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Security Threats in Nigeria; Digital Image Processing As a Panacea
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Abstract

This paper emphasises the significance of digital image processing as a solution to various security threats in Nigeria. In recent times, the rate of crime in Nigeria is continuously on the upsurge, ranging from theft to robbery to kidnapping and recently to the feared insurgent group from the north known as the boko haram. These crimes amongst others present an impediment to the growth, development and existence of the country as it continuously threatens the unity of the nation. In the light of this, the government has come up with the introduction of computer-based closed circuit television (CCTV) cameras which is a form of digital image processing system in public places to monitor and record images of what is taking place in specific locations. This paper explores the various forms of security threats, the importance and significance of Digital image processing system as a panacea to those threats.

Keywords: Digital image processing, crime, 'boko haram', CCTV, security threats

Introduction

If ever one has found itself in an insecurity situation, one will agree that no amount of resources spent on security is too huge. Nigeria as a nation has not only continued to spend its resources on security but also ensure that policies are in place in order to tackle her ever increasing and intensifying security threats.

The former National Security Adviser to the President Goodluck Jonathan, Gen. Azazi Andrew in 2011 rightly highlighted in his presentation at the *5th Policing Executive Forum Conference Proceedings* "This has made national security threat to be a major issue for the government and has prompted huge allocation of the national budget to security [1]. In order to ameliorate the incidence of crime, the federal government has embarked on criminalization of terrorism by passing the Anti-Terrorism Act in 2011, installation of Computer-based Closed Circuit Television cameras (CCTV) in some parts of the country, enhancement of surveillance as well as investigation of criminal related offences, heightening of physical security measures around the country aimed at deterring or disrupting potential attacks, strengthening of security agencies through the provision of security facilities and the

development and broadcast of security tips in mass media"

With this in mind, one can actually say that the government is in the right direction in tackling insecurity. But with the persistent security challenges and the inability of the security apparatus of the government to guarantee safety and security in the country, the question of insecurity in the country still lingers in the lips of its citizens.

In this paper, we looked at the digital image processing, the concept of security, security threats and how digital image processing system like the closed circuit television (CCTV) helps in crime reduction and prevention.

Definition of Terms

Image

An image is a collection of various coordinate points that make an object. That coordinate point when brought together is the image of that object.

An image is a two-dimensional function $f(x,y)$, where x and y are the spatial (plane) coordinates, and the amplitude of (f) at any pair of coordinates (x,y) [2].

Digital Image

If x, y and the amplitude values of f are finite and discrete quantities, we call the image a digital image. A digital image is composed of a finite number of elements called pixels, each of which has a particular location and value.

Digital Image Processing

Simply put, Digital image processing refers to processing of digital images by using digital computers.

Digital Image Processing System

An Image processing system consists of a light source to illuminate the scene, a sensor system (CCD- Camera) and an interface between the sensor system and the computer. Among other things, the interface converts analog information into digital data which the computer can understand. This takes place in a special piece of hardware called the frame grabber, which also stores the image. The results of an image processing run will be transferred to the outside world by one or more input/output devices like printer, disks etc

Applications of Digital Image Processing

Some of the applications of digital image processing as identified include;

- **Remote Sensing:** satellite of aircraft images for earth resource, weather, sea surface, etc.
- **Inspection and Automation:** robotic control, manufacture control, quality inspection, safety monitoring.
- **Medical Imaging:** X-ray, Computer tomography, MRI, PET, g-camera, thermal-IR, sample inspection.
- **Astronomical Applications:** main observation tool, photon camera, radio image formation, aperture synthesis, radio interferometry.
- **Scientific:** microscope sample analysis, confocal imaging, x-ray analysis, surface inspection, etc.
- **Data Compression:** document storage, data reduction, JPEG/MPEG, digital image transmission.
- **Communications:** video telephone, multi-media computer links, document transmission, secure data links.
- **Military Applications:** target tracking, surveillance, smart weapons, automated guidance, secure data links.[3]

The Concept of Security

Security can be viewed broadly, as it connotes diverse meanings depending on the perspective of one's view. But for the purpose of this write-up, we adopted [4] view of security which

states that *"the situation that exists as a result of the establishment of measures for the protection of persons, information and property against hostile persons, influences and actions"*. It is the existence of conditions within which people in a society can go about their normal daily activities without any threats to their lives or properties. It embraces all measures designed to protect and safeguard the citizenry and the resources of individuals, groups, businesses and the nation against sabotage or violent occurrence [5].

