


Research Article

# Digital Defiance's Affecting Use of Information Communication Technology Deployed for Prevention and Detection of Crime in Community Policing in Malawi

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## Abstract

ICTs digital space has modernized citizen socialization amongst citizens to enhance security and is augmenting for lack of resource constraints as well as promoting less agents on ground thereby strengthening internal security through community policing. Availability of ICT gadgets, applications, and initiatives make simple and influential crime reporting and crime control. This study examines factors that affect the use of information communication technology deployed for crime prevention and detection in community policing. Mixed methods exploratory sequential design was used to collect data. Qualitative purposive sampling targeted four focus group discussions of 10 participants each and one key informant interview of 10 participants, interview guide instrument was utilized. Quantitative household survey used Yamene (1969) formula to identify 432 respondents who were randomly distributed into 10 locations of Muloza and used structured questionnaire. Qualitative data analysis follows transcribing, coding, and grouping into sub-themes, themes that answer research objectives aided by NVivo application. Quantitative analysis used descriptive statistics in SPSS version 20. Under pragmatics paradigm guided by democratic participation, social-disorganization and broken window theories, results show that the majority of ICTs are mobile telephones, which play an important role in the storage, dissemination, and replication of security information in community policing. Dominated by married persons at 56.5% in the youth category of 57.2% respondents. The police are faced with the technical challenge of installing and maintaining ICTs. The police have no ICT resources deployed for the prevention, detection, and investigation of crime in Muloza. Hence, the police rely on personal mobile phones, which are operated on do it yourself as convenience by victim or law enforcement agent to follow an issue. Regression when tested at confidence interval 95.0% showed that some factors have significance value on use of ICTs deployed for prevention and detection of crime in community policing (i) Age at  $p=.001$  (ii) Education at  $p=.000$  (iii) Income at  $p=.000$  (iv) Knowledge expertise at  $p=.000$  (v) Cost of accessing technologies at  $p=.009$  and (vi) Trust issues between police and people at  $p=.009$ . The importance of ICTs is that they have revolutionized monitoring and surveillance that may improve prevention, detection, and investigation of crime in community policing, and allow for storage, dissemination, and replication of security information. Proper use of ICTs for prevention and detection of crime may improve police investigations. Citizens' wide use of ICTs in formal and non-formal ways may help reduce corruption through wide information storage replication and dissemination.

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## Keywords

Prevention, Detection, Investigation, Deployment, ICT Enhanced Community Policing, Challenges, Obstacles, Importance, Effective

## 1. Introduction

ICTs have created a digital space for modern citizens' social networks and interactions for simple discussion and exchanging of information. Making social media indeed a catalyst for citizen-police interaction to enhance security [4]. ICT plays a role in strengthening internal security and community policing. The embracing of ICT-enhanced community policing has become crucial to reduce the endless and unpleasant growth of modern high-tech-aided crimes. ICT-enhanced policing improves virtual community policing, which makes available ICT gadgets, applications, and initiatives for simple and influential crime reporting and crime control [13]. Citizens have participated in community policing since 1980's in the United States of America [5].

In modern digital world ICTs are conceivably the fastest growing sector in the world. For the purpose of this paper, ICTs include electronic devices such as the Internet, websites, e-mail, mobile telephones, fax, telephone, radios, TVs, computers, CCTV cameras, and alarms [4]. They have transformed security by disseminating security and intelligence information with comparative simplicity, bringing surveillance to restricted areas and facilitating access to the remotest parts of the world [12]. ICTs have the capability to store, disseminate, and replicate all types of knowledge and information if deployed properly. This may yield to the capacity of preventing, detecting, and assisting investigations in community policing [13].

Virtual community policing improves surveillance and monitoring. The deliberate system of keeping a close watch on the behavior or activities of persons, groups, institutions, and organizations suspected of doing something illegal or warehousing information capable of causing breach by government security agencies will provide an online forum for the police to interact with the community, other government agencies, and other stakeholders with the primary objective of addressing crime and disorder problems and providing quality services to the public. Improving (1) crime reporting, (2) crime prevention, and (3) crime detection (investigations) [13]. Virtual community policing will enhance (a) the provision of information to the community, (b) soliciting information from the community, (c) engaging the community, and (d) problem solving [5, 13].

