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Agency Banking and Accessibility to Financial Services of Commercial Banks in the Northern Province of Rwanda

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ABSTRACT

This research project was on assessing the effects of agency banking on accessibility to financial services in commercial banks in the Northern Province of Rwanda. The study adopted a descriptive research design. The population was 555 agents under which sample size was 233 people found using the Yamae formula. The study used a stratified and simple random sampling method. Also, different research instruments of data collection were used which include: journals, articles, document analysis and questionnaires. The reliability of the study was tested by carrying out pilot research and found that Cronbach's Alpha of .831. The data was analyzed using SPSS version 21 and data was presented using tables, percentages, means, and standard deviations. To analyze the relationship between two variables, Pearson Chi-Square and Pearson correlation were used to come up with comprehensive results. It was clear from the study that strategic responses to the implementation of agency banking as a competitive strategy in enhancing customers' access to financial services included the provision of high-quality customer service, enhancing the operational structure and improving the brand image. The study established that operational structure, brand image and financial services awareness among the rural population are positively correlated (r = 0.805) with access to financial services. Access to financial services was greatly enhanced by strategically increasing the proximity of agency banking services, increasing the number of services that could be offered through agency banking and increasing awareness among the population on financial services available at agency banking outlets.

Keywords: Agency banking, Financial Services, Commercial banks, Customers, Rural population.

INTRODUCTION

Agency banking is one in which banks provide financial services through nonbank agents, such as grocery stores, retail outlets, post offices, pharmacies, or lottery outlets. Agency banking takes customers out of the bank halls to kiosks and villages. Investors have pumped billions into new platforms that offer agency banking services. This model allows banks to expand services into areas where they do not have sufficient capacity to establish a formal branch, which is

particularly true in rural and poor areas where as a result a high percentage of people are unbanked. Agency banking is quickly becoming recognized as a viable strategy in many countries for extending formal financial services into poor and rural areas in that agency banking enables clients to store, send and receive electronic money through local agents, rather than travelling to the nearest bank branch [1]. Agency banking has been adopted and implemented with varying

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degrees of success by several developing countries, particularly in Latin America. Brazil is often recognized as a global pioneer in this area since it was an early adopter of the model and over the years has developed a mature network of agency banks covering more than 99% of the country's municipalities. Other countries in Latin America have followed suit, Mexico. Peru, Colombia, including Ecuador, Venezuela, Argentina and Bolivia [2]. In Africa and Asia continents, the countries that have utilized the agency banking model to expand financial services include Pakistan, the Philippines, Kenya, South Africa, Uganda, and India. regulation. design, implementation of agency banking vary across countries [3]. The partnership has helped banks to take financial services closer to people and, more importantly, to areas that lack them. Kenya being the pioneer of agency banking in Africa changed its banking laws in January 2010, to allow commercial banks to offer their services through third-party businesses. The agents operate as satellite branches. The banking concept that is deepening access to financial services is gaining currency in Kenya, where one-third of the population still lacks access to formal banking services [4]. In Rwanda, agency banking was introduced in 2012, with Equity Bank being the pioneer. Other banks such as KCB, BK, and COGE Bank have followed suit. These banks have embarked on an important reform to expand banking services to millions of poor households by enabling third-party retail agents as a lowcost distribution alternative to branches. These agents are increasingly utilized as distribution channels important financial institutions. Banking agents are usually equipped with a combination of POS card readers, mobile phones, barcode scanners to scan bills for bill payment transactions. PIN pads, and sometimes PCs that connect with the bank's server using personal dial-up or other data connection [5]. Clients that transact at the agent use a magnetic stripe bank card or their mobile phone to access their bank account.

Identification of customers is normally done through a PIN, but could also involve biometrics. About transaction the verification, authorization, and settlement platform, banking agents are similar to any other remote bank channel. By December 2015, Equity Bank Rwanda had a total of 1016 agents in operation [6]. Agency banking minimizes fixed costs leveraging existing retail outlets and stores hence financial service providers do not need to invest in their physical infrastructure also by using mobile phones rather than POS terminals as technology platforms, financial service providers do not even have to incur equipment costs, for each new retail outlet opened. Such a variable cost structure makes the agent's economics very simple [7].

