

# The Preventive Role of Digital Visual Surveillance of a Crime

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Visual surveillance, with digital cameras of all kinds and the places in which they are installed whether in the streets, public administrations or homes and private places, play a role in preventing crimes and limiting their commission because of its psychological deterrent presence that prevents everyone who is tempted to commit crime, violate laws or prejudice the prohibitions. Remarkably, it has spread in recent years in Iraq digital surveillance cameras, both in public and private places. These cameras play two important roles, the first of which is the preventive role of crime by detecting crimes, which helps in achieving a good level to deter people who want to commit the crime, because they fear that they will be punished if they commit their crimes. The second is the role of restraining by preparing visual evidence that has an important role in proving the crime. The Iraqi legislator has not yet taken the initiative to find legal texts dealing with this issue, which requires setting controls and restrictions for the installation of digital cameras, whether in public or private places, and the use of the results of these cameras in criminal evidence requires the legislator to clearly indicate this in the Criminal Procedure Law Iraqi. Based on the foregoing, this study tries to search for a legal approach between the comparative legislations and what the Iraqi legislator can benefit from when amending the penal texts in a manner that avoids the many legislative flaws in the law.

**Key words:** *Digital visual surveillance, crime prevention*

## Introduction

Surveillance with digital cameras (Ryoma, et al.,2019) has spread in various countries of the world in general and Iraq in particular. It has played various roles among them; it may use digital visual surveillance to achieve several purposes, the most important of which are:

- 1- Fighting and preventing crime by uncovering crimes and providing factual crimes without distorting misleading or manipulating evidence.
- 2- Uncovering the ambiguity of many crimes and monitoring and controlling specific crimes, as in the case of traffic violations, accessing the correct administrative decisions and maintaining records and documents.
- 3- Reducing insurance costs by reducing the crime risks.
- 4- Monitoring workflow and ensure workers perform their work honestly, accurately and with a sense of responsibility and ensuring a safe workplace; perhaps one of the most important functions performed by surveillance with digital cameras is the preventive role of crimes by notifying citizens that the place is monitored by cameras and the presence of an alert to the location of the cameras, and therefore fear of the punishment that awaits him/her after he/she committed the crime with sufficient evidence to convict him/her of committing the crime .

Despite the great importance attached to digital surveillance as mentioned above, several comparative legislations have taken an initiative to find legal regulation in both European countries and the United States of America. As for Arab countries such as Egypt, Algeria, Morocco, Jordan and Iraq, they are still seeking to legislate laws that regulate digital visual surveillance. However, the only two legislations in this regard are the Qatari Law No. (9) of 2011 regarding the regulation and use of surveillance, and Kuwaiti Law No. (61) of 2015 regarding the regulation and installation of security surveillance cameras and security monitoring devices (Deibert,2008).

It should be noted that the Iraqi ministry of the interior has formed a communications' and information systems' directorate with a special section for surveillance cameras to be the watchful eye for maintaining security in all public roads and public places; this is because it has the ability to monitor, control and deter criminals and to protect public and private property. It works in this way to achieve the safety of vital installations and citizens; it has superiority over the old methods used in the field of surveillance, such as the use of security guards or direct monitoring of people (Slobogin,2002).

The problem that the research deals with is that, despite the wide spread organisation of surveillance cameras in public places and on public roads, and with the management of security agencies linked to the Iraqi ministry of interior, citizens have also raced to purchase digital surveillance cameras and install them in their own homes, commercial stores, commercial companies and other private property; this is to protect their people and their money from crimes and to be a deterrent to those who wish to commit a crime against them. It also helps them in the punishment of the perpetrators for all of the crimes against them and by providing a photocopy of the facts of the crime committed to the element and impose punishment against the accused in accordance with law; this is so that the perpetrators do not

escape punishment. However, the legislative authority does not interfere with the legislation of a law that regulates strictly the process of surveillance with digital cameras; what it includes is determining the legal conditions that must be observed in the process of installing and conducting the visual monitoring process with digital cameras and these restrictions must be observed in this the procedure, as they collide with the freedoms of others such as the right to privacy and the right to image as it represents the most important personal data (Roland, and Thomas,2019).