Ngboawaji et al. [12] report that properly deployed ICTs in community policing can be used to capture suspicious activities ranging from capturing thieves to detecting unfaithful wife in homes, outside homes and offices. ICT are used both in of-

fices and shops by business owners to scare off shoplifters and protect their employees. Security cameras are also used by banks, resorts, and churches to watch for safety of the majority of people who go in and out of the institutions. Installing quality security cameras in business, public or private room or place is important to prevent or detect theft, damage, or entry by unwanted persons. Effective and efficient security cameras must be used in a full ICT kit that has essential accessories that include monitors, recording equipment, cabling, and brackets to mount the cameras. Lack of effective surveillance and tracking tools allows crimes to go undetected.

Many countries in sub-Saharan Africa are trying to build ICT-enhanced means to cope with the teeming population and challenges for ensuring peace and security to deal with competition for scarce resources. However, in community policing, the use of ICT applications and initiatives deployed for prevention and detection of crime faces a number of challenges that can be categorized into three categories: institutional, social, and technical [7].

Institutional challenges range from sourcing, installing, maintaining, and using ICTs to manage virtual public surveillance and monitoring [8]. They include; availability of resources [7], capacity to run and collaborate ICT with citizens using well-trained personnel [14], institutional and political willingness influencing interest to acquire need to have and not nice to have ICTs based on local ICT needs [7, 14], and sustainable support from higher police administration and political government to allow quality public security administration to the needy community [14]. Ethical considerations in taking care to ensure lawful use are required by law. Anonymity is paramount to protect data providers from the local community [7, 14].

Social challenges range from individual citizen management to society coordination and collaborative use of ICTs [8]. They include local context factors that motivate citizens on how to manage actions toward particular goals [16]. Lack of coordination between all stakeholders to manage collaborative platforms [14]. Trust and accountability that allows minorities and vulnerable people to interact with police digitally [7]. Czapska and Struzinska [2] emphasize that social media can be very effective starting from offline. Certainly, lack of awareness thwarts the capacity to enable community members to participate in the creation of a sense of security within their local areas [7]. The process starts with need assessment [14-16]. Supported by awareness campaigns on the

acquired technologies that will help citizens participate in the creation of a sense of security [14].

Technical challenge challenges range from accessing, investing and maintaining, and user friendliness of ICTs by stakeholders [8]. They include affordability to access technology by providing the necessary infrastructure and equipment required to access the internet [7, 14]. Initial investment and maintenance of the ICT systems of hardware and software [14] and the complexity of deployed ICTs may create barriers for citizens to effectively use the ICT [3, 7]. Compatibility of ICTs with the majority of the population will motivate citizens to use them for their intended purpose [7, 14]. Accessibility of ICTs to rural citizens will allow vulnerable and minorities to participate in using the ICTs [7]. Sustainable energy is paramount to sustain the functioning of ICTs [14]. Environmental health is a consideration of how bad the developed technology contributes to taking care of the citizens' environment [7].

Community policing in Malawi dates back to 1994. However, the results of some studies indicate that citizens' participation in the implementation of community policing has not been fully activated due to various challenges, including lack of resources [10]. Bicher [1] points out that ICT can have an impact on public security development and can be a driving force for community policing progress in Malawi. However, ICT development is still very limited and makes citizens cut off from national security information because of multiple barriers including the following; inadequate resources, operational problems, and differences in interests among policy actors [1, 6]. Among the pervasiveness of mobile telephones that has revolutionized ICT-enhanced community policing as well as enhanced collaboration of participatory practices between citizens and police in Malawi [5], this study aimed to determine the factors that affect the use of ICT deployed for prevention and detection of crime in community policing.

This study is important because proper use of ICT deployed for prevention and detection of crime in community policing would improve the state of decline in Muloza, thereby stabilizing public peace and reducing the fear of crime. Results will improve the capacity to store, disseminate, and replicate crime-related information for citizens and police to improve citizens' participation in creating a sense of security through ICT in community policing.

To answer the research objective, we examined factors that affect information communication technology use in community policing deployment in crime prevention. The study focused on following specific questions: (1) What ICTs are used for prevention detection and investigation in the neighborhoods? (2) What are the challenges affecting the use of ICTs? (3) What is the importance of ICT use for prevention detection and investigation of crime in policing activities?

The rest of the paper explains the systematic procedure on where and how data was collected and analyzed. Thereafter, present results on ICT use for crime prevention detection and investigation in neighborhoods, challenges affecting the use

of ICTs, and importance of ICT use for prevention detection and investigation of crime in community policing.