Agency banking has become one of the essential services in the banking sector in bringing their services closer to the people who are in remote areas where brick-andmortar branches are not present. To move and access many customers, closer commercial banks started to allow other commercial outlets like shops supermarkets to act in their capacity as formal banks and this was formally launched by the National Bank of Rwanda about five years ago. According to [8], there will be significant growth in retail deposits amongst commercial banks that have embraced agency banking. [9] conducted a study on the effects of agency banking on access to financial services in commercial banks in Kenya, the study found that agency banking should be given attention to security measures. A few studies have been conducted on the impact of agency banking on the financial services of commercial banks in Rwanda. [10] studied the effect of agency banking on financial inclusion in Kenya. They established that customers with large transactions are unlikely to transact with bank agents because of security risks. Other studies that have been conducted have mainly focused on the impact of banking on the operational performance of commercial banks. The few studies on the impact of agency banking on

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accessibility to financial services in commercial banks in Rwanda that have been conducted targeted individual banks and were carried out before many commercial banks embraced agency banking. Unlike the past, today it is common to find one agent providing services of at least three commercial banks at the same outlet. The current study therefore seeks to bridge the gap between what has been previously studied by other researchers by carrying out

research on the effects of agency banking on accessibility to financial services in commercial banks in Rwanda. Although customers have benefited a lot through agency banking, it is not clear whether the financial services of commercial banks have improved or not as a result of adopting agency banking. This study will attempt to answer the following research question: What are the effects of agency banking on accessibility to financial services in commercial banks in Rwanda?

METHODOLOGY

Research Design

This study employed a descriptive research design. A descriptive study is concerned with specific predictions with narration of facts and characteristics concerning individual groups or situations [11, 12].

Area of the study

The study was carried out in four selected commercial banks in the Northern Province of Rwanda Bank of Kigali, KCB, Coge Banque and Equity Bank. The period of understudy was three years from 2013 to 2015. The areas covered were the Northern Province of Rwanda, particularly in four districts of Musanze, Burera, Rulindo and Gakenke districts. These areas were chosen because in Northern Rwanda the majority of people lived in remote areas where accessing bank services required them to go to towns where banks had branches. The study was to analyze the effects of agency banking on accessibility to financial services in commercial banks in the Northern Province of Rwanda, to investigate how the operational structure of agency banking influences customer's access to financial services in commercial banks in the Northern Province, to establish the relationship between brand images of agency banking and accessibility to financial services in commercial banks in the Northern Province, to determine the effect of agency banking on access to financial services in commercial banks in the Northern Province.

Target Population

A population is the total collection of elements in the current study about which the researcher makes inferences. [13] define a population as all individuals or common objects with defining characteristics. The study population was the operators of all bank agents' outlets. However, the target population comprised 555 agents of commercial banks in the Northern Province of Rwanda. The agents link the populations of remote areas and the mother bank in service delivery and ensure that the target customers get satisfactory services just like they would be served by the staff of the bank at the retail branches. According to the annual report of commercial banks end year of two.

Table 1: Population under study

Population category	Target Population
Equity bank Rwanda	175
Bank of Kigali	130
Kenya Commercial Bank Rwanda	150
Cogebank	100
Total population	555

Source: Equity Bank Rwanda (2015); Bank of Kigali (2015); Kenya

Commercial Bank Rwanda (2015); Cogebank (2015)

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$$n = \frac{N}{1 + Ne^2}$$

Sample Design

The selection of a sample from a target population requires the construction of a sampling frame. The sampling frame is normally made in the form of a physical list of population elements.

Sample Size Determination

According to [14] provides a simplified formula to calculate sample sizes:

Where; n: sample size, N: total population,

e = alpha level,

i.e. e = 0.05 if the confidence interval is 95%.

The total population is 555 using a 0.95 confidence interval, and the sample size is:

$$n = \frac{555}{1 + 555(0.05)^2} = 233 \text{ People}$$

Table 1: Population under study and Sample size

Population category	Target Population	Sample size
Equity bank Rwanda	175	73
Bank of Kigali	130	55
Kenya Commercial Bank Rwanda	150	63
Coge bank	100	42
Total population	555	233

Source: Researcher (2016) Sampling Technique

According to [11], a sample is a unit or portion of the target population with sufficient characteristics of the entire population. The key determinant of the sample size is the level of representation required. A high level of assurance can only be derived from a relatively large sample and vice-versa. The researcher used a stratified and simple random technique in selecting the respondents in which the respondents were arranged into strata that were according to different bank agents. An important benefit of stratified random sampling is that it ensures the presence of the key subgroup within the sample.

Data Collection Methods

The researcher used primary and secondary sources during the data collection. According to [15], it helps to collect accurate data to achieve useful results, thus questioning and observation are two basic methods of collecting data. The researcher used the questionnaires and documentation. Primary data was collected using structured questionnaires served to respondents through direct

contact with the agents and drop-and-pick methods. The method was chosen because it saves time and cost. Secondary data was obtained by reading relevant publications of other agents in the industry.

Data Collection Instruments

The main instrument that was used in the collection of data for the study was the questionnaires that consisted of close-ended questions. Secondary sources including books, journals and published reports were consulted to gather enough information for the subject under study.

Administration of Data Collection Instrument

The researcher distributed questionnaires to the respondents and waited for them for three days. Then the researcher made sure that the number of questionnaires distributed had been filled by all respondents or not. After carrying out questionnaires with respondents, the questions were edited and the information gathered was arranged into a meaningful and organized form by coding it. For the research to be more scientific and meaningful, the large quantities information gathered were condensed,

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hence facilitating easy analysis and processing of data, coding, tabulation and the analysis of the main findings were presented in chapter four.

