# AFRICA UNIVERSITY

(A United Methodist-Related Institution)

# IMPACT OF DIGITAL TRANSFORMATION IN THE REMITTANCES SECTOR IN ZIMBABWE

BY

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A DISSERTATION SUBMITTED IN PARTIAL FULLFILLMENT OF THE
REQUIREMENTS FOR THE DEGREE OF EXECUTIVE MASTERS IN
BUSINESS ADMINISTRATION IN THE COLLEGE OF BUSINESS, PEACE,
LEADERSHIP AND GOVERNANCE

#### **Abstract**

This study was conducted to investigate the impact of digital transformation in the remittances sector in Zimbabwe. To achieve the major objective, the study used descriptive design and simple random sampling to gather data from Mukuru customers. Forty-five sites were selected from a total of 450 Mukuru sites (representing a 10% sample size). The research stratified the sites into six regional management zones and targeted to select 10 from each. Within each stratum, the research applied simple random sampling technique using random number tables to select the participating sites. At the end, the 6 samples were then combined to form the overall sample. The study used digital questionnaires to collect data. The sample population was the company's walk-in customers across the six provinces within the company's regional subdivisions. The study used convenience sampling to select participants. The target was at least fifty customers per location for all the locations, and this exercise was carried out over a calendar month resulting in at least 1200 responses per location for the duration of the exercise. Chi square tests were done on the categorical data obtained from the chosen variables. The variables under study were type of device, place of residence, age, and remittance value. The research findings reveal a notable disparity in technology utilization within the remittance sector with 60% of the customers used Feature phones to transact, while 30% used android and 10% used other devices such as iPhone. More customers below the age of 30 use advanced android technology (12 %) compared to the other age groups i.e., middle-aged people, which is at par with senior citizens.at which were at 9 %, respectively showing that the customers below 30 years of age have a higher appetite for technology. Consequently, this has the effect of slowing digital advancement and consequently digital financial inclusion. It is from this result that the study highlights that the kind of remittances that are pushed through basic phones result in cash withdrawals as a means of cashing out. It implies that the country is still a bit far in terms of cashless transactions that result from remittances. This underscores the digital divide, where a considerable portion of the population remains anchored to rudimentary technology. Results indicated that majority of those transacting with basic technology are rural area dwellers, so the study recommended that remittance companies lead the way by providing their front-line staff with advanced technological gadgets. Leveraging on the NGO system that reach out to rural people to give food aid and relief cash transfers, Mukuru can partner on an NGO funded device disbursements together with cash so that they have basic Android devices; it is also a form of technological hunger that needs the assistance of donors. Furthermore, Mukuru can engage in customer awareness campaigns so that they pique their customer's interest to shift to advanced devices from the obscure feature phones.

**Key Words**: Mukuru, Android Devices, Remittances, Technology

# **Declaration**

I declare that this dissertation is my original work except where sources have been cited and acknowledged. The work has never been submitted, nor will it ever be submitted to another university for the award of a degree.

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# **Dedication**

I dedicate this research project to my family.

# List of Acronyms and Abbreviations

ADLA AUTHORISED DEALER WITH LIMITED AUTHORITY

**COVID-19** Corona Virus Disease 2019

**DOI** Diffusion of Innovation

**FDI** Foreign Direct Investment

**GDP** Gross Domestic Product

**IMF** International Monetary Fund

**KYC** Know your Customer.

**NFIS** National Financial Inclusion Strategy

**ODA** Official Development Finance

**RBZ** Reserve Bank of Zimbabwe

**SADC** Southern African Development Cooperation

**SCOT** Social Construction of Technology

**SDG** Sustainable Development Goal

**SME** Small to Medium Enterprise

SSA Sub Saharan Africa

SSK Sociology of Scientific Knowledge

**TAM** Technology Acceptance Model

**UNCDF** United Nations Capital Development Fund's

**UNDP** United Nations Development Program

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#### **CHAPTER 1: INTRODUCTION**

#### 1.1 Introduction

The COVID-19 pandemic has spotlighted the remittances industry, emphasizing its importance in the context of global migration and economic support for families in home countries. With a push from international financial bodies like the World Bank and IMF towards enhancing financial inclusion to spur economic growth and reduce poverty, Zimbabwe is urged to adopt digital transformation strategies to improve its remittance systems and financial inclusion efforts. This study aims to explore the extent of digital transformation in Zimbabwe and its impact on financial inclusion, particularly through remittances, which are crucial for the country's economic development and poverty reduction.

#### 1.2 Background to the study

This section of the study will provide background information on the topic. The background will break the topic into sub-components. This study will start by giving a background on remittances from a global perspective, then narrow it down to Africa, Sub Saharan Africa, and finally Zimbabwe. Furthermore, background of financial inclusion, starting from the global agenda down to Zimbabwe's targets and how it aims to achieve them through remittances (both domestic and international). The final part of the background will look at the digital transformation aspect. This study will zoom in on the current level of digital platforms used by the Zimbabwean remittance player vis-a-vis global trend setters in this arena. This section will bring together the three components of remittances, financial inclusion and digital transformation as regarding the aim of this study.

#### 1.2.1 Remittances

The subsections that follow breaks down the idea of remittances under the following subheadings: Overview of remittances, global trends, African trends, remittances in Zimbabwe and then give a background on the players in the Zimbabwean sector. This study employs the inverted pyramid style of analysis from the broader global arena down to the Zimbabwe scenario.

# 1.2.1.1 Overview of the remittances industry

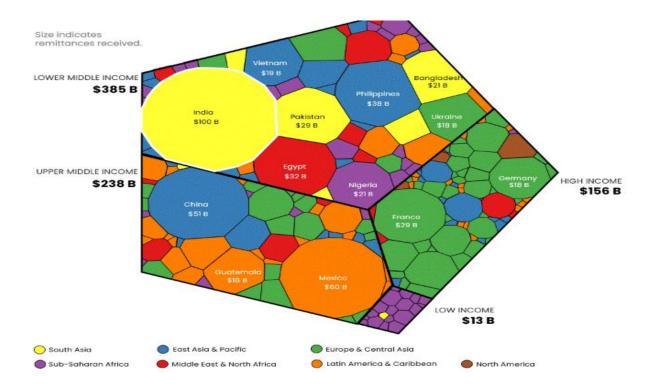
Extensive research has been conducted regarding international flows to developing countries, however, emphasis has been given to foreign direct investments (FDI), portfolio investments, and official development finance (ODA) (Aggarwal et al., 2011). Since the turn of the 1990s, development economists have been paying attention to remittances sent by international migrants to support their families in their home counties (Yang, 2011). Trends in international financial flows have witnessed remittances sometimes significantly surpassing ODA and sometimes equaling FDI (Yang, 2011. Remittances have been observed to move in large magnitudes and with more steady and stable flow compared to foreign direct investments. A sizeable number of studies have been carried out to that effect both on macro and micro levels to better understand the drivers and impact of international remittances (Aggarwal et al., 2011)

#### 1.2.1.2 Global Trends in Remittances

The top five countries that receive the highest remittances are India, China, Mexico, the Philippines, and Egypt (World Bank, 2023). Billions of dollars are sent to India annually, making it the country that receives the greatest amount of remittances (World Bank, 2023). China follows closely behind, with a considerable number of its

citizens working abroad and sending money back home. Significant remittances are also received by Egypt, the Philippines, and Mexico, which boost each country's economy (World Bank, 2023).

Figure 1.1 Global Remittances (Source: www.statista.com)



Remittance flows have a significant effect on the countries that receive them. Along with supporting investments in healthcare, education, and other vital areas, they also contribute to lowering poverty and raising living standards. People who receive remittances can access the formal financial system, which furthers financial inclusion (Amigo & Okyere, 2018).)

# 1.2.1.3 Remittance Trends in Africa

Table 1.1 below illustrates how close to \$100 billion in remittances, mostly from Western Europe, reached Africa in 2021 alone. The top 5 countries that had the highest inflows of remittances were Egypt, Nigeria, Morocco, Ghana, and Kenya, respectively. This implies that \$100 billion of free-flowing funds were pumped into the economies in Africa in the ratios given in Table 1.1 Whether the funds are used in developmental projects is another issue that has been widely researched.

**Table 1.1: Global Remittances** 

		Share of	Australia	Caribbea	Central and		North	Northern	Southern	Sub-	western Europe
territory	USD)	(%)	Oceania	and	Europe	Africa	America	Europe	Europe	Africa	
Africa	96158	100	148	12. 5	66	1336	153	3	942	1804	21844
	31,48	32.		0.4	32		243		148		
Egypt	7	7	424	2	5	325	6	143	9	88.37	1385
Nigeria	19483	20. 3	188	10.	8	208.	<ul><li>629</li><li>7</li></ul>	219	164	5493	4802

Morocc		11.		0.0	65.	33.4			4,00		
o	10704	1	10	9	1	6	556	99	2	19.63	5437
				0.5	15.		126				
Ghana	4506	4.7	39	3	1	3.68	9	59	345	1640	1111
				0.4	14.	18.9	151				
Kenya	3770	3.9	212	3	4	2	1	94	51	572	1255
			2.1			11.8		9.5			
Senegal	2657	2.8	4	0	9.6	5	344	2	764	687	807
			3.0		19.			23.			
Tunisia	2194	2.3	9	0	8	13.7	490	1	266	2.2	1288
1							I				
Zimba			124		1.5			4.6			
Zimba bwe	1982	2.1	.1	0.1	1.5 4	0.04	235	<b>4.6 3</b>	7.54	1204	404
	1982	2.1		0.1		<b>0.04</b> 21.8	<b>235</b> 88.3		<b>7.54</b> 71.4	1204	404
	<b>1982</b> 1759	<b>2.1</b> 1.8	.1		4			3		<b>1204</b> 10.83	1533
bwe			.1	0.0	<b>4</b> 12.	21.8	88.3	<b>3</b> 6.6	71.4		
<b>bwe</b> Algeria			.1 2.4 7	0.0	<b>4</b> 12. 4	21.8	88.3	3 6.6 3	71.4		
hwe Algeria Somali	1759	1.8	.1 2.4 7 16.	0.0	4 12. 4 18.	21.8 2 132.	88.3	3 6.6 3 203	71.4 3 25.2	10.83	1533
hwe Algeria Somali	1759	1.8	.1 2.4 7 16. 12	0.0	12. 4 18. 4	21.8 2 132.	88.3	3 6.6 3 203 .7	71.4 3 25.2	10.83	1533
Algeria Somali a	1759 1735	1.8	.1 2.4 7 16. 12	0.0	4 12. 4 18. 4 1.2	21.8 2 132. 8	88.3	3 6.6 3 203 .7 18.	71.4 3 25.2 1 22.1	10.83	1533 390

(Source: https://www.statista.com/statistics)

#### 1.2.1.4 Remittances in Zimbabwe

Former Finance Minister Patrick Chinamasa acknowledged the importance of remittances in the 2014 Budget Statement by indicating that most countries in the world, including Zimbabwe's regional neighbors, were benefiting immensely from financial transfers by their nationals in the diaspora. Remittances that are either invested or saved have a multiplier effect on the economy and have a developmental impact (UNDP, 2010).

With reference to Table 1.1, it shows that most of the inflows are intra Africa, i.e money moving from within Africa. This speaks to the immigration dynamic that most economic refugees are migrating to countries within the African continent. In that context, the South Africa to Zimbabwe corridor has become the most popular inbound remittance route in the Southern African Development Community (SADC) region, according to some of the findings. Between 2016 and 2021, the corridor saw an average of over 3 million transactions and USD 296 million annually.

Most remittances, specifically, come from the South African corridor, where they accounted for 43% of all remittances in 2021 (19% in 2015). Most transaction volumes from South Africa to Zimbabwe are through Authorized Dealers with Limited Authority (ADLAs)/non-banks, accounting for 86 percent of the total volume. Most recipients, 58 percent, receive USD 99 or less per remittance inflow.

The diaspora community in South Africa is supporting three or more family members in Zimbabwe, according to 72% of respondents. The average cost of sending remittances is 9.2 percent, and remittances are mostly used for household consumption. However, since the onset of COVID-19, 74% of respondents have experienced a decrease in remittance amounts received. (World Bank Report, 2022)

Table 1.2 below shows the impact of remittances on the gross domestic product of Zimbabwe. Its influence cannot go unnoticed because it has an impact of not less than 10% according to the 2019 figures; the highest it has ever gone was close to 14% in 2011. There can be said to be a positive linear relationship between remittances and GDP. As a country that is aiming to benefit the general populace by increasing the level of financial inclusion, remittances can be another channel by which that can be achieved. Remittances are simply the transfer of money from one person to another by means of cash or products. Major players in the remittances space are Mukuru, Money Gram, Western Union, Ecocash and Access Forex.

Table 1.2: Remittances and GDP

Year	Remittances(USD	GDP (USD in	Remittance as %
	in Millions)	Millions)	GDP
2009	1205.66	10061.94	11.98
2010	1413.25	12041.66	11.74
2011	1919.48	13750.84	13.96
2012	2113.58	16042.47	13.17
2013	1890.28	16361.64	11.55
2014	1903.97	16750.54	11.37
2015	2046.58	17048.68	12
2016	1856.04	17177.55	10.81
2017	1729.88	17985.58	9.62

2018	1729.88	18854.23	9.18
2019	1773.49	17327.04	10.24

(Source: WDI Online Database)

# 1.2.1.5 The Remittance Players and brief overview of the business environment

Due to economic hardships that are being faced by people in Zimbabwe, the channels of remittances have vastly increased. The channels used are of important use to this study as they give guidance on the levels of technology they use to remit funds or for the recipient/ sender to use their platforms to transact. Below is a summary of the 12 most used remittance platforms.