## 2. Methodology

### 2.1. Study Area

The study was conducted in Muloza- Mulanje, located at 36 K 792628.97 m E 8220322.32 m S. Borders Mozambique to eastern part of Mulanje District, and is near to Mozambican province of the Vila De Milange District with less than 10 km from the border. Ideal for the study because it is far with almost 30 kms from Mulanje District headquarters, porous border influencing un charted routes due to border mark of shallow Muloza and Ruo rivers, international intermarriages between Malawians and Mozambican who claim reciprocal rights on basic needs from both nations that allows reciprocal dual movements give chance to criminal opportunists to dare criminalizing the area. Furthermore, Mulanje mountain barriers between Muloza and the mainland of Mulanje and Phalombe. The police are challenged with a lack of resources. The existence of "international boundaries and territoriality" is often ignored. However, formal migration and trade occur at the Muloza border post, which is controlled by the Immigration Department and Malawi Revenue Authority (MRA) [4, 5, 9].

### 2.2. Research Design

This study implored exploratory sequential mixed method design, with an aim to offset the weaknesses of both qualitative and quantitative approaches thereby allowing collecting data from multiple angles to yield reliable conclusions. Qualitative approach aimed to collect data through oral interviews with focus group discussions to explore and capture people's attitudes, beliefs, and motives. Quantitative approach aimed to triangulate qualitative results through household surveys to confirm and generalize qualitative findings at a wider level [4].

### 2.3. Data Collection Methods

#### 2.3.1. Focus Group Discussion and Key Informant Interview

Qualitative approach conveniently and purposely identified 10 police officers, 10 business persons, 10 community policing forum members, 10 citizens and a key informant interview of police officers from South Eastern Region police headquarters at Luchenza for focus group interviews. All above stated participants were more important because these are stakeholders who interact daily in community policing in Muloza and are actors in the phenomena. Police at Regional Headquarters (South East) are experts in guiding community policing. An interview guide was used to collect data from participants.

### 2.3.2. Household Survey

Out of 23, 408 total population, a sample of 432 participants was identified through Yamene (1969) formula. The 432 were randomly distributed in the 10 locations of Muloza as shown in (Table 1). The study used structured questionnaire instrument to collect data on questions relating to demographics, ICTs used for prevention detection and investigation in the neighborhoods, challenges affecting the use of ICTs, and the importance of ICT use for prevention detection and investigation of crime in community policing.

**Table 1.** Showing the quantitative random distribution of respondents in locations of Muloza.

Location	Number of participants
Limbuli	43
Muloza	44
Gawani	43
Maliyera	43
Naamani	43
Sathawa	43
Songwe	43
Manayamba	43
Namasalima	44
Ruo	43
Total	432

### 2.4. Data Analysis

Qualitative data was transcribed word by word, edited, and uploaded in the NVivo (Version 12) software package. Thematic analysis was conducted using nodes as the method for identifying emerging themes. Described this as a 'cross-sectional code and retrieve method', which is used to organize and highlight emerging themes found in data in a systematic manner. Emerging themes answered to research questions. The exact wording from respondents were captured to avoid loss of context during the coding process. Therefore, to retain important contextual information where appropriate larger 'chunks' of data were included in the coding process, to allow consistent contextual information.

Quantitatively, descriptive statistics using frequencies, percentages, and charts were used to analyze each question from the structured questionnaire. Statistical Package for Social Sciences version 20 was used to analyze data.

## 3. Research Findings and Discussion

### 3.1. Socio Demographic Characteristics of Participants

Out of sampled 432 respondents, gender was balanced with 49.1% females and 50.9% males of average age of 38.96 years and 57.2% youth. Composition of families were 5.3% divorced, 7.2% separated, 10.2% widowed, 20.8% single, and 56.5% married. In terms of education, 16.0% never attended and 2.5% attended adult school. However, bigger proportion of participants attained primary, secondary, and tertiary education 32.2%, 38.9, and 10.4% respectively. In terms of occupations, 6.7% school going, 7.6% casual labor 16, 16.2% formal employment, 16.4% skilled employment, 26.2% farmer and 26.9% petty traders/business of average income of MK 103, 262.82.