Data analysis Procedure

According to [16] confirmed that the main purpose of content analysis is to study existing information to determine factors that explain specific phenomena. To this extent, therefore, the responses to the questions were interpreted and put into different specific and relevant categories. The data was analyzed using descriptive statistics in frequency tables. To enable the researcher to gain ground for concluding, this exercise involved editing, tabulation. SPSS version interpretation of findings. Editing was used to detect errors and omissions, correct them and certify that minimum data quality standards are achieved, the data collected was edited to verify the coherence of respondents in answering the questions and ensure that they were provided reasonable predetermined results. Tabulation was done to count the respondents and make statistical frequency distribution and statistical evaluation of data accuracy and reliability putting the information provided by the respondents in tables together with corresponding ratings in terms percentages. Tables were used for easy

Descriptive statistics were used to summarize the data and show response concentrations on the variables of the study. The results were presented and discussed accordingly in the following sections. Coding of the questionnaire was the first task, and then the data was entered into the spreadsheet and then transferred into the SPSS Version 21 for analysis. Statistical tools used were frequency distribution tables, chi-square correlation. The findings presented in the form of frequency distribution tables, percentages mean and Standard Deviation. Preliminary analysis procedures of cleaning, frequencies, consistency checks, and correction were done on the data obtained.

presentation and interpretation of data. The researcher interpreted data based on percentages that were obtained to show the relationship among variables. This helped to identify the major direction of information that was obtained during the research. This research used descriptive statistics and Pearson Chi-Square to analyze the research objectives.

Ethical Consideration

Ethics is a major branch of philosophy that has occupied great minds for many centuries. This study guide identified the core principles relevant to research with human participants, who translated these principles into specific guidance to support the researcher. The principles that the researcher was used include but not limited to informed consent, no pressure on individuals to participate, respect for individual autonomy, avoiding causing harm, maintaining confidentiality and taking particular care in research with vulnerable groups [17]. During the process of carrying out the research, the researcher exercised academic freedom and high standards in discussing the findings. The researcher did not use research for personal gain and information from respondents was treated with confidence. Every respondent had the right to withdraw during the research process.

RESULTS

relationships between independent and dependent variables of the study were determined and explored using chi-square and correlation analysis by conducting the chi-square and Pearson Pearson correlation. The researcher distributed 233 questionnaires to the respondents and received 230 of them back which is 98.7%. According to [18], a 50% response rate is adequate, 60% good and above 70% rated very well. This also concurs with [19] assertion that a response rate of 50% is adequate, while a response rate greater than 72.22% is very good. This implies that based on the assertions; the response rate in this case of 98.7% is very good.

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Demographic Characteristics of Respondents

The demographic variables used in this case were Gender, Age group and Level of education. Data was collected from people and that is why gender, age and level of education were inquired to know the

respondent's background. This is because variables have different preferences tastes and purchasing power thus were included as a factor that might play a role in determining the relationship between Agency banking and accessibility to financial services.

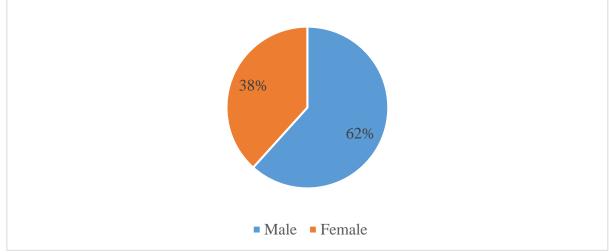


Figure 1: Classification of respondents by gender

A fair number of agents from each gender were surveyed. Among the 230 people sampled, 61.7% were male and 38.3% were female. Males in the study sample reported a greater number of the agents than did females in the study sample. It was evident

that more males have ventured into the agency business than females this is because males were more economically empowered than women; hence getting money for transactions for them is easier than for their female counterparts.

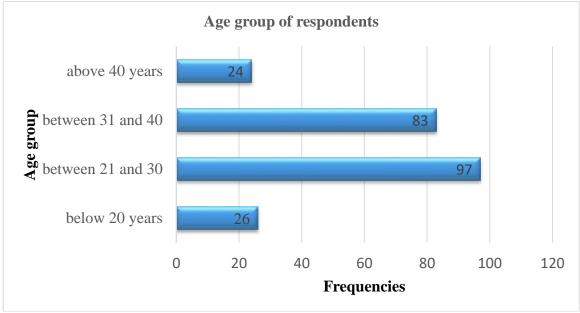


Figure 2: Classification of respondents by age

The respondents were grouped into different age categories who participated in the survey. This type of data was analyzed using the frequency as Table 3 shows that among 230 people sampled, 41.6% were between the age of 21-30 years, and 11.2% were between the ages of 0-20 years, 35.6% were between the age of 31-

40 years and 10.4% were above the age of 40 years. The age bracket between 21-30 years accounted for the highest percentage, followed by the age bracket between 31-40 years, followed by the age bracket above 40 years while the age below 20 years accounted for the lowest percentage.

