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Market Segmentation and Customer Satisfaction: A Study of the Sudanese Banking Industry

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ABSTRACT

The aim of this study is to examine four influential dimensions on which customer satisfaction in Sudanese banks is built; those are the market segmentation criteria, consumer behavior, the banking products offered, and the customers' perception of those products. This study employed a quantitative approach. Regression analysis alongside the correlation technique has been used to collect the data from a sample of 420 bank customers to establish the relationships between these factors and customer satisfaction. The findings demonstrate positive significant links between segmentation criteria, consumer behaviour, banking offerings, customer perception, preferences and customer satisfaction. In turn, positive perception is created, which leads to acceptance of the services and increases overall satisfaction. These findings highlight the significance of identifying and managing these factors to increase the level of customer satisfaction in the case of Sudanese banks.

INTRODUCTION

Market segmentation in the banking field is one of the eminent factors as specified in several studies (Haralayya & Aithal, 2021; Huy *et al.*, 2021; Mehdiabadi *et al.*, 2020; Yip & Bocken, 2018). It is a basic notion of the new marketing concept under which banking services are customized to the unique needs of the consumers divided into different groups via geographic, demographic, psychological, and behavioral factors (Aghaei, 2021; Fasanmi & Fasanmi, 2022; Madzik *et al.*, 2021). Market segmentation assists banking institutions to concentrate on particular customer requirements and improve client satisfaction to grow profits (Kartika *et al.*, 2020). The segmentation of the market into homogeneous groups also help the banks to utilize marketing strategies that are being formulated with customers' needs to improved outcomes and high retention (Hassan & Tabasum, 2018; Raiter, 2021). According to Arsova & Temjanovski, (2019), market segmentation is also useful to identify potential customers and offer them customized services to internally market them to ensure long-term success (Arsova & Temjanovski, 2019). Thus, market segmentation plays a vital role in banking that helps banks to understand a diverse customer segment and offer customized services to match their profiles, and as a result, this leads to improved experience for customers and financial performance (Hundal, 2020).

On the other hand, customer satisfaction is a critical factor in the banking sector (Pakurár *et al.*, 2019). Repeated satisfaction from clients means that customers are more likely to remain with the bank and less likely to switch to other banks. Therefore, relationships are prolonged, and loyalty is earned (Ghamry & Shamma, 2022; Nguyen

et al., 2020). Customer satisfaction leads to an increase in the number of services used, maintenance of higher balances in accounts, and also referrals, which in turn lead to higher profitability for the bank (Pakurár *et al.*, 2019). Customer feedback and satisfaction data allow banks to identify the gaps in services and customize their offerings in the best way to meet customer requirements, hence the improvement in service quality (Zouari & Abdelhedi, 2021). According to YuSheng & Ibrahim (2019), customer satisfaction is a unique differentiator when all the banks offer the same products, and it is also a source to gain a competitive advantage (YuSheng & Ibrahim, 2019). Aside from patronizing the financial system, satisfied consumers are considered necessary to the soundness and stability of the financial system, which is undoubtedly a keystone for economic growth (Aghakarimi *et al.*, 2023; Alber, 2019). According to, sustaining high customer satisfaction means that banks have to provide personalized services, fast and seamless issue resolution, digital innovations, and timely and appropriate responses to customer feedback (Anika *et al.*, 2023; Hasan *et al.*, 2023). Thus, customer satisfaction creates long-term relationships and improves the financial performance of the banks (Rashid *et al.*, 2020).

Market segmentation and customer satisfaction are one of fundamental issues in the Sudanese banking sector (Bushara *et al.*, 2018). According to Simon & Osunsan, (2022), market segmentation is the key concept in banking that allows banks to design services according to customer groups (Simon & Osunsan, 2022). Market segmentation enables banks to develop more targeted marketing strategies designed to be more responsive to the specific needs of their clients (Hassan & Tabasum, 2018). According to, customer satisfaction is a top priority

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among bankers of Sudanese banks and researchers have shown that this focus is essential (Elhassan *et al.*, 2021). As satisfied customers are more likely to stay with the bank and make repeated transactions, it helps to build the mutual ground for long-term partnerships between the bank and its customers (Ndubisi & Natarajan). Furthermore, highly satisfied customers are expected to utilize more banking services, keep substantial account balances and provide referrals that help the bank grow profitably (Omoregie *et al.*, 2019). According to, the Sudanese banks leverage data from customer feedback and satisfaction help them to identify their weak spots and provide valuable solutions that help them to better meet customer needs (Kordit, 2022).

