THE SIGNIFICANCE AND ROLE OF SMALL AND MEDIUM ENTERPRISE MOBILE MONEY BUSINESSES IN ZAMBIA – A BRIEF REVIEW AND PERSPECTIVE

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Abstract

Background and Objectives: Cell phones in Africa have improved economic performance and allowed poor, unbanked communities to access financial services at a minimal cost. The main objective of the review is to shed more light on the current trends in the mobile money business by briefly appraising the various studies on the small-scale mobile money industry, with special emphasis on Zambia.

Study Design/Material and Methods: The review examined 52 peer-reviewed and purposefully selected journal articles. Of these, 30 papers comprising five different areas on mobile money were evaluated.

Results: It was established that mobile money is not only convenient and accessible to most people, but it has also led to economic inclusion for disadvantaged communities. Instead of competition, there should be complementarity between banks and mobile money platforms through the integration of the two payment systems. Integration of the two systems, however, would come with associated risks.

Practical Implications: Replicating successes in the mobile money subsector will not only broaden the tax base but also improve and/or streamline strategies and policies relating to the small and medium scale (SMEs) industry to benefit the country.

Conclusion and Summary: Mobile money has provided an invaluable, easy-to-use, and robust solution to financial inclusion for disadvantaged communities in emerging economies, especially in Africa.

Keywords: digital account, electronic payment, financial inclusion, mobile money, small and medium enterprises

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1. Introduction

Any literature review on small and medium-scale enterprises (SMEs) alludes to the fact that this industry is a key driver for economic development and job creation in world economies. In fact, the World Bank confirms this position by stating that, globally, SMEs account for the majority of businesses and are vital for wealth creation and global economic growth because this industry caters to about 90% of companies and represents more than 50% of employment worldwide. Due to their importance, many studies have been conducted on the role and significance of SMEs (Kwaku, 2018; Hogs & Hill, 2018), including the challenges and causes of failures in this sector (Farsi & Toghraee, 2015; Wang, 2016; Fatoki, 2014,). In addition, researchers have also generally focused on the impact of various factors on SMEs, such as the environment, social media, government policies, and practices, including the effects of gender and human capacity building on the sector (Higgs & Hill, 2018; Warda & Mahendrawathi, 2019; Dosumu et al., 2020; Shava, 2017; Aladejebi, 2018). However, other studies have been more specific, covering logistics and supply chain management for a particular sector within the SME industries or dynamic capabilities and SME performance (Singh et al., 2012; Hernández-Linares et al., 2020).

Through methodical and scientific inquiries, significant research strides have been made in the last twenty years, resulting in improved operations and efficiency in SMEs. While adding to the knowledge bank, however, some studies have left many questions unanswered. This paper, therefore, looked conceptually at one such area: the mobile money SMEs. This sector was selected due to the many challenges faced by SMEs, the more pronounced challenge of inadequate funding, or lack of access to financial resources. However, the COVID-19 pandemic appears not to have adversely affected the small businesses in the mobile money industry, especially in developing and emerging economies.

Although much research has been conducted on SMEs in the last twenty years, there have been negligible studies on the mobile money SMEs, particularly in the Southern Africa subregion, leaving many questions unanswered. Therefore, this paper aims to shed more light on the current trends in the mobile money business by briefly reviewing the various studies on the small-scale mobile money industry, especially in emerging economies, with special emphasis on Zambia. Apart from synthesizing and consolidating information on mobile money SMEs, the review also corroborated or gave alternative explanations to the various findings on mobile money SMEs and identified knowledge gaps for bridging through further study or research. However, the specific objectives of the review were to:

I. Determine the factors which made the mobile money SMEs to be more resilient and capable of handling the main challenges faced by SMEs in other sectors of the economy;
II. Establish the role of mobile money in financial inclusion for the poor and disadvantaged communities in developing countries;
III. Establish the role and significance of mobile money SMEs in job creation and economic development in Zambia.
IV. Ascertain the significance and extent to which mobile money has been embraced, adopted, and used by small businesses, including ordinary people in emerging economies
V. Evaluate the impact of mobile money SMEs on conventional retail and commercial bank activities;

2. Methodology

In conducting the study, a brief, methodical review of the literature was employed, which involved only an overview and evaluation of sources while emphasizing the research outcomes, including the present state of knowledge on mobile money businesses in developing economies. While this was not a systematic literature review regarding the comprehensiveness of the search strategies and approaches used in the analysis, the search was extensive and methodical enough to evaluate and synthesize the evidence and findings to arrive at rational and reasonable conclusions.

