

Use of ICT in the Detection and Prevention of Crime in Kenya

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Abstract

Information Communication Technology (ICT) is a generic name used to describe a range of technologies for gathering, storing, retrieving, processing, analysing, and transmitting information and its use is immense in the field of law both in the enforcement of the laws and the prosecution of the offenders. The study adopted a survey design, since this method allows determination of sample characteristics for a large group in a very short time. Surveys are also effective in determining the attitudes, opinions and perceptions of persons of interest to a study. The design was chosen because of its appropriateness in educational research findings that yield accurate information. Surveys are also effective in determining the attitudes, opinions and perceptions of persons of interest to a study. This study employed mixed methods research design that used both qualitative and quantitative approaches in a single study to gather or analyze data. The study was conducted in Eldoret town in Uasin Gishu County. The study employed simple random, stratified and proportionate probability sampling techniques. A sample of 40 respondents from police officers, court officials, bank employees and civilians were purposely selected for the study from Eldoret town. Using simple random sampling the police officers, court officials, bank employees and civilians were stratified into stratas and the total study respondents were 40. The questionnaires was administered to police officers, court officials, bank employees and civilians and whereas interview schedule was administered to magistrates and police in charge. Data collected was processed, coded and analyzed to facilitate answering the research questions. This was done using descriptive statistics. The findings recommended that re training of law enforcers would help provide important strategies towards ICT in prevention and detection crime in Kenya. The study would be significant both to scholars and policy-makers in the government, among other agents, as it raises issues on the need to improve and further introduce ICT tools in prevention and detention the law enforcement agencies in Kenya.

Keywords: Information Communication Technology (ICT), Crime Prevention, Crime Detection

INTRODUCTION

According to Quarshie (2014), the scale of crime represents a considerable challenge to law enforcement agencies in Africa. With so much of our everyday communication and commercial activity now taking place via the Internet, the threat from crime is increasing, targeting citizens, businesses and governments at a rapidly growing rate in Africa. Criminals in Africa have gone high tech in their activities. They use the ICT to break into peoples bank accounts, withdraw money from peoples account and track movement of people and rob them. The study revealed the police in developed countries have developed ICT methods of crime detection and combat. Legislation has also been updated to allow the police to gather evidence on criminal activity carried out via the internet but Africa is yet to take advantage of ICT in fighting crime. ICT tools such as CCTV technology, tracking technology, social media and mobile phone are efficient in fighting crime. These are now everyday technology. According to Sethi (2013), Information Communication Technology (ICT) is a generic name used to describe a range of technologies for gathering, storing, retrieving, processing, analysing, and transmitting information, its use is immense in the field of law both in the enforcement of the laws and the prosecution of the offenders, use of this ICT tools by the police for the enforcement of it can have and greatly enhance service delivery to the public, as the police motto provides *utumishi kwa wote* or service to all.

ICT AND CRIME DETECTION

Information is the key word in crime detection and this information must be accurate and easily available. ICT has a huge role to play in this. For Africa to succeed in the fight against crime it needs a comprehensive adoption of ICT. The proliferation of Information and Communication Technology (ICT) in Sub-Saharan Africa has brought with it tremendous positive changes in socio-economic growth and development within the region. Paradoxically, ICT has also evolved to become a sophisticated tool in the hand of criminal for perpetrating different forms of cyber-crime. Unintended issues such as e-mail scam, identity theft, child pornography, organized crime and solicitation for prostitution are some of the vices that have become recurring indices on the internet (Longe, Ngwa; Wada & Mbarika, 2009). "Of the foremost duties enjoined upon the State, the foremost duty is to maintain public law and order and preserve the rule of law. It is one of the most important pillars of good governance as the collapse of public order and the rule of law can erode the faith of the citizens in their

government and erode its legitimacy. ICTs can play a pivotal role in transforming the police force from being an oppressive agency of the government to an agency which first and foremost exists to protect lives and the liberty of the common citizens” (ICTD Project Newsletter, 2007). But with the Recent transformations of digital technology have altered traditional behaviors in society – specifically how we retrieve information and communicate with others. Youth behavior, in particular, has changed significantly (Lenhart, Purcell, et al., 2010; Madden, 2010), this technological advancement has led to creation of not only a range of new crime problems, but also facilitated prevention, detection, investigation, prosecution and punishment of crime (Smith, 2007).

