

**DECISION ON THE USE OF CLOSE CIRCUIT TELEVISION (CCTV) IN TERMS OF  
SECURITY, CRIME PREVENTION AND TECHNOLOGY UTILIZATION  
( Study on CCTV users in Surakarta city )**

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**Abstract:** *Study aims to determine, the partial and the simultaneous influence of security, crime prevention and the use of technology on the decision to use Close Circuit Television (CCTV) in Surakarta City. Types of quantitative descriptive research. The population is all consumers Close Circuit Television (CCTV) In Surakarta with an unlimited number. Sampling techniques using purposive sampling with 100 of respondents. Data analysis techniques are multiple linear regression tests, F tests, t-tests, and  $R^2$ . Results showed that security, crime prevention and the use of technology had a significant simultaneous and partial effect on the decision to use Close Circuit Television (CCTV) in Surakarta City.*

**Keywords:** *Close Circuit Television (CCTV), security, crime prevention, technology utilization*

## **1. Introduction**

In the community environment, business or business environment definitely needs protection so that daily activities can run efficiently without interference from others or by any party; more efficient and effective than it takes a tool with unlimited supervision, by the level of community needs and technological developments that can control all access (Handoyo, 2003). Using CCTV, monitoring in a room or environment for companies, public services, and the surrounding environment that has support systems such as monitoring cameras, storage media, and control. Components of the system to ensure that CCTV surveillance can meet the needs of users, provide safety and security for users, and the impact of crime can be observed and prevented (Yio, 2018)

## **2. Literature Review**

### **Results Of Use**

In this study, the theory of variable use decisions is equivalent to the theory of purchase decisions. Purchase decision, according to Kotler, Armstrong in the journal Mardiansyah et al. (2016:58), is the decision-making process by the buyer, in this case, when the consumer buys. Kotler,2009) describes the stages of the process of purchasing decisions.

### **Security**

According to (Fauzan et al., 2019), security is a state of being safe, influencing individuals to feel comfortable in their activities. Security is a fundamental concept related to a person's ability to avoid danger, influenced by knowledge and motivation to prevent crime.

## Prevention

According to (Faisal, 2014) the concept of crime prevention in the book “The National Crime Prevention Institute,” prevention in crime is a process of anticipation, identification as well as minimizing the risks that will arise as a result of actions to commit crimes and initiation or activities aimed at eliminating or minimizing actions that harm others.

## Utilization of technology.

The basis of the use of technology is as a means or tool used to increase the efficiency and effectiveness of work, save time, energy and thought and accelerate the flow of information for decision makers, ease of use as the use of information technology is expected to provide benefits for users in the implementation of their duties (Listiani, 2016).

## 3. Research Methods

This type of research is descriptive Quantitative, the total population of all consumers in Surakarta with an infinite number. Sampling technique with purposive sampling of 100 respondents.

## 4. Data Analysis Results

### 1) Normality Test

**Table 1. Normality Test**

Unstandarized Residual	Limit	Description
0,200	0,05	Normal

Source: processed primary data, 2020.

Table 1 Kolmogorov-Smirnov Test method obtained by  $0.200 >$  significant value of  $0.05$  obtained normality test in this study is normal.

### 2) Multicolionarity Test

**Tabel 2. Multicolionarity Test**

Model	Tolerance	VIF	Result
Security	$1.283 > 0,10$	$185 < 10$	No multicollinearity
Prevention	$0,1215 > 0,10$	$249 < 10$	No multicollinearity
Utilization Technology crime	$0,1211 > 0,10$	$200 < 10$	No multicollinearity

In Table 2. all independent variable VIF values obtained value  $< 10$  and tolerance  $> 0.10$ . There was no multicollinearity in this study.

### 3) Heteroscedasticity Test

**Table 3. Heteroscedasticity Test**

Model	Significant	Result
Security	0,130 > 0,05	There is no heteroscedasticity
Absolute residual Crime prevention against Absolute residual	0,73 > 0,05	There is no heteroscedasticity
Utilization Of Technology the Absolute residual	0,728 > 0,05	There is no heteroscedasticity

Table 3. Glacier test method results significance of all independent variables >standard value 0.05 heteroscedasticity did not occur in this study.