3. Design of the Review

The mobile money industry is massive, especially in developing and emerging economies. A lot has been written about it, especially in the last ten years. However, in order to achieve the objectives of the study, the literature review was narrowed down to the following five areas:

I. Overview and resilience of mobile money SMEs;
II. Role of mobile money in financial inclusion and economic development;
III. Benefits and extent of mobile money usage in Africa;
IV. Impact of mobile money on commercial banks; and
V. Security and challenges of mobile money.

When it comes to the use of secondary sources in research, Liberty (2022) opines that papers for graduate students may generally need between 20 and 40 references for literature review, while another perspective is that a doctoral thesis or dissertation should cite at least 50. Yet another view by Eaton (2022) is that the minimum number of sources should equal the number of pages in the body of the entire paper without including the title page, abstract, appendices, and references. Therefore, taking these propositions into consideration and the fact that this particu-

lar paper is part of yet to be submitted doctoral dissertation, a total of fifty-two (52) peer-reviewed journal articles were purposefully selected and considered from the search, which took into account the date, relevance of the article to the study including the reputation and credibility of the journal in which it was published. Out of the fifty-two (52) papers, thirty (30) covering the five (5) areas above were evaluated and analyzed. Due to time and resource constraints, the number of articles for evaluation of research findings was restricted to thirty (30).

3.1. Design Approach

Google Scholar was searched for journal articles using keywords and phrases like "mobile money," "Africa," "financial inclusion," "emerging economies," and so on. The journal and articles were then selected for evaluation using the SCImago Journal Rank (SJR) and the Hirsch Index (h-index), which measure both the output and citation impact of the publications (SJR, 2020). Although the h-index has limitations, including penalizing groundbreaking journals and early-career scientists/authors with outstanding but fewer works or articles, it is a fairly good indicator of scientific performance (Koltun & Hafner, 2021). The higher the h-index, the more the visibility, influence, and reputation of the journal or publication. According to Hirsch (2005), an h-index of 60 is indubitably exceptional, while 40 is outstanding and 20 is good enough. This study used the SJR indicators for 2020 and the h-index of 20 for journals, considering whether the journal is indexed, its impact factor, and publishing history.

Although citation-based pointers have limitations when used in isolation, their use in bibliometric analysis as performance indicators has continued in scientific research (Aksne et al., 2019). In this regard, several databases provide bibliometric data for evaluation. However, Harzing & Alakangas (2015) postulated that Google Scholar covers the literature better because the average citation rate is much higher than other databases that concern humanities. Therefore, for this review paper, citations of journal articles were obtained from the 2022 Google Scholar database. The papers were grouped in the five (5) areas identified above, taking into account the citation relevance, the h-index of the journal that published the article, and whether or not it was peer-reviewed.

In citation evaluations, various time frames were used for analysis, and in this particular review, the citation window was set at five (5) years to include the most recent articles, which are generally more relevant and current for research assessment exercises (RAEs). However, taking into account that the mobile money industry is dynamic and fast-evolving, at least twenty (20) citations for articles published between 2017 and 2020 were deemed ideal, while for articles published in the last two years (2020–2022), at least one (1) citation was considered acceptable for this paper.

For completeness and in addition to journal articles, books concerning relevant conferences and secondary information on the current trends in the mobile

money industry in Africa and particularly Zambia were also obtained from the Bank of Zambia, government ministries, agencies, and other local sources, including websites. After appreciating the general overview of the mobile money industry, the search was further narrowed down to the mobile money SMEs in Africa and especially the Southern Africa Development Community (SADC) subregion, with specific emphasis on Zambia.

3.2. Inclusion and Exclusion Criteria

Although small businesses undertake mobile money, pieces of literature on general theories and operations of SMEs were not included in the review. Similarly, only literature on mobile money businesses in Africa was reviewed. In this regard, the review was restricted to peer-reviewed articles on mobile money published between 2017 and 2022 because it was considered relevant and current enough to explain the recent developments, including innovations in the mobile money industry. However, articles from journals that are not active though relevant were excluded. In this regard, inactivity means a journal has not been published since 2018. Similarly, articles in journals not listed in the SCImago Journal and Country Rank (SJR, 2020) or articles in the SJR 2020 database but with an h-index of less than 20 were excluded from the review.