#### i. Mukuru

Money transfer provider Mukuru has operations in several nations, including the UK, South Africa, Botswana, Zambia, and Malawi. Depending on the country, one can access their website to find their agent network, phone number, or online platform for convenient service. In Zimbabwe, Mukuru has a vast network of collection points known as "orange booths." Clients can find these at some Zimpost stores as well as OK, Bon Marche, ZB, POSB, Stanbic, and others. With a guaranteed pick-up point for US dollars, Mukuru charges \$10 for transfers of \$100 or more.

#### ii. Western Union

Western Union boasts a global network of more than 500,000 agents spread across 200 countries. Senders can access their services through online, offline, and app-based experiences. Western Union is one of the most practical transfer companies,

with 95 collection agents spread throughout their network in Zimbabwe. While they charge a competitive US\$8 transfer fee, the recipient is assured US dollars in cash.

#### iii. Hello Paisa

Hello Paisa has a network reaching 32 countries, including Zimbabwe, and their network includes many African and Asian countries. Senders have the option of transacting through their stores, online, or via application, while those receiving can collect through a wide network that includes Choppies, Steward, Metbank, Getbucks, Pick n Pay, CBZ Bank, and Banc ABC. Hello Paisa transaction fees range from \$8 to \$100 per transaction.

# iv. MoneyGram

With operations in 200 countries and a 347,000-strong agent network, MoneyGram is a genuinely global player. MoneyGram offers recipients the option to direct funds to their mobile money wallet in addition to 14 collection locations throughout Zimbabwe. Accordingly, their reach is entirely national. Senders can use MoneyGram's online service or any of their numerous agents located throughout the world. MoneyGram charges US\$10 to send US\$100.

# v. World Remit

World Remit is a money transfer platform with a focus on mobile money and it operates in 50 countries across the world as a way of giving a convenient service. World Remit offers more than 200 collection agents in Zimbabwe in addition to enabling recipients to receive money in their mobile wallets. These include banks

and retail outlets. World Remit offers a simple web-based service that you can use from a distance to process payments using credit cards and banks. They also have Apple and Android applications. Sending \$100 only costs US\$3.50 with World Remit.

#### vi. Senditoo

Senditoo is still a new kid on the block. It started in 2016 and started off as a mobile top-up service in which a person in one country tops up mobile credit for a person in another country. It now offers money transfers and now operates in over 50 countries offering transfer services to 39 African countries including Zimbabwe. Senditoo leveraged on the BancABC branch network for cash collection and became popular for their door-to-door cash delivery service. They charge US\$5 to send US\$100.

#### vii. Ecocash Remit

Cassava Ecocash Remit allows senders from 12 countries, notably China, to send funds to recipients who can receive money as cash or credited into mobile wallets. It brings a world of convenience and allows senders to send, whether via an agent, online, or mobile. Additionally, they have a social media platform called Sasai, where users can send money back to friends and family. Cassava Ecocash Remit charges an unbelievable US\$1.60 to send US\$100.

#### viii. Mama Money

Those who wish to remit funds, especially from South Africa, can employ the services of Mama Money, which was launched in 2015. Their major corridors are

from South Africa to Zimbabwe, but they are also expanding their tentacles into southern Africa.

Other remittance agents worth mentioning are Ria, Remitly, OFX, and other banks like Banc ABC, ZB, POSB, and Steward Bank, which offer domestic and international remittances to and from countries around Africa. These remittances are regulated by the Reserve Bank of Zimbabwe (RBZ) and licensed under Authorized Dealer with Limited Authority (ADLA)

The World Bank's World Development Indicators online database has information on remittances covering the period 1980–1994 and then 2009–2019. The information on remittances for the period 1980-1994 shows that remittances to Zimbabwe averaged about USD 10 million per year. The database also shows that, compared to the 1980s and early 1990s, remittances in 2009 (and beyond) had increased to billions (USD 1.2 billion in 2009). In 2012, the country received over USD 2 billion in remittances (13.17% of the country's GDP). The average annual value of remittances during the 2009-2019 period was USD 1.78 billion. Having shown that this is indeed a significant flow of money into the country, it is imperative for this study to establish if any technological improvements can be made to improve the financial inclusion brought on by these inflows.

Having summarized the trends and patterns of remittances from a global perspective and an African perspective, then the player dynamics on the Zimbabwean landscape, the study now juxtaposes them to look at financial inclusion in the context of remittances.

#### 1.2.2 Financial Inclusion

This subsection of the background explains the various aspects of financial inclusion and the expected outcomes of financial inclusion.

# 1.2.2.1 Financial Inclusion from UN Perspective and Sustainable Development Goals (SDGs)

Financial inclusion is a method that permits adults to have access to and be proficient with a variety of suitable financial services (Demirguc-Kunt et al., 2017). Such services must be provided responsibly and safely to consumer and sustainably to the supplier in a setting with strict regulations. Financial inclusion begins with a deposit or transaction at the most fundamental level, utilizing a mobile money service, a bank account, or another financial institution, which can be used to store or save data as well as send and receive payments. (Mutsonziwa et al., 2016)

In the 2030 Sustainable Development Goals, where financial inclusion is a target in eight of the seventeen goals, it is positioned prominently as a facilitator of other developmental goals. They are SDG 1 on poverty eradication; SDG 2 on food security, hunger relief, and sustainable agriculture; SDG 3 on promoting health and well-being; SDG 5 on gender equality and women's economic empowerment; SDG 8 on fostering economic growth and jobs; SDG 9 on assisting industry, innovation, and infrastructure; and SDG 10 on decreasing inequality. Furthermore, there is an implicit role for increased financial inclusion through increased savings mobilization for consumption and investment that can promote growth in SDG 17, which is focused on strengthening the means of implementation.

Research has shown that financial inclusion models can help achieve both the larger development goals and general economic growth. In a recent report, the McKinsey Global Institute found that digital finance alone could boost inclusive growth and add \$3.7 trillion to the GDP of emerging economies within ten years, benefiting billions of people. According to the findings of a long-term impact study on Kenya's M-PESA mobile money service, mobile money has helped up to 194,000 household or 2% of the country's population escape poverty and has been successful in enhancing the financial circumstances of low-income women and those living in households headed by women. Additionally, there is mounting evidence that financial inclusion contributes to the stabilization of economies and financial systems, mobilizes domestic savings, and increases government revenue (Djagadou, 2016).

Banks, cooperatives, microfinance organizations, money transfer businesses, and mobile network operators can expand the reach of financial markets where they would not have otherwise by using the United Nations Capital Development Fund's (UNCDF) last-mile financing models. UNCDF ensures that suitable financial products (savings, credit, insurance, payments, and remittances) are available to individuals, notably the excluded and underbanked, and micro, small, and medium enterprises, at a reasonable cost, and on a sustainable basis.

#### 1.2.2.2 What is financial inclusion in the Zimbabwean context?

The goal of financial inclusion is to enable individuals and businesses to access and use appropriate and affordable financial products and services to meet their needs in a responsible and transparent manner. Zimbabwe is a developing country with a

significant population that has limited access to finance. This study will explore financial inclusion in Zimbabwe and analyze the steps taken to increase it since 1980 as a way of introducing the subject matter.

As a point of departure, once a person can access the remittance service, they have been financially included. This is because for a person to access any remittance service, they go through a process of KYC verification and are registered on a database as a customer whose address is known and whose identity particulars are captured. This is a procedure monitored by the regulator, the Reserve Bank of Zimbabwe and every remittance transaction must be conducted on this basis.

#### 1.2.2.3 Financial Inclusion in Zimbabwe since 1980:

Zimbabwe was a British colony until 1965, and after that, it was ruled by a white minority regime until 1980. When it was granted independence in 1980, the government focused on rebuilding the country's infrastructure and economy. Unfortunately, the government faced several challenges due to political and economic instability. During the 1990s and early 2000s, Zimbabwe experienced hyperinflation, which led to the collapse of the formal financial sector.

In response to the economic crisis, the government launched the National Economic Recovery Program in 2000. One of the program's goals was to increase financial inclusion in Zimbabwe, and the government initiated several policies to achieve this goal. These policies included several liberalization measures, such as the removal of foreign exchange controls, the licensing of new commercial banks, and the establishment of a credit registry. These measures were aimed at improving access to financial services for individuals and businesses (Mandizha et al., 2020)

Since then, Zimbabwe has gradually implemented various projects and programs aimed at increasing financial inclusion. These initiatives are expected to help reduce poverty and increase financial access for marginalized and vulnerable groups in the country. In 2016, the government launched the National Financial Inclusion Strategy (NFIS) to coordinate these projects and provide the necessary guidance to increase financial inclusion. (Ministry of Finance, 2016)

# 1.2.2.4 Retrospective look at steps taken to increase the broader financial inclusion:

Several significant policies have been implemented that have significantly increased financial inclusion in Zimbabwe.

# i. Establishment of Savings-Based Microfinance Institutions:

Zimbabwe has created several savings-based microfinance institutions aimed at increasing financial inclusion. The Zimbabwe Association of Microfinance Institutions (ZAMFI) is a non-government organization that promotes and coordinates activities among microfinance institutions. These institutions provide essential loans, savings, and other financial services to excluded individuals and small and medium-sized enterprises (RBZ, 2017).

# ii. Mobile Banking:

Mobile banking has become an essential tool for increasing financial inclusion in Zimbabwe. In 2014, the government introduced mobile banking regulations that allowed mobile money service providers to operate in the country. These regulations were aimed at promoting financial inclusion and increasing financial access to marginalized and vulnerable groups. (RBZ, 2017).

#### iii. Bank Outreach Programs:

Bank outreach programs have been implemented to provide financial services to the unbanked population of Zimbabwe. These programs involve commercial banks setting up branches or agencies in remote areas with limited access to financial services.

# iv. Financial Education Programs:

Financial education programs aim at improving financial literacy and educating individuals and companies about the benefits of financial services. These programs include training sessions, discussion forums, and public awareness campaigns.

# v. Establishment of Micro-insurance:

Micro-insurance initiatives have been established in Zimbabwe to help low-income individuals and small and medium-sized enterprises access basic insurance products. As a result, these initiatives have helped to mitigate risks such as crop failures, droughts, and livestock diseases.

#### 1.2.2.5 Zimbabwe's Current Financial Inclusion Strategy

In the Zimbabwean context, the Reserve Bank of Zimbabwe crafted and is operating within the framework of Zimbabwe National Financial Inclusion Strategy (ZMFIS) (2022-2026) which defines financial inclusion as the effective use of a wide range of quality, affordable and accessible financial services, provided in a fair and transparent manner through formal or regulated entities by all Zimbabweans. This comprises having use of and access to a broad range of offered goods and services by several participants in the financial services industry, such as banks, insurance,

pensions, capital markets, micro-lending, financial institutions for development, and payment systems.

The expected outcomes of the National Financial Inclusion Strategy II (2022–2022) are aligned with the national development goals. The NFIS II focuses on delivering the following key outcomes:

- a) Financial Deepening: By utilizing more creative distribution channels and highquality, customer-focused financial products to meet long-term financial needs, financial needs can be met sustainably.
- b) enhanced means of livelihood and financial capacity for the targeted groups via the sustainable use of financial services and a combination of information, abilities, attitudes, and self-assurance to make wise financial decisions that promote stability, security, engagement in the economy, and higher standards of living.

#### 1.2.2.6 Expected Outcomes of the Financial Inclusion Strategy:

Below is a brief outline of expected outcomes of financial inclusion strategy

# i. Financial Deepening

Increased access to a diverse range of financial products and activities through efficient use is made possible by financial deepening, which raises productivity and strengthens resilience to shocks. The objective of the strategy is to encourage the creation of second-generation financial products to boost the adoption and utilization of financial services. Steady and rapid economic growth is facilitated by the development and expansion of financial services providers, products, and services in proportion to the size of the economy. A deepening financial sector is better positioned to support the real sector and propel economic recovery and prosperity.

# ii. Improved Livelihoods and Financial Capability

MSMEs continue to be a key driver of economic development, employment creation, and wealth creation. Knowledge of financial products and services, the ability and confidence to make sound financial decisions, coupled with formalization, skill development, and a supportive legal and regulatory framework, are key to unlocking the entrepreneurial skills that will facilitate new wealth creation in line with the objectives of the NDS I. 2.12 As part of the improved livelihoods, the strategy seeks to facilitate improved financial health and resiliency among the vulnerable groups. Financial health assesses how well one's daily financial system facilitates building resilience and shifts from measuring financial inclusion just based on access to finance to incorporating more broad and long-term goals of financial security, resilience, and quality of life. Financial health calls for a more coordinated approach among various stakeholders to facilitate uptake and sustained usage of financial services towards visible improvement in the beneficiaries' livelihoods. Financial inclusion, as a comprehensive approach that emphasizes resilience-building and long-term financial goals, is long-term and an effective tool for addressing some of the SDGs, like poverty reduction.

#### iii. Access to Financial Services:

Remittances provide individuals and families with an additional source of income, enabling them to access financial services such as savings, loans, and insurance products.

#### iv. Investment in Small and Medium-Sized Enterprises:

Remittance funds can be used to invest in small and medium-sized enterprises (SMEs), which are the lifeblood of Zimbabwe's economy. SMEs have a significant impact on job creation and economic growth.

