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Domestication of Telecentres by Malawian Rural Women

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ABSTRACT

The potential of telecentres to bridge the digital divide can only be realised when their services are appropriated by all groups in the community. Previous studies show that in Malawi only a few women use telecentres. This article used Domestication Theory to explain the processes through which women in rural Malawi encounter technologies, deal with them and integrate them into their lives. Data was obtained via interviews with women (both users and non-users) and a Telecentre Manager. The study shows that: i) commodification was influenced mainly by word of mouth; ii) the women who appropriated the Telecentre used it for instrumental and hedonic purposes; iii) the appropriation was influenced by convenience, compatibility with the needs of women and perceived usefulness of the Telecentre; and iv) non-use was due to lack of awareness, illiteracy, limited financial resources, cultural roles and perceptions about the telecentres. The findings could help policymakers in maximising use of telecentres among women.

KEYWORDS

Digital Divide, Domestication of Telecentres, Malawi, Rural Women, Telecentre

INTRODUCTION

Access and use of Information and Communication Technologies (ICTs) have the potential to develop communities (Chisango, 2014). For instance, ICTs improve skills, enhance social life and offer economic opportunities (Chikumba, 2011). Despite the benefits of using ICTs, access to these ICTs is low in Malawi. In 2014, of the total 16 million people, only 5,590 people were broadband internet subscribers, while 6,487,304 were mobile phone subscribers (Nyirenda, 2014). As such, over the past two decades, just as in many developing countries, the government of Malawi, with aid from various international organisations, has been establishing telecentres (Chikumba, 2011). A Telecentre is a public facility offering access to ICT services for educational, social and economic purposes (Chisa & Hoskins, 2016). Telecentres offer access to ICT services such as the internet, phone, fax, computer and, sometimes, library services (Chisa & Hoskins, 2016).

The potential of telecentres to bridge the digital divide can only be realised when the services they provide are appropriated and used by all groups of people in the communities they serve. However, research studies in many developing countries show that usage of telecentres does not cross all categories of people. Specifically, only a few women, as compared to men, use the facilities (Chisango, 2014; Kumar & Best, 2007). In Malawi, previous studies on usage of telecentres show that only a few women use these facilities (for example, Kapondera & Hart, 2016). This paper focuses on

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domestication of telecentres by women in rural communities in Malawi. In this study, our concern is to understand the process through which telecentres are appropriated in women's lives in rural Malawi. Specifically, we ask the following questions:

- How do rural women in Malawi integrate telecentres in their lives?
- What influences the use or non-use of telecentres by rural women in Malawi?

This study contributes towards generating information aimed at helping ICT policymakers regarding domestication of telecentres by women in rural communities in Malawi. Domestication theory was used to guide the research in understanding how women adopt and integrate telecentres into their lives. Malawi is particularly interesting because there are limited studies on the use of ICTs in Malawi and Malawi is one of the countries with low technology uptake; it is interesting, therefore, to see how communities in that environment deal with technology. Domestication refers to the processes through which people encounter technologies and deal with them by either rejecting them or accepting and integrating them into their everyday lives (Haddon, 2006). The use of Domestication Theory allowed us to explore the adoption as a process and not as a binary phenomenon.

BACKGROUND

Malawi is classified as a low-income country (The World Bank, 2016). On the 2016 Human Development Index, the country is ranked as number 170 out of 185 countries (Human Development Report, 2016). The country has a population of 17.2 million and more than half of the population live on less than \$1 a day (Malawi, 2012). The majority (83.9%) live in rural areas (Human Development Report, 2016) which have few roads and means of transport, low income levels, limited access to ICTs and electricity, and high dependence on fishing and farming (International Fund for Agricultural Development (IFAD, 2017).