According Hendricks (2013), Information technology has provided authoritarian states with capacity to monitor contain and discipline their subjects but information technology and the human rights associated with it have also done much to undermine their hold. These technologies need to be used heavily so as to enable detection of crimes prior to its commission leading to its prevention. This will maximise security. The use of ICT has been witnessed and has been established in everyday life across the world ,To this extent, it is strongly believed that with the kind of success which ICT has recorded in all spheres of life there is no doubt that it will be of tremendous assistance in solving the intractable problem of insecurity in Kenya. Some of the earliest form of ICT technology was used by the military and security industry in 1940 this was during the cold war for policing and national security include; the Internet, DNA analysis techniques, biometric identification technologies, CCTV and mobile phone cameras, listening devices, networked databases and neural networks for data analysis, voice recognition systems and others(smith, 2007). This leads to the development of a surveillance society, according to (report on surveillance society, 2006) it states that a surveillance society is a society which is organised and structured using surveillance based techniques, this has not been a recent case, it was observed when Jeremy Bentham designed the ‘Panopticon’ of which Bentham stated it as "A building circular... The prisoners in their cells, occupying the circumference—the officers in the centre. By blinds and other contrivances, the Inspectors concealed... from the observation of the prisoners: hence the sentiment of a sort of omnipresence the whole circuit reviewable with little, or... without any, change of place. One station in the inspection part affording the most perfect view of every cell."(Bentham, 1848). Fundamental scientific research enables the development of new technologies for crime prevention. Increased involvement of the science and technology community in crime reduction strategy is, therefore, desirable. Crime detection, prevention, reduction and control have remained burning issues because crime poses great threat to the society, especially as criminals adopt increasingly sophisticated technologies for crimes commission (Clarke, 2004). As evident in Kenya according to (Kriel, 2010) the future will be an increase in crime, particularly in the areas of violent crimes, especially with the use of firearms; gang crimes, especially by international syndicates and fraud and corruption. This may give rise to the need for a strategic by the state for the creation of a safer community and environment for its people through the use of ICT that is science and technology. With regards to (Onyenekenwa, 2010) the use of science and technology in crime prevention and detection can be linked to two prominent schools of thought: the social constructionists and the technological determinists; social constructionists believe that it is the social groups that define and give meaning to technological artifacts while technological determinists have the view that, once launched, technology assumes a life of its own as an autonomous agent of change, driving history,(Eneh, 2008a).

A study done by (Interpol, cybercrime 2012) it was found out that with the global nature of the Internet has allowed criminals to commit almost any illegal activity anywhere in the world, making it essential for all countries to adapt their domestic offline controls to cover crimes carried out in cyberspace. The use of the Internet by terrorists, particularly for recruitment and the incitement of radicalization, poses a serious threat to national and international security, (Quarshie, 2014) Africa (including Kenya) is now seeing an emerging trend with traditional organized crime syndicates and criminally minded technology professionals working together and pooling their resources and expertise, taking crime to a high tech level.

VIDEO AND CCTV

According to Chika (2014), Video and CCTV camera are an essential component and tool in ICT usage to combat and prevent crime. The system have falling into disuse because the system was originally designed to fail, not properly monitored and fraught with corrupt practices in the award and execution of the contract. Most African countries have experimented this method of crime detection but with little success. The criminals are developing high tech methods of committing crime, Kenya is yet to full take advantage of this everyday technology such as CCTV technology, tracking technology, social media and mobile phone, the solution is a coordinated approach in using ICT to fight crime (Quarshie, 2014).Before we state the use of ICT tools in the prevention and detection of crime, we must thus define what is crime? It can be defined as a wrong which affects the security or wellbeing of the public generally so that the public has an interest in its suppression: criminality is an ethical wrong that amount to a conducts which is hostile to the general moral sense of the people and community. (Sauders, 1988), two main crime prevention theories focus on understanding crime causation by examining relationships: victimization and social control (Lewis & Salem, 1981). The victimization theory