It is generally argued however that security is not the absence of threats or security issues, but the ability to rise to the challenges posed by these threats with expediency and expertise.

Security Threats in Nigeria

Security threats in Nigeria, ranges from theft to organized armed robbery, kidnapping and demand for ransom, assassination, repeated invasion and blockading of business installations, social injustice, unemployment, lack of access to livelihood resources, rising cost of living, and bombing. All these variables of crimes and social problems have made the Nigerian security environment to be complex [5].

The threats to Nigeria security according to [6], is epitomized by the virtually unstoppable rural urban drift (in spite of the deteriorating conditions in urban centres of the country) the fierce competition for the control of State power (especially at the federal level), the manipulation of ethnic and religious identities and sensibilities, the clamour for resources control and convocation of a sovereign National Conference (SNC) could be seen as indicators of the failure of the State to generate inclusive growth and development. The list of criminal acts is endless: assassinations, kidnapping, arson, organized armed robbery, vandalization, ritual acts, financial crimes, fraudulent acts, impersonation, economic sabotage, prostitution and women trafficking, drug abuse, cultism, examination malpractices, bullying, raping and assault amongst youths and students.

The rate of theft, armed robbery and kidnapping were on the rise and [7] noted that the rate of theft, armed robbery especially in the banks, kidnapping and assassination has continued to rise especially in the southern part of the country. Also, [8] in a survey of crime rate in Nigeria found that robbery rate has increased significantly in the past one year. Also the vandalization of business installations in particular, those of GSM operator has been on the increase. Research has indicated that these vices are not equally distributed in the country [8]. For instance, the South East states of the country have the highest incidence of kidnapping, armed

robbery and fraud while the northern states are characterized by bombing by the Islamic Sect, Boko Haram. With the incessant Boko Haram bombing of the northern part of the country, Nigeria indeed joined those isolated countries that carry that revolting tag of being referred to as terrorist states.

Insecurity situation in Nigeria from 2009 is unprecedented. In addition to the usual crimes, the coordinated attacks from the Boko Haram sect in the northern part of the country, besides making life

miserable for Nigerians, has affected so many businesses operating in that region.

The bomb explosions initiated by this group have been on the increase leading to enormous loss of life and property and a general atmosphere of fear and social tension in the country. Statistics have also indicated that in the last one year, there is a significant decline in peace as Nigeria dropped four places to 146th out of 158 countries in the 2012 Global Peace Ranking as shown in the table below.

Table1: Nigeria and other West African Countries on the Global Peace Index Ranking

S/N	Country	GPI Score 2009	GPI Rank 2009	GPI Score 2010	GPI Rank 2010	GPI Score 2011	GPI Rank 2011	GPI Score 2012	GPI Rank 2012
1	Ghana	1.76	52	1.78	48	1.75	42	1.81	50
2	Sierra Leone	-	-	1.82	53	1.90	61	1.86	52
3	Burkina Faso	1.91	71	1.85	57	1.83	51	1.88	56
4	Gambia	-	-	-	-	1.91	62	1.96	74
5	Senegal	1.98	80	2.03	79	2.05	77	1.99	78
6	Guinea	-	-	-	-	2.13	92	2.07	92
7	Guinea Bissau	-	-	-	-	-	-	2.11	95
8	Liberia	-	-	2.15	99	2.16	97	2.13	101
9	Mali	2.09	96	2.24	109	2.19	100	2.13	102
10	Benin	-	-	-	-	-	-	2.23	114
11	Niger	-	-	-	-	2.36	119	2.24	116
12	Mauritania	2.48	124	2.39	123	2.43	130	2.30	125
13	Cot d'Ivoire	2.34	117	2.30	118	2.42	128	2.42	134
14	NIGERIA	2.60	129	2.76	137	2.74	142	2.80	146

Source: Compiled from Global Peace Index (2009-2012)[9]

In fact, Nigeria has been identified as the least peaceful country in West Africa [9]. According to [10] West Africa is among the most unsecured region in the world and Nigeria is the most unsecured country in the region as it has consistently ranked high among the countries in West Africa. On the contrary, Ghana a neighbouring country to Nigeria has consistently ranked low and is taken as the most peaceful country in the region.

