

The Contribution of Technology-Driven Social Enterprises to the Livelihoods of Informal Female Traders: A Case of EcoCash in Harare, Zimbabwe

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Abstract

The livelihoods of most informal female traders in Zimbabwe experience financial exclusion and limited growth. Technology-driven social enterprises such as EcoCash could potentially redress this challenge. This qualitative study explored the contribution of EcoCash towards the livelihoods of informal female traders in the city of Harare in Zimbabwe using a single instrumental case study design. In total, 23 informal female traders and 3 key informants were purposively sampled for face-to-face interviews and a focus group discussion. The data were analysed thematically. The findings reveal that EcoCash boosts convenience in the livelihoods of informal female traders, and enables them to save income and to trade in a cash-strapped economy. Challenges associated with EcoCash include the high costs of transacting and the low digital literacy among its users. The findings in this article are hoped to contribute to the design of technology-driven community development models, to inform education of social entrepreneurship and community livelihoods, to lobby for pro-poor economic policies, and to support digital literacy training.

Keywords: EcoCash, informal female traders, sustainable livelihoods, social development, technology-driven social enterprises, developmental social workers

Introduction

This article aims to explore the contribution of EcoCash, a technology-driven social enterprise, towards the livelihoods of informal female traders in the city of Harare in Zimbabwe. In recent years, the advent of technology-driven social enterprises has been lauded by civil society as a potential source of opportunities for players within the

informal economy. The informal economy is sustaining a huge population in developing countries, including Zimbabwe (ILO 2017; Omomia 2014; OSISA 2015).

In the context of Zimbabwe, the informal economy is dominated by women who engage in a plethora of livelihood activities on a daily basis (ILO 2017). However, despite their multiple livelihood activities, 61.3 per cent of informal female traders and their families are living below the poverty datum line, which is pegged at US\$475 per month for a family of five (ILO 2017). In addition, informal female traders have a lower capacity to engage in profitable business because they have limited access to financial services, for example, payment services, credit, and money transfers (Munyanyi 2014).

Although past research shows that the livelihoods of most informal traders in Africa are boosted by social enterprises (Demirguc-Kunt and Klapper 2012; Gajjala and Tetteh 2014), the Government of Zimbabwe and researchers pay little attention to the contribution of technology-driven social enterprises such as EcoCash towards the livelihoods of informal female traders in Zimbabwe. It also appears that few studies in this area used qualitative methods. More exploratory qualitative studies might help to establish an in-depth understanding of the technology-driven social enterprises and their contribution to the livelihoods of informal female traders.

EcoCash is an innovative mobile payment solution that enables people to perform simple financial transactions such as sending, receiving, and saving money using a mobile phone (EcoCash 2018). The technology-driven social enterprise was launched in September 2011 as a digital solution to the problem of financial exclusion in Zimbabwe (FinMark Trust 2014; Mago and Chitokwindo 2014; TechZim 2017). As a digital social enterprise, EcoCash is now the largest provider of credit in Zimbabwe, with eight per cent of the population benefitting from its loans, while banks only provide credit for not more than four per cent of the population (UNCDF 2016). Mobile money credit is provided to service users based on their minimum savings on the EcoCash account and credit scoring based on transaction flows through the customer's EcoCash account (UNCDF 2016).

Considering the accessibility and affordability of the service to the general populace of Zimbabwe, Munyanyi (2014) argues that EcoCash and other mobile money transfer platforms are the directions to financial inclusion. Cell phone technology has generally been largely adopted by women, including those in rural areas (Munyanyi 2014).

In this article, the informal economy is defined as that part of the economy which is neither adequately sanctioned by the government nor sufficiently supported by the private sector and is run by informal traders or those who endeavour to make ends meet through their own initiative and enterprise (OSISA 2015). Livelihoods are the capabilities, assets (including both material and social resources) and activities required for a means of living (Serrat 2017). Financial inclusion refers to the provision of unlimited access to financial services, for example, payment services, savings accounts

and money transfers to people including the poor and low-income households (Munyanyi 2014). A technology-driven social enterprise is an organisation that uses business approaches, tools, and techniques based on digital innovations to pursue socio-economic or ecological missions to create community benefit (Matriano and Khan 2017; SCSE 2015). Social development is a planned and multifaceted process of social change which is aimed at advancing the quality of life and standard of living of all people (Midgley 2014).