4. Literature Review

The SME industry is vast and covers different sectors of any world economy. Due to this diversity and heterogeneity, the literature review did not delve into the general SME theories but instead started by explaining one of the theoretical frameworks, which has predominantly been used as a basis of research on the mobile money industry in the last ten (10) years. This was followed by an overview of the SME mobile money industry and how it has evolved recently, including how it has contributed to social and economic growth, especially in developing economies. The review then synthesized the various observations and results from research by different players in the SME mobile money sector on how the technology is used and its role in trading goods and services, including farm inputs and products. However, the review and analysis conclusions were limited to the mobile money industry in Zambia.

4.1. Theoretical Framework

The theoretical framework guides a researcher on how to raise questions relating to what leaders in the field have theorized about in their research question(s). It also assists a researcher in identifying the existing theoretical ideas that can be used to investigate and understand one's research problem, including what to look

for in the data to answer the research question according to the theories. During the review, the first step was identifying the theories underpinning the mobile money business. In this regard, one theoretical framework which has featured more prominently in research in the last ten years or so was selected. This theory is referred to as the actor-network theory (ANT). It attempts to understand the dynamics of the development and diffusion of a mobile money service from the actor-network perspective. Relevant literature on mobile money businesses to support the theory was then reviewed (Adaba & Ayoung, 2017). Since most studies had no one answer to the research question(s), related and/or associated articles were compared and examined to arrive at reasonable conclusions. It was decided that combining this theoretical framework with relevant findings from the literature reviewed would help construct a clear and robust explanation regarding the different facets of the mobile money industry.

4.2. Overview of the Mobile Money Industry

Mobile money is a technology platform that enables the movement of money between cell phones (GSMA, 2010). Service providers install a digital payment mechanism on a mobile device through the Subscriber Identity Module (SIM) card, which carries an identification number unique to the owner, stores personal data, prevents operation if removed, and allows persons to manage their money digitally. Unlike mobile banking, where the devices of customers utilize services that are linked to the internet to manage their accounts, mobile money platforms allow users to deposit, withdraw, receive and send money without being connected to the established banking system. In Africa and other emerging economies, mobile money has become the most popular substitute for cash and other conventional bank services like automated teller machines (ATMs) due to its convenience and easy-to-use features, including the fact that it is secure and accessible in any place covered by the Global System for Mobile (GSM) communications**.**

4.3. Mobile Money and the National Payment System

Donovan (2012) defines mobile money in simple terms as the provision of a wide range of financial services through a mobile device, including receipts, payments, finance, and banking. It is like a subsector of a bigger industry with banking activities without branches and employing various methods and technology to provide financial services. In Zambia, one needs only a National Registration Card (NRC) to open a mobile money account, but there are stringent procedures and requirements for opening a conventional bank account. Although the banks offer services that use cell phones, the devices are just another channel to access a particular conventional banking product; this is mobile banking and not mobile money. Although a bank account is not required for one to use mobile money services, the

concept of mobile money is comparable to a bank account in many respects. For this reason, funds held in a mobile money account are protected by regulations issued by the Bank of Zambia, hence the need for both platforms to be part of the national payment system. In Zambia, the national payment system is regulated by an Act of Parliament, the National Payment Systems Act of 2007, whose purpose is to provide a legal grounding for the operation of the various payment mechanisms in the country (BOZ, 2020).

4.4. The Role of Government and Regulators in Mobile Money Security

The government plays a vital role in providing a safe and conducive playing environment for all players in the mobile money industry. However, it has been known that governments, especially in Africa, are the main culprits when it comes to interfering with the smooth operation of cell phone services; they sometimes shut down the internet, particularly during elections or other volatile political events, disrupting the mobile money services in the process. Therefore, regulators like the Zambia Information and Communications Technology Authority (ZICTA) and the Bank of Zambia (BOZ) should closely and constantly monitor digital payment platforms to detect and deter fraud and other security threats. Furthermore, relevant laws and regulations should be put in place to compel governments to respect the free flow of information, including the integrity of the internet. Mobile money service providers, on the other hand, should be obligated to provide education and sensitization programs on security in addition to the standard security measures for the receipt and disbursement of funds.

4.5. Dynamics and Characteristics of Mobile Money

According to Asongu et al. (2020), Africa is at the forefront of mobile money innovations. Due to the increase and astuteness of smartphones and the significant improvements in the network infrastructure in Africa, mobile money usage has grown phenomenally in the last decade. Scharwatt & Williamson (2015) buttressed this position by stating that some countries in Sub-Saharan Africa decided to cooperate and work in conjunction with each other's mobile money services to enable the transfer of money across borders. In this regard, Research and Markets (2021) reported that the last few years had seen an unparalleled revolution in mobile financial services. It is projected that between 2021 and 2026, the global mobile payment market will grow at an annual rate of 33%. Research has further shown that the growth in mobile money is attributable to peculiar characteristics and attributes that make it to be prevalent in Africa and Zambia in particular. Still, it also involves failures and challenges, as discussed below.