### 3.2. Utilized ICTs for Prevention Detection and Investigation in Neighborhoods

**Table 2.** Have you or anyone in your community used any crime prevention or detection technologies?

Response	Frequency	Percentage
Yes	398	92.1
No	34	7.9
Total	432	100

n=432 Source: Own survey (2023)

Related to research question "What type of ICTs are used for prevention detection and investigation in community policing in Muloza?" Results from the household survey in (Table 2). above indicate that 92.1% agreed to have used ICTs for detection and prevention of crime in community policing. Findings from focus group discussions involving 10 police officers, 10 CPF members, 10 business persons, and 10 citizens reveal that in Muloza, ICTs used for the prevention and detection of crime in community policing are mobile phones, alarms, and CCTV cameras. Results from the household survey in (Table 3) reveal that ICTs used in Muloza for the prevention and detection of crime in community policing are mobile telephones at 61.3%, alarm systems at 13.3%, and CCTV cameras at 13%. Results are aligning with NSO [11] that mobile telephone was used by 96.8% of individuals using cellular network at 95.9% to access internet for communication and collaboration at 84.3%. Individuals subscribed to more than one cellular network provider for voice and data access Airtel at 71.0%, TNM at 61.0%, Access at 0.1%, and MTL at 0.1%. Mulanje



District Council [9] reported that most people had cell phones, which they used for communication, and this was rapidly spreading in rural areas.

The study interprets that most ICTs used for the prevention and detection of crime in community policing are mobile telephones relying on the cellular internet for voice and data services. The use of ICTs in community policing is dominated by married persons at 56.5% in the youth category of 57.2% respondents. The implication is that police and citizens rely on mobile phones for the storage, dissemination, and replication of security information. Mobile phones are important for the prevention and detection of crime in community policing. This is substantiated by remarks from some of the responses from interviewees during focus group discussions where it was mentioned that the alarm system is only used by the Chipiku store at Limbuli and the CCTV camera is only used at the MRA office at the border post crossing point. The evidence is in some statements from the respondents below:

"I use Smart Phone Techno for community policing".

"I use an Android phone for security issues"

"We use mobile phones for community policing"

"Mobile phones are used for security communications"

"We have an alarm system used by the Chipiku store at Limbuli for security against theft".

This finding is similar to those of Kumwenda et al. [4], who found people in Muloza most commonly used mobile phones. Similarly, Nwokedi [13] reported that virtual community policing in the form of mobile telephone technology creates easy and effective crime reporting and crime control in Nigeria. Ngboawaji et al. [12] showed that telephony is the most developed and most accessible gadget among the general population in Nigeria.

**Table 3.** What type of crime prevention or detection technologies were used? Please tick all that apply.

Item	Frequency	Percentage
control system	8	2.3
alarm systems	46	13.3
CCTV camera	45	13
GPS tracking	3	0.9
Mobile apps	212	61.3
Other	32	9.2
Total	346	100

n=432 Source: Own survey (2023)

### 3.3. Challenges Affecting the Use of ICTs

**Table 4.** Have you or anyone else in your community experienced any challenges or obstacles in deploying or using crime prevention or detection technologies?

Item	Frequency	Percentage
Yes	372	86.7
No	57	13.3
Total	429	100.0

n=432 Source: Own survey (2023)

Responses from the question "What challenges are affecting use of ICTs for prevention detection of crime in community policing?" Results from the household survey are shown in (Table 4) above indicate 86.7% of respondents accepted to have experienced challenges in using ICTs for the prevention and detection of crime in community policing. Quantified qualitative responses from the interviews in (Figure 1) indicate that financial challenges were pointed at ×5 by Business persons, ×5 by Citizens, ×3 by Police. Power shortage was mentioned ×3 by Police and ×2 by Citizens. Infrastructure mentioned ×3 by Police. Network mentioned ×5 by Citizens and ×1 by Police. Lack of support mentioned ×1 by Citizens. Lack of knowledge to run mentioned ×1 by Police. Negligence to pick calls mentioned ×2 by Citizens. Slow or no response mentioned ×2 by Citizens. A household survey by NSO [11] reported that ICT usage in Malawi was very slow at 84.4%, unstable at 38.9%, and too expensive at 35.7%. Results from the household survey in (Table 5). below, reveal challenges faced were technical issues (difficulty in installation, maintenance problems) at 69.88%, followed by lack of resources (equipment's) at 33.7% and trust issues between police and citizens at 12.4%. Results in (Table 6). below show regression when tested at confidence interval 95.0% show that some factors have significance value on use of ICTs deployed for prevention and detection of crime in community policing (i) Age at p=.001 (ii) Education at p=.000 (iii) Income at p=.000 (iv) Knowledge expertise at p=.000 (v) Cost of accessing technologies at p=.009 and (vi) Trust issues between police and people at p=.009.