The ICT penetration level in Malawi is low and there are disparities in ICT access between urban and rural areas; the rural areas of Malawi have limited access. In 2014, of the 64,247 people who had access to fixed telephones, only 18.7% were from rural areas (Nyirenda, 2014, p. 7). The national survey on access to and usage of ICT services in Malawi in 2015 shows that in the rural areas only 42% of the households had access to mobile phones as compared to 85.1% of households in urban areas; in rural areas 30.6% of the population had access to mobile phones as compared to 71.8% in urban areas; only 13.9% of people in rural areas owned a computer device as compared to 36.1% in urban areas; and 2.9% of people in rural areas accessed the internet, while urban areas had 23.7% access (Malawi Communications Regulatory Authority (MACRA, 2015).

The government of Malawi has been engaging in various initiatives to bridge the digital divide by increasing the penetration of ICTs in rural areas. Some of these initiatives include the formulation of the Rural Telecommunications Policy which enabled the provision of cellular phones at cheaper prices, and the formulation of the Malawi ICT Policy and the Malawi Growth Development Strategy which facilitated the establishment of telecentres in rural areas (Kapondera & Hart, 2016).

The idea of establishing telecentres in Malawi emerged in the early 2000s, with the aim of bringing the benefits of ICTs to rural areas and bridging the digital divide through universal access to, and affordable, ICTs (Chikumba, 2011). The first Telecentre started operating in 2007. There are currently more than 51 telecentres in rural areas of the country (Malawi, 2013) and the country is establishing more.

LITERATURE REVIEW

Overview of Telecentres

Telecentres are mainly established in rural and marginalised communities to enable individuals who cannot afford ICTs such as computers and the internet to have access to ICTs (Mbangala & Samzugi, 2014; Owen & Darkwa 2000); they offer access to services at low costs as compared to the alternatives (Gcora et al., 2015).

The concept of telecentres was born in the early 1980s. Telecentres may be established by individuals as commercial ventures and by governments as a social good. Telecentres are known by different names in different countries (Owen & Darkwa, 2000) and exist in different models offering different services. Despite the difference in models, all telecentres aim at bridging the digital divide, thereby developing disadvantaged communities.

Telecentres have the potential of transforming and developing disadvantaged communities due to the numerous roles they play. They provide economic opportunities to the communities by providing users with information on available jobs; by helping users save money by bringing the services closer to people and at lower costs (Kapondera & Hart, 2016; Kumar & Best 2007); by employing people to work within the telecentres (Kapondera & Hart, 2016); by helping the users expand businesses thereby increasing their finances; and enabling farmers to communicate with buyers and allowing people to advertise their farm products through the internet and radios within the telecentres (Roman & Colle, 2002). Telecentres play an educational role by improving the skills and knowledge of the users through computer tutorials and providing access to information for educational purposes (Kapondera & Hart 2016). Telecentres facilitate social interaction among community members. The ICTs within telecentres enable users to communicate with their families and friends (Mbangala & Samzugi 2014) and telecentres are considered as social spaces where bonds and ties are formed among users (Attwood, Diga, Braathen & May, 2013; Kapondera & Hart, 2016). Telecentres also help rural communities to access government services on different areas including education, health and agriculture (Chapman & Slaymaker, 2002). Furthermore, telecentres play a role in improving the health of the users; some people use telecentres to find information on how to deal with health problems (Roman & Colle, 2002). This, eventually, helps develop communities as only healthy people can contribute to development of these communities.

ICTs and Rural Women

Most rural women in many developing countries are poor, oppressed, deprived of many things, less educated, discriminated against with opportunities and dominated by the patriarchal system. In other words, in most rural communities, women are marginalised (Chapman & Slaymaker, 2002; Chisango, 2014) and this affects their self-efficacy negatively (Madima, 2007). Provision of access to ICTs through facilities such as telecentres in rural areas, which target all categories of people including women, has the potential to empower women. ICTs have the potential to transform women's lives. The previous section demonstrated the benefits of ICTs available within telecentres to members of the communities, including women.