Sources of Insecurity in Nigeria

To tackle insecurity, a key starting point should be to understand the causes of insecurity as well as to investigate their sources of social disorder and instability. As [11] pointed out, it is necessary to distinguish between different causes as each may require different remedy. Besides, it is to provide a holistic view to the suggestion or recommendations of solutions. More often, however, policy makers are

disinclined to isolate and clarify particular causes. They prefer blanket references, with the consideration that the causes of insecurity are interwoven and contributory to one another. Like in many other societies, the sources of insecurity in Nigeria have been traced to a number of factors and explained by different people. These factors have been classified or grouped into external and internal factors. Beyond the external-internal dichotomy, sources of insecurity have also been classified as either remote or proximate and immediate sources/causal factors.

Remote Factors

Lack of Institutional Capacity Resulting in Government Failure

This result from what [12] described as the corrosion or breakdown of institutional infrastructures. The foundations of institutional framework in Nigeria are very shaky and have provoked a deterioration of state governance and democratic accountability, thus, paralyzing the

existing set of constraints including the formal and legitimate rules nested in the hierarchy of social order. Evidently, as [10] observed, the state of insecurity in Nigeria is greatly a function of government failure, or can be linked to government failure. This is manifested by the incapacity of government to deliver public services and to provide for basic needs of the masses. The lack of basic necessities by the people in Nigeria has created a pool of frustrated people who are ignited easily by any event to be violent. The argument here, is that, Nigeria has the resources to provide for the needs of its people, but corruption in public offices at all levels has made it impossible for office holders to focus on the provision of basic needs for the people. [13] described the Nigerian situation as a 'Paradox of Plenty'. A situation where the country earns a great deal of revenue through oil sales, but fails to use these earnings to meet the needs of its people and to develop infrastructure as well as the economy. When these situations exist, crime rate is bound to rise and the security of lives and properties cannot be guaranteed.

Pervasive material inequalities and unfairness

Greater awareness of disparities in life chances is a major root cause of insecurity in Nigeria. This is a rooted general perception of inequality and unfairness which has resulted in grievance by a large number of people. This perception stems from the perception of marginalization by a section of the people, government development policies and political offices and this has become a primary source of disaffection and resentment. As noted by [14] a large number of the Nigeria population is frustrated and have lost hope, especially the youths, and have now emerged to express their disillusion about the pervasive state of inequality.

Ethno-religious conflicts

These have arisen from distrust among various ethnic groups and among the major religions in the country. [15], [13], [16] and [10] identified ethno-religious conflict as a major source of insecurity in Nigeria. Ethno-religious conflict was defined as a situation in which the relationship between members of one ethnic or religious group and another of such group in a multi-ethnic and multi-religious society is characterized by lack of cordiality, mutual suspicion and fear, and a tendency towards violent confrontation. Frequent and persistent ethnic conflicts and religious clashes between the two dominant religions (Islam and Christianity), present the country with a major security challenge. In all parts of Nigeria, there exist ethno-religious conflicts and these according to Ibrahim and Igbuzor (2002) as cited by [15] have

emerged as a result of new and particularistic forms of political consciousness and identity often structured around ethno-religious identities. The claim over scarce resources, power, land, chieftaincy, local government, councils, control of markets and sharia among other trivial issues have resulted in large scale killings and violence amongst groups in Nigeria [17].