The interpretation is that law enforcement institutions, especially police, are faced with the technical challenge of installing and maintaining ICTs. Muloza Police have no ICT resources deployed for the prevention, detection, and investigation of crime. Use of ICTs depends on (i) age, (ii) education, (iii) income, (iv) knowledge expertise, (v) cost of accessing technologies, and (vi) trust issues between police and people. The implication is that police rely on personal mobile phones that are operated on do-it-yourself as convenience by victim or law enforcement agent to follow an issue. Police may not have

full control of stored, dissemination, and replication of security information for effective prevention, detection, and investigation of crime in community policing. The police will have to rely on building and sustaining vibrant sustainable partnerships to manage crime. There is a need for awareness campaigns on the use of deployed ICTs for prevention and detection in the community to yield improved results. There is a need for MACRA to speed up opening telecentric at Namphungo, Chonde, and Chisitu Trading centers to increase public internet ICT access, the Malawi government to speed up the national fiber backbone through fiber optical cable owned by ESCOM and provide free internet to enhance use of internet in Muloza [9]. The evidence is substantiated from the following recorded statements from focus group discussions:

“The Muloza Police does not even have Wi-Fi for internet”.

“As a police institution, we don’t have ICT gadgets, such as computers. For example, here at Muloza, we have only one computer for administration. There is no hot line for people to call directly when they have issues. We use personal mobile phones that we may decide not to respond to when victims call”.

“Some people may not have the capacity to operate ICT applications”.

“There is usually network instability; thus, in other areas there may be no network and so on”.

“Some Sathawa places have no stable network. As such, there are times when we have encountered a situation in which it becomes difficult to link up with others through telephone because of lack of network”.

“Some places experience unstable network, as such telephone calls are not reliable in such instances especially areas close to Mulanje mountain”.

“So, officers are supposed to use their own money to buy units for bundles to manage ICT applications”.

“Citizens are using personal telephones bought with their own money and may choose not to use them for public security”.

“Some of the CPF members who are seriously involved in taking responsibility to manage security in our communities do not have the financial muscle to buy phones”.

“There are power shortages”.

“Muloza especially more remote areas such as Gawani, Sathawa, there are frequent blackouts and there is no power as such phones are off”.

“At Limbuli, there are some ESCOM lines that go off for a week or more than that. Phones may stay offline for long times and citizens are left with no choice but to be kept switched off”.

“To sustain telephone calls is about units. Units need money. There is time when our conversations end abruptly as we are giving out or receiving information because units are consumed”.

“In the course of using telephone calls to police, sometimes police officers are slow to pick our calls”.

“There are times when the police do not even respond to our calls because they are sleeping”.

“But we are disappointed that even when we call the police, they don’t send a transport to pick up the arrested suspects”.

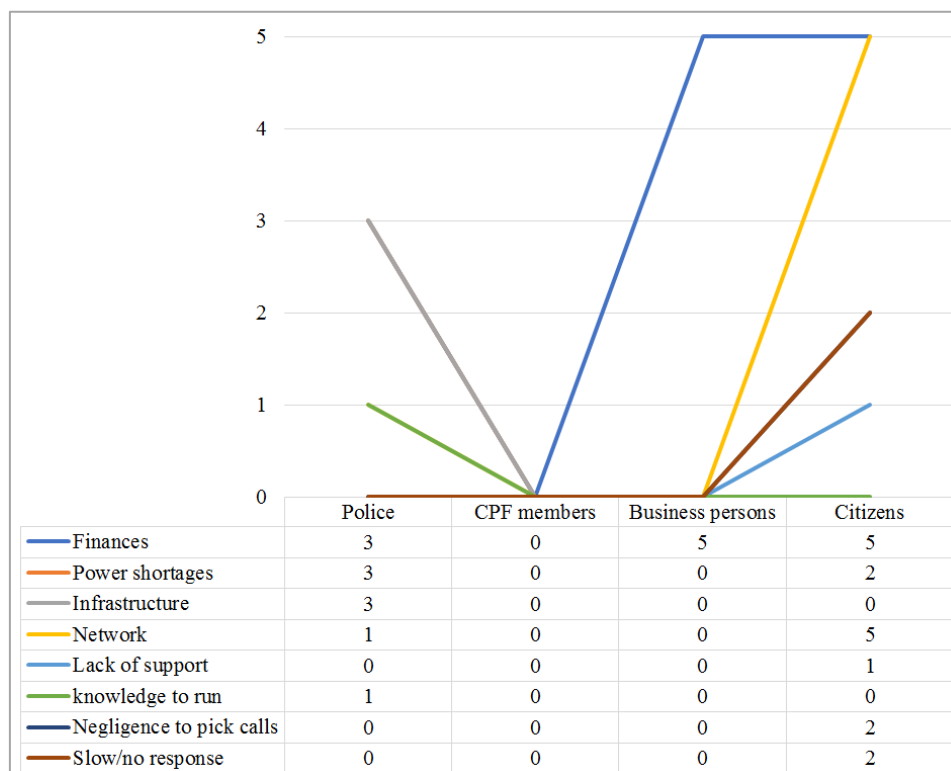
“The challenges with taking part in managing neighborhood security through social media are lack of finances at individual level. Other people are jobless, they are not doing business, and yet they must have telephones to be able to take part in managing security. They have the ambition but they lack funds to buy the telephones, worse still android phones which use WhatsApp and Facebook are expensive”.