Although attention to customer satisfaction and market segmentation in the Sudanese banking sector is increasing, banks face significant challenges, including broadness of segmentation precision and non-differentiation of products (Mehdiabadi *et al.*, 2020; Preeti & Roy, 2022). These concerns weaken segmentation strategies, contribute to the poor customer satisfaction levels, and cause loss of trust in banking institutions. Hence this requires further investigation to assess the effect of these problems on customer satisfaction and market segment diversification in the banking industry of Sudan to find the ways to resolve these issues. Therefore, this study investigates different segmentation criteria Sudanese banks use to understand the alignment between market segmentation and customer behaviours. The study also explores different strategies to improve segmentation precision for targeted marketing and service delivery. The analysis of existing product offerings in the banks of Sudan also evaluated to understand the customer perceptions and preferences regarding banking products.

LITERATURE REVIEW

Market Segmentation Criteria in Banking

In banking, market segmentation criteria help to build the base of understanding and addressing information and preferences of numerous customers, which defines the marketing strategy and the channels of communication (Calvo-Porrall & Lévy-Mangin, 2020). These criteria cover numerous parameters, which include demographic aspects like age, status, and profession, as well as geographical considerations such as location and cultural aspects (Leisch *et al.*, 2018). According to Aghaei, (2021), study on market segmentation in banking industry, which is concentrated at Shahr Bank, customers' expected benefits were the primary basis of customer segmentation. In this study, the researcher evaluates a range of perks that customers take advantage of when they do business with a bank, such as rates on loans and rates on deposit, convenience, customer service quality, and product features. Evaluating these expectations was a cutting-edge approach for Shahr Bank to classify the customer base and adapt services to different segments according to their preferences (Aghaei, 2021).

Another criterion on the basis of which banks segment their customers is the psychographic factors, which include lifestyle, values, and attitude that provide an understanding of customers' motives and communication preferences; indeed, behavioral traits also demonstrate transaction habits, channel preference, and level of loyalty among customers. Aryuni *et al.*, (2018), use K-means and K-medoids clustering methods to divide customers in the XYZ bank. The details of the parameters for segmentation were not disclosed in his study but generally include elements such as customers' transaction activities, demographics, financial needs, and preferences. These criteria narrow down the heterogeneous population to homogeneous groups of customers sharing similar symptoms, allowing XYZ Bank to tailor the marketing strategies and services specific to each group (Aryuni *et al.*, 2018). While the identification of product lines, customer groups, and price or geographical differentiation generate initial segments, financial needs and goals, risk profiles, and technographic segmentation further enrich the segmentation process which enables banks to offer products and services that completely fit in customers' unique requirements (Calvo-Porrall & Lévy-Mangin, 2020; PERERA, 2023).

Mahdiraji *et al.* (2019) utilize big data analysis and clustering through a multi-criterion decision-making (MCDM) approach to determine appropriate market segmentation criteria, which involve examining such data points of customers like demographics, transactional behavior, channel preferences, along with product usage patterns. The proposed clustering-MCDM approach focuses and evaluates multiple criteria simultaneously and, therefore, effectively segment customers, aiding banks to devise targeted marketing strategies and ultimately improve customer experiences (Mahdiraji *et al.*, 2019).

Fares *et al.* (2023), refer to the application of artificial intelligence (AI) in the banking sector, which is a moving away from the traditional segmentation approach. AI technology analyze huge data of customers, considering attributes in line with transaction history, online behaviour, demographics, and social interactions. Using AI for segmentation and personalization entrepreneurs detect behavioural patterns and, therefore, offer their clients tailor-made services and specific marketing campaigns (Fares *et al.*, 2023).

Moreover, customer lifetime value, engagement levels, and customer satisfaction scores enable banks to allocate resources and initiatives with the aim of retaining the valuable customers and increasing the overall customer experience level (Cavaliere *et al.*, 2021). The analysis of the market dynamics which contains the market positioning and the competitive landscape are acting formally to direct banks' strategic decisions to choose a specific market segment or have a differentiation factor in the market (Koriyow & Karugu, 2018). Eventually, these segments enable bank to tailor their products, marketing strategies and has the effect of ultimately building stronger and more sustainable customer relationships.

