Analysis of Moment Structures) version 26 in order to test the suggested models and investigate the correlations between the variables in more detail. With the use of AMOS, SEM made it possible to evaluate both direct and indirect correlations between the variable component of digital marketing services and bank performance, offering a strong framework

for assessing the information. Using these SPSS AMOS version 26 technologies was essential to deriving trustworthy, legitimate conclusions from the data.

Results and discussions

In line with the research questions, this section displays and evaluates the information gathered from the respondents. Brief discussions follow the presentation of the data and results.

Demographic variables

Thirty-one percent (31.3%) of respondents are females, and 68.7% of respondents are males. While showing the relative numbers of men and women who participated for each selected bank, 68% at Commercial Bank of Ethiopia, 69% at Oromia Bank, 69% at Cooperative Bank, 70% at Awash Bank, and 70% at Abyssinia Bank were men. The percentage of female respondents at Commercial Bank of Ethiopia is 32%; 30% at Awash Bank; 30% at Abyssinia Bank; 31% at Oromia Bank; and 33% at Cooperative Bank (Table 1). To ensure gender balance and give women's voices, the ratio of male to female compositions is maintained in accordance with the sample design.

The distribution of respondents for all particular banks is displayed by the education level: 12 and below (23.5%), certificate (5.25%), diploma (20.5%), B.A/B.S.C. (38.25%), M.A/M.S.C. (12.25%), and PhD (0.25%). The distribution of respondents by how long they have been with chosen banks is displayed by years 1-3 (27%), 4-6 (29%), 7-10 (18%), 11-20 (16%), 21-30 (5%), and above 30 years (5%) (Table 1).

Table 1. The demographic variables of the respondents

Gender	CBE(Yabello)		AB (Yabello)		AW(Yabello)		ORO(Moyale)		COOP(Moyale)		Total
	Freq.	Per.	Freq.	Per.	Freq.	Per.	Freq.	Per.	Freq.	Per.	
Male	99	68%	31	70%	57	70%	47	69%	41	67%	275
Female	47	32%	13	30%	24	30%	21	31%	20	33%	125
Total	146	100%	44	100%	81	100%	68	100%	61	100%	400
Level of education											
12 and below	35	23.3%	9	21%	20	25%	16	23%	14	23%	94
Certificate	7	5%	3	7%	4	5%	4	6%	3	5%	21
Diploma	35	24%	8	18%	15	19%	13	19%	11	18%	82
B.A/B.S.C	53	37%	19	43%	32	39%	25	37%	24	39%	153
M.A/M.S.C	15	10%	5	11%	10	12	10	15%	9	15	49
PhD	1	0.7	-	-	-	-	-	-	-	-	1
Total	146	100%	44	100%	81	100%	68	100%	61	100%	400
Banking experiences											
1-3 years	37	25%	14	31%	21	26%	17	25%	19	31%	108
4-6 year	45	31%	12	27%	23	28%	20	30%	17	28%	117
7-10 years	28	19%	7	16%	16	20%	12	18%	10	16%	73
11-20 years	22	15%	7	16%	13	16%	10	15%	9	15%	61
21-30 years	7	5%	2	5%	4	5%	5	7%	3	5%	21
Above 30 years	7	5%	2	5%	4	5%	4	4%	3	5%	20

Measure of reliability and validity

Using Cronbach's alpha and composite reliability tests, which are common indicators of internal consistency, we assessed the constructs' dependability in this work (Hair et al., 2017). When the Cronbach's alpha coefficient is greater than 0.70, it has been deemed appropriate, and the composite dependability (CR) score should additionally be beyond this cutoff (Oluwatayo, 2012). The results showed that the constructions' Cronbach's alpha coefficients were above the acceptable range, ranging from 0.709 to 0.916. All of the constructs have good internal consistency, as shown by the composite reliability ratings, which varied from 0.708 to 0.934.

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We used both discriminant and convergent validity to assess the validity of the ideas. Convergent validity was evaluated by inter-item correlation and confirmatory factor analysis. According to the results, the correlation values ranged from 0.408 to 0.881. This raised questions about the uni-dimensionality of the items within the constructs because six values were below the acceptable correlation level, which is usually set above 0.50 (Byrne, 2013). The average variance extracted (AVE), which we computed to assess discriminant validity, exceeded the 0.5 minimum threshold and ranged from 0.611 to 0.722 (Byrne, 2013; Oluwatayo, 2012). This result confirms the validity of the notions and implies that the study scale is typically acceptable.