### **The Concept of Visual Digital Observation**

As a result of the development witnessed by digital camera imaging technology from capturing a large number with great speed and great accuracy, these modern technologies have been utilised by linking them to recording devices and monitoring systems through television screens; great benefits have emerged for this type of surveillance in various fields in general and in the criminal law in particular, and in this second type the citizens benefited from it with regard to preventive monitoring and controlling crimes on the one hand, and the visual evidence obtained from them, on the other hand (Rosie, and Kate,2019 ; Paola, et al.,2019).

In addition, the comparative legislation including the Iraqi legislation, did not address the organisation of its procedures; there was a dispute about the extent of its legitimacy, the evidence obtained from it and the possibility of benefiting from it in the criminal evidence. In this topic we will discuss the concept of digital visual surveillance by research on the definition of digital surveillance and discuss the limits of the legality and legal nature of digital surveillance.

In this research, we will try to shed light on the most important aspects necessary for a legal regulation in Iraq that regulates the process of digital visual monitoring, in order to play its primary role in deterring criminals from committing their crimes and strengthening the preventive role of digital visual surveillance at the expense of the restraining role represented in preparing convictions for crime (Merrills, 2017 ; Tran,2018)

### ***The Definition of Visual Digital Surveillance***

The definition of visual digital surveillance requires its definition, whether it is at the level of jurisprudence or comparative legislation or an indication of its most important technical components and a statement of the most important characteristics that are distinguished, and this is what we will address in this requirement and in the following (Elias,2018) :

### ***The Meaning of Visual Digital Surveillance***

Visual digital surveillance is defined as the process of monitoring that takes place in a specific place or places and at a specific time by watching and recording events, behaviours, actions that are used by people to use a large group of virtual digital operations resulting from subtle transformations from the virtual medium to inside sophisticated devices that work to get it out with a motion picture video with extreme accuracy and super speed (Soumya, T.,2017)

It also known as a photo recording of a specific crime or event as a mobile recording by means of an electronic means, that can save the photograph so that it can be reviewed more than once and in a way that achieves the efficiency in the crime and proving it or exiling it from the accused<sup>i</sup>. There are those who define visual digital surveillance as the monitoring that takes place through observing what is happening in a specific place through television circuits linked to digital cameras, then commenting what happens from the facts and actions or infringements issued by people who are in that place during a specific period and time (Maria, and Sergio, 2005 ).

It is clear from this extrapolation of the aforementioned definition that electronic surveillance is a means of collecting data and information and through live video imaging that is done through two components; the first is the digital camera and the second is the digital recording device and it aims to identify the occurrence of criminal acts, to accurately show the details of their event and to uncover the circumstances of their occurrence. This is done through members of the judicial police specialising in surveillance.

Digital cameras are considered as the first component of the sophisticated digital visual monitoring devices that work at high speed and efficiently, for the accurate to capture of the mobile face at a rate of less than 5 to 6 images per second and for the purpose of strengthening the image and making it more clear (Anthony R., and Michael ,2003) .

The Kuwaiti law regulating and installing security surveillance cameras and devices No. 61 of 2015, defined digital surveillance as every device intended to capture, transmit and record the image with the aim of monitoring and observing the security situation, while the recordings were defined as what was captured, transferred and recorded by cameras and security monitoring devices (Anthony R., and Michael ,2003) .

There are several factors that affect the choice of the type of digital cameras used in the monitoring process according to the condition of the place, the distance to which the signal is transmitted and the quality of the photos to be taken; they are of several types (Mary J., and Mary Tripsas., 2012):

1- According to the signal reception system

A- IP Camera This type of camera is used to monitor some places and transmit video filming over the internet, and this is done in an encrypted form.

B- Cameras connected to a wired system linked to the cameras in the image, to the control circuit through wires. What is wrong with this type is the freedom to choose the place to install the cameras, with the difficulty of moving cameras after installing the system.

C- Cameras associated with a wireless system, which are those cameras that are not associated with the television circuit located in the headquarters of control and control with wires, but the images are transferred using Wi-Fi technology; they are monitored via the internet and viewed by the mobile phone or computer with the availability of the night vision feature by means of infrared radiation.

2- Digital cameras, according to their locations:

A- Interior which is installed and used inside the buildings and in closed and uncovered areas.