The rest of the article presents the sustainable livelihoods approach (SLA) as the theoretical framework underpinning the study. An overview of technology-driven social enterprises in Africa is provided. The research methodology used is explained. Lastly, the findings and conclusions which include recommendations for developmental social workers are highlighted.

Theoretical Framework

The study used the SLA as its theoretical framework. The SLA is a tool for development work which highlights the way in which to understand, analyse and describe the major factors that influence the livelihoods of people (Petersen and Pedersen 2010). The SLA is important as an interpretive lens in this study because there is a clear connection between the study and the approach's core components and assumptions.

The SLA consists of five major components, namely, the vulnerability context, livelihood assets, transforming structure and processes, livelihood strategies, and livelihood outcomes (Yohannis, Waema, and Hutchinson 2017). These are illustrated in Figure 1.

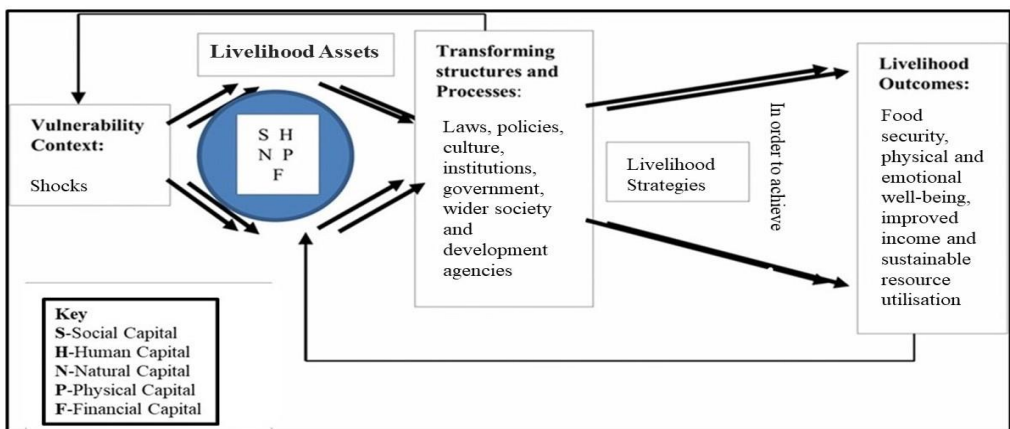


Figure 1: Sustainable livelihoods approach (Source: Yohannis, Waema, and Hutchinson 2017)

The first component of the SLA is the vulnerability context. This refers to the insecurity in the well-being of people who face changes in their environment (Serrat 2017; Yohannis, Waema, and Hutchinson 2017). In the context of this study, examples of vulnerability include macro-economic instabilities and the inability to cope with technological changes which threaten the sustainability of informal female traders' livelihoods.

The livelihood assets is the second component of the SLA. This refers to a stock of resources: physical (infrastructure), natural (tangibles like land), human (skills, knowledge, health), social (family networks, formal networks), and financial (savings, credit) resources (Cortes 2014). These can be obtained, developed, improved or transferred through generations (Cortes 2014). Examples of livelihood assets in this study include the savings and mobile phones of informal female traders.

The third component of the SLA is the transforming structures and processes. This includes the institutions, organisations and policies that frame the livelihoods of poor people, and they are found at all levels – from the household to the international level (Petersen and Pedersen 2010). In this study, structures include the Government of Zimbabwe and the EcoCash service providers. Processes include the economic policies and regulations which influence the electronic transactions of informal female traders.

Livelihood strategies is the fourth component of the SLA. This refers to the way in which people act to achieve their desired livelihood (Petersen and Pedersen 2010). In the context of this study, livelihood strategies include both cash transactions and electronic transactions of informal female traders.

The fifth component of the SLA is the livelihood outcomes. This refers to achievements of people's livelihood strategies, for example, food security (Yohannis, Waema, and Hutchinson 2017). In the context of this study, the livelihood outcomes of informal female traders include income and the ability to meet basic needs such as food.

The SLA assumes that development work is only adequate when it focuses on people (Serrat 2017). In the context of this study, this implies that EcoCash can only be considered to be enabling development if its service is somehow improving the livelihood assets, strategies and outcomes of poor people, particularly those of informal female traders.

Furthermore, the SLA suggests that people are key actors in their own development and that external players are only facilitators in the process of development (Petersen and Pedersen 2010). In the context of this study, the assumption suggests that development can only be realised if informal female traders take the lead in enhancing their own livelihoods. In addition, it suggests that the EcoCash facility is only a catalyst for the development process which is meant to assist informal female traders to enhance their livelihoods.

