# E-Policing in the PNP Laoag City Police Station: Case Study

Jay-Lynne May S. Escalona

Abstract:- This study illustrates how the PNP Laoag City Police Station implement their PNP e-projects with the adaptation of modern policing system or the e-policing and problems arise during its implementation. The awareness of the community was also determined to test the reliability of the study. This research relied on the literatures and survey questionnaires to collect data. Hence, it was found out that the PNP e-project through the use of modern e-policing has effectively implemented in conducting investigation; crime reduction and; improved organizational communication. However, intermittent internet connection and lack of trained personnel were the primary problems encountered by the Police Station during its implementation. Therefore, the study recommends that the Regional Philippine National Police Training Unit may provide enhancement training for the PNP personnel before the appointment on specific PNP e-projects and may assign at least one IT expert personnel who will be in-charge in monitoring the internet connection when needed and maintain the performance flow of the system to avoid clogging of the system.

Keywords:- E-Policing, PNP E-Projects, Implementation.

## I. INTRODUCTION

E-Policing is defined as a transaction of services and information between the police and citizens using the internet (Royal Canadian Mounted Police, no date; Boondao and Tripathi, 2007; Lebeuf, 2006). As cited in the articles (Koper et al. 2009), e-Policing systems enable Law Enforcement agencies to be ahead of criminals in terms of utilization of sophisticated crime prevention and reduction technology as well as to enhance the security police records and could result in improved crime detection, analysis, and investigation.

Evolving computerized and mobile technologies are also changing the face of policing, from department and emergency communication systems to surveillance and investigation of criminal activity. To sum it up, the same tools that facilitate criminal communications also enable law enforcement to engage in new crime prevention efforts (International Association of Chiefs of Police, 2012), to locate, monitor, and apprehend offenders, and to prepare cases for prosecution. The International Association of Chiefs of Police (IACP) suggests a social media strategy in which law enforcement agencies can use a variety of tactics to "promote and enhance crime prevention efforts, "including: posting crime prevention tips, supporting

neighborhood watch groups, promoting crime prevention events, developing crime prevention blog, hosting a crime prevention web chat, creating a crime prevention podcast.

Meanwhile, e-Policing was adopted for community policing to promote better involvement of the public since community policing aims at enhancing police-community partnerships in crime prevention within their localities. With community policing, service delivery can be improved: problems can be jointly identified and solved; interactions between the police force and the public increase; and trust of the public in the police force can be enhanced (Dominique, W. 2010). However, Zambia's strategic adoption of this concept has been very slow with a concentration on internal police modernization for improved case analysis. The key stakeholders such as the public still face challenges to contact the Police through mobile technology despite having phones and other mobile terminals (Joel, et al., 2016).

(Colvin and Goh 2005) proves that the information quality and timeless are two important components that are effective in terms of achieving acceptance by the patrol officer. Wright (1978, p. 306) commented that the aim of technology as used in law enforcement is to facilitate and provide efficiency in policing. As well as to lift the perception of the police and changed the character of traditional policing. Thus, similarly represents changes in police management and organization and adaptation to the new technologies. As such, police may enhance their professional status and organizational legitimacy as well (Manning 1992a; Ericson and Haggerty 1997).

As agreed by Hanson, W. (2011), Community Policing today has also expanded through social networking to locate missing, alert neighbors of suspicious activity and even inform the public about crimes committed in their neighbors.

The Philippine Constabulary Data Processing Unit (PCDPU) was established on October 18, 1965, 3 years later renamed Crime Information and Data Processing Center (CRIDPC), concentrated mainly on collating crime-related data from the field. It was March 1, 1972, became Constabulary Computer Center wherein the main task is a nationwide crime data bank for use in crime studies accessible to law enforcement agencies on a direct inquiry basis. On January 13, 1988, the Constabulary Computer Center (CCC) was renamed PC/INP Computer Center. It was January 1991, under the creation of RA 6975 PNP Computer Service was officially organized. Through Resolution Number 2008-532 dated November 11, 2008, as

approved by NAPOLCOM, Computer Service was renamed **Information Technology Management Service** (itms.pnp.gov.ph).

The Information Technology Management Service manages, coordinates, and controls the IT environmental scanning for operational and administrative applicability in the PNP, the development and provision of the PNP data resource (computerized and non-computerized), computer and network facilities, information systems and services, and the design and/or improvement of PNP processes with the end-view that such services effectively respond to the requirements of the PNP, and in harmony with the overall plan for the PNP (itms.pnp.gov.ph/).