Alignment between Segmentation Criteria and Customer Behaviours

Consumer behaviour is the core of successful segmentation in banking to address customer behaviours in accordance with segmentation criteria (Osei *et al.*, 2021). According to Shareef *et al.*, (2018), demographic factors closely indicate how customers behave and act when related to banking services (Shareef *et al.*, 2018). Thus, banks shape their offerings and strategies more precisely which lead to increase in customers' satisfaction and loyalty. Another example was the case where the segmentation criteria of a bank contain behavioural patterns like regular mobile banking usage or a clear preference for digital transactions. Then, the bank creates digital solutions and promotional campaigns that are tailored to the liking of those customers (Häärä, 2021; Soukal & Draessler, 2019). Also, if the criteria for segmentation recognize a set of consumers, who were high risk takers and investment products enthusiasts, the bank exploit this target group, through tailored investment options and individual financial advice. Through this approach, banks optimize their resource allocation, refine product development, and generate more precise and contextualized experiences for their heterogeneous customer segments (Lamusu *et al.*, 2021). This alignment builds stronger bonds between banking institutions and their clients that in turn improve customer retention and the sustainability of banking sector's growth in a changing economic environment.

Banking Product Offerings

The Sudanese Agricultural Bank lying in Wad Medani Branch provides certain financial products and services which were designed to meet the requirements of the farmers, agricultural enterprises and rural communities. Respectively, these products and services comprise loans for farmers, supporting farming equipment and machinery, crop insurance, and advisory services for agricultural best practices. Moreover, the Sudanese Agricultural Bank also provide the banking products like savings accounts, current account and remittance services to fulfil the financial needs of the wide population (Bushara *et al.*, 2018). According to Mansour, (2019), The Islamic banks in Sudan were based on Shariah rules and

offer a variety of Shariah-compliant financial products namely, Murabaha (cost- plus financing), Mudarabah (profit- sharing), and Musharakah (partnership), while also providing Islamic investment products such as Sukuk. Additionally, they offer Shariah-compliant saving accounts, Takaful insurance service, and other Islamic financial instruments for those who want interest-free and Islamic banking solutions (Mansour, 2019). According to Mustafa, (2021), conventional banks and Islamic banks in Sudan share many of the same financial products and services, such as current accounts, loans, and various investment products, they also provide unique services like online, mobile, and foreign exchange banks. Banks in Sudan provide the financial products and services that meet the varied needs of its clients and thus contribute to the general financial stability and Sector's development (Mustafa, 2021).

Customer Perceptions and Preferences in Sudan

The research field on banking product and services perception in Sudan is diverse and dynamic, yielding specialized findings related to the impact of the factors shaping consumer behaviour within Sudan's banking environment. According to the study of Sen *et al.*, (2020), Islamists customers were attracted to Islamic banks. This assert the significant role of religious values in banking selections, representing high congruence between financial choices and religious values among the Sudanese consumers (Sen *et al.*, 2020). Bushara *et al.* (2018) attempt an empirical study concerning the service quality and customer satisfaction for one of the Sudanese Agricultural Bank. Through the examination of the perceived quality of services and its effects on customer satisfaction, this study outlines that the operative mechanism was one of major preference in the banking sector of Sudan. Identification of strong and weak performance areas by this research precise recommendations that help banks in pursuit of better service delivery and customer experience (Bushara *et al.*, 2018).

Besides that, Kaakeh *et al.*, (2019), investigate mixed models of the factors that influence bank choice by consumers to understand the various aspects of the customer's decision making process in the country. The