### 4) Autocorrelation Test

**Table 4. Autocorrelation Results**

Model	Adjusted R		Std. Error of the Estimate	Durbin - Watson
	R	R Square		
1	0,714	0,509	1,512	1,823

Source: processed primary data, 2021.

Table 4 value of DW < dU and DW < (4 - dU) = 4 - 1.823 = 2.177, then autocorrelation does not occur in this study.

### 5) Hipotesys Test

**Tabel 5 Multiple Linier Regresion**

Variable	Coef	T	Sig.	Description
Constant	1,201	0,564	0,000	Significant
Security	0,360	4,538	0,000	Significant
Crime Prevention	0,329	4,159	0,000	Significant
Utilization Technology	0,242	3,085	0,000	Significant

Shows the results of multiple linear regression obtained by the regression line equation

$$Y = 1,201 + 0,360 X_1 + 0,329 X_2 + 0,242 X_3$$

a)  $\alpha = 1,201$

Shows security (X1), Crime Prevention (X2), and the use of Technology (X3) give a positive value to the decision to use CCTV (Y) will increase by 1,201

b)  $\beta_1 = 0,360$

The security coefficient gives a positive value to the decision to use CCTV will increase by 0.360.

c)  $\beta_2 = 0,329$

Crime Prevention coefficient gives a positive value to the decision to use CCTV will increase by 0.329.

d)  $\beta_3 = 0,242$

The coefficient of technology utilization gives a positive value to the decision to use CCTV will increase by 0.242

## 6) F Test

**Tabel 6. F Test Result**

Model	F count	F table	Sig	Std	Description
Regression					
Residual	33,224	2,70	0,000	0,05	H1 Approved
Total					

Source: processed primary data, 2020.

Table 6. Shows the value of significance Fcount  $0.000 < 0.05$  and Fcount  $33.224 > F_{table} 2.7$ . All variables have simultaneous influence on the dependent variable.

## 7) t Test

a) from the calculation obtained t count =  $4.538 > t_{table} = 1.984$  and the significance of  $0.000 < 0.05$ . Security has a partial and significant effect.

b) from the calculation obtained t count =  $4.159 > t_{table} = 1.984$  with sig value.  $0.000 > 0.05$ . Partial Crime Prevention has a significant effect as well.

c) from the calculation obtained t count =  $3.085 > t_{table} = 1.984$  with sig value.  $0.003 < 0.05$ . Partial utilization of Technology has a significant effect as well.

## 8) Coefficient of Determination Test ( $R^2$ )

The result ( $R^2$ ) amounted to 50.9%, while the influence of outside variables amounted to 49.1%.

## 5. Conclusion

1) Security, Crime Prevention, and the simultaneous use of Technology positively influence the decision to use Close Circuit Television (CCTV) in Surakarta. Shown by Fhitung of  $33.224 > F_{table}$  is equal to 2.7 Sig value.  $0.000 < \text{standard } 0, 05$ .

2) Partial security has a positive and significant influence on the decision to use Close Circuit Television (CCTV) in Surakarta. Shown by the value tcount =  $4.538 > t_{table} = 1.984$  with the value of sig.  $0.000 < 0.05$ .

- 3) Partial Crime Prevention positively and significantly influences the decision to use Close Circuit Television (CCTV) in Surakarta. Shown by the value thitung = 4.159 > ttable = 1.984 with the value of sig. 0,000 < 0,05.
- 4) Partial utilization of Technology has a positive and significant influence on the decision to use Close Circuit Television (CCTV) in Surakarta. Shown by the value of t count = 3.085 more > ttable = 1.984 with the value of sig. 0,003 < 0,05.

### **Suggestions**

This research can be used as a guideline in future research by developing factors to be studied that can affect the decision of Use.

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