The Directorate for Information and Communications Technology Management (DICTM) was activated to integrate and standardize all the major PNP information systems and resources for further improve frontline services (NHQ GO# DPL 09-08). Not later the year 2010, the formulation of ICT policies in consolidation with the DICTM creating programs and guidelines of the system in under all electronic and communications technology resources of the PNP. Its duties and functions include the interoperability, integration, standardization, utilization, development, and maintenance of all ICT assets (itms.pnp.gov.ph/).

Likewise, effectively inclined to the implementation of programs and e-Projects of the PNP, particularly the IT SOLUTION under PNP Next Generation Investigation which composed of:

#### > CIRAS

Enhanced e-Blotter or Crime Information reporting and Analysis System will be interfaced with Geographic Information System (GIS) to evolve into a Qualitative Crime Analysis Management Tool. CIRAS will also be able to incorporate or access data from different e-projects of the PNP. These modifications of the e-Blotter system will enhance the ability of the field commanders to conduct qualitative crime analysis more efficiently and more accurately. The core objective of CIRAS is to serve as a scientific management tool for efficient and effective prescription of police intervention. It specifically serves as a crime database; Identify crime hot spots along with other trends and patterns; Use of spatial (space) and time series analysis;

## > CIDMS

Case Information Database Management System is a visual intelligence analysis environment that can optimize the value of massive amounts of information, allowing the analysts to quickly collate, analyze and visualize complex data from different sources. It is the investigator's digital notebook and a database system used to monitor cases initially on TF USIG cases which was developed by ITMS and first used by CIDG;

#### > CMAS

Case Management and Analysis System utilize the i2 Analyst Notebook which analyzes data information for the timely dissemination of information to operating/field units. It is an IT Solution designed to help investigators in the management and analysis of investigative data;

#### ➤ E-Subpoena System

The e-Subpoena System was developed through the Memorandum of Agreement signed between the PNP, Supreme Court and Department of Justice. It aims for a cost-effective delivery of subpoenas and other court documents to the PNP units. Since everything is accomplished online, the cost for paper and courier is no longer a burden while there will be no more delays, and the records are easily within reach:

### > E-Rogues Gallery

The e-Rouges Gallery System is an electronic rogues' gallery of wanted persons that will provide every police station in the country an access to data on criminals to include pictures that are in the files of police units in the country. Through e-Rogues Gallery, for example, the records of an individual or a suspect wanted for a crime in Quezon City can be instantly accessed by a police station in Butuan City with just a click of their fingers at the system;

### ➤ E-Warrant System

The e-Warrant System is a system where all warrants of arrest will be electronically documented so that they can be accessed through computers. Developed by a team of Technology Experts from Information Information Technology Management System (ITMS) and Directorate for Investigation and Detection Management (DIDM), the e-Warrant eliminates the hassle bugging snail mail system of delivering a warrant to a particular police station. The warrants accessed by the police through the system will facilitate the apprehension of a criminal because a warrant can be sent by email, printed out, and served. The warrant although not the original, but a faithful digital copy thereof, will facilitate the apprehension of a criminal because of the knowledge by the arresting officer that a warrant is pending for the former's arrest (pnp.gov.ph/).

In the PNP Annual Accomplishment Report of 2014, budgets are allocated based on the targets indicated in the initiative profile of the different Directorates which focuses on the crime prevention and crime solution in connection to the PNP Patrol plan 2030 (pnp.gov.ph). Since not all stations can put up an official website due to budget constraints, some resorted to social networking sites. The use of social media is an effective way of gathering, as well as disseminating data for public information (Memorandum Circular Number 2011-001). Community involvement counts in police matters; if the PNP seeks to enhance its image, then it must engage the public online; it can help the public understand more about the PNP and eliminate the animosity about the organization brought about by negative publicity and pop culture (John Ray, 2012).

Policing today is all about smart policing, criminal activities were all technology-driven. Hence, to effectively address the evolving crime rate with the use of technology, it is high time to develop policy intervention in terms of crime prevention. The Directorate for Investigation Detective Management (DIDM) of the Philippine National Police (PNP) during the launching of the IT solutions, former Chief DIDM Director Magalong, expressed that the main effect of having these IT solutions is that there will be higher crime solution efficiency, higher clearance efficiency and few personnel will run the system so that policemen are in the streets, unlike in the traditional way (radyonatin.com).

Technology seems to be advancing at an accelerating pace through visual technology, audio, computerized records storage, and advanced analytics, and the like. Although, epolicing may work for some people but not for others who experienced lower-income, low-internet, or lack of online access. This indispensable situation may not represent the entire community thus, may represent special interest rather than the general public.