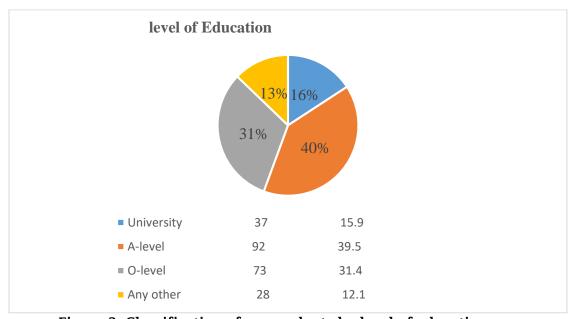


Figure 3: Classification of respondents by level of education

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Of the people surveyed, 15.8% had a University qualification, 39.5% had an Alevel qualification, 31.4% had an O-level qualification and 12.1% had any other qualification. The A-level qualification accounted for the highest percentage, followed by the O-level qualification and then the University level qualification and

any other qualification accounted for the lowest percentage.

Bank Agents

Four main agency banking providers in the Rwandan banking industry are used. The aim was to find out which agency banking provider is most preferred.

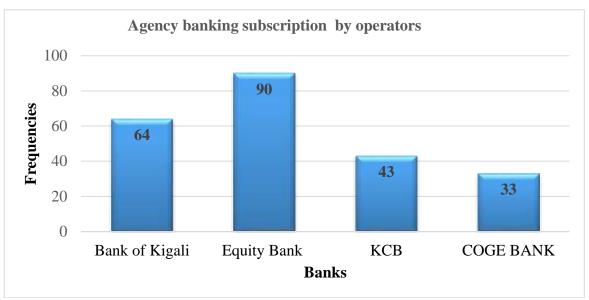


Figure 4: Classification of respondents by agency banking subscription by operators

The participants were asked about the agency banking service provider they prefer and they are currently using. The data was analyzed using frequency distribution as per Figure 4 Equity Bank was ranked the highest with 39.1 % potential users, BK was second with 27.8% users, KCB was third with 18.7% users while Coge Bank scored the lowest percentage with only 14.3% users.

Influence of operational structure on customer's access to financial services
The strategy used by an organization is fundamentally influenced by the operational structure of the organization. It dictates how policies and objectives are

established and how resources allocated. When an organization changes its strategy, the existing organisational structure may be ineffective. Agency banking being a new concept has forced banks to realign or change some of its structures to accommodate banking, thus this study sought to find out how the operational structure of agency banking influences customers' access to financial services in commercial banks in the Northern Province of Rwanda. Table 4.3 shows the level to which the respondents agree or disagree with some of the factors.

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Table 2: Extent to which operational structure influences customer's access to financial services

Variable	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean	Std. deviation
	F %	F %	F %	F %	F %		
Receiving the customers does not							
take too long time due to good	15	7	24	86	98	3.748	1.4102
The system, e.g. deposit, withdraw	7.7	3	10.3	37	42		
The costs of opening and	22	6	23	66	113	3.817	1.29212
operating an agency is cheap	9.4	2.6	9.9	28	49.8		
The amount of fees charged on							
agency Service is lower	15	7	25	76	107	3.622	1.45993
compared to going to the bank	6.1	3	11	33	47.2		
People use agency services to							
avoid movement costs to the	17	23	23	83	98	3.587	1.41693
main bank branch	7.1	3.9	9.9	37	42.1		
People make payments through	21	9	22	66	112	3.791	1.31498
agency services such as school,	9.3	3.9	9.4	28	49.4		
electricity bills, water bills							

(Source: field survey, 2016)

The study sought to determine the extent to which operational structure Influence customer's access to financial services was assessed by asking the respondents to their level of agreement on a Likert-scale, ranging from strongly disagree to strongly with statements related proximity, receiving the customers do not take too long time due of good system. From the findings the study established respondents that 7.7% of strongly disagreed, 3.0% of respondents disagreed, 10.3% of respondents were neutral, and 36.9% of respondents agreed while 42.1% of respondents strongly agreed that receiving the customers does not take a too long time due of good system as shown

by mean of 3.748 and standard deviation of 1.4102. On the question of whether the costs of opening and operating an agency are cheap. From the findings 9.4 % of respondents strongly disagreed, 2.6% disagreed, 9.9 % were neutral, 28.3% agreed and 49.8% strongly agreed that the costs of opening and operating an agency are cheap by a mean of 3.817 and a standard deviation of 1.29212. respondents were also asked if the amount of fees charged on agency Services is lower compared to going to the bank. The findings indicated that 6.4% respondents strongly disagreed, 3.0% of respondents disagreed. 10.7% neutral, and 32.6% of respondents agreed