Overall, the Cronbach's alpha and composite reliability scores show that the results clearly show strong internal consistency across the dimensions tested in the study. It follows from this that the components of each construct are measuring the same fundamental idea. However, more research is necessary to address the convergent validity issues, especially when several item correlations are less than 0.50. By fixing these weak points, it would be able to improve the overall resilience of the constructs. The AVE's strong discriminant validity results support the validity of the scale by demonstrating that the constructs are separate but consistent. Overall, the results demonstrate a solid foundation for the study; even though some areas may require refinement in future research.

Table 2.1. Internal consistency analysis: digital marketing services

Digital marketing		Cronbach`s Test		CR	AVE	SQRT (AVE)
		Item total correlation	Alpha Value			
Digital marketing		Ibs-Mbs 17 Items	0.916	0.934	0.521	0.721
Internet banking services						
IBS	(IBS1)	0.435				
	(IBS3).	0.877				
	(IBS4).	0.561				
	(IBS5).	0.814	0.730	0.925	0.561	0.723
	(IBS6).	0.449				
Digital teller machines						
	(ATM9)	0.881				
	(ATM10).	0.782	0.754	0.727	0.573	0.756
	(ATM11).	0.430				
Point of sale machines						
	(PSM13)	0.827	0.709	0.708	0.577	0.759
	(PSM15)	0.408				
	(PSM17)	0.417				
Social media marketing						
	(SMM20)	0.652	0.719	0.768	0.578	0.760
	(SMM21)	0.803				
	(SMM24)	0.865				
Mobile marketing services						
	(MBS25)	0.433	0.719	0.714	0.503	0.709
	(MBS27)	0.813				
	(MBS29)	0.461				
	(MBS30)	0.821				

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Table 2.2. The Bartlett's test of sphericity and the Kaiser-Meyer-Olkin Measure (KMO)

KMO and Bartlett's test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.955
Bartlett's Test of Sphericity	Approx. Chi-Square	60345
	df	1035
	Sig.	0

The data in this investigation appear suitable for factor analysis, as shown by the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy of 0.955, which was higher than the recommended threshold of 0.60 (Sung et al., 2018). Furthermore, as indicated in Table 2.2, Bartlett's test of sphericity was significant (P = 0.000), indicating that the data are suitable for factor analysis. Additionally, every communality exceeded 0.60, which is the acceptable criterion. This suggests that the variables are adequately represented by the retrieved components (Byrne, 2013).

Confirmatory factor analysis and path analysis

SEM is a combination of confirmatory factor analysis (measurement model) and path analysis (structural model). SEM is used to test complex relationships simultaneously. As stated by Marsh and Alamer (2024), SEM is an advanced multivariate analysis approach that is used to evaluate complex research models that have many independent and dependent variables and their proposed relationships. Prior to using SEM, data screening and descriptive statistics are necessary. In order to ensure that the scale appropriately reflects the underlying constructs and correlates with the collected data, confirmatory factor analysis (CFA) is then used to assess the validity and reliability of the measurement model (Ghaleb et al., 2024).

After CFA, the analysis of multivariate assumptions must be investigated to support route analysis, which looks at specific hypotheses and draws findings. Path analysis illuminates the significance of the constructs in the theoretical framework by elucidating their relationships. This research developed and refined a structural model based on validated CFA measurements, allowing for a thorough examination of the theoretical foundations and relationships within the study.