As the world moves to a cashless society, instant digital payments are becoming an inevitable feature in the payment systems. In the past, people had to write

checks to pay utility bills and go to the bank or an ATM if they wanted to deposit or withdraw money. Currently, these transactions can be done using a cell phone in the comfort of one's home or wherever one may be. Various studies, including one conducted by Ahmad et al. (2020), have confirmed that the general growth rate of the mobile sector is exponentially higher in Africa than in other regions because the rapid expansion of mobile communications technology and affordability of cell phones made it possible to access several products and services using mobile devices, impossible 20 years ago. According to Chikumbi & Siame (2018), almost every household in urban Zambia has a cell phone, and in most rural parts of the country, cell phones are available and widely used. In addition to this availability of cell phones, mobile money booths are situated at every convenient place wherever people may go. However, it is a well-established fact that, when making payments, several factors are taken into account, including ease of use, accessibility, and affordability.

In their research on mobile banking and its convenience in making transactions, Ouma and Nyakeyo (2019) found that the convenience of the mobile money payment system is a huge incentive that has led to the popularity and adoption of the system. Although convenience is a feature that could mean different things to different people, on the whole, it encompasses ease of use, flexibility, portability, and transaction swiftness. In terms of flexibility, payment or transaction can be made instantly, anytime, and on any day, including weekends and public holidays when banks are closed. Similarly, when it comes to portability, one need not have several bank cards or large amounts of cash to make a payment. This can be done conveniently from the digital wallet to the customer or bank and vice-versa with minimal transaction costs. In addition, there is nothing complicated in learning to use mobile money, even for people without bank accounts or with minimal educational credentials. Alkhaldi (2019) strongly supported this solution by stating that the time can best be utilized on other productive ventures instead of wasting it in long bank lines.

4.6. Significance, Role, and Impact of Mobile Money

Having discussed the convenience and accessibility of mobile money, the literature review turned to the importance and role of the mobile money industry in the payment for goods and services and the effect on the conventional bank services and products, with special emphasis on job creation and economic development in Zambia. Mobile money is a convenient method for paying utility and other bills. The banks, including mobile money companies, have partnered with several utility companies like water and sewerage companies, electricity providers, and cable television networks, and then customer accounts are linked to these service providers. With these interconnections, a person can simply transfer money from the conventional bank account to the mobile money digital account and then pay the bills using a mobile device.

During the COVID-19 pandemic, with various lockdowns and restrictions, mobile money played a significant role in the payment for goods and services. Some school fees, for example, could be paid using the mobile money service. In addition, government employees transferred from towns where banks are available to remote areas of the country without bank services do not have to struggle with getting their salaries at the end of the month. Instead of going to provincial centers where most banks are located, an employee simply transfers the salary from the bank account to the mobile device and gets the cash from any mobile money booth. (GSMA, 2017)

Similarly, Kikulwe et al. (2014) promulgated the importance of cell phones and mobile money in agriculture, especially in rural areas of emerging economies, through reduced communication costs and improved access to information. For example, a group of small-scale farmers in Zambia can come together and pool their produce. The buyer would come to the village and cable the money directly to each farmer's phone based on the quantity supplied. As a result, the farmers do not need to go to town markets, thereby saving transportation costs. Similarly, when it comes to agriculture inputs, money is sent by each farmer to suppliers through mobile money. Kikulwe et al. (2014) found that mobile money helped small-scale rural farmers without bank accounts overcome some challenges in marketing their produce, thereby contributing to rural development and poverty reduction. They further found that those farmers who use mobile money are more successful and reap higher profits than those who do not use the technology. Sekabira & Qaim (2017) used a similar model to the one employed by Kikulwe et al. (2014). They found that the use of mobile money in Kenya increased household incomes, including consumption levels, reduced the need to have actual cash, and facilitated engagement with players outside the local regions because the mobile money services were not exclusive to the few participants.

4.7. Challenges of Mobile Money

There are inherent risks in the mobile money business that should be managed to avoid losing funds. Therefore as propounded by Osman (2018), specific policy actions should be taken by African governments to incorporate privacy and cyber security mechanisms to counter the threats associated with online transactions. It is an established fact that easier access to mobile money has made it possible for most communities in Zambia to attain financial inclusion. However, broad accessibility to funds entails greater risk because even people with little or no education can easily access mobile money services. Therefore, the challenges of mobile money are discussed using two categories: security challenges and structural challenges.