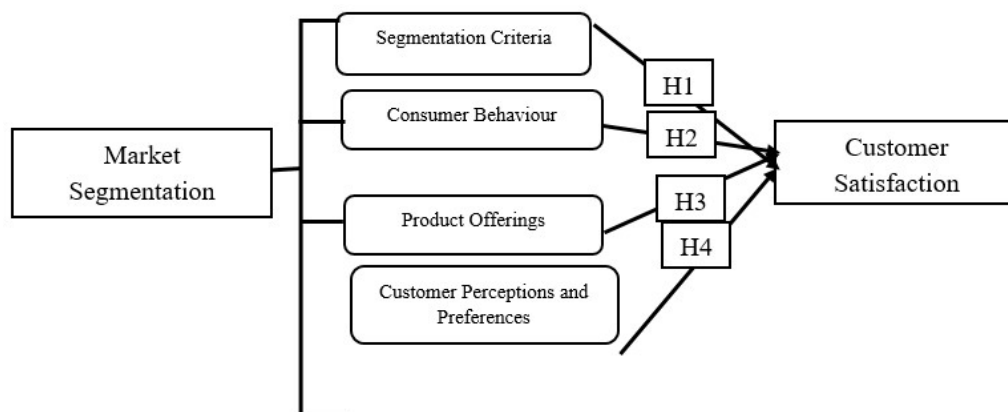


Figure 1: Conceptual Framework

study has identified the main factors behind the banks' customer selection including the convenience, reputation and the services provided. Thus, this comprehension is vital for banks to distinguish themselves and to draw and keep customers in a competitive market (Kaakeh *et al.*, 2019). Jibril *et al.*, (2021), provide meta-synthesis review of all available research concerning consumers' knowledge and attitudes towards Islamic bank products and services. Through the amplification of collective knowledge, the study provides a complete analysis of the customer attitude and level of awareness towards Islamic banking in Sudan (Jibril *et al.*, 2021).

Hypotheses Development

(H1): Market segmentation criteria significantly influence customer satisfaction in Sudanese bank.

(H2): Consumer behaviour significantly influence customer satisfaction in Sudanese banks.

(H3): Banking product offerings significantly influence customer satisfaction in Sudanese banks.

(H4): Customer perception and preferences has a significant impact on customer satisfaction in Sudanese banks.

RESEARCH METHODOLOGY

Research Design

The aim of this study was to explore the effectiveness of market segmentation and its impact on customer satisfaction along with some mediating factors such as, consumer behaviour, segmentation criteria, product offerings and consumer perceptions and preferences. A quantitative approach was employed to collect the data from 14 different branches of Barakah Bank. In the first stage the survey questionnaire was distributed among 420 customers of 14 different branches of Baraka Bank. The branches were selected on the basis of revenue and the number of customers. Then the Mugran consultant conduct a training for branch managers on data collection methods which took almost 3 working days. Hard copies were also delivered to branch managers in Khartoum and were emailed to 3 of the state branches. Then each branch submits their surveys to the main branch for the analysis process. Therefore, in this study the researcher develops a tailor-made survey to fit the needs of the Sudanese consumers and measure the constructs of satisfaction for Baraka Bank. Once the collection of the surveys completed, the data entry was a joint effort between the bank and the Mugran consulting. This process took more time than expected as some of the surveys were not up to the standards needed to reflect the correct position of the banks and its services. Excel and SPSS was used to analyse the data collected through the survey.

Sample Size

Initially a sample of 22 customers was selected for pilot testing from three different branches of Burj, Alsajana and Amarat. The results from this experimental survey were used as a basis for the construction of final survey.

The final survey was conducted with 420 customers of 14 different branches.

Survey Construction

The survey was constructed to measure dimensions of 5Ps (people, processes, premises, price and promotion), which was based on initial consumer behaviour analysis as well as loyalty, overall satisfaction and competitive positioning. A review for financial changes was also conducted with Baraka management and then the final survey was conducted.

Survey Distribution

After attending a meeting with Baraka we decided to select the most important subset of branches to conduct the study. Out of 25 14 branches was selected and the decision was based in terms of revenue and number of customers. Then the final survey was delivered to the 11 branch managers in Khartoum and was emailed to the 3 state branches.

The original sample size required for a 95% confidence interval and 5% sampling error rate was over 392. We distributed 420 surveys (30X14) to the 14 branches in total. Only 383 surveys were needed to produce accurate results. The additional 2X28 surveys would add more accuracy to the overall results and substitute for any surveys misfiled or not collected.

Instructions were given to the branch managers and employees who were going to carry out the survey. The instructions included the time span for the process (two weeks' maximum), that the surveys should be given to 18 personal customers and 12 corporate customers for the market segmentation purposes and the surveys should be given to the customer on his waiting time for the services. This process took 3 working days one for each district of Khartoum - Bahri, Omdurman and Khartoum Central. A bank representative from the marketing department accompanied us in these bank visits.