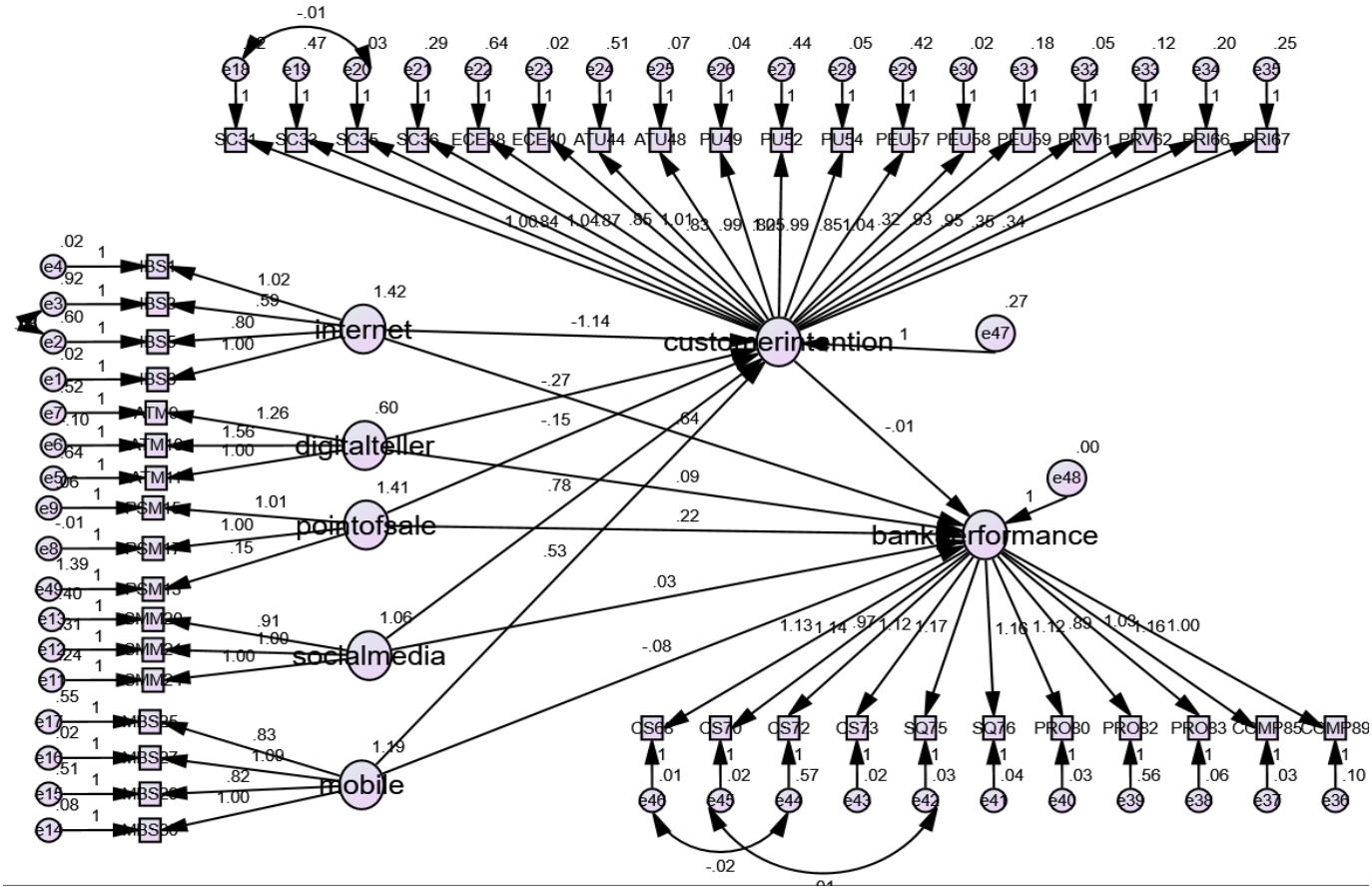

Figure 2. Measurement and structural model

Table 2.3. Model fit results (CFA)

No	The Fit indices	The Acceptable threshold	Result	The Model fit verification
1	CMIN/DF	≤ 3	1.077	Good fit
2	GFI	≥0.9	0.923	Good fit
3	NFI	≥ 0.9	0.945	Good fit
4	TLI	≥ 0.9	0.995	Good fit
5	CFI	≥ 0.9	0.996	Good fit
6	IFI	≥ 0.9	0.996	Good fit
7	RMSEA	≤ 0.08	0.016	Good fit

The model shows an excellent match across all assessed indices, according to the results of the confirmatory factor analysis. The suggested model is adequate in capturing the study's underlying constructs, as evidenced by the values for CMIN/DF (1.077), GFI (0.923), NFI (0.945), TLI (0.995),

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CFI (0.996), IFI (0.996), and RMSEA (0.016) all meeting or above the acceptable limits. These findings confirm the structural model's robustness and relevance for subsequent investigation.

Table 2.4. Model fit results

No	Symbol	The Acceptable threshold	Result	The Model fit verification
1	CMIN/DF	≤ 5	3.867	Good fit
2	GFI	≥0.9	0.098	Good fit
3	NFI	≥ 0.9	1.000	Good fit
4	TLI	≥ 0.9	0.950	Good fit
5	CFI	≥ 0.9	0.957	Good fit
6	IFI	≥ 0.9	0.923	Good fit
7	RMSEA	≤ 0.08	0.0273	Good fit

A mixed evaluation of how well the structural model fits the data is given by the fit indices in the table. The above value of 3.867 indicates a satisfactory match because it is less than the permitted cutoff of 5. Sadly, the model's Goodness-of-Fit Index (GFI) score of 0.098 is significantly below the suggested limit of 0.9, indicating that it might have trouble explaining the data's volatility and covariance. The Tucker-Lewis Index (TLI, 0.095), the NFI (1.000), the CFI (0.129), and the RMSEA are all significantly below the 0.08 threshold that meets the permitted constraints.