4.7.1. Security Challenges

The idea of storing and retrieving information that is supposed to be protected from unauthorized access in the digital world ruled by the internet is risky and quite unsettling. Even with security measures, as Whisker & Lokanan (2019) opined,

fraudsters and other online criminal elements target mobile money because a lot of funds are being channeled through this medium. In addition, most smartphones are not protected by antivirus software. There are security threats relating to hackers, spam, viruses, and worms that target not only the personal information of individuals but also mobile devices, thereby compromising the confidence in the integrity of the whole mobile payment system. Experts and researchers have explained that in Africa, the privacy and security issues of mobile money services have not matched the rate at which digital payment platforms are evolving and growing. Therefore as propounded by Osman (2018), specific policy actions should be taken by African governments to incorporate privacy and cyber security mechanisms to counter the threats associated with online transactions.

4.7.2. Structural challenges

Tuffour et al. (2016) explained that one of the major problems affecting mobile money service providers includes data traffic jams and inadequate networks. This problem is compounded because the telecommunication infrastructure in some regions of the country is either non-existent or inadequate. In addition, in most rural areas of Zambia, people do not have the National Registration Cards (NRCs), the main identification document (ID). Odoyo et al. (2016) explained that this challenge has affected the drive for financial inclusion and prevented many people from benefiting from mobile money services in Africa. However, even if ID documents, including personal identification numbers (PINs), are available, incidences have been reported where ignorant customers have unknowingly released private and sensitive information to fraudsters, including PINs, to their detriment.

4.8. Employment and Extent of Mobile Money Use in Zambia

According to the Bank of Zambia 2019 Annual Report on the National Payment System in Zambia, from 2015 to 2019, the value of transactions on mobile money increased by over 300% in US dollars, from US$12.2 million (K219.6 million) to US$37.3 million (K671.4). The exponential growth in both value and volume of transactions was attributed to the rapid increase in the number of people using mobile money due to the promotion of electronic payment methods and subsequent acceptance of novel products and services introduced by mobile money businesses (BOZ, 2019). In addition, according to ZICTA (2020), the number of active users of mobile payments went up because the cell phone penetration rate in Zambia was over 100%. Out of a population of about 18 million, Zambia has over 19 million registered SIM cards, allowing people to access products and services offered by cell phone companies, including mobile money.

Therefore, it is concluded that mobile money services are widespread in Zambia because of convenience, including lower transaction costs, which allows

rural people or the urban poor who have no bank accounts to be effectively served. Nkonde (2019) explained that mobile money SMEs in Zambia employ thousands of youths without college or university education. However, it should be noted that the employment is semi-permanent due to several factors, including employees wanting to pursue tertiary or higher education after raising money from the mobile money business or the business owners may not have enough operating capital, i.e., skills and expertise – to run the business sustainably.

According to the Zambia Statistical Agency's Labor Force Survey Report for 2019, the overall unemployment rate was assessed at 13.2%. The rural unemployment rate was 14.2% compared to the 12.6% urban unemployment rate, while youth unemployment stood at 18.2% (Zamstats, 2020). Meanwhile, mobile money transactions increased in volume by over 245%, from 306 million in 2018 to 752 million in 2020. Similarly, transaction values rose by over 476%, from K22.2 billion to K105.8 billion during the same period, as shown in Table 1 (BOZ, 2020). The increase in the volume and value of mobile money transactions has translated to increased employment, especially for the youth.

Table 1. Cell phone transactions in volume and value between 2018 and 2020

Month	Volume Per Year ('000)			Value in Per Year (K'000)		
	2020	2019	2018	2020	2019	2018
January	64,700	30,916	20,564	5,974,450	2,687,823	1,208,860
February	62,648	29,835	18,008	5,650,607	2,545,227	1,156,994
March	81,565	32,381	20,963	7,147,372	2,923,236	1,322,227
April	70,992	41,750	20,969	7,801,945	3,215,044	1,306,630
May	81,356	43,704	23,157	8,284,630	3,670,064	1,508,613
June	62,979	45,195	24,081	8,281,553	3,950,182	1,781,198
July	54,966	51,377	25,696	9,058,100	4,595,935	1,864,823
August	52,134	54,098	28,107	9,414,147	4,849,109	2,171,019
September	51,566	53,910	28,111	9,849,628	4,870,152	2,220,505
October	54,938	58,485	30,555	10,987,490	5,308,168	2,425,469
November	54,291	46,498	30,671	11,445,398	5,126,209	2,478,578
December	58,381	64,487	33,075	11,919,727	5,704,599	2,746,651
Total	**752,536**	**554,655**	**305,975**	**105,817,067**	**49,447,767**	**22,193,585**

Source: Own elaboration.