purports to the understanding of crime as an event that occurs between the environment, the offender and the potential victim, this theory is used to crime as events that occur between a potential victim, offender, and the environment. The victimization perspective has been used to develop prevention techniques that minimize opportunity for victimization by considering potential victims and offenders as actors who play a role in the environment (Lewis, 2011), the social control on the other hand does not focus on the crime as an event but rather seeks to takes the role of understanding the social relationships that potential offenders have that may encourage or discourage committing crime, it seeks to suggests that social interactions. Influence criminal acts through informal enforcement of social norms (Hirschi, 1969). These crime prevention theory predicts crime by measuring attitudes such as collective efficacy, but does not explicitly acknowledge the role that technology plays in shaping victim and offender behavior. Video and CCTV (close circuit television) this is an essential tool in ICT for crime detection and prevention, It is estimated that there are five million CCTV cameras in use today, and this number is likely to rise in the future (Gill, 2006), its aim as a surveillance technology is to prevent crime by increasing the perceived risks of potential offenders in engaging in criminal acts (Clarke, 1997), the technology is used to monitor roads, businesses, bus stops, railway stops, parks and even private residence.

THE USE OF ICT AND THE BILL OF RIGHTS

In 2010, the country adopted a new constitution, which provides an expansive bill of rights, including, among others, privacy rights. However, the country still lacks dedicated privacy legislation following the state's repeated failure to adopt the Data Protection Bill 2013¹, the chapter four of the constitution provides for the bill of rights, article 31 provides that Every person has the right to privacy, which includes the right not to have their person, home or property searched; their possessions seized; information relating to their family or private affairs unnecessarily required or revealed; or the privacy of their communications infringed.

In the digital era, communications technologies also have enhanced the capacity of Governments, enterprises and individuals to conduct surveillance, interception and data collection. As noted by the Special Rapporteur on the right to freedom of expression and opinion, technological advancements mean that the State's effectiveness in conducting surveillance is no longer limited by scale or duration. Declining costs of technology and data storage have eradicated financial or practical disincentives to conducting surveillance. The State now has a greater capability to conduct simultaneous, invasive, targeted and broad-scale surveillance than ever before²

In his book, 1984, we were warned by George Orwell to watch out for "Big Brother." Today, we are cautioned to look out for "little brother"³ and "little sister."⁴ It is no longer simply intrusion by the government of which we should be wary; it is intrusion by various commercial entities looking to profit from the use of private information as well.

In Kenya, specific data privacy provisions in relation to the information and communication sectors, including e-commerce, are contained in the Kenya Information and Communication Act (the Act) as read with the Kenya Information and Communication (Consumer Protection) Regulations (the Regulations). In addition, the Kenyan Constitution (the Constitution) broadly provides for privacy as a fundamental right. There is in general No protection of privacy at common law

STATEMENT OF THE PROBLEM

The 21st century crimes requires efforts to tackle the challenge through improvements in locking and alarm systems, to new devices for location, identification, and surveillance, improved advance forensic science labs meant to restrict individuals who pose a risk to themselves or others, the crime control tasks confronting both the community and our police services will be made easier. However Information communication technology (ICT) tools can assist in curbing crime nonetheless there are some challenges to the establishment or improvement of these technologies in Kenya. Kenya being a developing country some of this systems are unavailable difficulties of maintenance by the police, corporatizes and the citizens in general, while some have not been fully established so as to have full utilization of the tools for crime prevention and detection, this is evident in the Eldoret town, The cost of some of the tools are high and thus having the set up across the country would be a challenge, the lack of knowledge among the (some) judicial officers security officers and the police. This Trends and issues of this paper sought to establish the use of ICT in detecting and preventing crime in Eldoret town.