Conflict Of Perceptions Between The Public and Government

Over the years, there has been a standing mismatch between public and government perceptions. A situation which often result in the reactions of the public to the excesses of the military regimes which governed Nigeria and has continued after the end of military regimes and created a sensitivity by those in government at public intrusion in matters of state. Frequently, on any given incident, public and government reactions diverge. In such situations, the media has never helped matters. Media practices have always focused on the dramatic and the spectacular view of the given situations. Such reports have always been capitalized on in sophisticated ways by various groups, some of which are violent to incite public clamour for a change and immediate reaction through strategically provocative violence. The point here is that the approach of media report over the years has contributed to exacerbate insecurity or perception of insecurity in Nigeria. President Jonathan alluded to this situation when he made reference to the popular axiom that the pen is mightier than the sword. In his statement, "the sword is used to kill and destroy but what we use the pen to do is also very critical. When you have a society with these unending political conflicts, it is there on the media whether print, electronic or social media and this brings a lot of insecurity to the system" [18].

Weak Security System

This results from inadequate equipment for the security arm of government, both in weaponry and training. This is in addition to poor attitudinal and behavioural disposition of security personnel. In many cases, security personnel assigned to deal with given security situations lack the expertise and equipment to handle the situations in a way to prevent them from occurring. And even when these exist, some personnel get influenced by ethnic, religious or communal sentiment and are easily swallowed by their personal interest to serve their people, rather than the nation. Thus, instead of being national watch dogs and defending national interest and values, and protecting people from harm by criminals, they soon become saboteurs of government effort, by supporting and fuelling insecurity through either leaking vital security information or aiding and

abetting criminals to acquire weapons or to escape the long arm of the law.

Loss Of Socio-Cultural And Communal Value System

The traditional value system of the Nigerian society like most African societies is characterized by such endearing features as collectivism, loyalty to authority and community, truthfulness, honesty, hard work, tolerance, love for others, Mutual harmony and coexistence, and identification of individual with one another [19]. Other distinctive features of Nigerian traditional society are abhorrence for theft and high value for life. Stealing was considered extremely disgraceful and lives were also highly valued. All of these values which made society secured and safe have all gradually been thrown away and lost. New values have taken over their place over the years, with the so called 'modernity and civilization'. All our endearing values and morals have been traded off for western values.

The importance of a people's value system to their survival was espoused by Obama, when he challenged all societies to go back to their traditional values. In his words, cited by [19],

"Our challenges may be new. The instrument with which we meet them may be new. But those values upon which our success depends are hard work and honesty, courage and fair play, tolerance and curiosity, loyalty and patriotism, these things are old. These things are true. They have been the quick force of progress throughout our history, what is demanded then is a return to these truths".

Immediate and Proximate Factors

The immediate factors which caused Nigeria insecurity situation are inexhaustible. However, it would do just to mention a few of them in this paper.

Porous Borders

One major immediate factor which has enhanced insecurity in Nigeria is the porous frontiers of the country, where individual movements are largely untracked. The porosity of Nigeria's borders has serious security implications for the country. Given the porous borders as well as the weak and security system, weapons come easily into Nigeria from other countries. Small Arms and Light Weapons proliferation and the availability of these weapons have enabled militant groups and criminal groups to have easy access to arms [13]. Nigeria is estimated to host over 70 percent of about 8 million illegal weapons in West Africa.[20]. Also, the porosity of the Nigerian borders has made it possible for unwarranted influx of migrants from neighbouring

countries such as Republic of Niger, Chad and Republic of Benin [21].

These migrants which are mostly young men are some of the perpetrators of crime in the country.

Rural /Urban Drift

The migration of jobless youths from rural areas to urban centres is also one of the causes of insecurity in Nigeria [22]. Nigeria is one of the countries in the world with very high rural/urban drift. Most urban areas in Nigeria have grown beyond their environmental carrying capacities and existing infrastructure and this has resulted to increased poor quality of the living conditions in urban areas in Nigeria [23].

Out of frustration, these youths are drawn into crime.

Social Irresponsibility of Companies

Corporate social irresponsibility is a set of actions that increases externalized costs and/or promotes distributional conflicts [24]. Companies engage in corporate social responsibility in order to offset corporate social irresponsibility. The rise of terror groups in some parts of the country is directly related to the neglect of social responsibility by companies to the community where they are operating. This was the case of the Niger Delta crisis.

Unemployment/Poverty

As a result of the high level of unemployment and poverty among Nigerians, especially the youths, they are adversely attracted to violent crime [17]. [25] argued that the failure of successive administrations in Nigeria to address challenges of poverty, unemployment and inequitable distribution of wealth among ethnic nationalities is one of the major causes of insecurity in the country.