B- External - cameras are installed outside the buildings and in open areas and places.

3- According to her return to:

A- General cameras, which are the cameras that manage the process of installing, managing and monitoring which are documented by pictures of events in public places or inside public institutions, from the executive and police departments.

B- Special cameras, which are the cameras that individuals install and monitor the events taking place in their own places, whether in housing, commercial companies, shops or private institutions.

4- According to the method of installing it to:

A- Visible cameras, and this is done by announcing the presence of cameras in the place, and that the place is monitored with cameras to warn citizens not to violate the rules of conduct in some places or to observe respect for the law and not subject themselves to criminal accountability for criminal acts. This can be seen in public roads to monitor traffic violations in most cities in developed countries.

B - Hidden cameras, and this is done by installing cameras in places that are not visible, and the use of small-sized cameras made by specialised companies that may not exceed a few millimetres in size, and they are usually used in private places by individuals or by security and intelligence agencies (Ahmad, N., et al,2019).

As for the second part of the components of visual digital surveillance, they are digital recording devices. These devices represent electronic devices whose function is to store the images captured by the surveillance cameras, and they are one of two types:

#### 1- The digital recorder

These are electronic devices that receive pictures taken from digital cameras and store them in the internal memory (hard disk) or external memory (Flash memory) with the possibility of restoring their viewing; these types vary according to the accuracy and clarity of the cameras connected to them, and vary according to the storage capacity and the number of distribution ports for the cameras which ranges between 4-64.

#### 2- The registration device via the World Wide Web (the internet)

These are computers that register after communicating with the camera remotely from a nearby or remote location via the internet, and they are characterised by the possibility of connecting an unlimited number of cameras with the network, by providing the possibility of monitoring from more than one computer and taking advantage of the advantages of the system as it deals with digital signals.

### ***Visual Digital Monitoring Features***

The digital visual monitoring process has several characteristics, the most important of which are (Hitchin, R., 2015):

1- Visual digital monitoring is a technical process that takes place by converting magnetic or electrical pulses within the technical or electronic medium, translating it into a visual guide and outputting it in tangible physical form, in the form of static or moving images from which it can be inferred what happened from the facts or actions at a specific time.

2- Visual digital surveillance is related to the location of the hypothetical rather than physical crime, so that the observation can be conducted remotely through the cyberspace and by people who have no direct relationship with the parties to the crime, but rather people who have the ability to take some details of the crime.

3- The process of visual digital monitoring takes place through the virtual medium for electronic devices in the form of digital data that takes the form of two numbers (1,0) and can be re-displayed by converting them into digital images that reflect the visual situation about the crime, or photocopies of the events that took place before and after the crime (Christophe, et al.,2017) .

4 - The process of digital surveillance is a rich source of information to the parties of the crime, whether the perpetrator or the victim, which facilitates the process of criminal investigation and the inference of the crime and its perpetrator, and thus helps to detect the crime.

5- The process of visual digital observation is of a technical nature, as it derives its existence from what scientists make from technology, and this information is in the form of intangible magnetic or electrical pulses, and its awareness requires the use of technical devices and equipment and the use of special programs.

6- The digital visual surveillance with a high-speed dynamic nature is transmitted through the delivery networks transitive to the limits of time and space and depends in its development on the development of its electronic or technical environment (Shinbane,2016).

7- The evidence that results from the visual digital surveillance is difficult to get rid of by deleting it or destroying it, as it can be retrieved and repaired what was destroyed therein and showing it after hiding it. The destruction process can be considered evidence against the accused, in addition to the possibility of extracting a copy of the monitoring process identical to the original compensation of what happens to the copy saved in the device memory of damage, deletion or loss.