METHODS

A mixed methods research design is a procedure for collecting, analyzing, and "mixing" both quantitative and

¹ http://www.cickenya.org/index.php/component/k2/item/download/299_b3de9506b20338b03674eacd497a6f3a

² A/HRC/23/40, para. 33

³ Id. at 51-52

⁴ JEFFREY ROTHFEDER, PRIVACY FOR SALE22 (1992)

qualitative research and methods in a single study to understand a research problem (Creswell, 2012). Mixed methods is an approach to inquiry in which the researcher links, in some way (e.g. merges, integrates, connects), both quantitative and qualitative data to provide a unified understanding of a research problem (Creswell & Plano, 2007). This study employed mixed methods research design that used both qualitative and quantitative approaches in a single study to gather or analyze data (Cameroon 2009). The design was chosen because of its appropriateness in educational research findings that yield accurate information. Descriptive survey design was adopted for the study, it encompasses both quantitative and qualitative methods to collect data and analysis. The main instruments were questionnaire and interview schedule which was used to collect primary data for both qualitative and quantitative data for the study. This was mainly because it the best method available to the social scientist interested in collecting original data for describing the population. The data collection involved gathering both numerical information as well as text so that the database represents both quantitative and qualitative information (Creswell 2003). Secondary data was collected mainly by a selective review of previous relevant literature and government policy on gender from developed and developing countries. Data was analyzed by use of descriptive statistics. This included the use of frequency counts, percentages and tables in making deductions and generalizations about the whole population using sample data in order to answer the research questions. Responses from open-ended questions were recorded word for word and analyzed. Qualitative analysis involved organizing and transcribing the data, categorizing and reporting it in emerging themes.