Terrorism

At the most proximate and least disputable level, terrorism is the most fundamental source of insecurity in Nigeria today, and its primary bases and sources of support have generally been located in religious fanaticism and intolerance particularly in Islam dominated states of Nigeria. Terrorism which is a global phenomenon where no one is safe was defined by Sampson and [22] as "the premeditated use or threat of use of violence by an individual or group to cause fear, destruction or death, especially against unarmed targets, property or infrastructure in a state, intended to compel those in authority to respond to the demands and expectations of the individual or group behind such violent acts". Terrorism in Nigeria is an Islamic insurgency with a political undertone by a faceless group based in the Northern region of the country, which called itself Boko Haram, which takes into account the legitimate political, social and economic grievances of the Northern population. Nigeria has lost up to 1000 lives

in the North since 2009 to the insurgency of this infamous Islamic sect, Boko Haram.

Many theories have explained the terrorism challenge in Nigeria both in terms of personal motives of the terrorists, the underlying causes of terrorism, and the values of the communities that host the terrorism and sustain it. The theories commonly linked terrorism in Nigeria to religious, socio-political, economic and cultural parameters. Impliedly, while terrorism may originate in Islamic fanaticism, it is now driven as much by other factors such as inequalities within the country and lack among Nigerians, in terms of livelihood (economic) resources, education or access to education and good values which in turn threatens the existence of the Nigerian society.

All of the factors above are succinctly summarized in the views expressed by foreign observers about the causes of insecurity in Nigeria. [26] located the sources of insecurity in Nigeria in four factors: Political conflicts; Unbalanced development that involves horizontal inequalities; Religious/ethnic distrust; and Leadership failure. Eunice Reddick as cited by [27] associated the situation with low level of economic development as a result of poor governance and high level corruption. In her words, corruption is "the walls that stand in the way of progress, the red tape that stops an idea from becoming a business, the patronage that distributes wealth based on tribe and sect".

Digital Image Processing as a Solution to Various Forms of Security Threats

Concept of Crime Prevention

Crime prevention is a term describing techniques used for reducing victimization as well as deterring crime and criminals. It is applied specifically to efforts made by governments to reduce crime, enforce the law, and maintain criminal justice. Obviously, crime prevention is including any initiative or policy which reduces or eliminates the aggregate level of victimization or the risk of individual criminal participation. It includes government and community based programmes to reduce the incidents of risk factors correlated with criminal participation, the rate of victimization as well as efforts to reduce perceptions/fear of crime.

CCTV System and Security Concept

As stated earlier, security is "the situation that exists as a result of the establishment of measures for the protection of personnel, information and property against hostile persons, influences and actions [4]. It embraces all measures designed to protect and safeguard the citizenry and the resources of individuals, groups and the nation against international sabotage or external aggression".

Security can also be defined as any measure taken with a view to protecting anything of interest to an individual, organization or government, lives, money and materials are usually the essential things the security staff is required to protect.

Closed Circuit Television (CCTV) is a valuable management and security tool. The installation of a CCTV system as part of a series of security recommendations generally intended to prevent or detect crime. CCTV can be very effective in maintaining security. Video evidence can help with security enquiries or investigations and assist in securing criminal convictions. The visual recording of incidents, for evidential or investigative purposes, has many benefits and with a competitive customer driven market is no longer cost prohibitive.

CCTV systems will vary in size and complexity depending on their purpose and the defined security operational requirements. However, the basic purpose of any system will be to observe a scene and the activities that occur within it. The observation may be:

- I. Covert - the camera is concealed.
- II. Discreet - the presence of the camera will be known to some people, but its appearance will not automatically suggest its purpose.
- III. Overt - the appearance of the camera will be designed to clearly indicate its function and maximize the deterrent effect.

For crime prevention overt CCTV systems are usually more suitable whereas discreet or covert systems are more appropriate for crime detection and prosecution.