### ***The Limitations and Legal Nature of Digital Legacy Surveillance***

Due to the novelty of electronic evidence in criminal evidence and its importance in this field through the evidence obtained from it, the legislation did not address the regulation of its provisions; digital visual surveillance was one of these electronic means that played important roles in the criminal law whether in terms of preventing crime or proving its facts which led to the agreement of legal jurisprudence on a unified position about its legitimacy or legal nature. This is what we will cover as follows (dos Santos,2018):

### ***The Limit of the Legitimacy of Visual Digital Surveillance***

The legitimacy of visual digital surveillance varies according to the place in which the observation was made, whether public or private as follows:

#### ***First: Legitimacy of the Visual Digital Surveillance in a Public Place***

There are many jurisprudence opinions regarding the extent of the legislation of digital surveillance in a public place. One of the opinions argued is that taking pictures of one person who is in the public place does not imply and prejudice the person because his presence in the public place has gone out of his personal life and therefore his viewing has become permissible such as observing the naked eye of the suspect; also it may happen through electronic means including electronic surveillance cameras and no person has the right to object to taking his photo in a public place. He/she has the right to object to the publication of these pictures only (Papadaki, and Tim Chown.,2014).

While another opinion went on to oppose the first trend by refusing to use electronic devices from the security authorities in a hidden manner; it is not fair to take evidence obtained from these electronic means without enclosing them with adequate guarantees to preserve the dignity and personal data of the person, the most important of which is the right to privacy and the right to the image. Therefore, the owners of this opinion required that this means be

adequately safe-guarded and capable of increasing the preventive effectiveness in place of the restraining and punitive effectiveness. Perhaps the most important of these guarantees is that the surveillance cameras are not hidden and their presence must be announced; individuals should be warned that the place is monitored by cameras. This can be done by placing signs indicating the presence of cameras and the place being monitored, and that the advertisement be visible, as this would increase its preventive effect and make individuals refrain from committing crimes in that place for fear of punishment. Any omission of notification leads to the invalidity of the procedure and consequently the invalidity of the evidence derived from it (Louis,2019).

The third opinion on jurisprudence has recently emerged that calls for distinguishing between two cases regarding digital visual surveillance that takes place in the public place and the resulting photograph; this is set out in the following:

1. The first case is when the purpose is in the first place to monitor the public place and who is in it and make it a subject for the image that takes place differently to any person like the one who takes a picture with the aim of the printing it on an electronic card.
2. The second case is intentionally observing the photograph of a specific person and considering it as the main subject of the image, as in the case of the laboratory who is looking for a suspect or wanted person for justice and wants to conjure up evidence of attributing the criminal act to him.

Filming in the first case is with permission and there is no room for objection to it; in addition to not requiring its procedure to obtain permission from those present in it, while in the second case filming is not given permission due to the assault on the right to the privacy of individuals who dispatched their presence in a public place (Williams,2007).

### ***Second- The Legitimacy of Digital Surveillance in Private Places***

The subject of visual surveillance with digital cameras in private places raised juristic dispute regarding its legitimacy as criminal jurisprudence was divided in two directions:

The first point of view argues that photography with private digital cameras installed from individuals in private places is legal when authorised by the investigation authority, provided that it meets all the legal conditions for obtaining permission for visual surveillance by private cameras; in the event that the legislator does not regulate the conditions for obtaining permission, as is the case in Iraqi legislation, it can be measured by other types of surveillance, such as direct observation of suspects (Siri, and Timm,2019) . Whereas, another opinion held that this procedure is illegal, and the court cannot authorise it, or rely on it as evidence in criminal evidence, as long as the legislator does not specifically regulate this.

It is agreed that digital video surveillance, if hidden, is prohibited and not permissible, especially if it takes place without the approval or permission of the judiciary and without the consent of the person concerned. Otherwise, visualisation by digital cameras depends on its legitimacy based on two things that can be adopted as a result of the evidence; the first of these is the owners of the private place, as is the case with regard to the cameras that are installed from the owners of homes, stores, shops, companies and private institutions, and the second is that this was done without the approval of the owner of the place. The private place owner must obtain a warrant if the need arises to monitor in a private place (Siri, and Timm,2019).

### ***The legal nature of Visual Digital Surveillance***

Regarding defining the legal nature of the digital visual monitoring process, jurisprudence considered this process as one of the procedures for searching and investigating crimes; this is because it is one of the evidentiary procedures that intend to detect crime and document its occurrence electronically through photographing the situation in which the crime occurred, as is the case in road surveillance cameras which monitor traffic violations or for members of the judicial police in their monitoring of public places. If a crime occurs during the observation, they are required to keep a copy and take the necessary measures to preserve and inspect the evidence. Whereas, some aspect of jurisprudence has argued that it is a kind of electronic inspection, as it focuses on intangible things, represented by pictures, recordings and visual texts other than inspection, which focuses on material things (Gates, 2003).