# v. Financing Education and Healthcare:

Remittances can be used to finance education and healthcare expenses for families with limited means.

#### vi. Facilitate Asset Accumulation:

Remittance funds can help families acquire assets, such as homes or vehicles, which are important for improving living standards and promoting financial inclusion. Financial inclusion is critical for fostering economic growth and reducing poverty in Zimbabwe. Although much progress has been made since 1980, there is still much to be done to ensure that everyone has access to quality financial services. With the government's ongoing efforts to increase financial inclusion, initiatives from private banks and financial institutions, and the aid of remittances, the goal can be achieved. It is essential to emphasize the role remittances play in increasing access to financial services in Zimbabwe. Governments should, therefore, focus on policies that support remittance flows and encourage their use for financial inclusion.

# 1.2.2.7 The perceived impact of remittances on the financial inclusion agenda

Remittances have a positive impact on financial inclusion. Remittances help to bridge the gap between the amount of money available in the economy for investment and the amount needed for financial inclusion. Remittances can help individuals and households access financial products and services due to the influx of money into the economy. Furthermore, remittances are accompanied by a variety of

financial services, such as banks, money transfer services, and mobile banking, which increase access to financial services and products. These services provide more options for individuals and households to save and borrow, which increases financial inclusion. Additionally, remittances can provide individuals and households with more financial literacy, which is needed to make informed decisions about their finances. Finally, remittances can help stimulate the local economy, leading to increased job creation and increased financial inclusion. (World Bank Group, 2010)

So far with the discussion, above, underpinned by referenced studies, one key element standing out is that there is a symbiotic relationship between financial inclusion and remittances. Hence the need for Organs like UNCDF crafting ways to harness the flow of remittance to push the financial inclusion agenda. Remittances are a source of income in many developing countries, including Zimbabwe, and have significantly contributed to financial inclusion in the country. Remittances are the transfer of funds from a migrant worker to their family or friends in their home country. In Zimbabwe, remittances contribute significantly to the country's economy and represent a critical tool for increasing financial inclusion. According to Ncube (2018), remittances have been instrumental in facilitating financial inclusion in Zimbabwe by providing the following benefits: access to financial services; Investment in Small and Medium-Sized Enterprises; financing education and healthcare and facilitate asset accumulation:

Remittances have a positive impact on financial inclusion. Remittances help to bridge the gap between the amount of money available in the economy for investment and the amount needed for financial inclusion. Remittances can help

individuals and households access financial products and services due to the influx of money into the economy. Furthermore, remittances are accompanied by a variety of financial services, such as banks, money transfer services, and mobile banking, which increase access to financial services and products. (Mlambo et al., 2020) These services provide more options for individuals and households to save and borrow, which increases financial inclusion. Additionally, remittances can provide individuals and households with more financial literacy, which is needed to make informed decisions about their finances. Finally, remittances can help stimulate the local economy, leading to increased job creation and increased financial inclusion. (World Bank Group, 2010).

The third and final leg of this study concerns digital transformation. Rhetorically, digital transformation is the leg upon which financial inclusion runs, as implemented through remittance inflows. People can now pay for goods and services, receive wages from employers, and send money home more easily, affordably, and safely thanks to the digital transformation. Mobile money accounts facilitate the handling of high volume, small denomination transactions more effectively, enabling users to access financial services and save money for emergency situations.

# 1.2.3 Digital Transformation

This section of the study will give background information why digital transformation is mentioned as an enabler in the scheme of things and processes of remittances. This is the premise of the study as we investigate how true it is that digital transformation is the oil that smooths and gives impetus to the financial system as they push the financial inclusion agenda. So this section will shed more light on what digital transformation is, the levels of technology used by the service

providers, but the goal of this study is to expose how tech savvy the users of the remittance service are. From the standpoint of the service provider, it does not make logical sense to develop advanced IT systems, websites, and mobile applications to smoothen the transaction process when the recipients are technologically bankrupt, i.e., they are stuck in the heyday with feature phones that do not connect to the internet. This then informs the basis of this study; can any digital innovation and transformation have an impact on the financial inclusion agenda?

The topic of how financial technology, or Fin-Tech, can enhance financial inclusion is not only important for Zimbabwe's economic development, but it also commands attention on the international agenda. While financial technology and financial inclusion are not distinct from one another, financial inclusion in this thesis is defined as any age group of adults who have access to official institution providers for credit, savings, payments, remittances, and insurance (Cáamara and Tuesta 2017). Services must be provided in a way that is appropriate, accountable, and reasonable for the client and sustainable for the provider for clients to actually have access to them. Clients who are financially excluded must thus decide between using the official financial services that are already available and the unofficial ones.

Fin-tech, short for financial technology, describes creative financial transactions that reimagine traditional financial operations by utilizing new corporate models, software, processes, and products in the financial services industry. As an end-to-end online process, these transactions might involve one or more related financial services. (Schueffel 2017). According to RBZ (2018), extending digital platforms can significantly contribute to providing a wide range of diverse financial services

and products that are more secure, transparent, and affordable to individuals who are underserved and financially excluded. Financial inclusion can maintain social and financial stability through the development of more inclusive opportunities and the achievement of other economic and social national objectives. Careful research is needed to determine how Fin-Tech can support financial inclusion. First off, there has been a lot of discussion at international conferences about reducing poverty by encouraging financial inclusion. The G20 in Seoul (2010) and the Maya Declaration (2012), for instance, both recognize the role that financial inclusion plays in reducing poverty and set out to strengthen international collaborations in support of financial inclusion. The importance of financial inclusion in non-G20 countries is emphasized in the 2016 Hangzhou G20 Summit statement. As seen by the establishment of specific financial inclusion targets and the formation of financial inclusion units within central banks and finance ministries, it reflects the reality that promoting financial inclusion has risen to the top of the policy agenda in many developing countries (Thorsten et al., 2018).

Digital financial inclusion can be defined as digital access to and use of formal financial services by excluded and underserved populations. Such services should be suited to the customers' needs and delivered responsibly, at a cost that is both affordable to customers and sustainable for providers. Digital transformation continues to be a change that has gained importance in recent years. The benefits of digital transformation were highlighted, and the necessity of digital transformation was explained. In recognition of the potential of remittance inflows, the government of Zimbabwe, through the Central Bank, put in place several mechanisms to boost remittances. According to the Financial Gazette (2019), in 2016, the Reserve Bank of

Zimbabwe launched the Diasporal Remittance Scheme (DRIS) and further enhanced it in 2017. The scheme was meant to encourage remittances through channels. It witnessed an increase in the flow of remittances.

Kuschminder (2016), Kuschminder (2011), Masiiwa & Doroh (2011) and Brinkerhoff (2012) have illustrated that remittances accelerate economic growth in recipient countries. For instance, by eliminating credit constraints on the poor, improving the allocation of capital, facilitating infrastructure development, and substituting for the lack of financial development in recipient countries, remittance refers to monies and goods earned or acquired by non-nationals that are transferred back to their countries of origin. According to the International Monetary Fund (IMF), diaspora remittances are household incomes from foreign economies arising from temporary or permanent movement to those economies.

In addition, the world is now fast advancing towards a 5G internet revolution, which will be the culmination of the Internet of Things. The Internet of Things is expected to have a tremendous impact on spending patterns. Remittances being a channel designed to move money chiefly for spending, it would be better if we had an idea of how prepared the transacting public is for this soon-to-be reality. With recipients still stuck on internet-less (Feature Phones) devices, it will be exceedingly difficult to catch up to the first-world trends of financial development. So the starting point will be checking how prepared we are as a destination for remittance funds before analyzing the spending patterns.

## 1.2.3.1 Benefits and Challenges of Digital Transformation in Remittance

The digital transformation of the remittance industry has provided a range of benefits for financial inclusion, such as increased access to banking services, lower fees, improved security, and an enhanced customer experience. Financial inclusion is the process of providing access to financial services such as savings, payments, and credit to people of all economic backgrounds (McKinsey & Company, 2020). The digital transformation of the remittance industry has made it easier for customers to send money across borders using digital technologies such as mobile banking, internet banking, and digital wallets.

One of the main benefits of the digital transformation of the remittance industry is that it has increased access to banking services, especially for those in the unbanked and underbanked population. A survey conducted by the World Bank found that the share of adults with a bank account has increased from 51% in 2011 to 69% in 2019. This has made it easier for people to save and transfer money across borders more quickly and securely. In addition, the digital transformation of the remittance industry has resulted in lower fees and improved security. In some cases, customers can send money with no transfer fees, which makes it more affordable for those who are sending money to family or friends. Furthermore, digital transformation has resulted in improved transaction security, as most digital payment platforms use secure encryption protocols to protect customer data. (McKinsey & Company, 2020).

However, the digital transformation of the remittance industry comes with certain challenges. First, it is essential for customers to have access to digital technologies to use digital remittance services. This can be a challenge for those living in developing countries who lack access to the necessary infrastructure or are not tech-savvy. Additionally, the digital transformation of the remittance industry has increased

competition as more companies are offering similar services, which can make it difficult for customers to choose the right platform. Finally, the digital transformation of the remittance industry has led to a lack of privacy and security, as customers' data can be exposed to cybercriminals if proper security measures are not taken (McKinsey & Company, 2020).

In conclusion, the digital transformation of the remittance industry has provided a range of benefits for financial inclusion, including increased access to banking services, lower fees, improved security, and an enhanced customer experience. However, it has also introduced certain challenges, such as a lack of access to digital technologies and a lack of privacy and security. It is important for customers to be aware of the potential risks associated with using digital remittance services and take the necessary steps to protect their data.

## 1.2.3.2 The effect of technologies on the financial inclusion agenda

Digital transformation in finance is the reorganization and reshaping of finance and accounting functions using technology to recreate efficient operating systems and processes without replacing traditional systems. While digitally led financial transformation is essential for enterprises, many financial institutions remain in the throes of change due to various challenges. As we seek to make greater strides to close the financial inequality gap, we turn to novel solutions and approaches to be effective. (Dihel, 2017)

Technology has had a profound effect on financial inclusion by providing more options to access the financial system. According to a recent report from the World Bank, an estimated 1.7 billion adults around the world remain unbanked, while millions more are underserved by traditional financial institutions. Technology has

enabled new ways to access financial services, such as mobile banking, digital payments, and remittances. These new tools have allowed individuals to access financial services even if they live in remote areas or lack access to traditional banking infrastructure. (World Bank, 2017)

Digital payments have been an important driver of financial inclusion. In many developing countries, most people lack access to traditional banking services, but they have access to mobile phones. This has allowed individuals to make digital payments through mobile wallets, prepaid cards, and digital currencies, which can be more convenient and cost-effective than using cash.

Furthermore, technology has enabled the development of new financial products and services, such as microfinance and crowdfunding. Microfinance institutions, for example, offer small loans and savings services designed to help people in low-income communities build wealth. They use digital tools to facilitate the lending process, making it more cost-effective and efficient. Similarly, crowdfunding platforms provide individuals with access to capital from a wide network of investors without having to go through traditional banking channels. (World Bank, 2017)

Overall, technology has enabled greater financial inclusion by providing new tools to access the financial system. It has enabled the development of digital payments, microfinance services, and crowdfunding platforms, all of which have made it easier for people to access financial services.

## 1.2.3.3 The COVID-19 and adoption of modern technologies.

Boosted by social distancing measures, in 2021 the number of contact-less payment transactions in Turkey doubled compared to 2020, accounting for half of all in-store payments, while the payment amount increased threefold, according to the Inter-bank Card Center of Turkey. The approach to financial inclusion has transitioned from finding solutions for general problems to addressing the specific needs of distinct communities. To support financial inclusion, countries need to develop strong fintech ecosystems that help make financial services more accessible to an increasing number of people.

# 1.2.3.4 Layout of Remittances Industry Players in Zimbabwe, Their Technology, and the Services They Provide

To have a full appreciation of the playing field in the remittances space, here the study provides a background list of companies, the type of customer they serve, their charges and the technology the customer engages to access the services. The table below shows the summary of technologies used in transacting the remittances. As one can easily note, every remittance company uses SMS as a base point technology to transmit and confirm orders. Some like Mukuru have moved a step further in integrating their systems to social messaging applications like Whats-app. One can transact, view their own profile, make order changes on WhatsApp. This then requires a customer to move their technology to an android smartphone in order to enjoy the new level of convenience this brings about.

From Table 1.3 below, it shows that anyone with a feature phone can access the remittance service as long as the provider communicates their transactions via short message services(sms). Even with a feature phone one has a 72% chance of transacting using a USSD dial option to access the service providers' system. With a smartphone that has access to google play store, one can be able to download a remittance service provider's mobile application and 64% of the agents have built mobile apps that gives customers a chance to interface with their system while they move funds.

Table 1.3: Technology platforms used by Remittance agents

			MOBILE	WEBSIT		
	USSD	SMS	APP	E	СНАТВОТ	
Mukuru	Yes	Yes	Yes	Yes	Yes	
Access Forex	Yes	Yes	NO	Yes	webchat	
Mojo Mula	NO	Yes	No	Yes	No	
Innbucks	Yes	Yes	Yes	Yes	Yes	
					Yes	
Hello Paisa	Yes	Yes	Yes	Yes	WhatsApp	
Western Union	Yes	Yes	No	Yes	Yes Website	
World Remit	No	Yes	Yes	Yes	Yes	
Mone Gram	No	Yes	No	Yes	Yes	
Remitly	No	Yes	Yes	Yes	Yes	
BancABC						
Hoper	Yes	Yes	Yes	Yes	Yes	
Ecocash	Yes	Yes	Yes	Yes	Yes	
	72%	100%	64% Yes	100% Yes	91% Yes	

Yes	Yes		

Source: Researcher (2024)

For enhanced customer service and query resolution websites with a live chat or chatbot are now the in thing with all providers of remittances having interactive websites and chatbots that help. Mukuru has since taken the first initiative to move the interactive capabilities to social media apps like WhatsApp bringing much convenience and enhance the efforts to speed up the financial inclusion agenda.