Survey Collection

Each branch submitted their surveys to the main branch for the analysis process. After the collection of the surveys was completed, the data entry was a joint effort between the bank and Mugran Consulting. This process took more than expected (two and half months) as some of the surveys were not received by the Branch Managers and others were not up to the standards (needed to reflect the correct position of the bank and its services), or else did not arrive on time.

Data Analysis

This study explores the service attributes of Sudanese consumer and the wants and needs of Sudanese bank customer with the help of preliminary consumer behaviour analysis which is used to define and measure the critical dimensions of consumer satisfaction. According to a 2012 global banking survey of Ernest and Young stated that satisfaction drivers vary significantly

across international markets. Therefore, the researcher chose the drivers efficiently to find new ways for improving customer service. The researcher created a complete excel model to translate the number of responses and then analyse the data through SPSS by applying correlation and regression techniques to test the hypotheses.

Results & Analysis

Following results has been generated through SPSS after analyzing the data from the survey questionnaire.

H1

Market segmentation criteria significantly influence customer satisfaction in Sudanese bank.

Table 1: Relationship between Segmentation Criteria and Customer Satisfaction

Coefficients ^a					
Model		Unstandardized Coefficients		Standardized Coefficients	t
		B	Std. Error	Beta	
1	(Constant)	-1.133	.130		-8.710
	Segmentation_Criteria	1.381	.036	.881	38.035

a. Dependent Variable: Customer Satisfaction

The above coefficients table-1 illustrates valuable information regarding the relationship between segmentation criteria and customer satisfaction within the context of Sudanese banks. The constant term, with a value of -1.133 and a highly significant p-value of .000, indicates the estimated level of customer satisfaction when segmentation criteria were zero. This suggests that even in the absence of explicit segmentation criteria, there was a baseline level of satisfaction. The coefficient for segmentation criteria was 1.381, which implies that for every one-unit increase in segmentation criteria, customer satisfaction is predicted to increase by 1.381 units. This positive effect further emphasized by the

standardized coefficient (Beta) of 0.881, which indicates a relatively strong influence of segmentation criteria on customer satisfaction. The highly significant p-value of .000 and the substantial t-value of 38.035 reinforce the statistical significance and strength of this relationship. These findings highlight the pivotal role of segmentation criteria in shaping and enhancing customer satisfaction within Sudanese banks and the importance of strategic segmentation approaches in banking operations.

H2

Consumer behaviour significantly influence customer satisfaction in Sudanese banks.

Table 2: Relationship between Consumer Behaviour and Customer Satisfaction

Coefficients ^a					
Model		Unstandardized Coefficients		Standardized Coefficients	t
		B	Std. Error	Beta	
1	(Constant)	-.549	.071		-7.697
	Consumer_Behavior	1.149	.019	.949	61.447

a. Dependent Variable: Customer Satisfaction

The above coefficients table-2 presents crucial information regarding the relationship between consumer behavior and customer satisfaction. The intercept, with a value of -.549 and a highly significant p-value of .000, signifies the baseline level of customer satisfaction when consumer behavior was absent. The coefficient for consumer behavior, at 1.149, illustrates that for every one-unit increase in consumer behavior, customer satisfaction was predicted to increase by 1.149 units. This positive effect was further emphasized by the standardized coefficient (Beta) of .949, which indicates a strong and positive influence of consumer behavior on customer satisfaction. The substantial t-value of 61.447

and the highly significant p-value of .000 highlight the statistical significance and robustness of this relationship. These findings underscore the importance of understanding and addressing consumer behavior dynamics to enhance overall customer satisfaction within the studied domain, suggesting that strategies aimed at aligning services with consumer preferences yield substantial benefits in strengthening customer satisfaction levels.

H3

Banking product offerings significantly influence customer satisfaction in Sudanese banks.