Although ICTs offer several benefits to rural women and have the potential to transform the lives of these rural women, women's usage of and access to the ICTs are low. In the main, women access and use ICTs that require a low level of skill, are free to use and do not require literacy, such as radios and televisions; women shun ICTs such as the internet (Bakar, 2011; Kwake, & Adigun, 2008). Many studies have also found that only a few women benefit from ICTs available within public access venues. In a study by Kapondera and Hart (2016) on usage of telecentres in Malawi, out of 130 respondents, only 27% were females. There are a number of factors that hinder women from accessing and using ICTs. One of the factors is education. In many rural areas, women are less educated as compared to men. This has a negative impact because literacy is fundamental to ICT access and use (Best & Maier,

2007). The low educational levels of women also lead to women having a negative perception that ICTs are for men who are more educated than they are (Dlodlo, 2009; Gcora et al., 2015).

Cultural factors also affect women's access to ICTs in rural areas. In many developing countries, women are predominantly occupied with family care-giving roles; they are responsible for taking care of the children, the elderly and also caring for the needs of their husbands. This leaves women little time to access ICTs (Best & Maier, 2007; Mbangala & Samzug, 2014). The costs of ICTs also affect women's usage of ICTs in rural areas. Many rural women are uneducated and are not employed, so do not earn an income which they would use to access ICTs, both at an individual level such as cell phones (Kwake & Adigun, 2008) and from the shared facilities such as telecentres (Mbangala & Samzug, 2014; Roman & Colle, 2002). The situation is exacerbated by the fact that most women in the rural areas in developing countries have limited control over finances at household level (Dlodlo, 2009).

Perceptions that computers are complicated to use (Dlodlo, 2009; Gcora, et al., 2015); distances to the facilities with ICTs such as telecentres (Gcora, et al., 2015; Kwake & Adigun, 2008); and lack of interest in ICTs (Best & Maier, 2007) also contribute to the low usage of ICTs by rural women.

Malawian Rural Women

Rural Malawi has a higher female population of 51.7%; in urban Malawi the figures are reversed. The number of female-headed households is also higher – 24% in rural areas of Malawi as compared to 15% in urban Malawi (Food and Agriculture Organisation (FAO 2011). Most Malawian rural women are illiterate. Women in rural areas are occupied and dedicate their time to unpaid domestic work which leaves them with no time to participate in paid economic activities (FAO, 2011). They rely on farming and wage jobs (*ganyu*) to earn their living (FAO, 2011) and the majority of Malawian women engage in subsistence farming (Greco, Skordis-Worrall, Mkandawire & Mills, 2015). Furthermore, many Malawian rural women have limited say on reproductive choices which may result in having a high number of children; this, in turn, negatively impacts on their economic as well their health situation (Greco, et al., 2015).

DOMESTICATION THEORY

Domestication Theory outlines and explains the processes through which innovations or technologies are adopted and become part of individuals' daily lives (Chigona, Mudavanhu, Siebriz & Amerika, 2016; Habib & Sønneland, 2010). The theory was firstly used in media studies and later widely applied in science and technology studies (Haddon, 2006; Chigona et al., 2016). In ICT studies, the theory focuses beyond the adoption and use of ICTs to find out what the ICTs mean to people, how people experience them and the roles that these ICTs can come to play in their lives (Haddon, 2006). Furthermore, the theory emphasises that “domestication, essentially, is about giving technology a place in everyday life. The concept catches the practical, temporal, spatial place, but most importantly, it underlines how this is mixed with the cultural as an expression of lifestyles and values” (Hynes & Richardson, 2009, p. 483). The theory was deemed appropriate for the study as it helped to understand how Malawian rural women make telecentres, which are usually not part of their daily routines, become integrated and be part of their lives.

The theory has three main concepts also known as stages: commodification, appropriation and conversion (Frissen, 2000; Silverstone & Haddon, 1996).