## 1.2.4 The Aspect of Migration

The topic of remittance flows cannot be fully appreciated without taking a dig at the migration aspect. Because it is these migrating people that will initiate the transactions from their diaspora countries to their beneficiaries in home country.

# 1.2.4.1 Migration Trends Globally

**Table 1.4: The migration trends** 

<b>Country of Residence</b>	Male	Female	Total	
South Africa	461,293	311,953	773,246	
Botswana	28,680	19,248	47,928	
Malawi	613	467	1,080	
Mozambique	5,911	3,566	9,477	
Namibia	3,496	2,164	5,660	
Zambia	3,266	1,8 10	5,076	
United Kingdom	10,573	12,593	23,166	
United States Of America	4,369	4,196	8.565	

Canada	1,689	1,73 1	3,420	
China	1,1 51	916	2,067	
Australia	3,225	3,248	6,473	
Other African Countries	4,239	1,968	6,207	
Other European Countries	4,146	4.608	8,754	
Other American Countries	242	203	445	
Asian Countries	3,857	3,108	6,965	
Other Countries	16	18	34	
Not Stated	232	118	350	
Total	536,998	371,915	908,913	

Source: ZIMSTATS (2022)

Table 1.4 above depicts the migration trends of Zimbabweans as they spread to all corners of the world. This is according to the current national census data for 2022 published by Zimstats. The bulk of Zimbabweans are known to be based in South Africa, due to proximity and ease of access. This contributes significantly to the remittance corridor from South Africa. So if people are migrating to other countries, the prospects of them needing to interact financially with dependents back home increases thereby amplifying the need for remittance services.

Table 1.5: Reasons Why People Migrate

	Reasons For Emigrating									
Province	Employment	Settlement	reasons	Training	displacement	Disaster	Health	Other	Total	

			4,77					1.49	
Bulawayo	59525	827	7	6.215	47	72	230	7	73,190
	80.14		12.6					1,52	
Manicaland	6	810	2	3,012	86	118	398	7	98,717
Mashonalan	17,45		3.27						
d Central	7	265	4	1,431	33	29	102	459	23,050
Mashonalan			6.93						
d East	52307	533	4	3.535	52	78	273	991	64,703
Mashonalan	38.23		5,29						
d West	7	448	7	2.948	69	112	233	743	48,087
Matabelelan	93.41		5,35					1,18	103,66
d North	8	808	7	2,535	49	79	237	3	6
Matabelelan	128.8		6.27		11				143,31
d South	55	1,002	5	4,218	4	225	362	2260	1
			8.38					1.47	108,46
Midlands	93805	621	2	3.426	86	339	336	4	9
	131.5		15.3					1.78	153.38
Masvingo	78	940	65	2725	81	465	445	5	4
			9.08	13.35	13			1.86	
Harare	66.22	1.125	1	8	6	48	496	6	92,330
	761,5		77,3	43,40	75	1,56		13,7	908,90
Total	48	7,379	62	3	3	5	3,112	85	7

Source: ZIMSTATS (2022)

According to the recently conducted census of 2022, Table 5 above shows the provincial breakdown of push factors that led family members to migrate to other

countries. Masvingo has the most population that decided to go across the borders to seek economic opportunities, the bulk of them being pushed by the need to go and seek employment opportunities (Devillard & Zanamwe, 2022)

The Census of 2022 revealed that 13.6% of households in Zimbabwe have at least one person who emigrated beyond the Zimbabwean borders. This then speaks to the needs of two million emigrants who need to support their families back home. This then speaks of at least 2 million transactions per month, with the least amount of a transaction being sent across borders being US20 (Mukuru website). Figure 2 below depicts the household breakdowns by province as provided by ZIMSTATS.

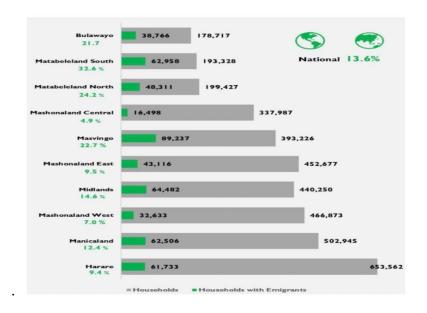


Figure 1.2 Migration trends (Source: ZIMSTATS Census 2022)

The above summarization of migration trends seeks to give basis and strengthen the argument that if people are migrating to greener pastures, remittance flows will always be considered as a free source of finance for economic activities.

#### 1.3 Statement of the Problem

Zimbabwe's remittance sector is crucial for enhancing financial inclusion, reducing poverty and contributing to economic growth yet faces challenges due to limited digital financial services access. (Chitimira, 2021) As of 2012, financial inclusion has grown to 64%, but the focus on traditional banking has hindered broader inclusion (RBZ, 2016). The reliance on bank accounts excludes many unbanked and under-served constituencies, affecting economic growth and social progress. According to IMF (2020), remittances have given an easy leeway for the financially excluded to be also involved in the financial ecosystem. With 35 Million migrants leaving or even migrating within Africa, the diaspora's potential to support home economies is underutilized due to digital financial services access barriers. Nyamadzawo et al., (2011) posit that the low levels of ICT diffusion in the country contributes to limiting the potential for digital solutions in enhancing sustainable development, as measured by teledensity, mobile access, internet and broadband penetration rates. Manyika et al., (2016), in their research they define digital financial services as financial services which are delivered through digital means, including through phones, tablets, cards, personal computers, and the Internet Can digital transformation in remittances significantly aid low-income families by providing an array of digital financial services apart from hard cash? Literature covering this aspect of impact remains largely unavailable. Previous studies highlight the positive correlation between remittances and economic growth, yet the benefits of digitalization in this context need further investigation Munanga, 2020). The general impact of remittances has been widely documented. Remittances in form of mobile money transfers have also been widely researched by scholars such as Kandiero et al. (2021), Mutsonziwa et al. (2016) and many others, in which they focused on Ecocash remittances. Tevera et al. (2023) also examined the emerging

unexplored synergies between digital-mobile technologies and cross-border food remittances in Southern Africa on the use of cell phones and applications by migrants, thereby addressing sender's side of technology. This research aims to assess how digital advancements on the beneficiary side impact remittance flows. It seeks to fill the knowledge gap regarding the use of different levels of technologies in transacting in the remittances sector. To address this problem, this study will investigate the level of digitization being used in the remittances industry. This study is going to zero in on demographic statistics of technology usage among cash remittance beneficiaries with specific target on the technology being applied to transact (Phones, tablets, and any other technologies).

## 1.4 Research Objectives

The following are the objectives of the study:

- 1.4.1 To explain if the type of phone used (e.g.) smartphone, feature phone) influences individual's access to remittance services through digital platforms.
- 1.4.2 To explain the part played by age demographics in digital financial inclusion and how it varies across diverse types of phones (smartphones, feature phones).
- 1.4.3 To assess the age dynamics in the adoption of technology used in remittances.
- 1.4.4 To investigate whether a customer's place of residence (urban or rural) influences the level of technology used in remittances.

#### 1.5 Research Questions:

The following are the research questions that the research study answered to:

- 1.5.1 What is the level of technology that is widely being used by the recipients of remittances?
- 1.5.2 What is the association between the level of technology used in remittances and the resultant impact on financial inclusion or remittance participation?
- 1.5.3 What are the age and technology matrices in the remittances industry and how do they influence the participation rates in the remittance funds flow?
- 1.5.4 Does a customer's place of residence influence the level of technology used in remittance (Rural or Urban)

## 1.6 Research Assumptions

The following are the assumptions which were made in the study:

- 1.6.1 The research will assume that Mukuru will remain functional until the research ends.
- 1.6.2 The study also assumes that the respondents of the study will provide reliable information.

## **Research Hypotheses**

The following are the hypotheses made by the study:

- H<sub>1</sub>-There is association between type of device and participation in the remittance industry.
- H<sub>2</sub>- Age influences the adoption of technology and consequently financial inclusion.
- H<sub>3-</sub> Place of residence influences the adoption of technology and consequently financial inclusion.

## 1.7 Significance of the study

This study was prompted by the discovery that, with the exception of some groceries sent across the border, most remittances received in Zimbabwe are made in cash. It would be interesting to collect data regarding the recipients' readiness to receive other remittance products in addition to cash that will facilitate easy transactions. Given the current state of customs technology, how prepared is Zimbabwe to accept sophisticated digital remittance products, even if they are to be developed?

Customers: This will ensure the remittances industry's enhanced customer experience. Customers today are tech-savvy and expect brands to be ahead of them. Going digital can track, attract, and positively engage customers, while banks and financial institutions can offer and deliver consistent and personalized products and services. It also improved operational efficiency and revenue generation.

Mukuru: Deploying the right set of digital transformation tools streamlines operational processes by automating manual tasks and integrating data. Such initiatives help save time and costs, resulting in increased profits. This also brings convenience to the customers and helps to improve their way of life, which is one of the agendas of financial inclusion. It also improved data accessibility and management. Digital transformation efforts help in collecting, managing, and storing raw customer data that can be analyzed to boost business intelligence and optimize growth. Improved operational efficiency and revenue generation:

The researcher: the successful completion of the study is of significance to the researcher because he has gained research skills, set attainable goals and following through every one of them.

#### 1.8 Delimitations of the study

The delimitations of a study are the boundaries or limitations that researchers set to narrow down the scope of their investigation. In the case of studying the impact of digital transformation on financial inclusion in the remittances industry in Zimbabwe, some delimitations could include:

Geographic delimitation: Focusing specifically on the remittances industry in Zimbabwe and not considering other countries or regions.

Time delimitation: Limiting the study to a specific time, such as the last five years, to analyze the recent impact of digital transformation on financial inclusion in the remittances industry in Zimbabwe. Data for this study will be gathered over one calendar month which may limit the scope of results of the impact of technology.

Sector delimitation: Concentrating only on the impact of digital transformation on financial inclusion in the remittances industry, excluding other sectors like banking or insurance. Banks also offer remittance services but for the purposes of this study, focus was to investigate impact that comes through Fintech organizations that are known to be highly disruptive in their makeup.

## 1.9 Limitations of the study

There are several limitations that could be encountered when conducting a study on the impact of digital transformation on financial inclusion in the remittances industry in Zimbabwe. Here are four limitations:

Sample size: The study may face limitations in terms of the number of participants or organizations included, which could affect the generalizability of the findings. The study is generalizing from studying one institution.

Data availability: The availability of data on digital transformation and financial inclusion specifically in the remittances industry in Zimbabwe may be limited, making it difficult to gather comprehensive information.

Time constraints: Conducting a thorough study on this topic may require considerable time and resources, which could be limited in practice.

Language barriers: Language barriers may exist if the study involves participants who do not speak English fluently, which could affect the accuracy of the data collected.

#### 1.10 Research Structure

The scope of the study is to investigate the impact of digital advancements on remittance transactions. Using Mukuru as a case study, the research seeks to answer the research questions based on the theoretical foundation of Technology Acceptance Model by probing its customers using a carefully designed questionnaire that will be administered at various sites across Zimbabwe.

#### **CHAPTER 2: REVIEW OF RELATED LITERATURE**

#### 2.1 Introduction

This chapter provide information from various publications on topics, subjects and themes related to the research problem under investigation. Overally, the chapter examines what various scholars and authors have said about the impact of digital transformation on the remittance sector, with a view to influence financial inclusion, economic growth focusing and reduce poverty in Zimbabwe. First section builds the theoretical framework which then becomes the anchor and guiding principle of this research, then the following segment builds the conceptual framework. The last section will review related studies and summarize them so that this research can lean on the backbone of previous research in the selection of variables and in testing them so as to enhance the robustness of the research.

#### 2.2 Theoretical Framework

The theoretical framework for this study will be based on the Technology Acceptance Model (TAM) and the Diffusion of Innovation (DoI) theories. These theories are well suited for examining the impact of digital transformation on financial inclusion in the remittances industry in Zimbabwe. However, the paper is going to look at other theories that could apply as well.

## 2.2.1 Theory 1: Technology Acceptance Model (TAM)

The Technology Acceptance Model (TAM) is a theory that was created to explain how users adopt and use modern technologies (Davis, 1989). It has been widely used across numerous studies on technology adoption and usage, including studies on

online banking and mobile banking. According to TAM, the use of technology is determined by two factors, namely perceived usefulness, and perceived ease of use (Davis, 1989). The perceived usefulness refers to the degree to which the use of technology is believed to improve one's job performance, while the perceived ease of use refers to the degree to which the use of technology is believed to be effortless.

In the context of the remittances industry in Zimbabwe, TAM can be applied to examine the adoption and usage of digital technologies such as mobile money, online banking, and digital wallets. These technologies have the potential to enhance financial inclusion in the remittances industry in Zimbabwe by providing greater access to financial services, reducing transaction costs, and promoting financial literacy. Nevertheless, the adoption of these digital technologies is dependent on customer perceptions regarding their usefulness and ease of use.