Another assumption of the SLA is that transforming people's livelihoods should be managed as a partnership between the people and their organisations and between the public and the private sector (Cortes 2014; Serrat 2017). Such partnerships are best understood as pro-poor public private partnerships in the nomenclature of the social development arena (Cortes 2014). In the context of this study, the assertion suggests a social contract and shared responsibility involving the private sector (EcoCash and developmental social workers), the Government of Zimbabwe and the informal female traders, with a focus on enhancing the informal traders' livelihoods. This axiom was critical in understanding the types of strategy that should be adopted to improve the utility of the EcoCash facility in the livelihoods of informal female traders.

Technology-Driven Social Enterprises in Africa

Technology-driven social enterprises in Africa are relatively understudied (Doherty, Haugh, and Lyon 2014). A study by Gupta, Beninger and Ganesh (2015) explored the way in which social enterprises develop innovative solutions to tackle complex social challenges and showed the contribution of BroadReach Vantage, a digital platform. This platform leverages mobile technology for data collection, integration and dissemination, and collaboration with public and private players in the health sector in more than 20 countries, including South Africa and Zambia.

The application of mobile technology in BroadReach Vantage concurs with the argument that technology is the biggest disruptor and social equaliser in the African region. It enables poor people to access health services that are ordinarily inaccessible to low-income citizens (Doherty, Haugh, and Lyon 2014). Furthermore, the fact that innovation in today's social enterprises is becoming more digital resonates with the view that the world is beginning to experience the Fourth Industrial Revolution which is characterised by numerous digital operations and features, including artificial intelligence, robotics, and the internet of things (Schwab 2016).

In spite of its comprehensive exploration of some of the technology-driven social enterprises within Africa, the study by Gupta, Beninger and Ganesh (2015) was limited to co-founders of the organisation and did not capture the voices of informal female traders on if and how technology-driven social enterprises transformed their livelihoods.

Another technology-driven social enterprise in the African region is Zipline. This is a social enterprise that was established in Rwanda in 2016 as the first drone delivery operation to deliver blood and other medical supplies to 21 remote hospitals during emergency situations (Zipline 2018). To date, instant drone delivery is ensuring that hospitals always have access to blood products, increasing the use of some blood products by nearly 175 per cent and reducing waste and spoilage by approximately 95 per cent (Lee 2018). The findings of the study demonstrate the impact of technology-driven social enterprises on people's lives. It might be important to explore the possibility of using Zipline to promote the livelihoods of informal female traders.

M-PESA is another technology-driven social enterprise that is enabling socio-economic progress within the African context (Demirguc-Kunt and Klapper 2012; Donovan 2012; Gajjala and Tetteh 2014; GSM 2016; Mutsonziwa and Maposa 2016; Suri and Jack 2016; UNDP 2014; World Bank 2013). In a content analysis-based study on M-PESA in Kenya, Gajjala and Tetteh (2014) describe the social enterprise as a mobile money facility that allows poor people to trade airtime, access microfinance loans and perform basic money transfers using a cell phone. M-PESA has become a popular alternative for cash in the Kenyan context and this has inspired the origins of technology-driven social enterprises modelled as mobile money platforms in other developing nations, including Zimbabwe (Gajjala and Tetteh 2014).

Research Methodology

Research Approach

The study used a qualitative approach to research. The approach is premised on the interpretive paradigm which is a set of theories that attempt to uncover the participants' reality (ontology) based on their own terms, values and description of subjective experiences (epistemology) (Carey 2013; De Vos et al. 2011; Rubin and Babbie 2017). The approach allowed the researcher to determine the contribution of EcoCash to the livelihoods of informal female traders based on the personal views and experiences of the participants. The approach was also significant in enabling the informal female traders and key informants to have sufficient control over their contributions and the research process in general which was important for exploring peculiar information about EcoCash.

Research Design

The study employed a case study design. The design entails exploration of a real-life, contemporary bounded system through a detailed in-depth data collection involving numerous sources of information reported as case descriptions and case themes (Creswell and Poth 2018; Royse 2016). The specific type of case study that was used is the single instrumental case study. This entails focusing on one specific issue within a bounded case that best illustrates a phenomenon (Creswell and Poth 2018).