Commodification, also known as imagination (Chigona, Chigona, Koyongo & Kausa, 2010), is concerned with the acquisition of the technology by the potential user which could be an individual, a household or an institution. Here the potential users come to know about the technology. It is the stage through which a technology emerges in a public space of exchange values, which could be through advertisements (Silverstone & Haddon, 1996), and is given an image by the potential user (Chigona et al., 2010). In many studies (e.g., Chigona 2015; Chigona et al., 2016) this has focused on how the individuals began using the ICTs and the factors that influenced the use of the ICTs.

Appropriation, the second stage, is about purchasing the material, taking it home and integrating the technologies in users' daily routines and lives. This stage is when a technology is accepted or rejected (Silverstone & Haddon, 1996). Silverstone et al. (1992), as cited in Habib & Sønneland (2010), divide the stage into objectification and incorporation. The objectification phase is when the technology or innovation is displayed or exhibited, thereby integrating it in the user's environment while incorporation is when the user uses the technology and integrates it into their daily routines and lives (Habib & Sønneland, 2010; Hynes & Richardson, 2009). In the context of telecentres, this can be understood by examining when people make a decision to use, the purposes for using, how they engage with the telecentres and their services, and factors influencing the use and non-use of the telecentres.

The third and last stage, *conversion*, is about activities that users engage in and display to signal to others such as friends, peers and families their participation in adopting and using the ICTs (Habib & Sønneland, 2010; Silverstone & Haddon, 1996). Conversion helps to give feedback to the producers, marketers or regulators of the technology, as the users in this stage engage themselves in showing technological competence and talk about how useful or not useful the ICTs are with others (Frissen, 2000). In the context of telecentres, conversion could be seen when users display the benefits of using the telecentre and recommend the use of telecentres to others.

METHODOLOGY

The research used an interpretive paradigm. Studying domestication of telecentres by Malawian rural women required in-depth understanding of the context. Therefore, the study employed a qualitative case study approach (Thomas, 2006). The study targeted Vikwa Community Telecentre. The case was purposively selected for two reasons: it is the oldest community-managed telecentre and it is the one that is mostly used (confirmed by MACRA officer in private communication in 2016).

Sampling and Data Collection Procedures

Data were collected from Vikwa Community Telecentre women users, women non-users and the Telecentre Manager of Vikwa Community Telecentre, using semi-structured interviews. For the purpose of the study, a user is defined as every woman who comes to the Telecentre to access the services offered in the Telecentre, except for the kiosk. Non-users were those who either came to the Telecentre to buy items from the kiosk or those who did not even come to the Telecentre. Purposive sampling was used to select the respondents; 11 users and 10 non-users were interviewed. The authors acknowledge that the sample size is small enough to allow them to make generalisations. However, this is not the intention of the study. The aim is to gain insights into the patterns of use—the study is primarily exploratory. The interviews with women were in Chichewa, the language spoken in the area, while the interview with the Manager was in English. The interviews were conducted by one of the researchers who has an understanding of the culture of the area.

The authors opted for interviews for data collection because they allowed for getting participants involved, allowed for participants to give expression from their point of view and allowed for probing. Furthermore, interviews allowed for getting responses from those with limited literacy (Kajornboon, 2005). This was important, especially as most women, especially the non-users, are illiterate.

Data Analysis

The collected data were transcribed and analysed using thematic analysis techniques (Fereday & Muir-Cochrane, 2006). The analysis allowed identification of themes which were linked to Domestication Theory. Due to ethical considerations, codes were used to identify the respondents. For users, prefix US (followed by sequential number) was used while, for non-users, prefix NU (followed by a sequential number) was used. For example, code for user respondent number 1 was US1 and code for non-user respondent number 1 was NU1.

Ethical Consideration

Consent was sought from all the respondents before they participated in the interviews. Respondents were assured of confidentiality and anonymity and were not asked to give their names. Participation in the study was voluntary.