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while 47.2% of respondents strongly agreed that the amount of fees charged on agency Services is lower compared to go to the bank as indicated by mean of 3.622 and standard deviation of 1.4993. In addition to the statement whether people use agency services to avoid movement costs to the main bank branch. The findings indicated that 7.3% of respondents strongly disagreed, 3.9% of respondents disagreed, 9.9 % were neutral, 36.9% of respondents agreed while 42.1 % of respondents strongly agreed that people use agency services to avoid movement costs to the main bank branch as shown by mean of 3.587 and standard deviation of 1.41693. Lastly, the respondents were asked if people make payments through agency services such as school, electricity bills, and water bills. The majority of the respondents agreed to the statement whereby 28.3% of respondents agreed, 49.4% of respondents strongly agreed, 9.0% of respondents strongly disagreed, 3.9% of respondents disagreed, and 9.4% of respondents were neutral that people do payment through agency services such as school, electricity bills, and water bills as indicated by mean of 3.791 and standard deviation of 1.31498.

Relationship between operational structure and accessibility to financial services

The relationship between the operational structure of agency banking and accessibility to financial services in commercial banks in the northern province of Rwanda was assessed using Chi-Square Tests and correlation.

Table 3: Chi-Square Tests between operational structure and accessibility to financial services

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	34,048	12	.001
Likelihood Ratio	37,271	12	.000
Linear-by-Linear Association	1,614	1	.204
N of Valid Cases	230		

The study results show that on overall significance, there is a statistically significant positive relationship between operational structure and accessibility to financial services because the p-value of all the measures which is p = .001 is less than the set value of p< 0.05. Table 4.4 shows that Tests for Pearson chi-squire on the respondents' mean scores for operational structure and access to financial services revealed that both operational structure and access to financial services had a relationship. Thus,

adopting Pearson chi-square was conducted using the means for operational structure and access to financial services. As stated, our alpha is 0.05, if the "Asymp. Sig. (2-sided)" for the Pearson Chi-Square statistic is less than 0.05; there is a relationship between the variables. The Chi-Square significance value is .001 which is less than p=0.05, which shows there is a relationship between one's agency banking operational structure and accessibility to financial services.

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Table 4: Correlation between operational structure and accessibility to financial services

		Operation structure	Accessibility to financial services		
Operation	Pearson Correlation	1	.861**		
structure Sig. (2-tailed)		.000			
	N	230	230		
Accessibility to	Pearson Correlation	.861**	1		
financial services	Sig. (2-tailed)	.000			
	N	230	230		
**. Correlation is significant at the 0.01 level (2-tailed).					

The Pearson Correlation was conducted using the means for operational structure and access to financial services. The findings were as shown in Table 5 Pearson Correlation analysis established that a and statistically positive significant correlation was established between operational structure and access to financial services (r=0.861; p<0.01). The correlation was very strong, representing an almost perfect correlation between operational structure and access to financial services. Higher access to financial services through bank agent outlets is associated with a good

operational structure associated with agency banking products and services.

Effect of brand image of agency banking on accessibility to financial services Brand image is the current view of the customers about a brand. The impressions consumers have of a company extend well

beyond the product or service the firm provides. Hence this study sought to establish the relationship between brand images of agency banking and accessibility to financial services. Respondents were asked about the extent to which they agreed or disagreed with some of those factors and the results are summarized in Table 6.

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Table 5: The extent to which the brand image of agency banking affects accessibility to financial services

Variable	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean	Std. deviation
	F %	F %	F %	F %	F %		
Most clients are aware of how different agency services	15	8	25	73	109	3,7478	1,40395
I provide work	6.3	3.4	10.7	32.6	47		
People come to inquire more	17	10	23	85	95	3,8174	1,29212
about the bank's new developments	7.3	4.3	9.9	36.5	42.1		
Most of my clients are aware of the	22	5	22	67	114	3,6913	1,4097
different fees charged on the	9.4	2.1	9.4	28.8	50.2		
various products and services.							
Most people are aware of the	14	8	25	73	110	3,6609	1,4011
existence of bank agents' outlet shops	6	3.4	10.7	32.6	47.2		
	1 =	_	0.0	0=	0.0	2.2702	1 0 4 7 0 7
People are aware of the existence	17	7	23	87	96	3,8783	1,24787
of the various products offered by	7.3	3	9.9	37.3	42.5		
Commercial banks							

(Source: field survey, 2016)

