



A Survey on Information Technology Devices in increase and decrease of Crimes

Hoshang Shambayati and Mahboobeh Taghizadeh Shahrokh Abadi
Tehran Azad university-faculty law, Tehran, IRAN

Available online at: www.isca.in, www.isca.me

Received 21st December 2013, revised 8th February 2014, accepted 23rd March 2014

Abstract

Applying information technology devices have effective influence on crimes prevention. In the other hand using information technology devices has increased committed crimes. So understanding effects of these devices on committing crimes and prevention ways is absolutely essential. The present study is carried out to understand most applicable information technology devices and to understand their effects on increase and decrease of committing crimes. After various researches situational and environmental preventions were chosen as the framework of the present research. To carry out the research I chose library method. Results show that some information technology devices such as CCTV cameras can manage crime committing by recognizing dangerous areas, supervision, arresting offenders and increasing crime costs. In continue devices like mobile phone, internet and satellite will be surveyed.

Keywords: Information technology, crime prevention theories, situational and environmental preventions.

Introduction

To use location and descriptive analysis we can predict effective criteria in accidents. We can determine the accident location on simple maps but we can't analyze data on simple maps so GIS is the best device to analyze location data and determine accident-prone areas.

It has been proved that location and crime are related together. Only a few studied on this issue that how we can obtain exact information and data about crime scene and analyze them with GIS. Robertson and Johnson believe that all abnormalities and social offenses include time and location aspects. So crimes and offenses are related to geographic aspect. Criminal behavior and the time and location aspects made each crime different from the other. Time and location aspects may result in injustice criminal distribution. Wood smuggling is a hard and complex problem in Iran and the crime is usually happened in special times. With help of GIS we can gather information in GIS system and determine wood smuggling centers and preserve jungles with guardian forces. Wood smuggling centers were determined by GIS and now we can predict future smuggling programs and manage the forestry plan.

Research Hypothesizes

The main hypothesis: Regarding information technology roles on human life and society it seems information technology devices have been influenced crime increase.

Subsidiary hypothesis: It seems that there is a meaningful relationship between CCTV cameras and crime decrease. It seems that there is a meaningful relationship between using

internet and committing or not committing crime. It seems that there is a meaningful relationship between using satellite and committing or not committing crime. It seems that there is a meaningful relationship between using mobile phone and committing or not committing crime. It seems that there is a meaningful relationship between using GIS and committing or not committing crime. It seems that there is a meaningful relationship between using GPS and committing or not committing crime.

First discussion- crime opportunity theory: There are three well known basics in crime opportunity theory and they are crime pattern, logical choice and daily activity. The principles of the theory offered by Cohen, Clotel and Lend and completed by Felson and Clark. Felson and Clark said that there are 10 basic principles in the theory¹:

Opportunity influences crime committing in all type of crimes. Crime opportunities are very special and we should not think that they extend to other crimes. Crime opportunities have time and place coincidence and they are extended in different places differently. Crime opportunities rely on daily activities. Committing a crime prepare background of another crime. Some productions arouse people to commit crime such as cash. Social changes can create new opportunities for new crimes. Crimes can be prevented by opportunities decrease. Crime decrease will not result in crime movements. Focused decrease of opportunities may result in added decrease².

The theories said that the mere existence of criminals and victims crime will not happened. So opportunities are so important for committing crime. Increase of crime opportunities result in crime increase and vice versa³.

The role of GIS in crime decrease: Crime distribution is different from one place to another. GIS results help police to understand crime distribution and choose the best action.

GIS has an essential role on place determination, transportation system management and traffic control⁴.

With help of network information from cities, streets and crime distribution we can analyze crimes and type of crimes and understand crime patterns. Driving accidents are one of the big challenges of governments which kill hundreds of people per year and cost government. So GIS help us to understand ways and transportation road security. GIS can save and process location information and data which help us to manage accidents and determine dangerous roads. Location analysis in GIS is another activity of transportation managers and police can predict the possibility of accidents with the analysis⁵.

To control transit vehicles: GIS can control all transit vehicles entering the country and roads per minute. GIS can analyze data related to road charges. Using the analysis we can understand road accidents and accident-prone roads⁶.

To determine the rate of accident in different kilometers. To determine the average of accidents per month in different kilometers. To survey accidents resulted in dead in different kilometers⁷.