The results are similar to those of Nwokedi [13] in Nigeria, where the use of ICT for prevention and detection is challenged by lack of equipment, inadequate funding, inadequate logistic support and infrastructure, and lack of serviceable ICT equipment. Similarly, Ngboawaji et al. [12] in Nigeria reported that people in local areas use ICTs for crime reduction, but knowledge and use of ICTs is still very poor among the general populace. Access to the three components of ICTs (Computers, internet and telephones) is still largely limited to elites and corporate institutions.

**Table 5.** If yes, what are the main challenges or obstacles faced? Tick all that apply.

Item	Frequency	Percentage
Lack of resources (equipment)	112	33.7
Technical issues (difficulty in installation, maintenance problems)	232	69.88
lack of knowledge and expertise in managing or using technology	16	4.8
cost of accessing appropriate technology	22	6.6
trust issues between the police and citizens	41	12.4
Do not know	9	2.7
Total	432	100

n=432 Source: Own survey (2023)



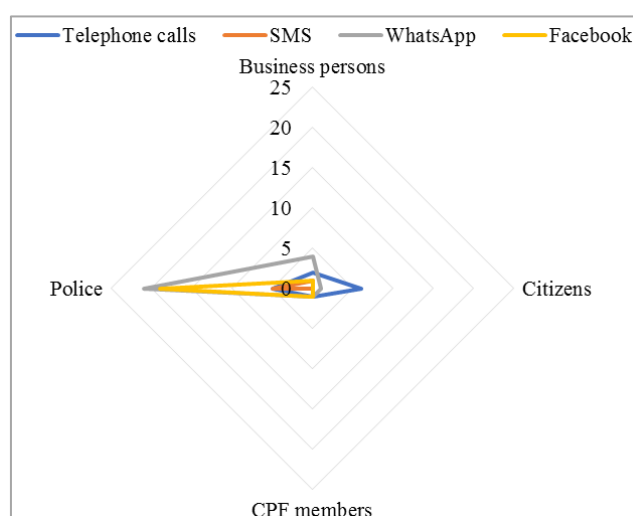
**Figure 1.** Qualitative quantified responses from interviews on challenges in the use of deployed ICTs for prevention and detection of crime in community policing.

**Table 6.** Regression.

Coefficients							
Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	95.0% Confidence Interval for B	
	B	Std. Error	Beta			Lower Bound	Upper Bound
(Constant)	.757	.318		2.378	.018	.131	1.383
Age	.009	.004	.101	2.210	.028	.001	.017
Sex	-.150	.106	-.063	-1.413	.158	-.359	.059
Marital status	-.087	.046	-.087	-1.904	.058	-.176	.003
Education	.317	.056	.259	5.645	.000	.207	.428
Occupation	.052	.027	.089	1.927	.055	-.001	.106
1 Income	8.827E-7	.000	.166	3.679	.000	.000	.000
Resources	-.150	.164	-.041	-.915	.361	-.473	.173
Technical issue	-.145	.130	-.055	-1.117	.265	-.401	.110
Knowledge expertise	-.448	.127	-.175	-3.529	.000	-.697	-.198
Cost of accessing technology	-.349	.134	-.136	-2.609	.009	-.612	-.086
Trust issues among police people	.389	.148	.134	2.634	.009	.099	.678

a. Dependent variable: ICT USAGE

### 3.4. Importance of Using ICT for Prevention, Detection, and Investigation of Crime in Community Policing



**Figure 2.** Qualitative quantified responses from interviews on the effectiveness of ICT applications during citizens' participatory activities in community policing.