Table 3: Relationship between Bank product Offerings and Customer Satisfaction

Coefficients ^a					
Model		Unstandardized Coefficients		Standardized Coefficients	t
		B	Std. Error	Beta	

1	(Constant)	-1.924	.155		-12.381	.000
	Banking_Product_ Offerings	1.524	.041	.875	36.863	.000

a. Dependent Variable: Customer Satisfaction

The coefficients table-3 provides crucial information regarding the relationship between banking product offerings and customer satisfaction within the context of the study. The intercept, with a value of -1.924 and a highly significant p-value of .000, denotes the baseline level of customer satisfaction in the absence of banking product offerings. The coefficient for banking product offerings was 1.524, indicating that for every one-unit increase in the quality or variety of banking products offered, customer satisfaction was predicted to increase by 1.524 units. This positive effect was further supported by the standardized coefficient (Beta) of .875, which highlight a strong and positive influence of

banking product offerings on customer satisfaction. The substantial t-value of 36.863 and the highly significant p-value of .000 underscore the statistical significance and robustness of this relationship. These findings underscore the importance of banking product offerings in shaping customer satisfaction levels, suggesting that enhancing the quality and variety of products can lead to notable improvements in overall customer satisfaction within the studied domain.

H4

Customer perception and preferences has a significant impact on customer satisfaction in Sudanese banks.

Table 4: Relationship between Consumer Perception, Preferences and Customer Satisfaction

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-1.976	.106		-18.720	.000
	Consumer_Perception_and_Preferences	1.463	.027	.937	54.841	.000

a. Dependent Variable: Customer Satisfaction

The coefficients table-4 provides significant information regarding the relationship between consumer perception and preferences and customer satisfaction. The intercept, with a value of -1.976 and an exceedingly significant p-value of .000, represents the baseline level of customer satisfaction when consumer perception and preferences were absent. The coefficient for consumer perception and preferences was 1.463, indicating that for every one-unit increase in the alignment of banking services with consumer preferences and perceptions, customer satisfaction was predicted to rise by 1.463 units. This positive effect further supported by the

standardized coefficient (Beta) of .937, highlighting a robust and positive influence of consumer perception and preferences on customer satisfaction. The substantial t-value of 54.841 and the highly significant p-value of .000 underscore the statistical significance and strength of this relationship. These findings underscore the pivotal role of understanding and catering to consumer perceptions and preferences in enhancing overall customer satisfaction, suggesting that strategies aimed at aligning services with consumer expectations yield substantial improvements in customer satisfaction within the studied domain.

Table 5: Correlation Analysis

Correlations					
		Segmentation_Criteria	Consumer_Behavior	Banking_Product_ Offerings	Consumer_Perception_and_Preferences
Segmentation_Criteria	Pearson Correlation	1	.947**	.863**	.932**
	Sig. (2-tailed)		.000	.000	.000
	N	420	420	420	420
Consumer_Behavior	Pearson Correlation	.947**	1	.914**	.978**
	Sig. (2-tailed)	.000		.000	.000
	N	420	420	420	420

Banking_Product_ Offerings	Pearson Correlation	.863**	.914**	1	.941**
	Sig. (2-tailed)	.000	.000		.000
	N	420	420	420	420
Consumer_ Perception_and_ Preferences	Pearson Correlation	.932**	.978**	.941**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	420	420	420	420

***. Correlation is significant at the 0.01 level (2-tailed).*

The correlation table-5 illustrates the robust relationships between segmentation criteria, consumer behavior, banking product offerings, and consumer perception and preferences. Each variable shows strong positive correlations with the others, indicating that as one variable increases, the others tend to increase as well. Specifically, segmentation criteria exhibit strong positive correlations with consumer behavior (.947), banking product offerings (.863), and consumer perception and preferences (.932), all of which were highly significant ($p < .01$). Similarly, consumer behavior, banking product offerings, and consumer perception and preferences also demonstrate strong positive correlations among themselves, with correlation coefficients ranging from .914 to .978, all highly significant ($p < .01$). These findings suggest a tightly interconnected relationship among the variables, underscore the importance of considering multiple dimensions such as segmentation criteria, consumer behavior, and product offerings, as well as aligning services with consumer perceptions and preferences, to enhance overall effectiveness and satisfaction within the studied domain.