Case Study Description

Vikwa Community Telecentre is one of three community-managed telecentres in Malawi. It is located in Mphepo Village, Traditional Authority Wimbe in Kasungu District. The community is about 25 kilometres from Kasungu Municipality. The community is characterised by poor roads, limited access to electricity and difficulty in accessing clean water. It has a catchment area of about nine villages whose population is approximately 180,000 people. There are about eight secondary schools, over 30 primary schools, and three health centres in the area. The community is dominated by subsistence farmers, mostly engaged in tobacco farming.

The Telecentre was established by the Government of Malawi through MACRA. It offers various services to the community including the internet; printing; photocopying; book binding; lamination; library services; identity card design and printing; scanning; a tuck shop and computer training on basic computer literacy. The Telecentre started operating in May 2010. It is managed by the community which set up a committee of nine people of which only three are females; the committee is male-dominated.

FINDINGS AND DISCUSSIONS

Table 1 summarises demographic data of the respondents. The users' ages ranged from 16 to 55 with the majority (9) being below 30; the age range of for non-users was between 18 and 45. The users were more educated than the non-users. Most of the users were students with a junior secondary school qualification. There were only two primary school dropouts among users. Seven non-users did not complete primary school; two non-users had junior secondary school qualification; and one had not attained any education.

Most of the women users were single while nine of the ten non-users were married; this is consistent with previous studies suggesting that single women are more likely to use the telecentres than those who are married (Madima, 2007). Married women are usually preoccupied with family-care roles, leaving them little time for the Telecentre (Mbangala & Samzugi, 2014). Regarding occupation, the majority of users (seven) were secondary school students, mostly in senior secondary school; two were business women and two were farmers. The majority of the non-users, four, earned their living through wage jobs (*ganyu*); two were business women; three were farmers and one was a student.

Commodification of Telecentres by Malawian Rural Women

Table 2 summarises the results based on the constructs from the Domestication Theory. Under Commodification, the authors identified two themes: publicity and word of mouth. Consistent with other domestication studies (Silverstone & Haddon, 1996), the authors noted that advertisements contributed to the commodification of the Telecentre. Advertisement was associated with the publicity of the Telecentre through an opening ceremony. Some users stated that they knew about the Telecentre from the opening ceremony of the Telecentre in 2010. The ceremony involved a high-profile cabinet minister and other national politicians coming to the rural area. This made it a big event and attracted the attention of the community:

The main driver for awareness of the Telecentre was by word of mouth. The majority of users heard from their friends, and some from the Telecentre Manager. The findings suggest that word of mouth is critical to commodification of telecentres in rural communities in developing countries. This may be attributed to the fact that Malawi is considered an oral society where information is

Table 1. Demographic information of users and non-users

		Number of respondents	
		Users	Non-users
Education	No education	0	1
	Did not complete primary school	2	7
	Primary school qualification	2	0
	Junior secondary school qualification	6	2
	Senior secondary school qualification	1	0
Occupation	Student	7	1
	Farmer	2	3
	Business	2	2
	Wage jobs (<i>ganyu</i>)	0	4
Marital status	Single	7	1
	Married	3	9
	Widow	1	0

passed on from one person to the other by word of mouth (Lwanda, 2003); there is also a lack of media (e.g., newspapers) in rural areas. Furthermore, word of mouth could have played a great role in creating awareness of the Telecentre because people in communities are more likely to adopt an innovation when they become aware of it through associates such as relatives and friends who are likely to persuade them (Mark & Poltrock, 2001). Word of mouth has also contributed to the use of ICTs in previous studies on marginalised communities (Chigona et al., 2016; Kapondera & Hart, 2016; Mark & Poltrock, 2001).

Appropriation of Telecentres by Malawian Rural Women

Appropriation is associated with purchasing and ownership of technologies such as computers (Chigona et al., 2016). In this study, appropriation is associated with the use of the Telecentre.