This PNP e-Projects specifically the IT Solutions offers to upgrade the PNP's investigative equipment, installation of a case tracking system, institutionalize the crime reporting from all PNP units reflecting the true crime situation in real-time, the implementation enhanced crime reporting system in the country and the like. Today, law enforcement is already implementing these kinds of new technological approaches, however, this study would like to determine the awareness level of the public and problems that are related to the implementation of the e-policing project of the PNP. As the rate of technology adoption accelerates it becomes increasingly important for police agencies to consider how they select and implement technology and what strategic objectives these technologies will help them achieve.

## > Theoretical Framework Conceptual Framework

This research is guided with the principle "Smart Policing is the New System". This study is based on the guidelines and procedures of Memorandum Circular No. 2010-016, to integrate and standardize all the major PNP information and communication systems and resources to further improve internal systems to include the interoperability, integration, standardization, acquisition, utilization development and maintenance of all ICT assets with DICTM as the locus of authority on ICT matters. Further, The Information and Communications Technology (ICT) has been at the forefront of global and innovations in the 21st century. It has contributed so much to the growth and productivity of organizations and societies around the world. In the Philippine National Police (PNP), ICT is considered an important drive of innovation and transformation as the organization is aiming for a strategic change through the institutionalization of the Integrated Transformation Program-Performance Governance System (ITP-PGS) or the PNP Peace and Order Agenda for Transformation and Upholding of the Rule of Law (P.A.T.R.O.L.) Plan 2030 which envisions a more professional, effective and credible police service by the

year 2030 (Command Memorandum Circular 28-13 (PNP Information and Communications Technology (ICT) Management Eligibility).

### ➤ Policy Implementation Theory

According to Stewart et. Al., 2008, Implementation is a means of the execution of the law in which stakeholders, organizations, procedures, and techniques work together to put policies into effect to attain goals. Simply put, policy implementation involves translating the goals and objectives of a policy into an action (Khan, 2016).

Thus, frontline implementers are the focal resources in policy implementation. They need a commitment to policy objectives and necessary skills in using available resources to achieve policy objectives since the incompetency of frontline implementers may lead to implementation failure (Mazmanian & Sabatier, 1989). This model will reconsider possible major problems of policy implementation and can be used in the formulation of measures to overcome them.

### ➤ Organization Theory

Organizations are defined as social units of people that are structured and managed to meet a need or to pursue collective goals. Theories of organizations include rational system perspective, division of labor.

According to Castells, networks are the primary unit of social organization. Castells argues that there is a new "variable geometry" that connects economic activity, states, and society. It is associated with either the study of the Internet, cities, and regions or social movements. Hence, he stated in his study that convergence of those technologies with an older and autonomous process of network forms of organizing with their focus on flexibility and adaptability as key modes of organizing.

## ➤ Community Policing Theory

It is a philosophy that promotes organizational strategies that support the systematic use of partnership and problem-solving techniques to proactively address the immediate conditions that give rise to the public such as crime, social disorder, and fear of crime (Community Oriented-Policing Services, 2017).

## > Conceptual Framework

This study uses the implementation process paradigm which is undertaken by the following conceptual framework shown in figure 1 which has five components: Implementing Organization, Community, Process, Output, and Outcome.

**Implementing Organization** – This is the implementing bodies of e-policing and first to encounter problems during the implementation;

**Community** – In this research, community is used to validate the data by means of measuring their awareness on e-policing;

**Process** – In the research process, this includes the extent of implementation and problem encountered by the policy implementers during the implementation of e-policing;

**Output** – this study identified the possible factors that affects the implementation of e-policing; and lastly,

**Outcome**— based from the output, this study will propose an alternative approach to heighten the performance of

personnel as well as for public information in coordination with the PNP Laoag City Police Station.

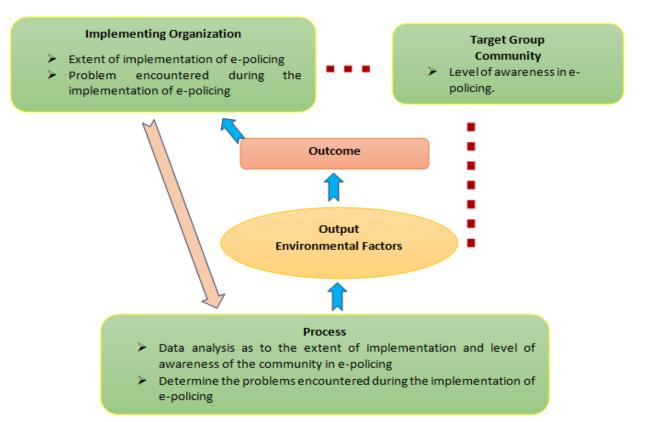


Figure 1. Research Paradigm

## ➤ Significance of the study Beneficiaries of the study are the following:

Law Enforcement Agency. This research will benefit the organization in maintaining their platform that allows public communication between agency and the community. This will aid them to overcome future dilemma that may arise in the implementation of new policies.