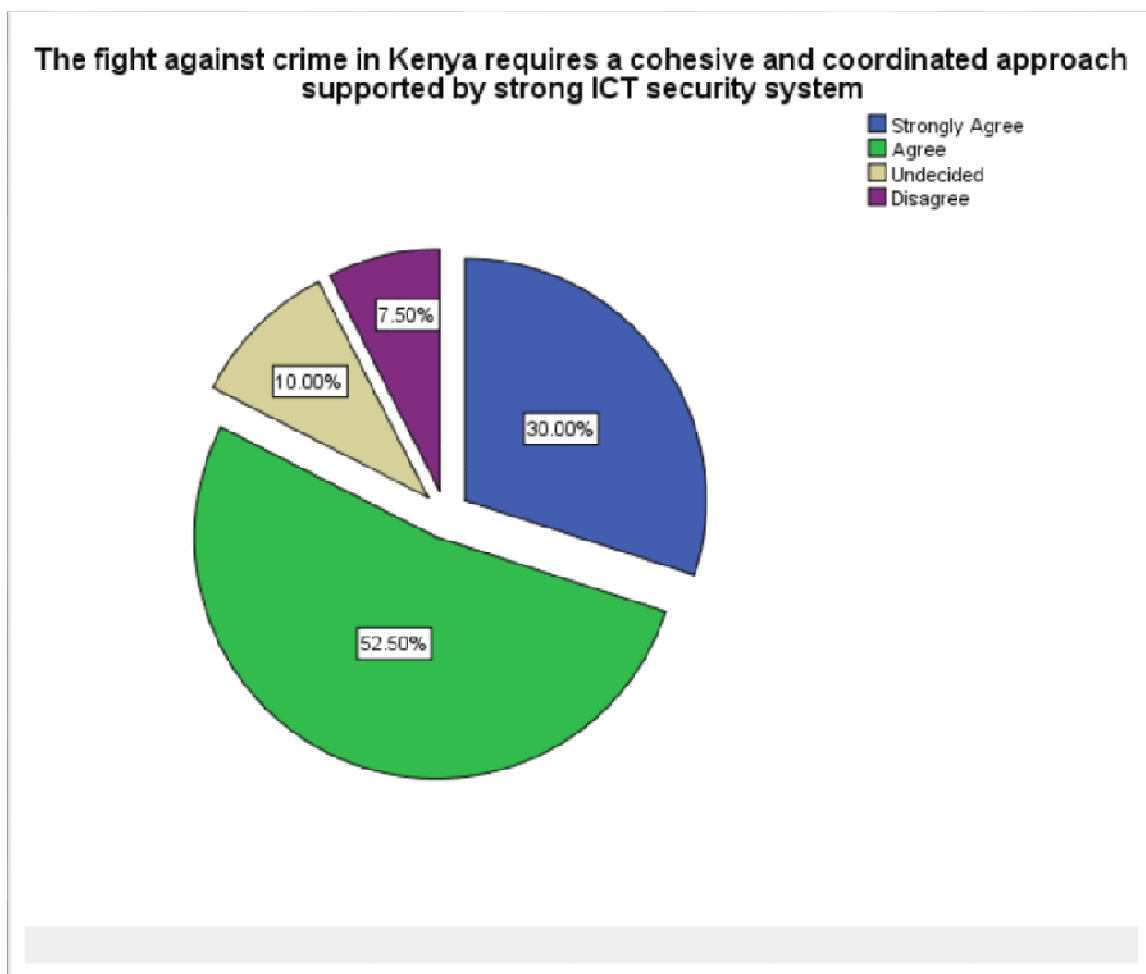
PROCEDURES

According to McMillan & Schumacher (1993) questionnaire encompass a variety of instruments in which subjects respond to written questions to obtain reaction, belief and attitude. It is relatively economical, has standardized questions, can ensure anonymity and can be written for specific purpose. A self-administered questionnaire was distributed to a total of 80 teachers in primary schools randomly selected in Eldoret Municipality and all responded to the distributed questionnaire. Interviews was administered to head teachers. For this study, all the teachers who were selected for the study were expected to provide relevant information on the study. The respondents were assured of confidentiality in their responses.