**Table 7.** How has digital platform use affected citizen participation in neighborhood safety and security practices?

	Frequency	Percentage
Do not know	21	4.9
Negatively	39	9.0
No effect	7	1.6
Positively	365	84.5
Total	432	100.0

Responses from the question “What is the importance of ICT use for prevention detection and investigation of crime in community policing?” Qualitative quantified responses from the interviews in (Figure 2) indicate that WhatsApp has been crucial to police officers because it has helped them solve more complicated issues because WhatsApp can store, disseminate, and replicate security information followed by Facebook. By nature of their job, police use WhatsApp and Facebook to solve complex issues [4]. Telephone calls were used by all sectors for reporting and mobilizing help [5]. Results from the quantitative survey in (Table 7). above show that 84.5% of citizens felt that the use of ICTs for prevention detection has positively affected citizen participation in neighborhood safety and security practices. Household surveys in (Table 8). below reveal that 87.2% of citizens agreed that the use of ICTs for prevention and detection in community policing has allowed them to use various ICT gadgets and applications to report a crime or suspicious persons to

authorities. Findings from the household survey in (Table 9). reveal that the use of ICTs for prevention and detection in community policing is important because it improved communication and information sharing between citizens and police at 77.7%, increased awareness of crime and safety concerns at 57.0%, and enabled citizens involvement in crime and suspicious activities at 56.5%.

The interpretation is that the use of ICTs has revolutionized communications and collaboration between citizens, citizens and police, and Malawians and Mozambicans, improving monitoring and surveillance that may improve prevention and detection of crime in community policing. The deployment of ICTs has allowed for the storage, dissemination, and replication of security information. The implication is that proper use of ICTs for prevention and detection of crime may improve police investigations.

Evidence is from some recorded statements during interviews with focus group discussions:



“WhatsApp applications can keep records of digital evidence inform of pictures, trace of call logs and videos”.

“When people from various areas share deposited evidence on WhatsApp of someone who had stolen something from Lilongwe and has come with the proceeds of crime in our community. We can identify such issues and organize ourselves with the police to arrest such suspects and recover stolen items”.

“WhatsApp is more efficient because it allows the taking and sending of pictures and videos of evidence that is used to nab a notorious criminal”.

“The wide participation of citizens through WhatsApp and Facebook will allow citizens to share sensitive issues with anybody that others might have been hiding. Once the issue has been widely deposited, many audiences may have the chance to see and follow up. As a result, more transparency may influence the reduction of the rate of corruption”.

“When the police have arrested a suspect, we share through WhatsApp with other police formations for identification if the suspect could be wanted by them too. Social media defeats the lack of resources such as transport and time”.

“People send various security-related issues on WhatsApp, and law enforcers are able to learn that someone has violated someone’s rights, and immediately investigations may be instituted. For example, a bus driver was driving carelessly and recklessly, and one passenger recorded a video that was then uploaded to the WhatsApp group. Immediately, the members started commenting, and some police officers were also on the group. They informed their traffic friends on duty along the road. They stopped and apprehended the driver”.

“The advent of social media such as WhatsApp and Facebook has allowed other citizens who may be concerned to act by recording the activity and secretly sharing it with other groups. Eventually, there is no hiding of the issue”.

“The use of social media has the capacity to deposit evidence on various groups, and issues that may be handled in Muloza may as well be uploaded at Malawi Police headquarters or at the regional level. The headquarters or regional official will ask Muloza for accountability. In that case corruption may greatly be reduced”.

“Though some CPF members or chiefs may try to hide some issue, the advent of social media has allowed other citizens who may be concerned to act by recording the activity and secretly sharing it with other groups. Eventually, there is no hiding of the issue. We have also witnessed citizens sharing videos of police officers who are in uniform but drunk. Police management has taken steps to deal with such officers disciplinarily. For example, a woman in a minibus in Lilongwe who carried a 50-kg bag. At the by-pass roadblock, police officers demanded MK3,000-00

from her to proceed with her bag. She paid the cash. However, someone within the scene in the same minibus recorded the video. The video was sent to many groups, and many uploaded it. Police management dealt with the officers”.