As per Table 6, First, the respondents were asked if most of the clients are aware of how different agency services they provide work. From the findings the results show that 6.4%strongly disagreed, 3.4% disagreed, 10.7 % were neutral, 32.6% agreed while 46.8% responded that they strongly agreed that their clients are aware of how different agency services they provide work as shown by mean of 3.7478 and standard deviation of 1.40395. On the question of the people coming to inquire more about the bank's new developments. 7.3% strongly disagreed, 4.3% disagreed, 9.9% were neutral, 36.5% agreed while 42.1 % responded that they strongly agreed that people come to inquire about the bank's new developments as indicated by a mean of 3.8174 and a standard deviation of 1.29212. Thirdly, the respondents were asked whether most of my clients are aware of the different fees charged on the various products and services. 9.4% strongly disagreed, 2.1% disagreed, 9.4% were neutral, 28.8% agreed while 50.2% strongly agreed that most of my clients are aware of the different fees charged on the various products and services as shown by a mean of 3.6913 and standard deviation of 1.4097. Further, respondents were exposed to the question that most people are aware of the existence of bank agents'

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outlet shops. 6.0% responded that they strongly disagreed, 3.4% disagreed, 10.7% were neutral, 32.6% agreed and 47.2% strongly agreed that people are aware of the existence of bank agents' outlet shops by the mean of 3.6609 and a standard deviation of 1.4011. Lastly, on the question of whether people are aware of the existence of the various products offered by commercial banks. 7.3% strongly disagreed, 3.0% disagreed, 9.9% were neutral, 37.3% agreed while 42.5% strongly agreed that people are aware of the existence of the various products

offered by commercial banks shown by a mean of 3.8783 and a standard deviation of 1.24787.

Relationship between brand image and accessibility to financial services

The end objective of the study was to establish the relationship between brand images of agency banking and accessibility to financial services in commercial banks in Northern Province. The relationship between brand image and accessibility to financial services was analyzed by using chi-square and correlation.

Table 6: Chi-Square Tests between brand images of agency banking and accessibility to financial services

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	30,463	12	.002
Likelihood Ratio	33,801	12	.001
Linear-by-Linear Association	2,428	1	.119
N of Valid Cases	230		

The means for the brand image of agency banking and access to financial services were used to compute the Pearson chisquare to establish whether the nature and magnitude of the relationship between the two variables. The findings show that there was a statistically significant relationship between the brand image of agency

banking and accessibility to financial services (p=.002 which is less than p=0.05). The association was positive, indicating that increased access to financial services was attributable to high levels of financial services awareness. The findings of the Pearson chi-square analysis are shown in Table 7.

Table 7: Correlation between the brand image of agency banking and accessibility to financial services

		Brand image	Accessibility to financial services		
Brand image	Pearson Correlation	1	.805**		
	Sig. (2-tailed)		.000		
	N	230	230		
Accessibility to	Pearson Correlation	.805**	1		
financial services	Sig. (2-tailed)	.000			
	N	230	230		
**. Correlation is significant at the 0.01 level (2-tailed).					

The Pearson correction was established between the two variables and found that

there was a statistically significant relationship between the brand image of

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INOSR HUMANITIES AND SOCIAL SCIENCES 9(2): 66-85, 2023 agency banking and accessibility to financial services (r = 0.805; p<0.01). The correlation was positive, indicating that

increased access to financial services was due to high levels of financial services awareness. The findings of the correlation analysis are shown in Table 8.

Effects of Agency Banking on customer's access to financial services Respondents were asked about the extent to which they agreed or disagreed with some of those factors and the results are summarized in Table 9.

Table 8: The extent to which agency banking affects customers' access to financial services

services							0.1
Variable	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean	Std. deviation
	F %	F %	F %	F %	F %		
Agency banking has made	21	9	19	66	115	3,7609	1,40468
many people to open savings bank accounts	9	3.9	9.4	28	49.4		
The number of people coming							
for financial services at the shop is high due to fewer difficulties	14	8	25	76	107	3,8565	1,26122
experienced compared to	6	3.4	11	33	47.2		
normal banking facilities							
	1.0	0	2.2	0.5	0.4	2.6174	1 45100
The number of people coming for	18	8	23	85	94	3,6174	1,45129
financial advice at the shop is high	7.7	3.4	9.9	37	42.5		
4	20		0.0	0.4		2.0204	1 40 400
At the shop, people walk small	22	6	23	64	115	3,6304	1,40428
distances to get many financial	9.4	2.6	9.9	29	49.4		
Services							
The number of people using	15	7	25	73	110	3,8739	1,26654
remittance and making payments	6.4	3	11	33	47.2		
through banking agents is high							

(Source: field survey, 2016)

As per Table 9, the respondents were asked to indicate the extent to which they agreed with five statements related to agency banking and whether many people open savings bank accounts. The study revealed that 9.0% strongly disagreed, 3.9% disagreed, 9.4% were neutral, 28.3% agreed and 49.4% strongly agreed that agency

banking has made many people open savings bank accounts by a mean of 3.7609 and a standard deviation of 1.40468. On the question of whether the number of people coming for financial services at the shop is high due to fewer difficulties experienced compared to normal banking facilities. The findings show that 6.0% of