Population, Sample and Sampling Procedures

The study population was composed of informal female traders in the city of Harare in Zimbabwe. According to the Zimbabwe Chamber of Informal Economy Association (ZCIEA) (2018), there are 12 000 informal female traders in Harare who make up 60 per cent of the 20 000 informal traders in the city. Choosing the study population from Harare was appropriate because the city has the largest number of informal female traders compared to other areas in Zimbabwe (ZCIEA 2018).

The study purposively sampled 23 informal female traders in Harare and three key informants from the management of EcoCash, the ZCIEA and the Vendors Initiative for Social and Economic Transformation. The technique was appropriate for this study as it allowed the researcher to collect relevant information by engaging participants who had sufficient knowledge and experience of the EcoCash facility. This concurs with Carey (2013) who argues that purposive sampling guarantees the relevance of findings. All the informal female traders matched the following inclusion criteria:

- participants should be informal female traders who have been operating in the city of Harare for three years and more;
- participants should be registered members of the ZCIEA; and
- participants should have been using the EcoCash mobile money platform for three years or more.

The researcher obtained information on potential participants and the location of their workspaces from a register on basic business information of informal female traders kept by the ZCIEA. The information assisted the researcher to easily identify and accurately sample participants who met the foregoing sampling criteria. Out of the informal female traders who met the criteria, the researcher focused on those who were available to take part in the study during the data collection period.

All the key informants met the following inclusion criteria:

- key informants should have been based in Harare for three years and more;
- key informants should be knowledgeable about the EcoCash mobile money facility; and
- key informants' work should have been directly or indirectly involved with informal female traders in Harare for three years or more.

All three key informants who took part in the study confirmed their availability to participate during the data collection period which set them apart from other potential interviewees who equally met the selection criteria.

Methods of Data Collection

The data were collected from 15 informal female traders through face-to-face interviews and a focus group discussion with eight informal female traders using a semi-structured interview guide and a focus group discussion guide respectively. A separate semi-structured interview guide was used for the key informants. Triangulating the methods of data collection and sources of information was important for ensuring the credibility of findings. In line with the sentiments of Marshall and Rossman (2016), face-to-face interviews were appropriate for this study because they enabled the researcher to make immediate follow-ups and probes whenever informal female traders and key informants presented information that needed further clarification. A focus group discussion was

appropriate for this study because it allowed the researcher to monitor and appropriately respond to the verbal and non-verbal cues of the informal female traders in line with the sentiments of Hennink, Hutter and Bailey (2011) on the advantages of focus group discussions.

Method of Data Analysis

The data were analysed thematically. The method involves identifying, analysing and reporting important patterns across the data set (Creswell and Poth 2018). In the context of this study, the data set included information provided by the participants during the interviews and focus group discussion. The following phases of thematic analysis were followed: organising data, reading through all data, coding data, developing themes and descriptions, interrelating themes and descriptions, and interpreting the meaning of themes and descriptions.

According to Braun and Clarke (2006), one of the advantages of thematic analysis is that it is flexible and thus suitable to use with different theoretical frameworks. This was important for this study as it allowed the researcher to apply the SLA as an interpretive lens in the process of data analysis.

Ethical Considerations

The ethical considerations observed during the study were: voluntary participation, informed consent, confidentiality, and anonymity. The researcher enabled voluntary participation of the informal female traders and key informants by discussing the participant information sheet with potential participants. The researcher explained the purpose of the study, indicated the estimated time required to complete the interviews or discussion and described what was expected of the participants during the study. This ensured that they chose to participate freely without threats or coercion and without exposure to undue influence or immoral benefits. This resonates with the sentiments of Strydom (2011) who argues that no one should be forced to participate in a study.

To uphold informed consent, the participants signed consent forms agreeing to participate in the study, and for the interviews and focus group discussion to be audio recorded. The researcher upheld confidentiality through keeping the voice recordings of the participants on a password-protected computer. In addition, the researcher kept the transcripts under lock and key. In line with the views of Baez (2002), upholding confidentiality in this study was important because it enabled the researcher to protect the privacy of the research participants and to maintain the integrity of the study. The researchers upheld anonymity by using numbers such as Participant 1 and Key Informant 2 instead of using the actual names of the informal female traders and key informants when reporting the findings. This is in line with the sentiments of Seidman (2013) who argues that every participant has a right to privacy.