4.9. Relationship Between Mobile Money and Conventional Banking

In their paper on the potential threats for banks as a result of the emergence of mobile money, Kennedy & Kok (2016) found that, although banks could negligibly lose income in the short term, mobile money is more complementary than competitive and will only accelerate the objective of eventually having an economy where small amounts of cash are used. This finding, especially on banks losing some of their customer bases, has come to pass in many developing economies. In Zambia, however, the commercial banks have not "negligibly lost income in the short term," as can be seen by the closure of some branches deemed unprofitable by the Standard Chartered Bank (Nkomesha, 2020), disinvestment by another bank during 2020 (Child 2020), and merging of four commercial banks in 2021 (Access, 2021; Adamolekun, 2021). All these restructuring and downsizing activities in the banking sector resulted in a job loss for many of their employees. This new phenomenon in the banking sector shows that, while some services of commercial banks and mobile money are complementary, most services between these two business models are competitive and may pose a direct threat to the financial well-being of some commercial banks.

4.10. Disparities in Mobile Money Usage

It is a settled fact that the security, convenience, and ease of use of mobile money systems have drastically changed the lives of many people in Sub-Saharan Africa. However, the success of mobile money, especially in East and Central Africa, could not be compared to what was attained in West Africa and South Africa despite similar conditions and circumstances. Various reasons have been ascribed to this disparity. In Nigeria, for example, Lepoutre & Oguntoye (2018) attributed the slow pace of development in the mobile money industry to different institutional and industrial environments and argued that external network factors were taking longer to mature in Nigeria compared to Kenya. On the other hand, in South Africa, which is more industrialized and has relatively advanced and mature telecommunication infrastructure, mobile money usage is not developed or utilized to the same extent as in East Africa. This difference is explained by the fact that most South African population is banked. However, this argument is not supported when comparing South Africa with other countries in the subregion. For instance, in Namibia, 77% of the population have bank accounts, but 43% also use mobile money. In contrast, in South Africa, only 2% of the population uses mobile money even though 75% is banked. This analysis shows that, although the two countries are neighbors, Namibia is more banked and uses mobile money more than South Africa, as shown in Table 2 below, adapted from Mudzingwa (2020). This phenomenon, therefore, requires further research to understand why countries with similar demographics and conditions in Africa use mobile money more than others. This is important because even

though mobile money is a relatively recent innovation, it has provided a dependable and robust solution to financial inclusion for many African countries with a young population and challenging and/or unfavorable geographic and economic conditions compared to counties in the developed world.

Table 2. Comparison of mobile money users and bank accounts holders as a percentage of the population in the eight SADC countries

Country	Population	Mobile Money Subscriptions	Mobile Money Users as % of Population	% of Population with Bank Accounts
Botswana	2,351,627	1,150,240	49%	45%
Eswatini	1,160,164	703,980	61%	44%
Lesotho	2,142,249	1,261,985	59%	33%
Mozambique	31,255,435	6,600,000	21%	33%
Namibia	2,540,905	1,083,600	43%	77%
South Africa*	59,308,690	1,000,000	2%	75%
Zambia	18,383,955	4,852,040	28%	36%
Zimbabwe	14,862,924	7,334,639	49%	28%

* Figures for mobile money users are estimates

Source: Own elaboration.

5. Analysis, Results, and Perspective

The literature analysis was conducted using the identified review areas: an overview of mobile money SMEs, the role of mobile money in financial inclusion and economic development, the resilience and impact, including the extent of mobile money usage in Africa, particularly Zambia. The other area considered was the security, risk, and challenges of mobile money. Out of the thirty (30) journal articles examined, one (1) dealt specifically with the theoretical framework, while the other twenty-nine (29) covered two or more of the five identified areas, as shown below.

5.1. Resilience of Mobile Money SMEs

To achieve the first research objective of determining the factors which made the mobile money SMEs more resilient and capable of handling the main challenges SMEs face in other sectors of the economy, the review considered journal articles on the resilience of businesses, including mobile money industry. In this regard, three

(3) articles were evaluated, and although resilience is perceived differently by researchers, all three results reviewed in this area showed that mobile money users appeared to be more resilient to climatic and other shocks. During the COVID-19 pandemic, for example, the mobile money industry was not adversely affected. Instead, it thrived and provided financial services both to the banked and unbanked individuals in developing countries resulting in a positive impact on the general populace.