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respondents strongly disagreed, 3.4% disagreed, 10.7% were neutral, 32.6% agreed while 47.2 % of respondents strongly agreed that the number of people coming for financial services at the shop is high due to fewer difficulties experienced compared to normal banking facilities as shown by mean 3.8565 and standard deviation of 1.26122. The respondents were asked if the number of people coming for financial advice at the shop is high. The 7.7% that studv indicated strongly disagreed, 3.4% disagreed, 9.9% were neutral, 36.5% agreed, and 42.5 % strongly agreed that the number of people coming for financial advice at the shop is high by a mean of 3.6174 and standard deviation of 1.45129. On the question if at the shop, people walk small distances to get many financial services, 9.4% strongly disagreed, 2.6% disagreed, 9.9% were neutral, 28.8% agreed while 49.4% strongly agreed that at the shop, people walk small distances to get many financial services as shown by mean of 3.6304 and standard deviation of 1.40428. Lastly, the respondents were asked if the number of people using

remittance and making payments through banking agents is high. From the findings the study established that 6.4% strongly disagreed, 3.0% disagreed, 10.7 % were neutral, and 32.6% agreed while 47.2% strongly agreed that the number of people using remittance and making payments through banking agents is high by a mean of 3.8739 and standard deviation of 1.26654. This implies that agency banking is continuously improving leading to significantly increased access to financial services in those banks that have rolled up the service due to its convenience and efficiency in operation.

Relationship between agency banking and accessibility to financial services

The third and final objective of the study was to determine the effects of agency banking on access to financial services in commercial banks in the northern province of Rwanda. In this sub-section, the respondents' views on agency banking and its relationship with access to financial services were analyzed by using chi-square and correlation.

Table 9: Chi-Square Tests between agency banking and accessibility to financial services

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	34,217	12	.000
Likelihood Ratio	34,43	12	.000
Linear-by-Linear Association	3,682	1	.064
N of Valid Cases	230		

A test of chi-squire revealed that the respondent's means scores on the availability of agency banking had a positive impact on accessibility to financial services. Thus, means for agency banking and access to financial services were used to compute the Pearson chi-squire to determine whether there was a significant relationship between agency banking and accessibility to financial

services. The Pearson chi-squire analysis as per Table 10 revealed that there was a statistically significant relationship between agency banking and accessibility to financial services (P=.000; p< 0.05). The relationship was positive and very strong, indicating that greater access to financial services was attributable to increased utilization of bank agency services to pay various utility and service bills.

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Table 10: Correlation between agency banking and accessibility to financial services

		Agency banking	Accessibility to financial services		
Agency banking	Pearson Correlation	1	.774**		
	Sig. (2-tailed)		.000		
	N	230	230		
	Pearson Correlation	.774**	1		
Accessibility to	Sig. (2-tailed)	.000			
financial services	N	230	230		
** Correlation is significant at the 0.01 level (2-tailed).					

Table 11 shows Pearson correlation results of agency banking and accessibility to financial services. The Pearson correlation analysis revealed that there was a significant statistically relationship between agency banking and accessibility to financial services (P=0.774; p< 0.01). relationship was very representing that higher access to financial services was caused by increased utilization of agency banking to pay various utility and service bills. Most of these payment services are provided through POS services or mobile money transfer/payment services. When compared to the long distances to be covered, the costs of travelling and the long queues, the rural population prefer transacting through the bank agents of the banks in which they hold accounts.

DISCUSSION

This study had 3 specific objectives namely: to investigate how the operational structure of agency banking influences customer's access to financial services, to establish the relationship between brand images of agency banking and accessibility to financial services, to determine the effects of agency banking on access to financial services in commercial banks in the Northern Province of Rwanda. The discussions in the following sections highlight the key findings of the study based on the objectives.

Findings on effects of operational structure on customer's access to financial services

The first objective was to investigate how the operational structure of agency banking influences customer's access to financial services. The study found that commercial bank customers get adequately good services from agents of commercial banks in the northern province of Rwanda since the means score as per Table 3. Table 4 and Table 5 indicated that (r= 0.861) there is a relationship between one's agency banking operational structure and accessibility to financial services. The first point of contact that establishes a

relationship between the rural people and a financial institution is a bank account. Lack of availability of appropriate, lowcost, fair and safe financial products and services to certain segments of society, supplied by normal suppliers is financial exclusion. [20] observed that there are some problems with financial services in rural areas. The demand for financial services in rural areas has increased but small population size results in high cost and makes financial services less attractive to people in these areas. Info Resources also highlighted various challenges to rural financial services, the most important of these challenges being the high transaction cost. However, with most banks having either completely done away with or considerably lowered the charges associated with deposit and withdrawal, the most critical barrier to accessing financial services has been addressed. This has increased the number of people in rural areas who own bank accounts and thus can transact at the agency outlets. The challenge of difficult topography and weak configuration of infrastructure that has for a long time discouraged banks from opening ATMs or branches in rural areas

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has been addressed by establishing agency banking. This has profoundly seen the rural populace avoid travelling long distances to cities to get financial services, which were not only costly but also tiresome and prohibitive. The effect has been increased access to financial services, hence the positive association between operational structure and access to financial services.