Findings and Discussion

It should be noted that this study transpired in a setting (Zimbabwe) which has a long history of macro-economic instability coupled with the lack of cash in the economy. These conditions gave birth to EcoCash as a tool for financial inclusion (Levin 2013). At the time of data collection, the Government of Zimbabwe had adopted austerity measures in a bid to reduce the national budget deficits and this triggered a severe cash crisis.

Four themes emerged from the data collected on the experiences and perceptions of informal female traders and key informants on the way in which EcoCash contributed to the livelihoods of informal female traders, and are discussed next. The themes also include challenges associated with the use of EcoCash.

EcoCash as a Source of Convenience for Informal Female Traders

EcoCash brings the much-needed convenience to the livelihoods of informal female traders. It enables the informal female traders to perform financial transactions instantly, for example, by sending and receiving money using a mobile phone. This is important for informal female traders to save time, to reduce costs of travelling, and to trade in a cash-strapped economy. Commenting on the way in which the EcoCash facility boosts convenience in her own case, Participant 1 recounted:

EcoCash also enables me to pay rentals to my landlord without travelling to where he is. This allows me to save money which I would otherwise spend on transport costs. Also, if I run out of electricity at night, I simply use EcoCash to purchase electricity tokens. When my mother or child falls sick while I am away, I can simply send money through EcoCash instantly so that medication is purchased.

These sentiments concur with the comments made by Participant 4 at the focus group discussion:

Also, there is no more need for us to send money using bus drivers which was not only costly but risky. We now send the money while we are seated on our workstations and trading with our customers.

Key informant 3 also commented:

Informal female traders are now able to buy airtime individually using their mobile phones because of the EcoCash facility. This reduces downtime. They no longer need to leave their workplaces in search for airtime recharge cards when they want to conduct business communication.

Participant 6 showed how EcoCash brought convenience in a cash-strapped economy when she said:

Nowadays cash is very scarce in Zimbabwe so our customers pay for the goods that they buy from us using EcoCash.

This resonates with the sentiments of Key Informant 1 who said:

EcoCash makes it easy for informal female traders to buy stock and improve income by selling the stock to more customers at a time when the country is going through a serious cash crisis.

The findings concur with the sentiments of Levin (2013) who argues that the EcoCash facility enables service users including informal female traders to perform electronic transactions from any place. This helps them to avoid alternatives such as transferring money through bus companies which is a slow, inconvenient, insecure and expensive method (Levin 2013). In addition, Gajjala and Tetteh (2014) posit that the mundane tasks of bill payments and financial transactions are speeded up and made easier through the push of a button owing to technology-driven social enterprises such as EcoCash.

The findings of this study are significant because they demonstrate the transformational power of technology-driven social enterprises. The findings illustrate the way in which the EcoCash facility improves the business model of informal female traders from being cash-based to electronic money based, which is more convenient. The shift from cash-based to electronic-based transactions during a cash crisis confirms the SLA's assumption that livelihoods are sustainable when they can cope with and recover from shocks such as economic turbulences (Serrat 2017). One may also be justified to argue that the role of EcoCash in saving the traders' time and financial resources demonstrates the human-centred nature of technology-driven social enterprises. This can be shown in the way informal female traders can do more work such as trading to meet their basic needs concurrently. This confirms the principle of the SLA, which states that interventions such as social enterprises should be people-centred to be sustainable for the livelihoods of the beneficiaries (Cortes 2014). It is also important to observe that the role played by EcoCash in bringing convenience does not take away informal female traders' leading responsibilities as entrepreneurs; rather it serves as a catalyst to the livelihood activities. This confirms the SLA's suggestion that people remain key actors in their own development and that external players are only facilitators in that process (Petersen and Pedersen 2010).

Although the convenience of transacting electronically and gaining more income is imperative, the capacity to save that income is equally vital. The next theme thus focuses on EcoCash as a depository for saving informal female traders' income.

Ecocash as a Depository for Saving Informal Female Traders' Income

The informal female traders reported that EcoCash makes it easier for them to save their income given that they do not have access to conventional banking services. Keeping money in an electronic account helps informal female traders to reduce unnecessary

buying, to build sufficient capital for expanding livelihood strategies, and to cushion their livelihoods in times of emergencies. Commenting on the way in which EcoCash helps her to save her income, Participant 4 said:

EcoCash also helps me to save my money. It operates like my savings account. Sometimes I can keep about \$20 in my EcoCash account and I make sure not to spend it unnecessarily.