The US judiciary has emphasised that adopting the digital video surveillance process is a legal process by accepting pictorial recordings as evidence in forensic evidence. It was stated in a ruling by the New York Supreme Court in 1977, "The recording by video cameras in the place where the crime occurred, which is a clinic the dentist prepares electronic search and seizure". The court established its decision that despite the absence of a text in the Law of the Memorandum of Inspection and Electronic Tapping of New York City, it decides to adopt photocopying in criminal evidence, but it was found during the interpretation of the aforementioned law that it does not prevent this registration. As a result of the New York City electronic eavesdropping law, New York courts have issued issuance of video surveillance notes, which were taken by the US Federal Court, and some have called it visual inspection (Gates,2003).

We conclude from the above that the visual digital surveillance represents procedures for investigating and inferring crimes if they occurred during the occurrence of the crime and were issued by members of the judicial police or to seize some crimes such as traffic violations, while it represents an inspection procedure within the virtual world represented by the memory of the photo recorder or external memory.

### ***The Effect of Digital Visual Surveillance on Crime Prevention***

There are a set of conditions required by legislation and comparative systems in conducting digital visual surveillance, which the Iraqi legislator must work to regulate in any future legislation or system in order to properly perform its role, whether in the preventive or restraining and punitive aspect (Siri, and Timm,2019).

Regarding the protective effect of digital visual surveillance, studies and research have proven the existence of a preventive role against crime. This is what we will cover as follows:

#### ***Conditions for digital surveillance***

Legislative and comparative regulations included legal conditions for organising digital visual surveillance as a preventive measure to prevent crimes from occurring on the one hand, revealing their circumstances, identifying the person who committed them and extracting visual evidence from them in order to have value in proof before the criminal courts; on the other hand, it requires, according to those systems, some technical controls and conditions that regulate the process of installing and operating digital surveillance cameras. To discuss these two matters, we will discuss the first in terms of the conditions required for conducting digital visual surveillance, and the second, the controls for installing digital surveillance cameras (Lisa M., et al.,2005).

#### ***Legal Condition for Digital Video Surveillance***

For the purpose of legalising digital video surveillance, the laws included a set of required conditions, as follows:

1. Determining the institutions, public places and buildings in which cameras must be installed and operated such as ministries, departments, public institutions, hotels, residences, complexes, banks, money exchangers, gold sales, shopping centres, public hospitals or previous and other establishments determined by the competent authorities .
2. Determining the places that it is prohibited to monitor with cameras such as places intended for housing or sleeping treatment rooms, changing room's, toilets and women's salons or any location where cameras are consistent with the right to privacy.
3. Determining the authority responsible for granting licenses to use security cameras and granting this authority entry to establishments for the purpose of inspection of cameras and security monitoring devices and granting them the authority and competence to determine the location points and number of cameras and surveillance devices (Lisa M., et al.,2005)
4. The obligation to place boards in prominent places that show that the place is equipped with surveillance cameras and the obligation of the owners of the facility to

keep the records of a period specified by the law; also they must not make amendments to them, hand them to the component authorities immediately upon request and to execute those records after the end of the period.

5. It is prohibited to transfer, store, send, or publish the recordings taken by surveillance cameras except with the approval of the authority determined by the law.
6. Providing for the criminalisation of acts that include violation of the right to privacy or the use of registration for unlawful purposes, such as extortion or publishing records without the consent of their owners, which constitutes a violation of the right to personal photography and stipulates penalties for such actions (Siri, and Timm,2019).
7. Records must be kept for a period of not less than 31 days, and servers for the system and backup recording devices must be provided in the event of any emergency of the original devices (Williams,2007).
8. Determine the legal value of surveillance camera records in criminal evidence and the extent to which they can be taken as evidence for a conviction after examining it and verifying its authenticity.