Period and Frequency of Use

As depicted in Table 3, the women users' period of use ranged from two weeks to seven years. The results show that the Telecentre received new women users almost every year.

The majority of the women users used the Telecentre every day. The ones who used it on daily basis were all students – two used it once a week; one used it once a month; and the other one was not certain – she used it when the need for use arose, which could range from a month to three months. The student users used the Telecentre as one of their daily routines and it was integrated into their lives. These findings differ from the findings by Best and Maier (2007) on women's usage of ICTs in kiosks in India. In their study, the majority reported low usage of once a month or less. The higher usage in our study could be due the fact that, in our study, most of the users were students who needed services such as the library on a regular basis for their academic work.

Purposes of Using the Telecentre

The majority of the women users used the Telecentre for academic purposes. Being students, they needed a space for reading. In addition, homes and schools in rural Malawi may lack ideal space and facilities for doing academic work. Some users also used the Telecentre for social and leisure purposes. A 55-year-old user said she uses the Telecentre services to print and photocopy wedding invitation

Table 2. Stages of domestication of telecentres by Malawian rural women

Aspect of domestication	Units of meaning	Selected quotations
Commodification	<ul style="list-style-type: none"> • Publicity-opening ceremony 	<ul style="list-style-type: none"> • This other day there was an opening function for everyone to know that it is a telecentre [US5]. • I just saw them building this house and this is when people were saying it is a telecentre. Thereafter they came for an opening ceremony. This is how I came to know about it and its functions [US6].
	<ul style="list-style-type: none"> • Word of mouth 	<ul style="list-style-type: none"> • I heard about it [telecentre] when I asked my friends the place they go to for studying. So, this is when they told me about the Telecentre [US11]. • I heard about the Telecentre from the Manager. This other day I met the Telecentre Manager who told me they have a nice place for studying. So, I came to see the place and like it [US8]. • I heard about the Telecentre from the Telecentre Manager [US9].
Appropriation	Purposes of using <ul style="list-style-type: none"> • Academic purposes • Leisure purpose 	<ul style="list-style-type: none"> • Since I have just started using the Telecentre, I only come here to study because it is conducive environment for my studies [US1]. • ...the Telecentre to photocopy pamphlets for academic work [US2]. • This Telecentre is useful in various ways... it helps to photocopy materials. When, say, there is a wedding in my community and would want... to print wedding invitation cards, we come here to print them. [US4].
	Factors influencing the integration of telecentres by Malawian rural women <ul style="list-style-type: none"> • Compatibility with their needs • Convenience • Perceived usefulness 	<ul style="list-style-type: none"> • I use the Telecentre because it stocks materials necessary for my education [US8]. • I like coming here because the place is always quite which is ideal for reading [US8]. • Because when studying here, one can concentrate because there is no one to disturb you here unlike home where parents would want you to help them with some household chores [US10]. • [We use] it is because it is closer to the school as compared to other places. So, when we knock off from school, we just come here [US10]. • I would like be computer literate so that I can have a computer certificate because most jobs these days require people who are computer literate [US5].
	Factors influencing the non-integration of telecentres by Malawian rural women <ul style="list-style-type: none"> • Lack of awareness of the functions and benefits • Illiteracy • Cultural roles • Perception that telecentres are for the educated 	<ul style="list-style-type: none"> • It is true that some women do not use the Telecentre because they lack knowledge... because most women just see it as a house and do not know what it is all about[US3]. • In this community I think it is because most women do not know that everyone can use the Telecentre. They just say that, aah let those who use it continue using it, it is not for everyone... they lack knowledge [US1]. • It is just that we [women], do not know its benefits [NU3]. • Because of the household chores we are expected to do at home, by the time the chores are done one finds that it is late and cannot make it to the Telecentre... so yeah, lack of time [NU2]. • I think it is due to the fact that those women say that place [Telecentre] is for the educated and for me who never went to school I cannot go there [US3]. • The telecentre] should introduce adult literacy programme so that we become literate... [NU8] • As I have said, this is for the educated. Like for 'Komvuters'. Do you call them Komvuters? How do you expect me to operate them? [NU9]
Conversion	Recommend to friends	<ul style="list-style-type: none"> • The Telecentre is useful to me... I tell my friends that you should be visiting the Telecentre where you will find such materials in the library that you can use [US2].
	Teach others	<ul style="list-style-type: none"> • I use the skills that I gain from using this Telecentre to show and teach my friends who do not know anything about the Telecentre and on the topic I have studied here [US2].

