



DEPARTMENT OF BUILDING SURVEYING  
FACULTY OF ARCHITECTURE, PLANNING AND SURVEYING  
UNIVERSITI TEKNOLOGI MARA

THE EFFECTIVENESS OF CCTV IMPLEMENTATION BY  
MUNICIPAL COUNCIL FOR PUBLIC SAFETY

MOHD NOOR ADAM BIN MOHD NORDIN  
(2005362037)

BACHELOR OF BUILDING SURVEYING (HONS)


APRIL 2008

DEPARTMENT OF BUILDING SURVEYING  
FACULTY OF ARCHITECTURE, PLANNING AND SURVEYING  
UNIVERSITI TEKNOLOGI MARA

## THE EFFECTIVENESS OF CCTV IMPLEMENTATION BY MUNICIPAL COUNCIL FOR PUBLIC SAFETY

"I hereby declare that this academic project is the result of my own research  
except for the quotation and summary which have been acknowledged"

STUDENT'S NAME : MOHD NOOR ADAM BIN MOHD NORDIN

SIGNATURE :  .....

UITM NO : 2005362037

DATE : 13 OCTOBER 2008

## ACKNOWLEDGEMENT

بسم الله الرحمن الرحيم

First of all, I would love to express my greatest gratitude to the Mighty God for giving me the strength and wisdom to accomplish this dissertation regarding “The Effectiveness of CCTV Implementation by Municipal Council for Public Safety”.

Next, I would like to dedicate my special appreciation to my dissertation supervisor, Mr. Zulkifli Sapeciay for his encouragement, patient, advice, guidance, and assistance as all of those is are essential in order for me to finish writing this dissertation.

I also want to acknowledge my family members for their love and support whenever needed especially during the difficult period in preparing the data and facts suitable with the dissertation requirement.

Not to forget, officials from MBSA, DBKL and MPSJ and also respondents from Shah Alam, Kuala Lumpur and Subang Jaya who were willing to spare their time to entertain me during interview session and questionnaire distribution. Thank you is all that I can say.

Then, want to show my appreciation to all of my friends especially my classmates for providing me the needed things either in terms of ideas or tools required. I also owe a special word of thanks to all the people that agree to share their knowledge on the purpose of writing this dissertation.

Last but not least, a million thanks to those that have been involved direct or indirectly in making this report. Without their help, it seems impossible for me to produce this dissertation; only god can repay their kindness. Thank you.

## **ABSTRACT**

Closed Circuit Television Cameras (CCTV) have become an important crime prevention and security measure world-wide. In Malaysia, in the set up of the Safe City Program, CCTV is one of the integral parts of it. With the target of protecting the safety of the public, it is essential that a study being done to ensure the effectiveness CCTV system implementation in terms of enhancing safety with a relevant operational cost.

In this dissertation, the aim and objectives are obviously to investigate the effectiveness of CCTV implementing in enhancing the safety of the public, to understand deeply on CCTV as a safety appliances, and at last to develop a conclusion on whether CCTV is the right option in overcoming safety problem and its effect in interrupting with the public privacy.

The study and research is limited only on three major city area with municipal council that are Shah Alam (under Majlis Bandaraya Shah Alam municipal), Kuala Lumpur (under Dewan Bandaraya Kuala Lumpur municipal) and Subang Jaya (under Majlis Perbandaran Subang Jaya municipal). The research and data documented in this dissertation came from series of interview sessions with the particulars municipal's expert in CCTV system, residence respond in the questionnaire and field trip to all three of the case studies area.

From the entire information achieved, a conclusion on CCTV effectiveness can be resolved. Effectiveness here based on the opinion and perspective view of professional and expert of CCTV together with the respondent that live in the area where their municipals implemented CCTV.

The outcome shows that majority of the public and all of the experts agree on the effectiveness of CCTV implementation for public safety but before that a very detail and particular research must be conducted, so that the CCTV system picked is the best in terms of its location, condition, coverage, quantity, safety provided, maintenance, no privacy intrusion and its overall performance.

# CHAPTER 1 : INTRODUCTION

## 1.1 GENERAL VIEW:

CCTV, or closed circuit television, is a system comprised of cameras that are specifically configured to transmit signals to a monitor for viewing. Unlike broadcast television, which emits signals that may be picked up by any receiver, CCTV signals are limited in scope and exist within a specified area (hence the moniker "closed circuit").

A simple CCTV system consists of a wall-mounted camera connected to a monitor by coaxial cable. These "line-powered" systems (so called because the monitor powers the camera through the connecting cable) can be installed by the user and are popular among small retail stores and other similar environments. Line-powered systems may utilize multiple cameras, all connected to a monitor by coaxial cable. These monitors typically have switches that allow the view to toggle between camera views automatically, or focus on a particular frame of interest.

While the line-powered CCTV system is easy to install and maintain, it is limited in its scope due to the dependence of the cameras on the monitors for power. An outlet-powered system, where complex arrangements are more easily arranged, is similar to the line-powered setup. Cameras transmit their signals to a monitor through a coaxial cable, but are powered by a plug in an outlet.

These line and outlet-powered CCTV systems can be very basic or very complex, depending on the security needs of their users. For example, a small