Findings on the relationship between the brand image of agency banking and accessibility to financial services

The second objective was to establish the relationship between brand images of agency banking and accessibility financial services. The study found that agency brand image is moderately good since the means score (see Table 6) is great. However, it has a significant effect determining the accessibility to financial services. Therefore, on-brand images and access to financial services, the study established that (see Table 7 and Table 8) the respondents respectively agreed (79.6%) that most clients were aware of how different agency services provided work, people go to enquire more about the bank's new developments, people are aware of the existence of the various products offered by commercial banks and most people are aware of the existence of bank agents' outlet shops. There was a significant, relationship between brand images and access to financial services. With high levels of awareness of available financial services at the agency outlets, the costs related to the provision of the services as well as transaction costs among other pieces of financial information have increased efforts to ensure that the

In line with the first objective of the study which sought to determine the effect of operational structure on accessibility to financial services, the study revealed that good operational structure is a major contributor to customer's access to financial services. The banks do understand the application of good operation structure in agency banking, in

unbanked rural population has access to financial services.

Findings on how agency banking influences customers' access to financial services

The third and final objective of the study was to determine the effects of agency banking on customer's access to financial services in commercial banks in the Northern Province of Rwanda. The study found that agency banking is moderately good indicated by means score and standard deviation as per Table 4.9. However, The Pearson chi-squire and Pearson correlation analysis revealed that was a statistically significant relationship between the agent's bank and access to financial services (see Table 10 and Table 11). The relationship was positive and strong (r= 0.774), indicating that greater access to financial services was attributable to increased utilization of agency banking to pay various utility and service bills. This implies that with most providers adopting technology-based and cashless payment systems due congestion in the main cash customer service halls, most of the agents of the services have responded positively to such utilizing such strategies, payment services. Most of these payment services are provided through POS services or mobile money transfer/payment services. When compared to the long distances to be covered, the costs of travelling and the long queues, the rural population prefer transacting through the bank agents of the banks in which they hold accounts. Hence advantages associated with bank services have led to increased access to financial services and by large, financial inclusion.

CONCLUSION

its business operations. This corresponds with [21] since the study found that good operational structure in agency banking very great extent influences banks' international business operations. Secondly, the study concludes that there is a positive relationship between bill payments and access to financial services. Advances in innovation that have brought

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about the adoption of telco-money transfer services and the extensive introduction and penetration of point-of-sale devices have encouraged many service providers adopt and businesses to cashless payments. Due to the convenience associated with cashless payments that save bank clients' time associated with queuing to make payments of some bills such as electricity and water bills as well as the general security related to cashless transactions, many people have adopted such kinds of payments whose imperatives include operating a bank account. Thus, with such kinds of services as payment of bills, financial inclusion among the rural poor has been enhanced. The study further concludes that financial services accessibility bv customers through banking agencies had a positive impact on the financial performance of commercial banks in Rwanda with many of the banking institutions indicating that agency banking had made it easier for them to reach out to many potential clients without investing so much in opening branches hence it's a cost-effective measure. Finally, the study financial concluded that services awareness positively influences access to financial services. When people are aware of the available services, are provided with more accurate and up-to-date information on new developments in the agency banking segment and know where to get the services, their access to financial services increases thus enhancing financial inclusion.

Recommendations

Commercial banks should ride on the successes made in agency banking to scale up access to financial services hence financial inclusion by opening up more outlet networks to considerably reduce the distances covered by the rural poor. Better geographic outreach can remove distance as a barrier to financial access for both the bank and the client, thus allowing banks to be more responsive and less intimidating to their deposit customers. This should be augmented by allowing the agents to

perform other services such as a collection of cheques to enhance financial access and inclusion. Secondly, study the recommends improvement of the brand image of all agent banks operating in the retail market. The study recommends that information and awareness should be put in public to build confidence and trust in agency banking as a secure, efficient and modern way of banking. Riding on the positive influence of customer's access to financial services, commercial banks and other financial institutions should make careful efforts to institutionalize customer programs that will raise awareness among not only existing clients but also potential customers. This has the potential to increase take-up of financial services thus benefiting both the client and the financial institution.

Suggestions for further studies

The study relied on self-reported data mainly from the commercial bank perspective alone and used a single industry setting. Further research could seek to address this limitation by using multiple industry settings such as telecommunication companies to conduct their studies and this would enhance the validity and generalization of the research findings.

Although the bank agents were fit to give reliable data, there is a possibility that the information from these agents was not the only source of information about agency banking and accessibility to financial services. It may be vital to use both information from the bank managers and compare it with the views of the other stakeholders like the competitors and suppliers. Possibilities of exaggerated results from self-reported data may also exist where secondary data is not available for further validation. To handle this limitation, future research can combine the views of managers. customers. suppliers, competitors and other relevant organization stakeholders.

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