RESULTS AND DISCUSSION

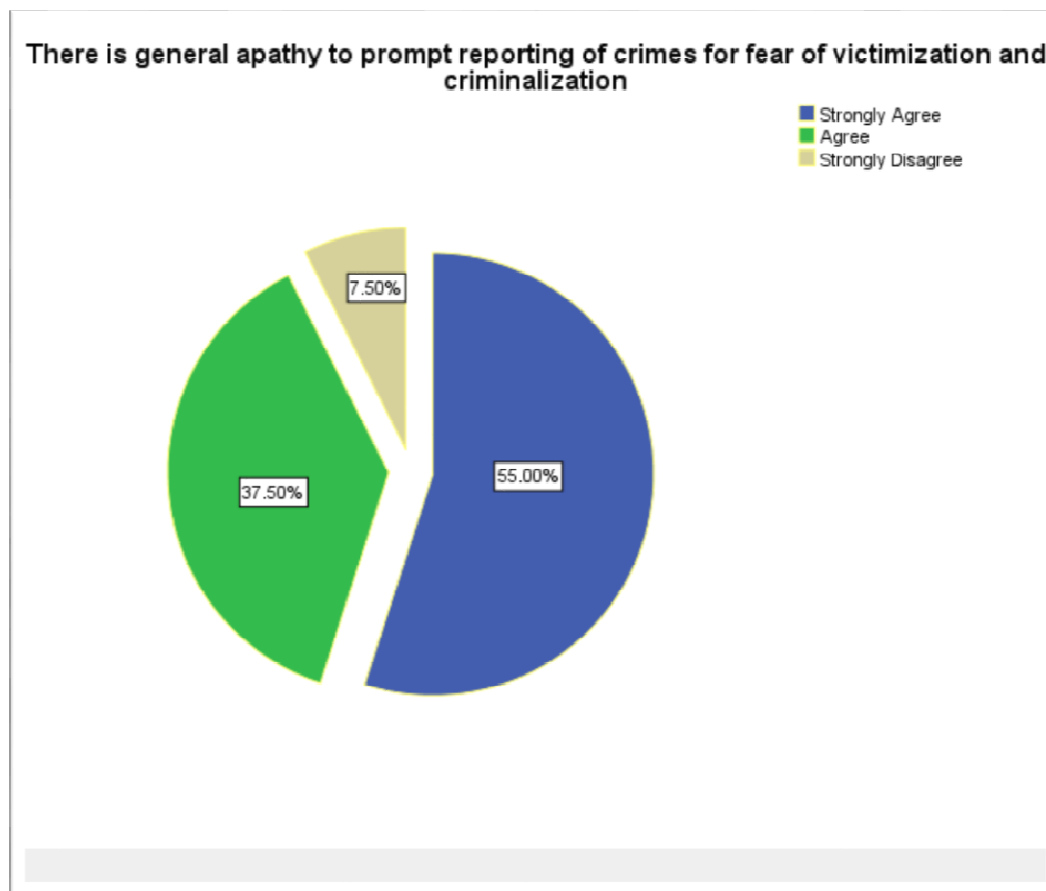
1. ICT AND CRIME

The respondents were asked to indicate whether the fight against crime in Kenya requires a cohesive and coordinated approach supported by strong ICT security system and it revealed that 52.2% agreed while 30% strongly agreed with the statement.



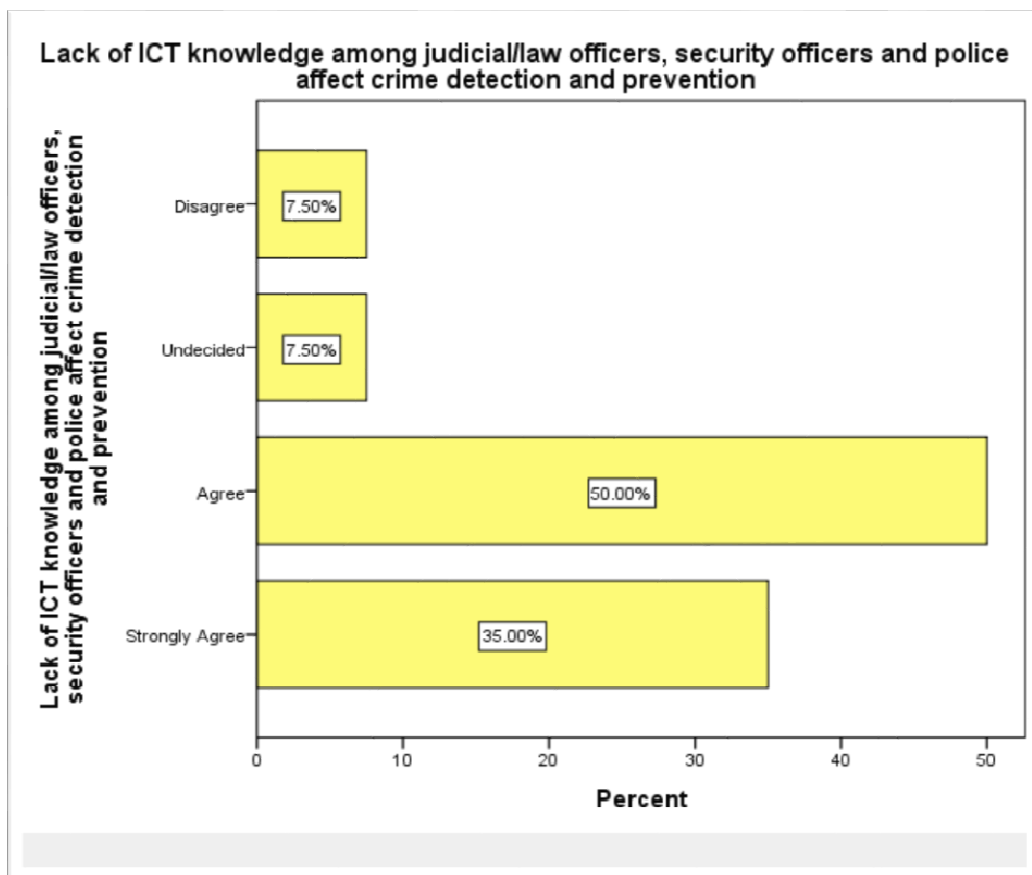
2. REPORTING OF CRIMES

The respondents were asked to indicate whether There is general apathy to prompt reporting of crimes for fear of victimization and criminalization and it revealed that 52.2% agreed while 30% strongly agreed with the statement.