cards. Some students also used the Telecentre to read non-academic books. The services that the women used were consistent with the literature which states that women mainly use the ICTs that do not require skills or literacy (Bakar, 2011; Kwake & Adigun, 2008), as most of the users did not use the services such as computers. Nine of the participants indicated that they used library services: to read the books in the library and or use the reading space. As much as some women (five) used the ICTs, the ICTs that they used were photocopiers and printers that did not require skills; while only two of the women came to the Telecentre for computer classes.

Table 3: Users' period and frequency of using the Telecentre

		Number of respondents
Period of use	Two weeks	1
	Three months	1
	Six months	1
	One year	4
	Two years	1
	Three years	1
	Four years	1
	Seven years	1
Frequency of use	Every day	7
	Once a week	2
	Once a month	1
	When need arises	1

Factors Influencing the Integration of Telecentres by Malawian Rural Women

Several factors influenced the use and non-use of the Telecentre and its services, as depicted in Table 2. When women users were asked why they used some particular services and not others, the most common reason was compatibility with their needs. Most women, especially students, used services like the library because it provided the materials that they needed in their education, as well as a conducive environment for reading or studying. In addition, the students felt that there were no disturbances, compared to studying at home where girls would be sent to do household chores. A number of studies have shown that, in rural Malawi, parents burden girls with household chores at the expense of their education (Valentini, 2004). In this way, the Telecentre offered a space to “escape” from home and focus on their studies.

Convenience also influenced the women’s use of the Telecentre. Women used the Telecentre because it was closer than other facilities providing similar services. The effect of distance on the usage of telecentres by women has been reported in previous studies (e.g., Gcora et al., 2015). Perceived usefulness, which is the belief that the use of computers will result in achieving personal goals (Umrani & Ghadially, 2003), also influence women to use the Telecentre, especially those attending the computer course. The two women who indicated that they attended the computer classes said that they had decided to acquire computer skills because that would enable them to find jobs which normally demand people who have computer skills.

Factors Influencing Non-Integration of Telecentres by Malawian Rural Women

Women non-users were asked why they do not use the Telecentre. Women users were asked to give their views on what they think affects other women who do not use the Telecentre. All the ten non-users were aware of the Telecentre in their community. This is in line with findings by Chisango (2014) which found that most rural women are aware of the existence of ICTs but do not use them. Several factors contributed to the women’s non-use.

Lack of awareness of the functions of the Telecentre was the main reason why women did not use the Telecentre, as the majority, 15 (users and non-users) of the participants, gave reasons related to lack of appreciation of the functions and benefits of the Telecentre and stated that women did not know that everyone could use the Telecentre. Similar findings have been reported in the literature (Attwood et al., 2013; Mbangala & Samzugi, 2014). It is recommended that the management work

on sensitising women about the Telecentre, its functions and its benefits. Findings further suggest that the Telecentre make more efforts to raise the awareness of the Telecentre in the community. According to the Telecentre Manager, the only publicity the Telecentre had promoted was the opening ceremony in 2010 (seven years prior). Although the Manager also told people within the community about the Telecentre, community leaders should be involved to raise more awareness in the community. Kumar and Best (2007) argue that in rural communities like this, local leaders should be involved in the promotion of telecentres because they are respected and have substantial influence on their communities.