DISCUSSION

Market Segmentation Criteria Influence Customer Satisfaction in Sudanese Banks

The customer satisfaction and segmentation relationship, based on selected criteria, is supported by many banking sector researches. Through segmentation, banks are capable of personalizing their services that cater to specific customer needs and satisfactions (Babatunde *et al.*, 2024; Rane *et al.*, 2023). For instance, customized offerings driven by demographic, psychographic, or behavioural segmentation have been demonstrated to increase customer satisfaction because they are tailored and relevant to the client's needs (Madzík *et al.*, 2021). A heavy regression coefficient and a strong effect of segmentation criteria on customer satisfaction in Sudanese banks clarifies the need of segmentation strategies to meet customer needs successfully.

Consumer Behaviour Influences Customer Satisfaction in Sudanese Banks

Consumer behaviour enhances customer satisfaction in a way that consistent research shows customer satisfaction to be of significant importance to the banking industry (Ahrholdt *et al.*, 2019; Zhao *et al.*, 2021). Financial institutions consider customer-focused methodology and

agile adaptability towards the changing customer trends get the highest levels of satisfied and loyal consumers (Prapraite, 2022). Therefore, the necessity of continuous tracking of customer behaviour trends and fast track reaction plans ultimately translate to increased customer satisfaction as seen by the significant influence of customer behaviour on customer satisfaction in the banking sector of Sudan.

Banking Product Offerings Influence Customer Satisfaction in Sudanese Banks

The impact of banks' product offerings on client satisfaction level is also well documented in literature (Aisyah, 2018; Gomachab & Maseke, 2018). Diversification of a wide range of superior products and services that accommodate to the specific needs and preferences of customers is a necessary ingredient to satisfaction and loyalty (Pekovic & Rolland, 2020). Financial institutions that continually introduce new and improved products to be responsive to the changing market needs have a better chance of satisfying consumers' expectations (Ogundipe *et al.*, 2024). The significant coefficient and strong impact of banking product offerings on customer satisfaction in Sudanese banks prove the importance of product development and diversification strategies that applied to improve overall customer satisfaction.

Impact of Customer Perception and Preferences on Customer Satisfaction in Sudanese Banks

The results are supported by other studies that focus on the fact that meeting customer satisfaction levels means tailoring banking services to customer expectations (Alolayyan *et al.*, 2018; Pakurár *et al.*, 2019). Banks that concentrate on understanding and tackling customer perceptions and preferences by considering their needs and issues through provision of customized services and efficient communication channels build a solid and strong connection with their customers and higher satisfaction (Parajuli *et al.*, 2020). The relationship between customer perception and preferences, and customer satisfaction in Sudanese banks, demonstrates the importance of adopting customer-centric approach to service design and delivery.

RECOMMENDATIONS

- Improve personalization continuously, creating people-based marketing, segmenting customers and revolving marketing and product offerings around their needs.

- Invest in consumer behaviour analysis, set up new systems for the observation and analysis of consumerism behaviour to detect changing demands and develop proactive plans.

- Introduce innovative financial products and services to get a hold of the market and provide customized solutions that are highly valued by customers.

- Establish an advanced and proactive two-way communication system via various channels (websites, social media, response hotlines) taking into account request of consumers on timely and valuable information run-through.

- Establish a sound feedback system to get customers' feedback during a number of stages. Then, employ these materials as a foundation to revise the products and work processes.

LIMITATION

The study has certain limitations which should also be taken into account. The generalizability of the results has been affected by sample bias, as the characteristics of a sample population not sufficiently reflect the wider customer base. Besides, cross-sectional design that was used in the study does not lead to the establishing of causality between variables and miss long-term trends of customer satisfaction. Also, utilization of self-reported measures while assessing customer satisfaction and other vital variables lead to response bias and social desirability effects which undermine the reliability of the data.

CONCLUSION

In conclusion, this study has provided unique findings on the factors determining customer satisfaction among the Banks of Sudan. The results indicate that market segmentation criteria, consumer behaviour, banking products and consumers' determination and preference in the market are the key factors that affect consumer satisfaction. The findings of this study help the banks to create various customer-specific strategies to address the multitude of various demands to make more satisfied and loyal customers. Nevertheless, it also emphasized that the study has certain limitations, such as biased sampling, cross-sectional design, and omitted variables. Along with that, future research should consider these weaknesses and investigate the intricacies of customer satisfaction in the banking sector. This work advances the current literature surrounding customer satisfaction and implicitly it has practical implications for improving bank services and customer experiences to both Sudan as well as other countries.

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