CCTV as a mechanism of crime reduction

The mechanisms under which CCTV aims to reduce crime are based upon the following assumptions:

- (i) Deterrence. The potential offender becomes aware of the presence of CCTV, assesses the risks of offending in this location to outweigh the benefits and chooses either not to offend or to offend elsewhere.
- (ii) Efficient Deployment. CCTV cameras allow those monitoring the scene to determine whether police assistance is required. This ensures that police resources are called upon only when necessary.
- (iii) Self Discipline.
 - By Potential Victims. They are reminded of the "risk" of crime, therefore altering their behaviour accordingly.
 - By Potential Offenders. The threat of potential surveillance (whether the cameras are actually being monitored may be irrelevant) acts to produce a self discipline is spied upon. Unverifiable: the inmate must never know whether he is being looked at any

moment, but he must be sure that he may always be so". Similarly, the CCTV camera may produce self-discipline through fear of surveillance, whether real or imagined.

(iv) Presence of a Capable Guardian. The "Routine Activity Theory" by [28] suggests that for a crime to be committed there must be a motivated offender, a suitable target and the absence of a capable guardian. Any act that prevents the convergence of these elements will reduce the likelihood of a crime taking place. CCTV, as a capable guardian, may help to reduce crime.

(v) Detection. CCTV cameras capture images of offences taking place. In some cases this may lead to punishment and the removal of the offenders' ability to offend (either due to incarceration, or increased monitoring and supervision). The latter mechanism is by far the most publicized, with few bank robbery cases, in which images of the offenders on CCTV aided their detection and subsequent arrest.

CCTV as a Mechanism of Crime Prevention

The mechanisms by which CCTV may prevent crime are numerous. These have been articulated by [28], which has been described as follows:

(i) **Caught in the act** – perpetrators will be detected, and possibly removed or deterred.

(ii) **You have been framed** – CCTV deters potential offenders who perceive an elevated risk of apprehension.

(iii) **Nosy parker** – CCTV may lead more people to feel able to frequent the surveilled places. This will increase the extent of natural surveillance by newcomers, which may deter potential offenders.

(iv) **Effective deployment** – CCTV directs security personnel to ambiguous situations, which may head off their translation into crime.

(v) **Publicity** – CCTV could symbolize efforts to take crime seriously, and the perception of those efforts may both energize law-abiding citizens and/or deter crime.

(vi) **Time for crime** – CCTV may be perceived as reducing the time available to commit crime, preventing those crimes that require extended time and effort.

(vii) **Memory jogging** – the presence of CCTV may induce people to take elementary security precautions, such as locking their car, by jogging their memory.

(viii) **Anticipated shaming** – the presence of CCTV may induce people to take elementary security precautions, for fear that they will be shamed by being shown on CCTV.

(ix) **Appeal to the cautious** – cautious people migrate to the areas with CCTV to shop, leave their

cars, and so on. Their caution and security-mindedness reduce the risk.

(x) **Reporting changes** – people report (and/or police record) fewer of the crimes that occur, either because they wish to show the desirable effects of CCTV or out of a belief that "the Council is doing its best" and nothing should be done to discourage it.

How CCTV Aims to Prevent Crime?

A CCTV system is not a physical barrier. It does not limit access to certain areas, make an object harder to steal or a person more difficult to assault and rob. This does not mean it is not an example of situational crime prevention. It is highly situational, and as will be shown, does have some crime prevention capacity in the right situations. Although CCTV has many functions, the primary preventative utility is to trigger a perceptual mechanism in a potential offender. It seeks to change offender perception so the offender believes if he commits a crime, he will be caught. In other words, CCTV aims to increase the perceived risk of capture, a factor which, assuming the offender is behaving in a rational (or limited rational) manner, will de-motivate the potential offender. For this crime prevention process to succeed, two elements must exist:

(i) The offender must be aware of the camera's presence.

(ii) The offender must believe the cameras present enough risk of capture to negate the rewards of the intended crime.

There is a second mechanism whereby CCTV has the potential to reduce crime. The cameras may be able to assist in the detection and arrest of offenders. This crime prevention mechanism requires that police can respond in a timely manner to any significant incidents identified by camera operators, and that the local criminal justice system can pursue the offenders' conviction. This mechanism will work if incarcerated offenders are prevented from committing further crimes within the CCTV area (or other local area). Although there may be some initial crime reduction due to the installation and publicity of a new system, offenders may soon learn what types of incidents elicit a police response and the speed of that response. The availability of local resources is therefore a factor in the success of this mechanism.