To determine accident-prone: With help of road engineering and GIS we can determine accident-prone places⁸. To determine roads slope in different locations to survey on accident possibility, To determine the biggest road slopes in roads to analyze accident possibility. To survey on relationship between accidents with criteria such as highness and weather⁹.

The role of CCTV cameras in crime increase: Technologies increase level and quality of our lives and we try to use modern devices for more tranquility but sometimes we hurt each other with new technologies and break other's privacy. CCTV cameras are the best example and people are unsatisfied with some bitter experiences of cameras set on rest rooms, swimming pools because they felt no privacy¹⁰.

CCTV cameras and privacy policy: Many countries set CCTV cameras to prevent crimes in accident-prone places and roads. According to the law breaking privacy of people is illegal in Iran and no one can do that. Principle 22 of the constitution said: rights, life, house and job of people are safe and no one can search other's house unless with judicial authorization. But the government emphasizes on crime prediction and set various CCTV cameras in different places. And the question is this that what are CCTV cameras for? For crime prediction or breaking other's privacy? How can we analyze it?

There is no matter for CCTV cameras set in public places but we have faces cases abusing these types of cameras such, setting in restrooms, pools or etc¹¹.

Civil Rights Violations: Internet cafés are obliged to set CCTV cameras and this is Civil Rights Violations. There are other appropriate ways to prevent crimes and setting CCTV cameras in private places is in contrast with the constitution. Today police can determine crimes and criminals using new technologies. In some European countries setting CCTV cameras in streets is considered Civil Rights Violations and here in Iran as internet cafes are private places where people transfer information, setting cameras in internet cafes is illegal but we can see the cameras set in cafes. But who is in charge in case of any crime committed in internet café? Of course the café's manager should inform the police and there is no need for CCTV cameras in internet cafés. There is also another point, cameras can save passwords of the users and if someone access them can abuse them easily¹².

The role of mobile phones in increase of crimes: To preserve security is an important issue challenging experts. Hack means illegal access to other's information and who commits this crime is called "hacker". Hackers can access to other's information or change them. Hackers use mobile phones widely. Recent years with increase of smart phones, hacking is happened more often even with simple soft ware normal people can hack¹³.

To put mobile phones to fix: To copy Sim card information as it is useful sometimes it can be very harmful as well. Any illegal connection with a Sim card is in responsibility of the document holder of the Sim card. We recommend people don't put their mobile phones to fix with the Sim card or in access of public.

The role of GIS in crime increase: To use GIS is a little hard and need guide so lack of information about the GIS may result in abuse. Here we discuss about this issue.

Crime model digital device: GIS shows the details of locations and thieves can get the information easily. GIS has been abused for band robberies and hostage because of the lower cost and better information about details.

Internet and moral crimes: Sexy pictures to arouse adolescents to liaison are one of the problems of the internet. Internet can distribute pictures in a flash. Sexy pictures or videos can shake family roots and morality and increase immorality and religion aversion. Copyright breaks with internet easily and generally increase all kinds of crimes.

To abuse ATM cards: Today most commercial exchanges are carried out by the internet. People pay bill by the internet or credit cards and during these exchanges people should show their passwords which may result in abuse.

Credit cards divided into three categories: Credit cards which can save values and use it for commercial exchanges. These cards may be only "memories" or smart cards which use to save and transfer data.

Cards which are able to do transactions between banks and they are usually used for shopping services¹⁴.

Now we can find out how credit cards work. In a research in 1993 it was shown that more than 14 crooks abused credit cards for more than 100 types of crimes. Abused credit cards were generally lost or robbed ones. Abusing credit cards can be carried out on the internet because people have to reveal their passwords to shop¹⁵.

Lack of supervision on distributed subjects: There is no supervision on distributed subjects on the internet and if there is it is very rare¹⁶. There are inappropriate subjects for children on the internet which may result in criminal behaviors in future¹⁷.

Drug smuggling on the internet: Drug smuggling can be committed easier by Emails and other online services. Smugglers are more secure because they do smuggling online without any presence and police can't arrest them easily¹⁸.

Decrease of emotional relationships: Most internet users are children and adolescents and generally young people. Today there are few emotional relationships between family members¹⁹. People even get married on the internet. Transferred data by the internet are unreliable. And internet marriages result in failure often²⁰.

Pornography is another problem of the online world. Porn pictures can be saved and transferred on the internet²¹. Porn pictures can deceive children and women. Recently women have been abused in pornography very often in different ways²².