Table 2.5. Research hypotheses

Hypotheses	Item	The Estimate loading	loading of P-value	Remark
H1: The Bank performance is significantly influenced by social media marketing services.	SMM-BP	.021	.122	Rejected
H2: The performance of banks is significantly influenced by virtual marketing services.	IMS-BP	.649	***	Accepted
H3: The performance of banks is significantly influenced by cell phone marketing services.	MBS-BP	0.91	***	Accepted
H4: Bank performance is significantly impacted by point-of-sale terminals.	POSM-BP	.222	***	Accepted
H5: The performance of banks is significantly impacted by automated teller machines.	DTM-BP	.108	***	Accepted

The empirical results from the study model testing allow for the following deductions regarding the ways in which various banking technology and electronic services impact bank performance

H1: The Bank performance is significantly influenced by social media marketing services.

Table 2.5 shows that the p-value of 0.122 is higher than the traditional significance level of 0.05, and the estimate loading of 0.021 is extremely low. This implies that there is no statistically significant relationship between social media marketing and bank performance. This result is consistent with that of Bakri and Kamal (2018), who noted that while social media may boost engagement, performance metrics are typically unaffected by it. This highlights the need for banks to balance social media marketing's inefficiencies with their overall performance outcomes.

H2: The performance of banks is significantly influenced by virtual marketing services.

Virtual marketing services have a significant, favorable, and substantial influence on bank performance, according to Table 2.5's high estimate loading of 0.649. The research by Abdullahi et al. (2015), which discovered that internet banking adoption greatly improves operational efficiency

and customer satisfaction within financial institutions, is consistent with this finding. Such data reaffirms how important online banking is to boosting the banking industry's performance.

H3: The performance of banks is significantly influenced by cell phone marketing services.

The findings in Table 2.5 show a substantial p-value together with a very strong estimate loading of 0.91 for mobile banking services. This suggests that mobile banking services are essential for improving bank operations. This finding is supported by research by Gonzalez et al. (2016), which demonstrates how mobile banking significantly improves bank client loyalty and financial performance. The significance of mobile banking as a major factor in financial sector success is highlighted by this data.

H4: Bank performance is significantly impacted by point-of-sale terminals.

A high a significance level and positive loading of 0.222 in table 4.5 indicate that POSM advance bank performance, which is corresponding to empirical studies by Rowles and Brown (2015), who highlighted that POS terminals enable smooth transactions, which improves banks' financial performance and service delivery. This suggests that POS technology is essential for increasing operational efficiency and customer satisfaction in the banking industry.

H5: The performance of banks is significantly impacted by automated teller machines.

Even if the estimated loading of 0.108 is lower than the loadings of other recognized hypotheses, it nevertheless shows that ATMs have a beneficial impact on bank performance. This conclusion is accompanied by Tan and Lau (2016). In this way, ATMs indirectly enhance performance by increasing transaction volume. This implies that even little contributions from ATMs can have a significant impact on banks seeking to improve overall performance and service reach.

In summary, the analysis indicates that internet banking services, mobile banking services, point-of-sale machines, and automatic teller machines positively impact bank performance. However, based on available statistics, social media marketing does not seem to have a statistically significant impact on bank performance. These findings align with several studies in the literature, underscoring the

importance of digital banking infrastructure and services in promoting better financial outcomes for banks.

Conclusions

The study's findings show that internet banking, mobile banking, point-of-sale machines, and automated teller machines all significantly contribute to operational efficiency and customer engagement, which in turn fosters improved financial outcomes for banks. Banks are concentrating on DMS and reducing their offline services by a small amount, which is increasing their profit through reduced costs, physical labor, and efficiency ratios. By making things easier for their customers, several banks have raised profits. The importance of mobile banking services and other digital banking technology in enhancing Ethiopian banks' performance is emphasized by this study. It also emphasizes the urgent need for banking institutions to prioritize and invest in the development of strong digital marketing strategies that are in line with consumer needs and technological advancements. By using these strategies, banks may improve the quality of their services and gain a competitive edge in the increasingly digitized financial industry. Subsequent research endeavors ought to broaden their purview to encompass a greater variety of geographical regions within Ethiopia, in addition to conducting comparative evaluations among various African nations and beyond. Examining shifts in bank performance and customer intentions over time may be possible with longitudinal research. This method might make it easier to comprehend how advancements in mobile banking will affect consumers in the long run and how their tastes will change as digital technologies develop. Richer insights into consumer perceptions and experiences with mobile banking services may be obtained by incorporating qualitative techniques like focus groups and in-depth interviews. Gaining insight into the subtleties of client pleasure, trust, and intention may help identify important variables that affect bank performance. In order to enhance customer experiences and operational efficacy, future research should look at how emerging technologies like blockchain, artificial intelligence, and machine learning impact mobile banking services and overall bank performance.

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Conflict of interest

No conflicts of interest are known to exist.

Ethical clearance

Each participant provided informed consent by guaranteeing that their answers would remain confidential and that their involvement was entirely voluntary. All ethical guidelines were adhered to during the dissertation process.

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