On the same note, Participant 3 from the focus group discussion said:

When my business is faced with financial challenges, I address them using my EcoCash savings. I also make use of the savings to expand the business.

In addition to the sentiments of the informal female traders, the key informants commented on the way in which EcoCash is enabling women to save money at a group level for the success of their livelihood strategies. Key Informant 3 attested:

So, I can say that EcoCash is encouraging a culture of saving among informal female traders. They can reinvest the funds into their businesses and enable growth. It is transparent because all members can monitor the transactions and check the balance of their group account.

The findings concur with the sentiments of Goodwin-Groen and Klapper (2016) who argue that most women in the informal economy use facilities such as EcoCash to transform their livelihoods by saving money and reinvesting it regardless of the urge to spend impulsively. The findings also coincide with the study by Mutasa (2015) which shows that the EcoCash facility transforms the livelihoods of women in the informal economy by enhancing their financial discipline which leads to the growth of livelihoods.

The findings are important because they demonstrate the significance of technology-driven social enterprises such as EcoCash in fostering financial inclusion through offering informal female traders financial services such as a savings account. EcoCash can increase informal female traders' assets, particularly savings which are listed as financial assets in the SLA (Serrat 2017). The ability of informal female traders to save through EcoCash and reinvest their savings confirms the SLA's assumption that livelihood assets can be developed and improved (Cortes 2014).

In spite of the role of EcoCash in improving the livelihoods of women in the informal economy, there are problems associated with the use of the facility, for example, the high cost of transacting.

High Cost of Transacting

The high cost of transacting on EcoCash negatively affects some informal female traders' livelihoods. The cost is a culmination of unofficial EcoCash tariffs levied by

some of the EcoCash agents coupled with the Government of Zimbabwe's financial transaction tax which is two per cent for every dollar transferred electronically. Owing to the high cost of transacting, some informal female traders find it difficult to agree with their customers and suppliers on the price of goods and services and this slows down the rate at which they trade. The challenge also results in multi-tier pricing for the same commodity, which scares customers away. Commenting on the high cost of transacting, Participant 15 complained:

The biggest challenge that I face when using EcoCash in my business is that of high tariffs as well as the recently introduced government taxes. Some of the EcoCash agents are charging me 25% of the amount that I intend to withdraw.

On the same note, Participant 7 from the focus group discussion reported:

When I require \$20 cash from EcoCash agents they instruct me to send a total of \$24 because of the unofficial tariffs.

In addition to the sentiments of the informal female traders, Key Informant 1 commented:

They are being charged by EcoCash service providers as service users through the tariffs and they are being taxed by government through the 2% transactional taxes.

The findings concur with the viewpoint of Musungwini et al. (2014) who posit that EcoCash and other mobile money-related social enterprises are characterised by the high costs of transaction which affect service users. On the same note, Chair (2014) argues that the high costs of transacting also affect the pricing of airtime in some instances. The findings of this study are important because they demonstrate the negative impact of a faulty macro-economic environment on the success of technology-driven social enterprises and informal female traders. The fact that the participants alluded to the monetary policy of Zimbabwe as a hindrance to the progress of livelihoods, shows the interdependency between social progress and economic factors. This aligns with the multifaceted nature of social development which emphasises the importance of social, economic, political and environmental factors, among other things, in the pursuit of development (Midgley 2014).

The high tariffs attributed to the EcoCash agents also carry undertones of a negative macro-economic pressure. The findings thus demonstrate an incongruent relationship between the micro and macro levels of development articulated under the principles of the SLA. According to the SLA, the micro level should nurture policies and governance whereas the macro level should support the strengthening of people (Cortes 2014). Based on the findings, one might argue that the circumstances in Zimbabwe's macro-economic environment stifle the growth of the informal female traders' livelihoods. Their financial livelihood assets are vulnerable to economic shocks in the form of the high transactional costs.

In addition to facing high costs of transacting, some informal female traders have low levels of digital literacy which negatively affects their livelihoods as they fail to use EcoCash effectively.

Low Levels of Digital Literacy

Low-digital literacy among some informal female traders minimises their ability to utilise the EcoCash facility effectively when carrying out livelihood activities. Some of the traders become susceptible to dishonest customers who cheat them during transactions. The challenge also limits the traders' ability to fully exploit the services of EcoCash, for example, the savings account. Commenting on the challenge of low digital literacy levels, Participant 12 reflected:

It is also possible for some customers to cheat us as women when we are selling our products. When I started to use the EcoCash facility some customers would lie that they have sent money to my account.