Increasing prostitution: Researches show that the main pattern of the adolescents in clothing and fashion is satellite programs. Foreign channels are trying to influence countries culture and values so they product various programs to change culture and values of the destination country. Foreign channels have been trying to product interesting programs to change women clothing (Hijab) in Iran²³. They are trying to show prostitution and criminal manner logical and beautiful and deceive young innocents.

Conclusion

There are different elements and criteria in social changes. One of them is technology s we can't deny its effect on societies. Even the ways of using new technologies change societies. We can't ascribe technology to all changes of societies but it has influenced societies in very cases. The best way to prevent crimes is to decrease crime opportunities because people usually consider all possibilities before committing a crime and there should be three elements to expect a crime: opportunity, ability and plan²⁴. So crime prevention plan should consider these elements. Conditional prevention influences people by decreasing opportunity and ability.To determine crime-prone situation, dangerous places, promote supervision and increase

costs of committing crimes will decrease crimes in societies. This type of prevention use new technologies to decrease crimes. CCTV cameras should be set where guardians are able to use them and check monitors properly because these cameras are expensive and should be applied properly. To achieve the goals and prevent crimes we should decrease crime opportunities. Support actions to criminals should be considered and applied to take criminals back to normal life²⁵.

References

1. Ahmad Jafarnejad, modern technologies management, Tehran, rasaneh publication, 166, (2003)
2. Technology management, Seyyed Kamran Baqiri, rasa publication, (2008)
3. Rights and security in cyber environment, *International contemporary researches, Tehran, (2005)*
4. Marketing management, Ahmad Roosta, amirkabir publication, (2010)
5. Technology background, Mohammad Zanjani, samt publication, (2000)
6. Sociology dictionary, BaqirSarookhani, amirkabir publication, (1996)
7. Sociology dictionary, Mohammad JavadZahidi, maziar publication, page 262, (2005)
8. Information technology management, HooshangMomeni, nashr publication, (2001)
9. CCTV cameras in rest rooms, Mahdi Kahani Moqadam, (2008)
10. CCTV cameras in streets, Amir Raqib, (2010)
11. CCTV cameras, Qolami, (2010)
12. CCTV cameras under web, Qolami, (2010)
13. Information technology history out of Iran, Hadi Taqipoor, (2012)
14. Technology and crime prevention, Hamid Norrozi, No 6604, (2008)
15. Technology and crime prevention, Hamid Noroozi, Resalat newspaper, No 6604, page 20(2008)
16. Vijaylakshmi S., Mohan V. and Suresh Raja S., Mining of users access behavior for frequent sequential pattern from web logs, *International Journal of Database Management System, (IJDM), 2, (2010)*
17. Yıldız B. and Ergenç B., (Turkey) in Comparison of Two Association Rule Mining Algorithms without Candidate Generation, *International Journal of Computing and ICT Research, 674(131), 450-457 (2010)*
18. Nan-chanHsich and Kuo-Chang cha, Enhancing consumer behavior analysis by data mining techniques, (2009)

19. Peter P. and Wakabi-Waiswa Venansius Baryamureeba, Extraction of Interesting Association Rules Using Genetic Algorithms, *International Journal of Computing and ICT Research*, **2(1)**, (2008)
20. Shrivastava A. and Sahu R., Efficient Association Rule Mining for Market Basket Analysis, *Global Journal of e-Business and Knowledge Management*, **3(1)**, (2007)
21. Bechtel C. and Jayaram J., Supply chain management: A strategic perspective, *International Journal of Logistics Management*, **8(1)**, 15-34 (1997)
22. Chan L.K. and Wu M.L., Quality function deployment: A literature review, *European Journal of Operational Research*, **143(5)**, 463-497 (2002)
23. Chen I.J. and Paulraj A., Understanding supply chain management: critical research and a theoretical framework, *International Journal of Production Research*, **42(1)**, 131-63 (2004)
24. Demirtas E. and Ustun O., An integrated multi objective decision making process for supplier selection and order allocation, *OMEGA*, **36(1)**, 76-90 (2008)
25. Ghodsypour S.H. and O'Brien C., The total cost of Logistics in supplier selection, under conditions of multiple sourcing, multiple criteria and capacity constraint, *International Journal of Production Economics*, **73(3)**, 199-222 (2001)