For example, there has been a significant increase in the adoption of mobile money in Zimbabwe, which has been attributed to its perceived usefulness (Chimhini & Mutenheri, 2017). Zimbabwe has a large remittances industry, and the adoption of mobile money has enabled more people to receive and send money at a lower cost compared to traditional methods. Thus, the use of TAM theory can evaluate the factors that support the adoption and usage of digital technologies in facilitating financial inclusion in the remittances industry.

Other theories that can apply when investigating matters to do with technological absorption are Diffusion of Innovation theory, Social Construction of Technology theory, Actor Network Theory. These theories will be looked at in brief as supporting theoretical basis for this dissertation.

## 2.2.2 Theory 2: Diffusion of Innovation (DoI) Theory

The Diffusion of Innovation (DoI) theory explains the rate at which innovative ideas, products, or technologies spread through a social system (Rogers, 2003). It suggests that innovation diffusion happens in various stages, starting with early adopters and extending to laggards (Rogers, 2003). The DoI theory emphasizes that individuals in diverse groups adopt innovative ideas and technologies at different rates, depending on their perceived needs, values, and social context. The rate of diffusion of innovation is also influenced by perceived complexity and relative advantage.

In the remittances industry in Zimbabwe, DoI can be used to study the factors contributing to the adoption and diffusion of digital technologies in financial inclusion. For instance, there has been a surge in the popularity of digital technologies such as mobile banking, PayPal, Skrill, and other digital wallets, which could offer significant benefits in the remittances industry in Zimbabwe. Still, the adoption rate is not universal and is manifested by diverse groups in society, i.e., rural, and urban populations. DoI theory can help analyze these challenges and other sociological factors that influence the adoption and spread of digital technologies in promoting financial inclusion in the remittances industry.

The remittances industry in Zimbabwe remains significant, but there are still factors that affect financial inclusion, such as inadequate access to financial services, a lack of financial literacy, and high transaction fees (Munyuki, 2016). The digital transformation presents an opportunity to enhance financial inclusion in the remittances industry through increased adoption of digital technologies, including online banking, mobile money, and digital wallets. Consequently, TAM and DoI

theories are the most relevant theories that can be used to explore the impact of digital transformation on financial inclusion in Zimbabwe's remittances industry.

Applying TAM and DoI theory to the remittances industry in Zimbabwe, it is evident that the adoption of digital technologies can positively affect the financial inclusion agenda by reducing the cost of financial services and improving access to financial services. The TAM theory helps provide a framework for evaluating customer needs, which determine the perceived usefulness and ease of use of digital financial services such as mobile money, online banking, and digital wallets. For instance, if potential users perceive that a given digital technology will reduce the cost of transactions, they may be more likely to adopt and use it. Moreover, if the digital technology is easy to use or understand, it could accelerate adoption, boosting financial inclusion.

On the other hand, DoI theory helps evaluate various social and cultural factors influencing the adoption and use of digital financial services. In Zimbabwe, rural areas face more significant challenges with access to digital technologies and banking services. Thus, the digital divide remains an impediment to financial inclusion in Zimbabwe (Munyuki, 2016). To promote digital financial inclusion, policymakers must consider these sociological factors that limit the adoption of digital financial services in rural areas.

The adoption of digital financial technologies such as mobile money, digital wallets, and online banking is on the rise in Zimbabwe. Despite this progress, further efforts must be made to boost financial literacy and encourage the use of digital financial services. Digital literacy involves the basic skills and knowledge necessary to interact with digital technologies and promote the use of online financial inclusion products and services. Policies and government initiatives can be instrumental in

improving financial literacy in Zimbabwe by providing education and workshops on the benefits of digital financial services.

## 2.2.3 Theory 3: The Social Construction of Technology (SCOT) theory

It was first proposed by Wiebe Bijker, Thomas Hughes, and Trevor Pinch in the 1980s. The theory suggests that technology is shaped by social groups and communities rather than being determined solely by its functionality or inherent properties. SCOT emphasizes the social processes involved in the development, design, and use of technology.

The constructivist theory of technological innovation known as the Social Construction of Technology (SCOT) draws its inspiration from the sociology of scientific knowledge (SSK), specifically from its symmetry principle. SSK, in short, maintains that theories that are successful are products of their social context just as much as those that are not; theories fail because they are "true," but because they are accepted by society. Similarly, SCOT maintains that an analysis of successful innovations must uncover the social context that either supports or inhibits the innovation in question. This is because successful innovations cannot be explained by assuming that they "work" better than failed innovations (Pinch & Bijker, 1984; Bijker, 1992).

A novel approach to analyzing the social context of technological innovation was introduced by SCOT. Unlike the linear model of technological innovation (Madhjoudi, 1997), which envisions a mythical, linear succession of basic science, applied science, development, and commercialization, SCOT sees a range of groups (referred to as relevant social groups) vying for control over a design that is far from

predetermined at this stage (SCOT refers to this as the interpretive flexibility phase). Because each group has a different understanding of the problem that the new artifact is meant to solve, they each favor a unique technological design that may include elements and operating principles that the other groups may not find appealing. A process known as stabilization occurs when one social group outnumbers the others, favoring that group's design and erasing the others (Pinch and Bijker, 1984), or when two or more groups work out a compromise (Bijker, 1996).

Technical innovation, according to SCOT, is a complex process of co-construction in which society and technology, to the extent that they could even be conceived separately of one another, negotiate the meaning of new technological artifacts, alter technology through resistance, and construct social and technological frames-of-thought, practices, and action. Rather than being the product of mythical men introducing modern technologies and releasing them into society, initiating a series of (un)expected impacts.

Wiebe Bijker and Trevor Pinch introduced SCOT in a landmark paper (Pinch and Bijker, 1984). Despite a great deal of criticism, SCOT is still one of the two most well-known theories of technological innovation in science and technology studies (STS). The other well-known theory is actor-network theory, which was created by Michel Callon and Bruno Latour.

SCOT arose in the context of a broad-based scholarly assault on technological determinism by STS scholars (especially historians and sociologists of technology). Technological determinism holds that a new, superior technology will push aside its

competitors and force society to adapt. For STS scholars, technological determinism is problematic because it does not adequately describe or explain technological innovation. For activists concerned about the increasingly dangerous impact of new technological systems, such as nuclear power, technological determinism is problematic because it breeds passivity: When a modern technology is sure to "win out," what use is there in protesting against it? SCOT both subverts the fundamental tenet of technological determinism and persuasively argues for greater public participation in technological innovation processes by showing new technological artifacts as the outcome of a process in which multiple social groups had differing ideas about what "better technology" meant. Given that technological artifacts are the outcome of processes involving group interaction, why are not organizations advocating for the public included in the interpretive flexibility period?

A primary issue with SCOT is that, due to its overemphasis on the social, it fails to acknowledge the importance of the physical world and the ways in which it confines us (Jasanoff, 2004). Another argument is that since only groups that are involved matter in SCOT, the concept of the relevant social group implies that you will miss something if that group is not present in the story (Wajcman, 1995). Lastly, some regard SCOT as a form of social determinism (Lipartito, 2003)

## The following are the key tenets of SCOT

 Interpretive flexibility: SCOT argues that technologies have multiple interpretations and meanings, which can vary across different social groups.
 These interpretations are influenced by the values, beliefs, and interests of the groups involved.

- ii. Relevant social groups: SCOT focuses on the role of social groups in shaping technology. It identifies diverse groups, such as engineers, users, policymakers, and activists, as influential actors who participate in the construction of technology.
- iii. Closure and stabilization: According to SCOT, technological advancement results from negotiations and closure between various social groups rather than being a linear process. A technology is more difficult to alter or modify once it has reached a stable state.

## 2.2.4 Actor-Network Theory (ANT)

Bruno Latour and Michel Callon created ANT in the 1980s. According to ANT, technology is made up of a network of interconnected actors, both human and non-human. It emphasizes the dynamic relationships and interactions between these actors and how they shape the development, use, and impact of technology.

## Key tenets of ANT include:

- i. Non-human actors: ANT challenges the traditional human-centered view of technology by considering non-human entities, such as tools, machines, and institutions, as important actors in the network. These non-human actors have agency and influence the development and use of technology.
- ii. Actor-network: ANT focuses on the relationships and connections between actors, both human and non-human. It sees technology because of collaborative efforts and interactions within the network.
- iii. Translation is a key component of ANT, as it involves actors in a network negotiating and aligning their meanings, values, and interests to develop a

collective understanding of technology. This process shapes the development and use of technology.

In conclusion, this essay has discussed the theories that can be used to examine the impact of digital transformation on financial inclusion in the remittances industry in Zimbabwe. The Technology Acceptance Model (TAM) and the Diffusion of Innovation (DoI) theory offer an appropriate framework for analyzing the factors that facilitate or impede the adoption of digital financial services. SCOT and ANT offer insightful viewpoints on the ways in which social factors shape and impact technology. In order to comprehend the dynamics of technological development and adoption, they emphasize the significance of social groups, interactions, and interpretations.

The promotion of digital financial inclusion in the remittances industry in Zimbabwe is highly dependent on the adoption and usage of digital financial services. Policies, education, and other initiatives must aim to increase access to digital financial services, reduce transaction costs, and enhance financial literacy to increase the efficacy of digital technologies and promote financial inclusion.

## 2.3 Conceptual Framework: Technology Acceptance model

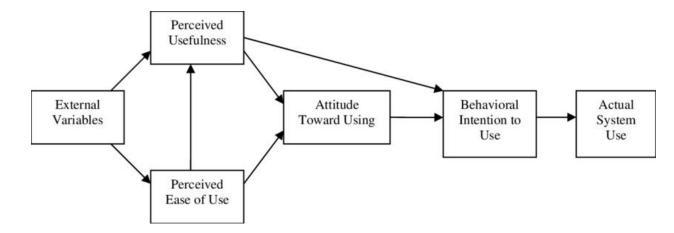


Figure 2.1 TAM Source Researcher (2024)

The Technology Acceptance Model (TAM) is widely used as a theoretical basis for investigating the impact of digital transformation on financial inclusion in the Remittances industry.

- 2.3.1 TAM provides a framework for understanding how individuals perceive and adopt modern technologies, which is crucial in assessing the impact of digital transformation on financial inclusion in the Remittances industry.
- 2.3.2 TAM helps in identifying the factors that influence individuals' intention to use digital technologies for remittances, such as perceived usefulness and ease of use.
- 2.3.3 TAM allows researchers to analyze the impact of digital transformation on financial inclusion by studying the behavioral intentions of individuals towards adopting digital remittance platforms.
- 2.3.4 TAM helps in assessing the effectiveness of digital transformation initiatives in improving financial inclusion by examining the actual usage behavior of individuals towards digital remittance services.

- 2.3.5 TAM enables researchers to identify the barriers and challenges faced by individuals in adopting digital remittance technologies, such as lack of trust or awareness.
- 2.3.6 TAM provides insights into the role of social influence and subjective norms in shaping individuals' attitudes and intentions towards using digital remittance platforms.
- 2.3.7 TAM helps in understanding the cognitive processes that individuals go through while evaluating and deciding to adopt digital remittance technologies.
- 2.3.8 TAM allows researchers to compare the impact of different digital transformation strategies on financial inclusion by examining the differences in individuals' attitudes and intentions towards various digital remittance platforms.
- 2.3.9 TAM provides a theoretical basis for studying the long-term impact of digital transformation on financial inclusion in the Remittances industry by examining the factors that influence individuals' continued usage behavior.
- 2.3.10 TAM enables researchers to develop interventions and strategies to promote the adoption of digital remittance technologies among underserved populations, thereby improving financial inclusion.

## 2.4 Empirical Literature Review

This section aims to go through some previously conducted studies to gather empirical research findings surrounding this topic. This study will review studies done all over the globe and will also look at studies conducted focusing on Africa. This study will gather studies conducted for Sub-Saharan Africa and studies that

focus on Zimbabwe particularly. This will enable to reveal the study gap in the literature.

Djagadou (2016) conducted a study, and the objective of this study was to assess the impact of mobile money on financial inclusion in Sub-Saharan Africa (SSA). The study adopts a systematic literature review approach, covering forty-one studies published between 2010 and 2015. The review reveals that mobile money has significantly contributed to financial inclusion in SSA by increasing access to financial services, especially for those in rural areas and the unbanked population. The study also found that mobile money has had a positive impact on savings mobilization, financial intermediation, and poverty reduction. The research tools used in this study were a systematic literature review and a thematic analysis approach. In conclusion, mobile money has immense potential for enhancing financial inclusion and promoting economic development in SSA. However, there are still challenges such as regulatory barriers, limited interoperability, and consumer protection concerns that need to be addressed to ensure the sustained growth and effectiveness of mobile money services in enhancing financial inclusion.

Tedla & Gebremedhin (2016) carried out a study. The objective of this study was to systematically review the literature on the relationship between mobile money and financial inclusion in sub-Saharan Africa. The authors' aim was to identify the main factors that affect the adoption and use of mobile money services and their impact on financial inclusion in the region.

The research methodology used in this paper is a systematic review of the literature. The authors identified and analyzed relevant studies from academic journals, books, and reports that investigate the relationship between mobile money and financial inclusion in sub-Saharan Africa. The tools used in this study include a comprehensive search strategy and a rigorous screening process to identify relevant studies.

The findings of this paper suggest that mobile money services have a positive impact on financial inclusion in sub-Saharan Africa. The adoption and use of mobile money services are influenced by factors such as consumer trust, affordability, ease of use, and accessibility. The authors also find that mobile money services have the potential to improve financial access and increase financial literacy, particularly for women and rural populations. However, the authors note that challenges such as inadequate network coverage, a lack of interoperability, and regulatory barriers can hinder the growth and sustainability of mobile money services in the region.