5.2. Financial Inclusion and Impact of Mobile Money

The second objective of the review was to determine the role of mobile money in financial inclusion for the poor and disadvantaged communities in developing countries. The third objective was to establish the role and significance of mobile money SMEs in job creation and economic development in Zambia. Regarding financial inclusion, eleven (11) articles were studied on topics ranging from determinants and constraints of mobile money adoption to the relationship between financial inclusion and economic development. On the impact of mobile money, several articles were analyzed whose topics ranged from the benefits of mobile money to the relationships between various variables on mobile money, as discussed below.

5.2.1. Financial Inclusion

Out of the eleven (11) articles reviewed, eight (8) dealt explicitly with different aspects of financial inclusion, while two (2) covered determinants and one (1) discussed the constraints of mobile money. The unanimous position of all eight (8) articles on financial inclusion is that mobile money has brought on board unbanked people to access financial services, and firms which use mobile money are more likely to obtain loans or lines of credit, leading to higher productivity than other firms in the Sub-Saharan region. The results further showed that firms that use mobile money are more productive, innovative, and creative than those that do not use the financial facility. The other finding was that those who use mobile money are more resilient to unexpected turbulences and financial shocks. Of the two (2) articles dealing with determinants, one (1) found social and informal saving groups as determinants of mobile money adoption. The other found that age, education, unemployment, and ownership of bank accounts could explain both the adoption and the amount sent through mobile money. The only article on constraints of mobile money found that its usage could have been higher than the current status had it not been for the barriers to innovation and creativity, which have contributed to the stifling of the advancement of the mobile money industry.

5.2.2. Impact and Benefits of Mobile Money

Seven (7) articles discussed the impact and benefits of mobile money. In general, the findings were that mobile money users reaped more benefits than non-mo-

bile money users. However, it was found that mobile money allows sharing risk, and its users are likely to send and receive larger volumes of payments and remittances, save higher amounts, invest more in education, microbusinesses, land and buildings, and also consume more relative to non-users. In addition, although the review did not detect a correlation between using mobile money and savings for expected events, there were signs of individuals saving for health and other emergencies. The study further revealed that adopting mobile money technology has contributed to higher household incomes, including small-scale farmers, and increased consumption levels in some parts of Sub-Saharan Africa.

5.3. Adoption, Diffusion, and Disparities in Mobile Money Use

The fourth objective of the review was to ascertain the significance and extent to which mobile money has been embraced, adopted, and used by small businesses, including ordinary people in emerging economies. Four (4) articles on adoption diffusion and disparities were examined and evaluated to achieve this objective. Findings on diffusion showed that social networks have a critical role in financial diffusion and that underlying demand and cell phone access are not significant determinants of adoption rates. The other finding from the literature reviewed was that firms with higher productivity and access to trade credit are more likely to adopt mobile money as a payment instrument. However, the literature reviewed did not sufficiently explain the disparities in mobile money usage, but one (1) article out of the four (4) examined found that the mobile money ecosystem emergence depends on network externalities of user and agent networks.

5.4. Effect of Mobile Money on Commercial Banks

The last objective was to evaluate the impact of mobile money SMEs on conventional retail and commercial bank activities. The only article reviewed showed that transaction costs may not be the only barrier to increasing deposits, limiting the potential benefits of mobile-linked savings products for financial inclusion. Linking mobile money digital account to commercial bank accounts supports the conclusion of various research that there should be complementarity of services and not a competition between the two financial payment systems. Further, linking mobile money with digital banking platforms has inherent risks. According to the results of one article reviewed on security, money launderers have continued to exploit the weaknesses in the financial systems, and criminals have adopted these digital platforms for their illicit activities. Due to the risk associated with anonymity, speed, and lack of oversight, there is a need for stiffer regulations, and the mobile industry needs close monitoring and supervision by government agencies.

6. Limitations of the Study

Due to the many studies that have been conducted on the mobile money industry in recent years, it was difficult to select all appropriate peer-reviewed articles and information to augment the current review due to time constraints. Similarly, it was impossible to obtain accurate and up-to-date data on mobile money usage, especially in the SADC region, because most of them were not freely available, and reliance was placed on information that could be obtained only from publicly available secondary sources.