“The wide use of ICTs will allow citizens to share sensitive issues with anybody, which others might have been hiding. Once the issue has been widely deposited, many audiences may have the chance to see and follow up. As a result, there is more transparency, which may influence the reduction of corruption rate”.

“Use of telephones, cameras, alarms, CCTV cameras can reduce corruption as well as thefts in our locations. if we put CCTV cameras in our home to capture whoever may come to commit offences”.

“The use of social media has amplified communications between security stakeholders in Muloza. Allow encrypted sending and receiving of information through WhatsApp telephone calls from sender to receiver. Has built confidence in people to take part in managing security in their neighborhood because no third- party can know compared to conventional communications. Where it needed the person to go in person and talk to the police about anything suspicious. This posed threats to those taking part in sharing information with the police. People could not confidently participate for fear of their security when discovered by criminals”.

The results are similar to those of Nwokedi [13] in Nigeria, which use technologies that allow communities to create pages that store information dissemination and replication. Access to large amounts of public and police-specific data will be a potential tool for officers to be better informed, improve intellectual and investigation capabilities, have better access to criminal records and prevent crime, enhance public safety, and reduce crime. Ngboawaji et al. [12] reported that in Nigeria, the use of ICTs has transformed security by dispersing security and intelligence information with comparative ease, bringing surveillance to sensitive areas as well as making possible access to the remotest parts of the world.

**Table 8.** Have you ever used an ICT application (e.g., WhatsApp, SMS, Facebook, etc.) to report a crime or suspected activity?

	Frequency	Percentage
Yes	374	87.2
No	55	12.8
Total	429	100.0

n=432 Source: Own survey (2023)

**Table 9.** How important is citizen participation in the deployment and use of crime prevention and detection technologies?

Item	Frequency	Percentage
Improved communication and information sharing between citizens and the police	334	77.7
Increased awareness of crime and safety concerns	245	57.0
Enabled citizen' involvement in crime and suspicious activities	243	56.5
Increased citizen involvement in crime prevention and community policing efforts	182	42.3
Provided a platform for community dialog and engagement	126	29.3
Facilitated faster emergency response times	73	17.0
Provided a means for citizens to provide evidence and share information with law enforcement	51	11.9
Total	430	100

n=432 Source: Own survey (2023)

## 4. Conclusion and Recommendations

This paper examines factors that affect the use of information communication technology deployed for prevention and detection in community policing. Specifically, deployed ICTs for crime prevention and detection in neighborhoods, challenges affecting the use of ICTs, and importance of effective use of ICTs deployed for prevention and detection of crime in community policing. Results show that the majority of ICTs deployed for prevention and detection are mobile telephones, which play a significant role in the storage, dissemination, and replication of security information in community policing. Dominated by married persons at 56.5% in the youth category of 57.2% respondents. The police are faced with the technical challenge of installing and maintaining ICTs. The police have no ICT resources deployed for the prevention, detection, and investigation of crime in Muloza. Hence, the police rely on personal mobile phones, which are operated on do it yourself as convenience by victim or law enforcement agent to follow an issue. Regression when tested at confidence interval 95.0% shows that some factors have significance value on use of ICTs deployed for prevention and detection of crime in community policing (i) Age at  $p=.001$  (ii) Education at  $p=.000$  (iii) Income at  $p=.000$  (iv) Knowledge expertise at  $p=.000$  (v) Cost of accessing technologies at  $p=.009$  and (vi) Trust issues between police and people at  $p=.009$ . Importance of ICTs is that they have revolutionized monitoring and surveillance that may improve prevention and detection of crime in community policing and allow for storage, dissemination, and replication of security information. Proper use of ICTs deployed for prevention and detection of crime may improve police investigations. Citizens' wide use of ICTs in formal and non-formal ways may help reduce corruption.

The current study focused on factors affecting deployment of ICTs for the prevention and detection of crime in community policing. Based on findings, police officers need to come

up with more civic education on need for citizens to adopt to use of ICT in community policing activities, and government to come with subsidy policy on security related ICT gadgets to reach grassroots.

## Abbreviations

CFGD	Citizens Focus Group Discussion
BFGD	Business Focus Group Discussion
CPFGD	Community Focus Group Discussion
PFGD	Police Focus Group Discussion
MRA	Malawi Revenue Authority
NSO	National Statistics Office

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## Conflicts of Interest

The authors declare no conflicts of interest.

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