The desire to catch an offender in the act is often the rationale behind the placement of hidden cameras. Undoubtedly CCTV evidence is convincing, though CCTV's ability to reduce overall crime levels through detection (rather than prevention) is less convincing and arguably a less effective way of impacting crime. For this mechanism to be effective, the implementer must believe arrests are the best way

to solve a crime problem. There is some evidence that increasing arrests can have a short-term benefit, but the benefit fades in the long term without a more preventative policy.

An important consideration in the effectiveness of a surveillance technology is the type of crime to be tackled, because this impacts the criminals' ability to adapt. Although a CCTV system may reduce the likelihood of burglary at a commercial location within the range of the camera, there is some evidence that drug markets can continue operation in the presence of CCTV by changing their operating practices. For example, at one location some offenders met and discussed business in the cameras' presence, but concluded the transaction at another site. In other CCTV areas, however, drug crime that could not successfully relocate or adapt to the cameras was eradicated.

A third, more general mechanism by which CCTV may reduce crime is through an increase in collective efficacy. [30], argue that if residents see CCTV cameras being installed in their neighbourhood, this will signal to them a degree of investment in an effort to improve their local area. They argue that this might lead to greater civic pride and optimism, and, as a result, lead to an increased level of informal social control among the local people. A counter to this argument is that overt cameras may instead lead to a neighbourhood being labelled as high-crime, accelerating the process of social disorganization.

Other usefulness of CCTV amongst others includes;

Aid to Police Investigations

Regardless of the potential for a CCTV system to have a role in crime prevention, it can still make a contribution in a detection role. There are numerous examples of CCTV tapes aiding in an offender's conviction. Camera footage can also help identify potential witnesses who might not otherwise come forward to police. CCTV camera evidence can be compelling, though issues of image quality are a factor if CCTV images are used for identification purposes. If the cameras record an incident, and police respond rapidly and make an arrest within view of the camera (and the offender does not leave the sight of the camera), the recording of the incident can help investigators gain a conviction, usually through a guilty plea. The potential to assist in police investigations may also drive offenders away from committing offences that take time, as they run a greater risk of capture.

Provision of medical assistance

As a community safety feature, CCTV camera operators can contact medical services if they see people in the street suffering from illness or

injury as a result of criminal activity (such as robberies and assaults) or non-crime medical emergencies. The ability to summon assistance is a public safety benefit of CCTV.

Information gathering

Cameras can also be used to gather intelligence and to monitor the behaviour of known offenders in public places (such as shoplifters in public retail areas). Camera operators often come to know the faces of local offenders, and the cameras become a way to monitor their movements in a less intrusive manner than deploying plainclothes police officers. For example, officers in one city were able to gather intelligence on the behaviour of individuals selling stolen goods. This intelligence was gathered remotely by CCTV cameras and enabled police to interdict in an organized and coordinated manner. Although intelligence gathering is a potential benefit of CCTV, the use of intelligence gathered from CCTV to control public order through surveillance is perceived by some to be a threat to civil liberties.

Conclusion and Recommendation

As shown above, the use of digital image processing in the security environment can be very advantageous. Sources of insecurity in Nigeria are almost limitless and present a major impediment to the growth and development of the country. Its role in the overall crime prevention/reduction strategy cannot be over emphasized, as its effectiveness can be recognized, measured and valued. It is paramount that the intended role and operational requirements of a digital image processing system for security are predetermined and agreed. As a management tool, it can be used for incident reduction or post-incident analysis, to act as a deterrent or to provide valuable support to security. It can be used as a valuable support for a crime investigation.

Therefore, the government, civil society groups, business organization and individuals must fight insecurity so as to create an enabling environment where business organizations will feel free and secured to achieve their full potentials and the country will itself be safe to achieve sustainable development. As a recommendation, prevention and emergency response focusing on the rising state of insecurity in the country should be the main focus on insecurity management. Also, the government should do more than mere talking, not just establishing acts on anti-terrorism but also ensure the adequate training and equipment of law enforcement officers to tackle insecurity in Nigeria

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