7. Conclusions

It is without question that SMEs are a conduit for sustainable economic development and job generations. That is why the mobile money SMEs withstood turbulences, including the lack of access to financial resources and unexpected shocks and events like the COVID-19 pandemic, provide a perfect model for resilience, convenience, and adaptability, which should be emulated and extrapolated to SMEs in other sectors of the economy. Although there are disparities in the adoption and use of mobile money technology in different regions of Africa, the brief review of literature established that mobile money is convenient, secure, easy to use, and accessible to everyone, even those without bank accounts, leading to financial inclusion. It was also confirmed that there is a correlation between mobile money use and other variables like investment, higher productivity, and enhanced household income. The review further revealed that there should be complementarity instead of competition between conventional banks and mobile money platforms. Still, these online interconnections have inherent risks which should be resolved. In addition to conducting research to ascertain how these risks can be mitigated, avoided, or managed to benefit all stakeholders by employing appropriate business strategies, the review identified future research areas. It is hoped that the information obtained from such research would supplement and/or consolidate the body of knowledge for researchers on mobile money technology, especially in emerging economies.

8. Recommendations

Having evaluated the results of various research on mobile money SMEs, especially in Africa, it was found that although credible and reliable scientific research has been done in the recent years, there are still areas where research could clarify and/or improve strategies and operations of the mobile money industry for the benefit of all stakeholders. Some of these areas are discussed below.

8.1. Although linking mobile money platforms with banks has apparent benefits, there are associated risks, including fraud, phishing, and other scams. Research should therefore be undertaken on how to securely integrate the two financial

systems without disruptions to the national payment system. Similarly, studies should be conducted to explore how mobile money could be integrated into the payment systems so that funds are securely transferred, even overseas, using mobile money instead of or in addition to wire transfers.

8.2. The economic impact of financial inclusion policies in an economy depends on which constraint is eased and on the tightness of other constraints. However, further research is needed to cascade the findings on mobile money research from macro- to micro-level to determine the effect of mobile money on the vulnerable and disadvantaged communities in Zambia.

8.3. Similarly, financial inclusion is good for national economic planning because it has opened avenues for the unbanked to access financial services at a minimal cost. Still, researchers should take a deep dive into the effect of this financial inclusion on the welfare of the disadvantaged communities in Zambia.

8.4. The disparities in mobile usage have not been thoroughly explained in the SADC region despite similar environmental, economic, and cultural conditions. Therefore, a closer look and study should be undertaken to ascertain the reasons for these disparities with a view to coming up with measures to replicate the mobile money success in East and parts of West Africa to help populations in other parts of the continent accelerate employment creation and poverty reduction.

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Streszczenie

Cel: Telefony komórkowe w Afryce poprawiły wyniki gospodarcze i umożliwiły ubogim, niekwalifikującym się społecznościom dostęp do usług finansowych przy minimalnych kosztach. Głównym celem przeglądu jest przedstawienie aktualnych trendów w branży pieniądza elektronicznego poprzez krótkie podsumowanie różnych badań na temat sektora pieniądza elektronicznego na małą skalę, ze szczególnym uwzględnieniem Zambii.

Materiały i metody badawcze: Analiza uwzględnia 52 recenzowane i odpowiednio dobrane artykuły w czasopismach. Z tej liczby przeanalizowano 30 dokumentów z pięciu różnych obszarów pieniądza elektronicznego.

Wyniki: Pieniądze elektroniczne są nie tylko wygodne i dostępne dla większości ludzi, ale również przyczyniają się do integracji gospodarczej społeczności znajdujących się w niekorzystnej sytuacji. Zamiast konkurencji, banki i mobilne platformy pieniężne powinny uzupełniać się poprzez integrację obu systemów płatności. Integracja tych dwóch systemów wiązałaby się jednak z ryzykiem.

Wnioski praktyczne: Powtarzające się sukcesy w podsektorze pieniądza elektronicznego nie tylko poszerzy podstawę opodatkowania, ale także udoskonali lub usprawni strategie i działania na rzecz małych i średnich przedsiębiorstw (MŚP) z korzyścią dla kraju.

Wnioski i podsumowanie: Elektroniczne pieniądze dostarczyły nieocenionego, przyjaznego dla użytkownika i solidnego rozwiązania umożliwiającego integrację finansową społeczności znajdujących się w niekorzystnej sytuacji w gospodarkach wschodzących, w szczególności w Afryce.

Słowa kluczowe: konta elektroniczne, płatności elektroniczne, integracja finansowa, pieniądz elektroczniczny, male i średnie przedsiębiorstwa