Another paper by Amigo and Okyere (2018) provides a systematic review of the relationship between FinTech and financial inclusion in sub-Saharan Africa. The main objectives of the study were to identify the ways in which FinTech can promote financial inclusion in the region and to evaluate the existing literature on the topic.

The authors employed a systematic literature review methodology to identify relevant studies on FinTech and financial inclusion in sub-Saharan Africa. The search was conducted in several databases, including Google Scholar, EconLit, and Scopus, and resulted in the inclusion of thirty-six studies in the final analysis.

The authors used a qualitative content analysis approach to analyze the selected studies. The research tools used in the study were a codebook and a matrix to organize and categorize the findings. The study found that FinTech has the potential to significantly enhance financial inclusion in sub-Saharan Africa. Specifically, FinTech can increase access to financial services, reduce transaction costs, and improve the efficiency of financial systems. However, the study also identified several challenges to the adoption and use of FinTech in the region, including limited digital infrastructure, low levels of financial literacy, and regulatory constraints. Overall, the study highlights the importance of FinTech in promoting financial inclusion in Sub-Saharan Africa and provides valuable insights into the opportunities and challenges associated with the adoption and use of FinTech in the region.

Colquhoun and Kola (2018) conducted a study to review the existing evidence on the use of mobile money for promoting financial inclusion in Sub-Saharan Africa and to identify areas for further research. The authors' hypothesis was that mobile money can increase access to financial services, improve savings behavior, and promote entrepreneurship in low-income populations. Their findings suggest that mobile money has the potential to achieve these objectives, particularly in areas with limited access to traditional banking services. However, the effectiveness of mobile money varies depending on factors such as the regulatory environment, infrastructure, and consumer awareness. The paper posits five hypotheses and investigates them using a review of existing studies, including randomized control trials and quasi-experimental studies. The researchers used both qualitative and quantitative tools for data collection and analysis. The findings suggested that mobile money has had a

positive impact on financial inclusion, particularly in sub-Saharan Africa. The authors recommended further study in areas such as the effects of the introduction of mobile money on existing financial infrastructure and the role of regulation on mobile money uptake. There is also further proposed research on the impact of mobile money on income generation, the gender gap in financial inclusion, and the role of public-private partnerships in expanding mobile money services.

The paper by Adeola & Obire (2018) aimed to review the existing initiatives for digital financial inclusion in sub-Saharan Africa and identify the challenges and opportunities associated with these initiatives. The study also aimed to provide recommendations for improving digital financial inclusion in the region. The authors employed a systematic literature review methodology to identify relevant studies on digital financial inclusion in sub-Saharan Africa. The search was conducted in several databases, including Google Scholar, JSTOR, and ProQuest, and resulted in the inclusion of twenty-five studies in the final analysis. (Adeola & Obire, 2018).

The research tools used in the study were a codebook and a matrix to organize and categorize the findings. The authors analyzed the selected studies using a qualitative content analysis approach to identify the challenges and opportunities associated with digital financial inclusion in the region. The study found that digital financial inclusion initiatives have the potential to significantly enhance financial inclusion in sub-Saharan Africa. Specifically, these initiatives can increase access to financial services, reduce transaction costs, and improve the efficiency of financial systems. However, the study also identified several challenges to the adoption and use of

digital financial inclusion initiatives in the region, including limited digital infrastructure, low levels of financial literacy, and regulatory constraints.

The authors recommend that policymakers and stakeholders in the region collaborate to address the challenges associated with digital financial inclusion and promote the adoption and use of digital financial services. The study concludes that digital financial inclusion initiatives can play a crucial role in promoting financial inclusion in Sub-Saharan Africa, but that careful attention must be paid to the challenges and opportunities associated with these initiatives.

Coming down to other research conducted in the Zimbabwean context, this research refers to this first paper by Kuchipudi (2017), which aimed to provide a comprehensive systematic literature review of financial inclusion in Zimbabwe. The objectives of the study were to identify the key determinants of financial inclusion, assess the current level of financial inclusion in Zimbabwe, and examine the challenges and opportunities for enhancing financial inclusion in the country. The research tools employed were a thorough search of academic articles, journals, reports, and other relevant sources to gather data and information to answer the research questions. The findings of the study revealed that numerous factors like education, income, infrastructure, and government policies impact the level of financial inclusion in Zimbabwe. The study also identified challenges, including low literacy levels, a lack of trust in financial institutions, and an inadequate regulatory environment, which hamper the achievement of financial inclusion in the country. The paper concluded by suggesting various measures that Zimbabwe can undertake

to enhance financial inclusion, such as improving financial literacy, developing relevant regulations, and promoting the use and adoption of digital financial services.

In the second paper by Chirisa & Mhlanga (2016), the authors explore the challenges and opportunities for achieving financial inclusion in Zimbabwe. The objective of the paper was to review existing literature on financial inclusion in Zimbabwe, identify the key issues and challenges, and suggest strategies for improvement. The authors used a systematic literature review methodology to collect and analyze data from various sources, including academic papers, reports, and policy documents. The findings suggest that financial exclusion is a major problem in Zimbabwe, with a considerable proportion of the population lacking access to basic financial services. The authors highlight the need for a comprehensive financial inclusion strategy that includes increased access to financial services, financial literacy programs, regulatory reforms, and the use of technology to improve financial access for underserved communities.

The third paper in the Zimbabwean context to be referred to as part of the empirical evidence is the paper with the title "Financial Inclusion in Zimbabwe: An Analysis of the Banking Sector" by Gumbi (2018). It analyzes the state of financial inclusion in Zimbabwe, with a focus on the banking sector. The objective of the study is to examine the factors that influence financial inclusion in Zimbabwe, with a particular emphasis on the role of banks. The author uses a mixed methodology comprising qualitative and quantitative data collection techniques, including interviews with banking sector stakeholders, statistical analysis of existing data, and a review of secondary literature. The findings indicate that while banks play a critical role in

expanding financial inclusion in Zimbabwe, there are several challenges that hinder their efforts, including prohibitive costs of financial products, inadequate infrastructure, and insufficient financial education. The author suggests several recommendations to enhance financial inclusion, including the adoption of innovative technologies, partnerships between banks and mobile network operators, and the strengthening of financial literacy programs (Chitimira et al., 2021),

The fourth paper to be reviewed is by Mugadza and Sopoaga ("Financial Inclusion in Zimbabwe: An Analysis of the Mobile Money Industry), which examines the role of mobile money in enhancing financial inclusion in Zimbabwe. The objective of the study is to analyze the state of the mobile money industry in Zimbabwe, identify key challenges and opportunities, and propose recommendations for improvement. The authors use a qualitative research methodology that includes interviews with key stakeholders, a review of secondary literature, and a critical analysis of mobile money usage data. The results suggest that mobile money has played a significant role in expanding financial inclusion in Zimbabwe, with a sizable proportion of the population using mobile money services to conduct transactions. The authors highlight several challenges that hinder the growth and sustainability of mobile money, including poor network coverage, inadequate regulatory frameworks, and insufficient financial literacy. They propose several recommendations to enhance mobile money adoption and regulation in Zimbabwe, including the need for stronger regulatory oversight, the expansion of network infrastructure, and the provision of targeted financial literacy programs.

Table 2.1 Summary of Empirical Research

Authors	Year of	Topic	Variables	Data testing and Analysis Models
	Study			7 marysis ivioueis
Zou, L., & Chen,	2018	Digital Transformation and Financial Inclusion in China	1)Access to financial services	Regression analysis
			mobile  2)banking usage,	
			3)internet penetration,	
			4) GDP per capita	
Kim, H., & Lee, S.	2019	The Impact of Mobile Payment Services on Financial Inclusion	1) Mobile payment adoption,	1)Descriptive statistics, 2)t-tests,
			2)financial access	3)regression analysis
			3) income	

			level,	
			level	
Raj, R.,	2020	Digital Transformation and	1)Mobile	1)Chi-square test,
& Rao,		Financial Inclusion in India	banking	
V			usage,	2)regression
				analysis
			2) financial	
			literacy,	
			3)income level, gender	
			ievei, gender	
Zhang,	2017	The Impact of E-commerce on	1) E-	1)Panel data
Y., et al.		Financial Inclusion	commerce	analysis,
			adoption,	
				2)fixed effects
			2) financial	models
			access,	
			3) economic	
			development	
			4)internet	

			penetration	
Wang,	2019	Digital Payments and Financial	1)Digital	1)Logistic
L., et al.		Inclusion in Developing Countries	payment	regression,
			usage	
			,	2)propensity score
			2) financial	matching
			access,	
			3)poverty	
			level,	
			4)population	
			density	
Li, Y., et	2016	The Role of Mobile Banking in	1)Mobile	1)Descriptive
al.		Promoting Financial Inclusion	banking	statistics,
			adoption,	
				2)t-tests,
			2)financial	
			access,	3)regression
				analysis
			3)income	
			level,	
			education	

		level			
st,	1)Chi-square test,	1.Digital	Digital Transformation and	2018	Gupta,
		technology	Financial Inclusion in Rural Areas		R., &
sion	2) regressio	adoption,			Dey, D.
	analysis				
		2.financial			
		access,			
		3.rural			
		development			
		level			
data	1.Panel dat	Fintech	The Impact of Fintech on	2020	Chen, J.,
	analysis,	adoption,	Financial Inclusion in Africa		et al.
ects					
	models	access,			
		2 2000000000000000000000000000000000000			
		giowiii,			
		4.internet			
	analysis,	development  4, income level  Fintech adoption,  2.financial access,  3.economic growth,	-	2020	

			penetration	
Park, J.,	2017	Digital Payments and Financial	1.Digital	Descriptive
et al.		Inclusion in South Korea	payment	statistics,
			usage,	t-tests,
			2.financial	
			access,	regression analysis
			3.income	
			level,	
			education	
			level	
Liu, X.,	2019	The Role of Blockchain in	1.Blockchain	1.Logistic
et al		Enhancing Financial Inclusion	adoption	regression,
			2. financial	2.propensity score
			access	matching
			3.trust level	
			4. income level	

Santos,	2018	Digital Transformation and	1.Digital	Chi-square test,
J., et al.		Financial Inclusion in Brazil	technology	
			adoption,	
			2 %	regression analysis
			2.financial	
			access,	
			3.income	
			level,	
			icvei,	
			4. education	
			level	
V C	2020	TI I (MIII DIII	M 1 '1	D : ::
Yang, S.,	2020	The Impact of Mobile Banking on		Descriptive
& Lee, J.		Financial Inclusion in Vietnam	banking	statistics,
			adoption,	T
			·	T-tests,
			financial	
			access,	regression
				analysis
			income	

			level,	
			education	
			level	
Patel, D.,	2017	Digital Payments and Financial	Digital	Chi-square test,
et al.		Inclusion in India	payment	
:			usage,	regression
			financial	analysis
			access,	
			income level,	
			education	
			level	
Wu, Y.,	2019	The Impact of Fintech on	Fintech	Panel data
et a		Financial Inclusion in China	adoption,	analysis,
			financial	
			access,	fixed effects
			economic	models
			development,	
			internet	
			penetration	

Kim, S.,	2016	The Role of Mobile Payment	Mobile	Descriptive
et al.		Services in Promoting Financial	payment	statistics, t-tests,
		Inclusion	adoption,	regression analysis
			financial	
			access,	
			income level,	
			education	
			level	

Source: Researcher (2024)

## 2.5 Summary

From the empirical evidence gathered above, this research discovers that most of the research conducted, even from a global perspective, chiefly utilized systematic literature review methodology to gather and analyze data. Only a handful are considered primary data collection tools, such as questionnaires and interviews. Due to the angle taken by this research, it will require that we apply the quantitative tools of questionnaires and direct interviews to address the research questions and direct them towards achieving the objectives.

The methodology will be outlined in the next chapter, informed by both theoretical and empirical micro foundations.

#### **CHAPTER 3: METHODOLOGY**

#### 3.1 Introduction

A research methodology is defined as a specific procedure or technique which is used to identify select, process, and analyze information on specific subject matter (Creswell, 2018). This section of the research study serves to describe and explain the research process, discuss relevant data collection methods as well as give rationale for the choice of methods that the investigation is going to use. This section therefore covers the research design, research approach and population of the study, sampling, data sources, research instruments, reliability and validity of the study, data collection, data analysis, data presentation, and ethical considerations.

## 3.2 Research Design

A research design is the general plan about the course of action which a survey will follow in producing answers to the research questions of the study. Critical elements of the research design include research methods and strategies which relate to the collection and analysis of data. Shenton (2014) indicates that there are several research designs which include descriptive, historical, archival, conclusive, explanatory, exploratory and cross-sectional design. The investigation made use of the descriptive research design.

## 3.2.1 Descriptive Design

According to Brar and Kular (2010) they defined descriptive research as a study which is concerned with the characteristics of a group of people or of an individual. Descriptive research

was used to understand the problem at hand. It enabled the researcher to gather information about the technology levels that Mukuru customers are exposed to, and gather data on the place of residence i.e where they come from and demographic aspects of the customer base. Data gathered through descriptive design give a static view of the current situation which the research intends to do. The goal was to be able to organize data by percentages so that analysis can be done. Patel (2017) used the same design to investigate the same problem in India but however, he went on to mix with exploratory design for him to understand the usage of funds, which is not the scope of this research. Santos (2018) applied the same design to study the same problem in Brazil, but he also employed secondary data to achieve his objectives. This design of choice was the best fit as the research sought to gather primary data on the status quo and be able to make deductions in accordance with the research objectives.