### ***Controls for Installing Digital Surveillance Cameras***

The systems for digital surveillance cameras require technical specifications and controls for the installation of surveillance cameras, including:

1. Surveillance cameras must have the ability to capture and transmit images and a speed of no less than 25/30 per second and in high quality in order to distinguish people and objects in the captured images clearly (Williams,2007).
2. The cameras must be installed and with a vision meter that can identify people and read car plates, and must be installed in the exits and entrances of buildings, as well as corridors, car parks, reception halls and other active sites in each facility.
3. Cameras must be set with the correct dates and time and automatically to be displayed on the screen in order to take advantage of the time recorded in the identification and detection of crimes that occur and be documented so that these recordings become a physical guide enhanced by the picture and time.
4. The surveillance cameras should be installed with specifications determined by the relevant authorities in the Ministry of Interior in accordance with the minimum locations and distribution points for cameras and security monitoring systems in each facility mentioned in the law.
5. That there is a specific classification for the vision measures of the objects in the visual monitoring system in terms of type of vision, purpose, and percentage of vision.
6. Informing the facilities owners of the procedures followed in the event of permanent, total, partial or temporary suspension of the security monitoring system.

7. Informing the facility owners of the penalties in case of violating the law or the instructions that were sent.
8. The procedures required of institutions and companies which should be clarified in the event of a breakdown that leads to a complete or partial suspension of the system.
- 9- The procedures used should be specified in case of any amendment to the security monitoring system.

### ***The Effect of Digital Visual Surveillance on Crime Prevention***

Although visual digital surveillance takes place through closed-circuit television and through the use of a number of high-definition digital cameras and a limited number of television screens, this contributes significantly to deterring criminals from committing their crimes, which leads to a reduction in levels of crime. Camera monitoring is one of the best ways to prevent crimes from occurring in different parts of the world, whether in the United States of America, European or Asian countries, and we will address this requirement of the preventive effect of digital visual surveillance on crimes, in the following two sections:

#### ***Factors Affecting the Protective Role of Digital Visual Surveillance***

##### ***First -The Positive Point***

Visual surveillance with digital cameras does a great job in curbing criminal activities for two reasons. The first is that surveillance cameras provide close evidence of crime and then it is possible to reach, track the perpetrator, prosecute, and bring him to trial, thereby reducing instances of impunity. The second is that surveillance with digital cameras has changed the rules and principles of investigation and trial. In the past, the emergence of this type of surveillance was a matter of escaping criminals from prosecution and thus enabling them to escape punishment, was possible and easy, and this led to encouraging them to continue to commit crimes, as long as they could eliminate punishment and impunity. But with the emergence of this type of surveillance, it has become well possible to prove the commission of the crime and to obtain evidence to prove the crime and assign it to the perpetrator. Therefore, according to official statistics in the United Kingdom, crimes of theft especially and other crimes that occur in casinos and public places, have halved in London, and thus this method has proven effective in preventing crime (Paul, and Serge,2006).

Warning notice is one of the a preferred ways in which a closed circuit television can work to prevent and reduce crimes and through which funds are protected against any movement or actions that raise suspicious of the possibility of assault crimes against people or money; therefore the protection measures get a signal and access to achieve better protection.

The psychological impact of digital video surveillance is the most important step in reducing crime. Protection with this type of monitoring reminds the people who make it, of the weaknesses in protection and if the place is not safe, people take more measures to protect their property. Just as digital surveillance has an impact on potential crime victims; it has a greater psychological impact on potential criminals by refraining them from committing crime in places where they perceive it to be under camera surveillance .

According to the experiences, criminals are aware that closed-circuit television provides evidence of the occurrence of crime in the places and areas targeted for protection, which leads them to face trial, and thus affect criminals themselves and compels them to stop their criminal activities. For example in Brazil, before the use of surveillance cameras with cameras on trains and railway stations, theft crimes were common, but this was largely ended after entering the surveillance systems in closed-circuit television.

### ***Second Negative Points***

Despite the positive points mentioned previously, there are several factors that reduce the effect of camera surveillance in reducing crime, the most important of which are:

1. Criminals can change their targets easily, especially since the issue of providing surveillance cameras from all places is not possible. Criminals can redefine their goals that they intend to target with their crimes from an initial look at the places where surveillance cameras are available in the event that these cameras are visible and not hidden, especially those that are installed by the security services in the state.
2. If the target areas of the TV surveillance have large areas, it is impossible to continuously monitor many screens, which leads to confusion and misinterpretation of activities which provides loopholes for criminals to commit their crimes.
3. Lack of independence in closed-circuit television gives the possibility of loopholes that criminal gangs may exploit to commit their crimes; criminals often know that television circuits are electric powered and there is a suitable time to restart them in the event of a power outage. Thus, criminals can, if they are regularly in a gang, commit their crimes by tampering with the power supply lines of the cameras, causing the cameras to stop working; they can also cause an imbalance in the transmission of electronic signals that transmit the video images by penetrating or disturbing the TV circuit system .