Participant 2 from the focus group discussion made the following observation:

It seems that as women we tend to lag behind when it comes to the use of technological tools and some youth take advantage of us and steal from us.

Key Informant 3 reinforced:

One of the challenges that most informal female traders face when using the EcoCash facility is low literacy levels. This is mainly because in the past the education system was biased towards male counterparts so some of the informal female traders have challenges in operating our mobile money facility and using services like ecosave, cash in and cash out.

The findings coincide with those of a study conducted by Antonio and Tuffley (2014) which show that women in the developing world have significantly lower technology participation rates than men. This is owing to the entrenched socio-cultural attitudes to the role of women in society (Antonio and Tuffley 2014). More so, the findings confirm the claims that women with lower levels of education often find it difficult to perform more complex digital functions on their mobile phones (Chair 2014; Goodwin-Groen and Klapper 2016; World Bank 2013).

The findings are meaningful because they reflect the digital gender gap that characterises developing countries including Zimbabwe. Based on the findings, one may be justified to comment that although insufficient digital literacy manifests at individual level, it is considerably a result of skewed education policies and societal norms which undergird patriarchal communities. Also, the problem of low-digital literacy and its negative impact on the utilisation of livelihood-enhancing technologies such as EcoCash, shows the centrality of human capabilities in the process of development (Todaro and Smith 2015).

The findings confirm the SLA's suggestion that poor human assets, for example, the lack of adequate skills among individuals, slow down progress in their livelihoods (Cortes 2014). Furthermore, the findings show that the sustainability of informal female traders' livelihoods may be affected by particular processes such as gender-biased education policies and cultural values which suppress women (Serrat 2017). This is particularly relevant where informal female traders were historically disadvantaged by the education system. In the light of these insights, one might therefore argue that whereas technology-driven social enterprises such as EcoCash can optimise livelihood outcomes, they may also unintentionally aggravate inequalities, especially if the intended beneficiaries are not digitally skilled enough.

Conclusion

The study demonstrates that EcoCash plays a critical role in the success of informal female traders' livelihoods. The technology-driven social enterprise boosts convenience in the execution of informal female traders' livelihood activities by enabling them to perform instant financial transactions using a mobile phone in the comfort of their workstations. In addition, EcoCash presents informal female traders with an electronic money-based business model which allows them to continue trading successfully in a cash-strapped economy. EcoCash also plays a significant role in informal female traders' livelihoods by improving their capacity to save and reinvest their income against the backdrop of limited access to banks and financial services. Developmental social workers can use these findings to build community development models which harness the power of digital technologies in strengthening livelihoods of marginalised populations. Developmental social workers in education might also use the findings to build course content in the area of social entrepreneurship and community livelihoods in the digital era.

The study also shows that there are challenges associated with the use of EcoCash in the livelihoods of informal female traders. Informal female traders are affected by the high costs of transacting when they use EcoCash. The challenge is caused by unofficial tariffs that are levied by EcoCash agents as well as the transactional taxes levied by the Government of Zimbabwe. The high costs of transacting reduce the financial assets of informal female traders, especially their income, and lower the profitability and growth of their livelihood strategies. Developmental social workers might use these findings to advocate economic policies which are favourable to the livelihoods of informal female traders especially with regard to taxes. Evidence-based advocacy might entail informing the Government of Zimbabwe about the significance of EcoCash as a technology-driven social enterprise and the way in which pro-poor macro-economic policies might enhance both the platform and the livelihoods of informal female traders. Developmental social workers might also advocate strict regulations to govern the tariff system and activities of EcoCash agents as a way of protecting the informal female traders.

Some informal female traders' relatively low levels of digital literacy when using EcoCash appears to be another challenge. Low digital literacy makes informal female traders vulnerable to dishonest customers who can cheat them, and it also reduces their chances to fully utilise the EcoCash services such as savings accounts. Developmental social workers might help to create a strategy for EcoCash service providers to effectively impart digital literacy skills that are necessary when using the EcoCash platform to informal female traders. Developmental social workers might also advocate digital literacy skills to be taught as a mandatory subject from primary to tertiary education level. This concurs with the SLA's assumption that the process of enhancing people's livelihoods should be managed as a partnership between the people and their organisations, and also between the public and the private sector (Cortes 2014; Serrat 2017).

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