## 3.2.2 Population and Sampling

Betty (2020) defined sampling as the selection of a subset of the population of interest in a research study. In this study, the population contains remittance customers, especially Mukuru customers. Mukuru has a wide network of operating sites in every city and most growth points. They are estimated to be more than 450 sites. Using Reserve bank of Zimbabwe statistics, Mukuru is moving significant volumes in terms of remittance values and was in 2023 assessed by the Financial Action Taskforce (FATF), a regional body governing movements of funds across regions, to measure Zimbabwe's compliance to the governance of the body. This implies that RBZ places Mukuru as a significant player which can make or break the

economy of Zimbabwe. Hence, this study has elected to use Mukuru as a focal point for data collection.

In selecting the sites, the research study employed stratified simple random sampling to choose the sites. Mukuru has 450 sites, and a research target of forty-five sites as 10% it was sufficient for the study. We began by stratifying the sites into six regional management zones and targeted to select 10 from each. Within each stratum, the research applied simple random sampling technique using random number tables to select the participating sites. At the end, the 6 samples were then combined to form the overall sample.

#### 3.3 Data collection instruments

The study used digital questionnaires to find information on digital transformation towards the financial inclusion agenda. The sample population was the company's walk-in customers across the six provinces within the company's regional subdivisions. The study used convenience sampling to select participants. Convenience sampling is a non-probability sampling technique in which individuals or units are chosen for inclusion in a study based on their availability or accessibility to the researcher. This method is often used in situations where it is difficult or impractical to obtain a truly representative sample, such as when conducting research in a specific location or with a specific group of individuals.

Convenience sampling can be useful in certain situations where speed and ease are essential, such as pilot studies or preliminary investigations. However, it is considered less dependable than other sampling techniques as it may not be representative of the entire population being studied, leading to biased or inaccurate

results. So in this case, interviewees will be drawn at random from the Mukuru queues across the country as business goes on as usual. This study will utilize all the staff members at the selected locations to collect as much information as possible. We target at least fifty customers per location for all the locations, and this exercise will be carried out over a calendar month. So, we expect at least 1200 responses per location for the duration of the exercise. No personal details will be asked except for the simplified close ended questions on the questionnaire.

## 3.3.1 Questionnaire

A questionnaire is a document that contains questions and other types of items designed to elicit information for analysis (Boparai, Singh, and Kathuria 2018). Furthermore, when it comes to questionnaires, the respondent is the key instrument. This is so because, to get the information required for the study, the researcher is dependent on the respondent who will answer the questionnaire. Questionnaires was used in this study. Closed-ended structured questionnaires was used because of the need for time management since they are faster to complete and for easy compilation of data by the researcher. This method was used in this study because of its low cost, larger sample coverage, data reliability, and the fact that it is free from bias (Kothari, 2022). The researcher is senior personnel with access to customer-facing employees across the country through social media chat-groups like WhatsApp. These employees are called tellers or client liaison officers, and they assisted in gathering the responses. The study utilized google forms which automatically fed into the data spreadsheet.

Each of the following questions in the questionnaire are feeding into either perceived usefulness or perceived ease of use:

## 3.3.2 The Questionnaire Design

Question 1: Town

Question 2: Type of Customer

- ★ Sending
- ★ Receiving

Question 3: Age

- ★ below 30
- ★ above 30 but below 50
- ★ Senior Citizen

Question 4: Type of phone used by the customer.

- ★ Feature Phone
- ★ Smartphone Android
- ★ Other advanced

Question 5: Where the customer lives.

- ★ Rural Areas
- ★ Locations (Township Ghetto)
- ★ Low-density suburbs

Question 6: Transaction amount

#### 3.3.3 Justification of the Research Questions on the questionnaire:

Answers to the above questions helped to guide our conclusion in the sense that it revealed the age demographics of the transacting population and we were able to relate them to the theory of adoption of technology. We expected the younger population of the survey to be more advanced in terms of technology; therefore, the priori expectation was that the younger should be the ones receptive to digital products that spearhead remittances and financial inclusion.

Also, the question of where the customer was coming from spoke volumes about the level of technology they are bound to use. We expected the bulk of the remittances to be directed towards the rural population, followed by township ghetto dwellers. The expectation was that rural dwellers should possess the Feature Phone or Kambudzi type of phone due to its battery saving capability, and it carries the least level of technology for one to be able to transact, thereby being financially included. While a considerable proportion of smartphone Android users should be in the townships because of the capabilities of internet reception in the locations, unlike in rural areas where they at best expect to receive calls and SMS, For Mukuru customers, the type of customer determines the level of technology you can use. For receiving customers, even with a basic Feature phone or "kambudzi" one can transact but if they are sending they may have to create the transactions via the WhatsApp platform because they integrated their system with the messaging application for ease of access to one's personal profile, where one can view previous transactions edit transactions details etc. So the type of device spoke to the kind of transaction that a customer could carry out. The basic level of Feature Phone (Kambudzi) is the starting point for conducting financial transactions in the remittance space. So there is an expectation

that the value of transactions is a function of the type of device; advanced devices are used for bigger remittance transactions.

The place of residence played a key role in determining the remittance values. There was also an expected link between the place of residence and the type of device. Although we expected most recipients of funds to be from rural areas, their vulnerabilities have come to be on par with those of city ghetto dwellers (from the High Density Surburbs). Hence, the need for support from their relatives in the diaspora to have a sustainable livelihood. Most rural dwellers were expected to have the Kambudzi type of phone due to the battery's longevity, while we expect the locations dwellers to have smartphone Android phones. The research brought out the proportions of the residences, such that if digital products are to be designed to attract more flows of remittances, the customer bases will be known.

The question of age was a key determinant in this research. There was a general expectation that elderly customers are late adopters of technology. We expected senior citizens and older customers to be heavily leaned towards rural residences and in possession of the lowest of technologies. There was a general expectation that the elderly will be receivers of remittance funds rather than senders, as we expect them to receive financial support from children in the diaspora. Like earlier highlighted, to receive funds all that is needed is a basic device that can receive a sms with order details, without which you cannot be eligible to transact. This demographic outlook gave insights into the ages that participate in the remittances space. This study broke down the beneficiary according to age

The question on the type of transaction: This was meant to capture the flow and direction of remittances and the technology involved. This study meant to unearth the

technology status of the one who was sending and look into the technology where the funds were landing if they were receiving. The data collected helped to review the hypotheses that 1) The basic level of transaction was feature phone or Kambudzi device, no device no transaction. 2)Higher values or remittances corresponded to advanced devices which explained that digital transformation enhances the depth and quality of financial inclusion

## 3.4 Data collection procedure

The researcher is privileged to be one of the high-ranking employees of the institution used in this study and, as such, obtaining permission to conduct the study. The researcher made use of field agents already stationed in over sixty locations out of the possible 450 sites across the country, and he briefed them on how the research responses should be filled in. Since no personal information was being sought, verbal consent was sought from the participants. The questionnaires were distributed to the selected individuals at different sites since the forms were electronic. The questionnaire were administered electronically via Google Forms, which the administrator (tellers and client liaison officers) will ask the subjects to fill out. And for ease of data collection, only one form with the same questions will be used across the board. The target set per location was at least fifty respondents per day for twenty-four working days. Considering that a specific location can have an average of 250 walk in customers per day. This gave us a representative sample enough to give credible results.

## 3.5 Analysis and Organization of data

Quantitative data was analyzed using Excel. During the data analysis, the data describing the sample was generated first in the form of demographics. This was done in the form of percentage distributions of continuous variables such as age and frequencies for categorical data such as type of device and place of residence. A large sample was taken to enhance the quality of the categorical data that gathered (Galetsi, 2020). The total number of human participants enrolled were from Mukuru and targeted to be 72000. The source of recruitment was from the walk in remittances customers. Age range was 18 years and above and both female and male of participants were recruited because no one below the age of eighteen is permitted to transact with Mukuru.

## 3.5.1 Data analysis: Tests on categorical Data

Since the data was summarized as categorical data, the study concluded by testing association of variables at 5% level of significance.

The chi-square test for association is a statistical technique used to determine whether there is a significant association between two or more categorical variables. It is used to examine differences in the distribution of frequencies observed in one variable across distinct categories or levels of another variable.

To perform the chi-square test for association, a contingency table was created that displays the observed frequencies for each combination of categories of the two variables being tested. The expected frequencies were then calculated assuming that there is no association between the variables being studied. The chi-square test

statistic was then calculated by comparing the observed and expected frequencies, and a p-value is obtained to determine if the results are statistically significant.

The test compares the observed frequencies of various categories of two or more categorical variables and compares them with the expected frequencies. If the differences between observed and expected frequencies are statistically significant, then there is evidence of an association between the two categorical variables being tested.

#### 3.7 Ethical considerations

The researcher obtained permission to carry out the research at the institution. Since subjects cannot be notified beforehand, they can only be advised, and their participation sought when they walk in to conduct their business at the site. No personal information is recorded, and anonymity is maintained by removing all identifying information on the questionnaire. Confidentiality is ensured by taking the responded to a secluded place for the 1-minute interview.

#### 3.8 Summary

Areas covered in the methodology was the research design, where descriptive design was employed using questionnaire as an instrument. The institution being used, Mukuru, was first stratified to capture geographical disparities. Then simple random sampling technique was applied to select samples of participating sites within the strata. Permission was first sought from the institution. The questionnaire was administered through agents taking control of the sites. Agents were advised to use the language which the respondents were comfortable with. Data analysis was done through excel, after tabulating and categorizing the responses, Chi-square statistical

tests were performed to establish relationships in the datasets. The results will be presented in the next chapter.

# CHAPTER 4 DATA PRESENTATION, ANALYSIS, AND INTERPRETATION

#### 4.1 Introduction

The research aimed to determine the impact of digital transformation on financial inclusion in the remittances industry. The research was conducted using a major player in the remittances industry known as Mukuru. More than seventy thousand customers were interviewed using over forty-five locations throughout the whole country. The aim of data collection was to answer the following research questions: What is the level of technology that is widely being used by the recipients of remittances? What is the association between the level of technology used in remittances and the resultant impact on financial inclusion or remittance participation? What are the age and technology matrices in the remittances industry and how do they influence the participation rates in the remittance funds flow? Does a customer's place of residence influence the level of technology used in remittance (Rural or Urban). The rest of the chapter is designed as follows, results of technology used and the type of transactions, results of technology being used vis-a-vis residence, results of age demographics on type of technology used?

## 4.2 .1 Level of technology widely used.

Customers were asked which device they use amongst the three options provided. Sixty percent of customers used Feature phones to transact, while 30% used android and 10% used other devices such as iPhone. This answers to the first question that the study posed as it investigated the most popular technology that is used by Mukuru customers. This study finds that majority of remittances are being conducted

on basic devices. This reveals that the transacting public is yet to accept advanced technology.

Table 4.1: Popularity of transacting devices

	type of device			
	Android Smartphone	Feature Phone	Other	Total
sum of remittance values	\$2,150,986	\$4,30,1971	\$716,998	\$7,169,955
Percentage	30%	60%	10%	100

Source: Survey Data(2024)

This has the effect of slowing digital advancement and consequently digital financial inclusion. It is from this result that the study highlights that the kind of remittances that are pushed through basic phones result in cash withdrawals as a means of cashing out.

It implies that the country is still a bit far in terms of cashless transactions that result from remittances. Once a customer receives funds on a feature phone, the next thing is to find a site to cash it out. Rather a digitally advanced economy gives the opportunity to spend the remittances digitally over internet in the comfort of offices or homes.

## 4.2.2 Influence of type of device on type of transaction (Sending or Receiving)

This section reports back on the type of device used on the type of transactions and it is broken down as follows.

- i. Percentage of customers sending money with respect to the device
- ii. Percentage of customers receiving money with respect to the device

The table below shows that 73% of customers are receivers of remittance funds, while 27% are senders, both local and international. As earlier alluded to, 60% of transactions are carried out on basic technology, while 40% are carried out on higher technology. 44% of customers receiving are doing it on backward technology. Feature phone also dominates on the sending platform, implying that even if service providers are to develop stunning user friendly but advanced applications for their convenience, they will not be able to be on-boarded onto the platform.

Table 4.2: Type of device and type of customer

	Type of Device			
Type Of customer	Android Smartphone	Kambudzi	Other	
Receiving Customer	22%	44%	7%	73%
Sending Customer	8%	16%	3%	27%
	30%	60%	10%	100%

Source Survey Data(2024)

## 4.2.3. Influence of age demographics on technology adopted and used.

The survey data was categorized into three sections: Percentage of customers below 30 years old; Percentage of customers between 30 and 50 years old; Percentage of customers over 50 years old vis-a-vis the types of phones used by each category.

Table 4.3: Type of device and Age ranges

	type of device			
Age	Android Smart-phone	Kambudzi	Other	Grand Total
Below 30	12%	24%	4%	40%
31-50	9%	18%	3%	30%
Senior Citizens	9%	18%	3%	30%
Grand Total	30%	60%	10%	100%

Source: Survey data (2024)

Table 4.3 above shows the adoption of technology by age. Customers below the age of 30 show that they have a higher appetite for technology, at 12%, followed by middle-aged people, which is at par with senior citizens. This implies that, though a considerable proportion of the young customers use the basic device to transact, they are also adopting the technology as it advances. It is also noted that the Feature

phone is most popular across all age groups with 24% of those under the age of 30 using it.