### ***Evaluating the Preventive Role of Digital Visual Surveillance in Crime Reduction***

It can be said that the visual surveillance system with digital cameras, although it contributes to a large extent in preventing the commission of crimes of various kinds, at the same time it does not eliminate the final crime because there are criminals with their knowledge that their

crimes are located in places subject to surveillance with cameras. Also, closed-circuit television provides evidence of their condemnation, but they do not back down from carrying out their criminal plans and try in various ways to get rid of surveillance (Moyo, 2019).

Several evaluation studies have been conducted on the effectiveness of closed-circuit television in one of the crimes and its prevention and the following points have been indicated:

1. There is some evidence confirming that digital visual surveillance has contributed effectively to deterring crime, but this effect is limited and generally short in life. In this regard, the researchers urged media coverage of the installation of closed-circuit television and its role in detecting crimes, and facilitating the task of tracking and apprehending criminals, which contributes to continuing its performance of its preventive role for a longer period of time.
2. Research agreed in this regard that the effectiveness of closed-circuit television surveillance and its impact is greater in deterring crime in small and less complex areas than in major cities and regions with a more complex geographic nature.
3. Research indicates, according to investigations conducted with convicted criminals, that surveillance cameras are not perceived as being in themselves a deterrent factor in committing the crime, especially for drug and alcohol users.
4. There is evidence that confirms the truth about what is known as the displacement of the crime or its migration from the areas that are subject to visual surveillance via closed television circuits to other neighbouring or remote areas where there are no electronic means of surveillance available.
5. Studies in this regard have shown that the effectiveness of digital visual surveillance in detecting the causes of crime and criminal proof, identifying the perpetrators and confronting them with visual evidence which is more than their contribution to the efforts to deter crime (Moyo, 2019).

## **Conclusion**

The preventive role of crimes is one of the most important functions performed by surveillance with digital cameras, by notifying citizens that the place is monitored by cameras and alerting them to the location of cameras and thus inducing fear of the punishment that awaits him/her after he/she has committed the crime, with sufficient evidence to condemn him/her for his/her commission of the crime. The visual digital surveillance represents procedures for investigating and inquiring about crimes, if they occurred during the occurrence of the crime and were issued by members of the judicial seizure or for seizing some crimes such as traffic violations; this represents an inspection procedure within the virtual world represented by the memory of the photo recorder or external memory.



There is a set of conditions and controls required in conducting digital visual surveillance that the Iraqi legislator must work to regulate in any future legislation or system, in order to properly perform its role, whether on the preventive side or the restraining and punitive aspect. Some evidence confirms that digital visual surveillance has effectively contributed to deterring crime, but this effect is limited and generally short in life.

Creating a legislative organisation for visual monitoring requires identifying the institutions, public places and buildings in which cameras must be installed and operating, such as ministries, departments, public institutions, hotels, residential complexes, banks, exchange offices, selling gold, shopping centres, public hospitals, and private or valuable or dangerous materials and other facilities that are determined by the competent authorities.

Also, this issue requires specifying places that are prohibited from monitoring with cameras, such as places intended for housing or sleeping, treatment rooms, changing rooms, toilets, and women's salons, or any location where cameras are inconsistent with the right to privacy. In addition, it is important to determine the authority responsible for granting licenses to use security cameras and security surveillance devices; in addition to this is giving this authority the authority to enter facilities for the purpose of inspection of cameras and security monitoring devices and to determine the locations and points of the cameras and monitoring devices and their number. Perhaps it is also important to adhere to placing boards in prominent places that show that the place is equipped with surveillance cameras. The obligation of the owners of the facility must keep the records for a period specified by the law, not make changes to them, hand them to the competent authorities immediately upon request and to execute those records after the end of this period.

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