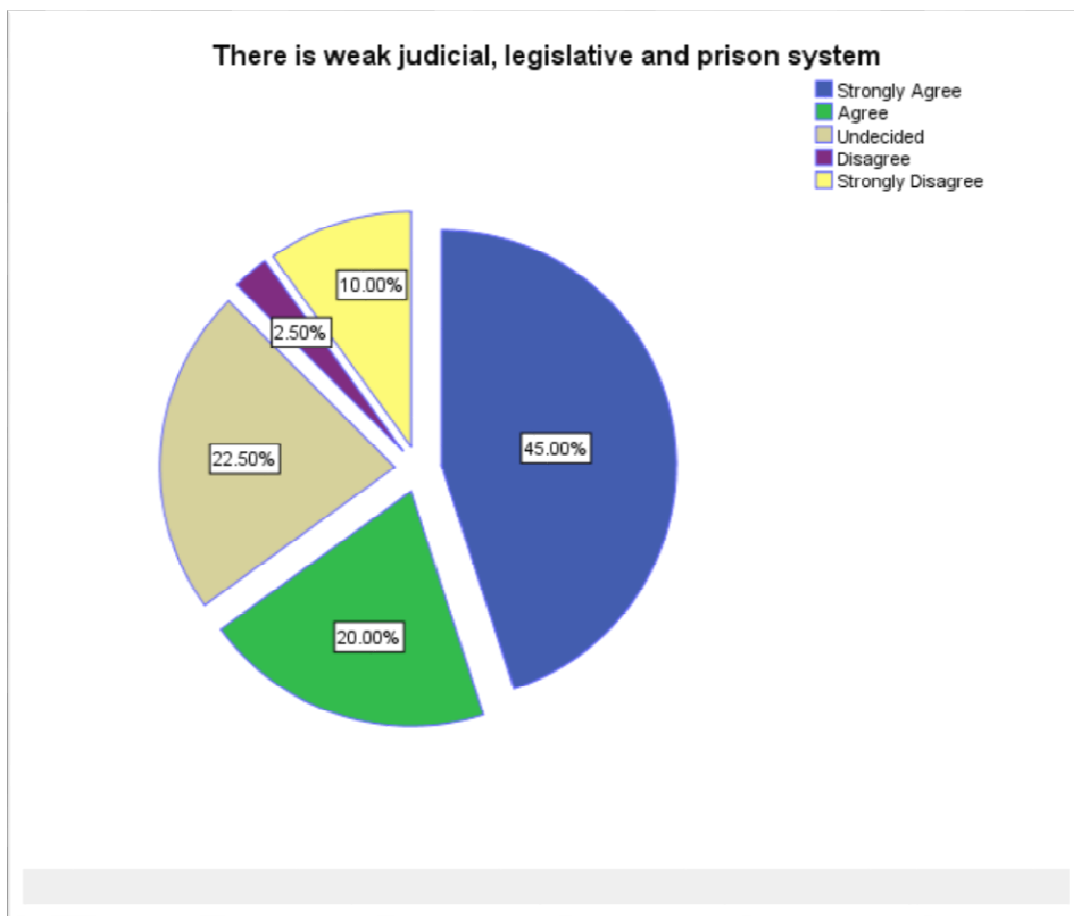
3. LACK OF ICT KNOWLEDGE

The respondents were asked to indicate whether Lack of ICT knowledge among judicial/law officers, security officers and police affect crime detection and prevention and it revealed that 52.2% agreed while 30% strongly agreed with the statement. This is supported by Quarshie(2014) that, the fight against crime in Africa requires a cohesive and coordinated approach supported by strong ICT security system. In addition the security agencies require support in the form of strong legal framework, strong base of cyber security experts with expertise in system administration, network administration, penetration testing, security audit, forensic investigation, information security and software development to deal with the future challenges of both conventional and cybercrime. Today the battle against crime continues, and law enforcement agents have more tools at their disposal than ever before. African countries need to acquire and use them to fight. To meet the demands of investigation as well as prosecution, the research recommends the use of these every technology (CCTV technology, tracking technology, social media and mobile phone) which are not tools expensive to purchase, install and operate.