## 4.2.4 Influence of place of residence on technology used.

Based on the survey data, the data was categorized as follows:

- i. Percentage of customers using basic phones known as Kambudzi or Feature
   Phone
- ii. Percentage of customers using Android smartphones
- iii. Percentage of customers using iOS smartphones

Table 4.4: Place of Residence and technology

type of device	Locations(Ghetto)	Low Density	Rural Areas	Totals
		Surburbs		
Android	18%	9%	3%	30%
Smartphone				
Kambudzi	18%	6%	36%	60%
Other	3%	6%	1%	10%
	39%	21%	40%	100%

Source: Survey Data (2024)

**Table 4.5 Place of Residence and Transaction value** 

Place of Residence	number of customers	Value of	Percentages
		Transactions	
Locations (Ghetto	20485	\$ 2,160,533	30%
Low suburbs	6828	\$ 707,451.00	10%
Rural Areas	40968	\$ 4,301,971	60%
	68281	\$7,169,955	100%

Source: Researcher (2024)

From the tables above, it can be noted that a paltry 30% of remittance customers have advanced to smart-phones, while a large majority are still at the base of device technology, as marked by the 60% who still use the basic phone called Kambudzi. This Feature phone uses the minimal technology of SMS to send and receive funds. What can be established is that 100% of customers either own a device or have access to one that can receive order details, which can be used at the payout point to redeem the vouchers. The highest constituency is that of rural dwellers with a basic phone; it can be said that 36% of all transactions are carried out using the most basic technology. This is consistent with the theory that the study introduced. The table below shows the monetary value of transactions carried out via different devices. From the table, it can be noted that 60% of transactions amounting to \$4.3 million were carried out using basic technology. 30% of transactions were carried out using a bit of advanced technology, while a small percentage of 10%, close to US0.8 million, were carried out using advanced technology.

## 4.3.1 Chi-Square Test 1:

Testing the association between the type of customer (sending or receiving) and the type of technology adopted

**Table 4.6 Customer type and Technology** 

	Type of Device			
Type Of customer	Android Smartphone	Kambudzi	Other	
Receiving Customer	22%	44%	7%	73%
Sending Customer	8%	16%	3%	27%
	30%	60%	10%	100%

Source Survey Data(2024)

## Hypotheses:

1) H0: There is no association between the variables being tested.

H1: There is an association between the variables being tested.

Testing at a 5% level of significance

2) Reject H0 if the chi-square calculated is greater than the chi-square critical value.

The critical value of the chi-square with (3-1)(2-1) = 2 degrees of freedom testing at 5% level of significance is 5.991.

## 3) Calculations:

**Table 4.7 Observed and Expected Frequencies** 

		Observed Frequencies			
Type	of		Kambud		
		Android smartphone		Other	
Customer			zi		
Receiving		22	44	7	73

customer				
Sending customer	8	16	3	27
	30	60	10	100
	<b>Expected Frequencies</b>			
	Android smartphone	Kambud zi	Other	
Receiving customer	21.9	43.8	7.3	
Sending customer	8.1	16.2	2.7	

Observed Frequencies(O)	Е	(O-E)^2/E
22	21.9	0.000456621
44	43.8	0.000913242
7	7.3	0.012328767
8	8.1	0.001234568
16	16.2	0.002469136
3	2.7	0.033333333

	0.050735667

Source: Researcher (2024)

Therefore, X<sup>2</sup> Calculated is =0.050735

4) Decision Criteria: Since the Chi square calculated is 0.0507, which is less than 5.991, we do not reject the null hypothesis and conclude that there is no sufficient evidence to claim an association between the variables. In context, the evidence gathered suggests that there is no association between the type of transaction and the type of device used. In other words, digital transformation does not influence transacting capability and, financial inclusion.

## 4.3.3 Chi-Square Test 2:

Table 4.8 Place of residence and Technology

Count of Remittance Value	Place Of Residence			
Type of Device	Locations Ghetto	Low Density Suburbs	Rural Areas	Totals
Android Smartphone	18%	9%	3%	30%
Kambudzi	18%	6%	36%	60%
Other	3%	6%	1%	10%
Grand Total	39%	21%	40%	100%

Source Survey Data (2024)

- Testing for the association between place of residence and the type of technology adopted
- 2) H0: There is no association between the place of residence and the technology being used.

H1: There is an association between the place of residence and the technology being used.

Test level: 5%

# 3) Rejection Criteria:

Reject the null hypothesis if Chi Square Critical at 5% level with (3-1) = 4 degrees of freedom = 9.488

# 3) Calculations

**Table 4.9 Observed and Expected Frequencies:** 

	Observed Frequencies						
	Locations (Ghetto)	Low Density Surburbs	Rural Area				
Type of Device							
Android Smartphone	18	9	3	30			
Kambudzi	18	6	36	60			
Other	3	6	1	10			
	39	21	40	100			
		Expected					
		Frequencies					

Type of Device	Locations(Ghetto)		Low Density Surburbs		Rural Area	
Android Smartphone	11.7		6.3		12	
Kambudzi	23.4		12.6		24	
Other	3.9		2.1		4	
Observed Frequenci	es(O)	Expecto	ed Frequen	cies		(O-E)^2/E
18		11.7			3.392307692	
9	9		6.3			1.157142857
3		12			6.75	
18		23.4				1.246153846
6		12.6				3.457142857
36		24		6		
3		3.9		0.207692308		
6		2.1			7.242857143	
1 4					2.25	
						31.7032967

Source :Researcher(2024)

5. Decision: Since the calculated value of 31.7032 is greater than 9.488, there is sufficient evidence to reject the null hypothesis and conclude at the 5% level of significance that place of residence plays a significant role in the type of technology that is used in the remittances space. This implies that place of residence influences

the type of device a consumer has, which ultimately influences their digital participation.

## **4.4 Chapter Summary**

In this chapter, it was noted that 60% of the remittances are conducted on rudimentary technology as represented in this study by Feature Phones. Based on theoretical framework highlighted in chapter 2, the rate of adoption of technology used in remittances is dependent upon many factors, some of which are: place of residence (rural vs urban), age of respondents. The impact of that is that it puts a cap on the digital products that can be developed particularly for the Zimbabwean sector because many of the participants will have no access to the digital products. The inter-linkages and relationships of variables will be discussed in the next chapter with respect to each research objective.

#### CHAPTER 5: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

#### 5.1 Introduction

The study investigated, using data from over 45 Mukuru collection points with over 72000 customers, the impact of digital transformation on financial inclusion using remittances. It tested the hypothesis that there is an association between the technology used and the type of transaction, and it also tested the association between the place of residence and the technology used in transacting. It sought to answer the specific question concerning the impact of the level of technology on the remittance values and the proportions of technology being used as clustered by distinctive characteristics such as age and place of residence (whether rural, urban high density, or urban low density). A descriptive design was adopted and stratified, and simple random sampling techniques applied to select the participating sites. Over 72000 customers were asked (50 customers per day per site) using convenience sampling to select participants.

#### 5.2 Discussion

Having collected data from over 45 Mukuru locations for a month, seeking to answer 5 questions summarized by a multiple-choice questionnaire, the results of the study show that the type of device (which is a level of technology) has no association with the type of transaction being conducted. Whether a person is sending or receiving funds has no bearing on the level of technology they are using, but nonetheless, by engaging in transactions, whether receiving or sending, they will have been counted as having been financially included. So even with basic technology, such as a simple

phone called Kambudzi, one can be financially included and be able to receive or send money to or from their loved ones.

#### 5.3 Conclusions

From the findings which were obtained from the data collected, the following are the research conclusions. The conclusions are on the research study, impact of digital transformation on financial inclusion in the remittances sector of Zimbabwe. The results will be discussed under the headings of the set objectives.

5.3.1 To understand if the type of phone used (e.g) smartphone, feature phone) influences individual's access to remittance services through digital platforms.

This was the first level of assessment where data was collected to check at what level of technology are the Mukuru customers accessing remittance (i.e) being financially included. It was discovered that majority of transactions were being carried out use base- level technology which is a feature phone. A feature phone cannot access internet. It is meant for basic level communication of calling and short-message-service (SMS). Research found out that 60% of transactions be it sending or receiving were being done using basic technology or entry level technology. This jells well with the notion postulated by Technology acceptance theory which says that technology is adopted based on the easiness of use. So the idea that comes to mind is to create equally easy platforms on advanced devices and help the recipients to migrate to advanced cellphones.

5.3.2 To understand the part played by age demographics in digital financial inclusion and how it varies across several types of phones (smart-phones, feature phones).

The study discovered that both the old and the young customers were at par on the rate of adoption of technology and hence showed no difference on the transacting value in their technologies they used. It was noted that out of the 60% population that transacts using Feature phones, 24% were below the age of 30 years and 18% were above the age of 50 years. While it is logical for the elderly to shun technology, this study shows that even the youthful participants were averse to technological advancement. And in terms of Android devices ,12% of participants being youths have been seen to access financial services these Android devices. These have a leeway to digital financial inclusion were financial services designed to be used via internet can be accessed. A handful of participants being 4% youths and 3% Senior Citizens have been observed to access financial remittances using advanced devices like iPhones. These can safely be concluded that they are dependents of senders in the UK, USA or Dubai diaspora who can afford to spend on devices to give to their elderly parents and dependents.

5.3.3 To investigate whether a customer's place of residence (urban or rural) influences the level of technology used in remittances.

This study discovered an association between the level of digitization (measured by the type of device being used by the one transacting) and where a person resides. From the three categories of residences identified, it was noted that the rural people were less digitized but were the recipients of the bulk of money. Urban ghetto dwellers were midway in the population with smart-phones and basic technology,

and they received significant remittances. The conclusion based on this is that digital transformation may not necessarily influence the value but rather enhance the quality and use of the remitted funds.

#### 5.3 Recommendations:

Following the analysis above these are the recommendations from the study

- 5.3.1 Remittance institutions like Mukuru may equip their staff with the level of technology that they would want to see in their customer, for example Android then take time to demonstrate to the customers whenever they come the easiness and convenience of using advanced technology. They can practically show them that one can be able to check their transaction history, create and edit money vouchers on their own at their own convenience using better and advanced devices.
- 5.3.2 For an organization aiming to transition its young customer base from feature phones to at least Android phones, a strategic approach focusing on both the practical benefits and the aspirational aspects of smart-phones could be highly effective. This research recommends that organizations like Mukuru to implement an awareness campaign that highlights how Android phones or better can enhance the users' daily lives, such as through access to educational apps, health monitoring, and financial services that are not available on feature phones. This is not only limited to remittances only because when they sell the idea that a change in level of technology can lead to a paradigm shift in lifestyle across and through. Additionally, emphasizing the affordability of entry-level Android smart-phones and the availability of easy payment plans can address budget concerns.
- 5.3.3 Pairing these efforts with influencer partnerships or testimonials from friends and family who have made the switch can also add a layer of relatability and aspiration. Organizing workshops or interactive sessions where young people can

experience firsthand the benefits of using an Android phone could further pique their interest and ease the transition by making it less intimidating.

5.3.4 Collaborate with NGOs and phone manufacturing companies to ensure that affordability is not an issue with rural or ghetto dwellers. The organization can work on introducing financing plans that make it easier for clients to make the switch. For example, partnering with phone manufacturing companies for discounted group rates. Design a system that can identify regular clients and score them based on their transaction value and frequency, offer them devices and a percentage is deducted on each remittance transaction towards amortizing the phone loan. A remittance discount can be offered to senders so that they encourage the beneficiaries to advance their technology. This is possible because currently Mukuru is collaborating with UNICEF and WPF to support hunger-stricken families across many districts and sometimes the cash transfer from these NGOs can be equivalent to the worth of a basic Android phone. So it's just a matter of, instead of looking at hunger as a problem, you define it as technological deficit which needs to be addressed and improve the livelihood. It does not only end in remittances but can also impact on social life as the sender and recipient can now chat on video calls, send each other pictures of projects being undertaken.

## 5.4 Recommendations of further study

- 1. Investigate the impact of cultural factors on the adoption of digital financial services in rural areas of Zimbabwe.
- 2. Explore the role of government policies and regulations in promoting and advancing digital transformation in the remittances sector.

- 3. Examine the effectiveness of different marketing strategies in increasing awareness and usage of digital remittance platforms among different demographic groups.
- 4. Analyze the potential benefits and challenges of integrating block-chain technology into existing remittance systems to enhance security and transparency.

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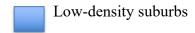
# **List of Appendices**

# **Appendix 1: Questionnaire Survey Instrument for Mukuru Customers**

Administrator, please explain to the customer that this is a voluntary exercise, where the researcher wants to understand the following questions about their inclination to technology when conducting remittance transactions.

Please select the correct responses as provided by the respondent.							
Question 1: Town (Where transaction is being conducted currently							
<b>Question 2:</b> Are you sending to or receiving funds today?							
Sending							
Receiving							
Question 3: What is your age range from these three categories?							
below 30							
above 30 but below 50							
Senior Citizen							
Question 4: What is the type of phone you use from the categories below?.							
Feature Phone							
Smartphone Android							
Other advanced							
Question 5: Where do you live under the following cutegories?.							
Rural Areas							

Locations (Township Ghetto)



Question 6: \	What is the	value of the	transaction	you are doin	g today?
	• • • • • • • • • • • • • • • • • • • •				