As in many studies (Best & Maier, 2007), illiteracy negatively affected the use of the Telecentre by women because it affected their use of the Telecentre. This could be due to the fact that literacy levels of most Malawian rural women are low (FAO, 2011); and that eight of the ten women non-users had not completed primary school and hence were not functionally literate. At the same time, there are no literacy programmes in the Telecentre and in the whole community. This finding implies that the Telecentre benefited only the women who were already empowered through literacy, thereby exacerbating the inequalities which might have existed in the community prior to the existence of the Telecentre.

Cultural roles also affected the integration of telecentres in women's lives. Most women were responsible for most of household chores and this limited time for accessing telecentres. This result is consistent with the literature (Best & Maier, 2007; Mbangala & Samzug, 2014).

Perception of women about telecentres being a place for the educated affected their use. Since most of the non-users had not completed primary school, they felt inferior and excluded from the Telecentre. Non-user NU9, who had dropped out of primary school (Standard Two), also perceived the Telecentre to be for the educated. The respondent struggled to say the word "computer"; she called them "*Komvuters*" (instead of the correct Chichewa word which is *Kompyuta*). The perception of the Telecentre to be only for the educated in the community could be attributed to the fact that people who usually visit the Telecentre are students. The perception of telecentres has also affected use of ICTs by women in other countries such as South Africa (Dlodlo, 2009; Gcora et al., 2015).

The financial situation in the rural communities affected the domestication of telecentre services. All the services offered in the Telecentre including library services are offered at a fee. Even those using the Telecentre could not access all of the services because they could not afford them. A user explained that she could not complete her computer course in the Telecentre because she did not have enough money. As stated above, most of the women engaged in wage jobs (*ganyu*) and earned only a small amount of money. This hindered their use of the Telecentre. Similar findings were reported in other ICT studies (Kwake & Adigun 2008) and from the shared facilities of telecentres (Mbangala & Samzug, 2014; Roman & Colle, 2002).

Conversion of Telecentres by Malawian Rural Women

The results show that some users have reached the conversion stage. Most women users started using the Telecentre after their friends or relatives who had been using it recommended it to them. In the appropriation stage, it is clear that some users had made it part of their lives as most users made use of the telecentre and visited it on a daily basis.

Some users also stated that they recommended the Telecentre to others. Conversion is also reflected in how users used the skills they gained from using the Telecentre. Most users, especially students, used the skills to teach others who were facing challenges in their academic life.

CONCLUSION

The study sought to understand the process through which telecentres are appropriated in women's lives in rural Malawi. The study employed Domestication Theory as a theoretical lens. The study shows that commodification was influenced by a number of factors that included advertisements

and word of mouth. The users used the Telecentre for a variety of reasons, both instrumental and hedonic. The students used the Telecentre mainly for academic purposes. The findings provide insights into the services that women use and the factors that determine the services that they use. The women primarily used services that did not require ICT skills, such as photocopiers, printers and books, and reading space in the library. A number of factors influenced the appropriation of the Telecentre and its services. Convenience, compatibility with the needs of women and perceived usefulness influenced women to use the Telecentre. On the other hand, lack of awareness, illiteracy, lack of money, cultural roles and perception that telecentres are for the educated made some women not use the Telecentre. The results show that some users, especially students, have integrated the use of the Telecentre in their daily routines; some have reached the conversion stage so that they could recommend the Telecentre to others.

The study recommends that telecentre management should create awareness in the community on an on-going basis. The awareness campaigns should focus on sensitising women on the functions of the telecentre and its benefits. This will also help to minimise the perception that telecentres are for the educated. The study also recommends that telecentres should start offering literacy classes to facilitate the use of telecentres by the women. The committee should be gender-balanced. A gender-balanced committee would be more sensitive to women's needs and women would feel the centre is for women's needs as well. The study also recommends continuation of establishing telecentres in rural communities, as they have the potential to transform the rural communities. This study was limited to a small sample size; future studies should be conducted using larger sample sizes.

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