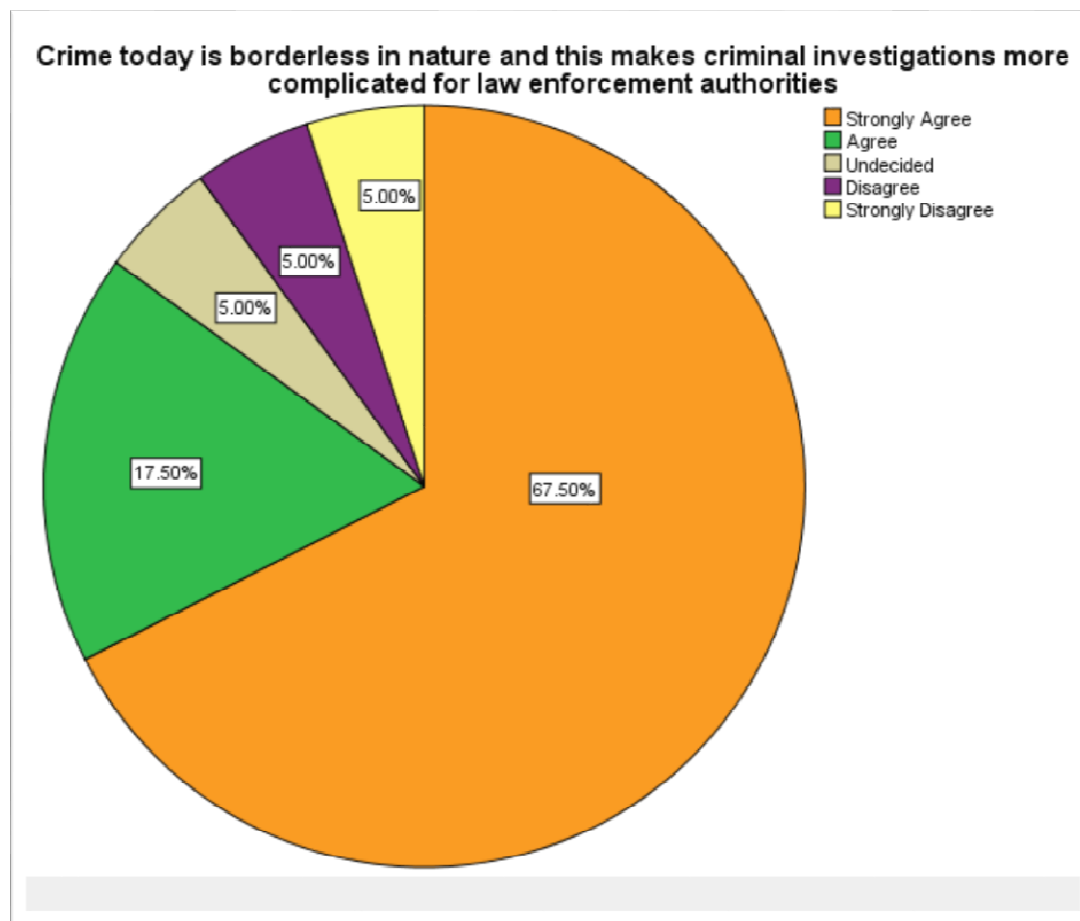
4. WEAK JUDICIAL, LEGISLATIVE AND PRISON SYSTEM

The respondents were asked to indicate whether there is weak judicial, legislative and prison system and it revealed that 52.2% agreed while 30% strongly agreed with the statement



5. CRIME IS BORDERLESS IN NATURE

The respondents were asked to indicate whether crime today is borderless in nature and this makes criminal investigations more complicated for law enforcement authorities and it revealed that 67.5% strongly agreed with the statement.



CONCLUSION AND RECOMMENDATIONS

The proliferation of modern and complex information communication technology (ICT) including the borderless connectivity of the World Wide Web (www) have significantly altered the way nation states deals with their security, political, economic and social issues. While the western and developed countries have taken advantage of developments in the ICT to improve on their legal and institutional arrangements in crime detection and prevention, Africa have grossly lagged behind and have not leveraged on these 21st century tool in addressing its myriad of security and other challenges. However the study recommended that re training of law enforcers would help prevent and detect crime in Kenya.

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