**Police Personnel.** This study will help them improve their community relation as to the new trend of reducing crime rate, uphold communication and public information dissemination through the use of Information and Communication Technology (ICT).

**Community.** The study will impart a higher-quality of awareness that pertains to the policy implemented by the policy implementers.

## > Operational definition of Terms

To further understand the study, the following terms are hereby defined:

**Implementing Organization**— is defined as the implementing bodies of e-policing;

**Target group** – is defined as the validator of the implementation of e-policing.

**Environmental factors** – it is defined as the driving mechanism that indicates influence development and implementation of e-policing.

## > Statement of the Problem

The study aimed to assess the e-policing system implemented by the Laoag City Police Station. Specifically, the participant is sought to answer the following:

- 1. What is the level of awareness of the community on e-Policing?
- 2. What is the extent of implementation of e-Policing in Laoag City Police Station?
- 3. What are the problems encountered in the implementation of e-Policing in Laoag City Police Station?

## II. RESEARCH METHODOLOGY

This chapter presents a description of the research method that will use in the study. It consists of (1) research design, (2) population and local of the study, (3) data gathering instrument, (4) data gathering procedure, and; (5) treatment of the data.

## Research Design

The study used quantitative research, according to Aliaga and Gunderson (2002:81), Quantitative research is "explaining phenomena by collecting numerical data that are analyzed using mathematically based methods (in particular statistics).

The researcher aimed to describe people or existing conditions of e-Policing of the PNP of Laoag City Police Station with the use of a case study. According to Kowalczyk (2015), descriptive research is a study designed to depict the participants in an accurate way. This investigates a phenomena-population by selecting samples from the population to discover the relative incidence, distribution, and interrelation of variables.

## ➤ Population and local of the Study

In this study, the researcher used the purposive sampling technique to obtain the sample. Purposive sampling is the process of selecting a sample by taking a subject that is not based on the level of the area, but it is

taken based on the specific purpose (Arikunto (2010:183). Simply put, the researcher decides what needs to be known and sets out to find people who can and are willing to provide the information by knowledge or experience (American Journal of Theoretical and Applied Statistics 2016). Hence, the PNP of Laoag City Police Station were chosen purposively as the primary participants considering that these police officers are the first-hand implementers of e-policing in their respective units and community people coming from Laoag City as the secondary participants for a reason that they are used to determine the validity of the data gathered. Provided below is the map of Laoag City, Ilocos Norte.



Figure 2. Map of Laoag City, Ilocos Norte

#### ➤ Data Gathering Instrument

In data gathering, the researcher used the survey questionnaire. According to Check & Schutt, 2012, p. 160, Survey research is defined as the collection of information from a sample of individuals through their responses to questions. This type of research allows a variety of methods to recruit participants, collect data, and utilize various methods of instrumentation. The data gathering instrument of the researcher will initially subject to validation by the adviser and approval by the Chief of Police of Laoag City Police Station.

## ➤ Data Gathering Procedures

In conducting the study, the researcher requested for the approval of the Laoag City Police Station with the aid of a letter to be given to them duly signed by the adviser and the dean of the College of Criminal Justice Education. Upon approval, the researcher administered the distribution of survey questionnaires to the participants of the said police station and an informal follow-up interview may be conducted when needed. For the validation of the reliability of the data, a survey questionnaire is distributed to the resident of the City as well thru the use of google forms.

#### > Treatment of Data

The researcher used the descriptive type of data analysis to describe the extent and problems encountered in implementing the e-policing of the PNP Laoag City Police Station. The treatment shows or summarized data in a meaningful way which allows simpler interpretation of the data. The study used the weighted mean and a four-point Likert scale to analyze and describe the data gathered.

Interpret the data in the following manner:

Point Value	Range of Values	Interpretation of the Level of Awareness	Descriptor of the Level of Awareness
4	3.51-4.50	Very Much Aware	Knowledge with skills and training
3	2.51-3.50	Much Aware	Knowledge with trainings
2	1.51-2.50	Slightly Aware	Knowledge and skill
1	1.0-1.50	Least Aware	Basic knowledge

Table 1. Level of Awareness

Point Value	Range of Values	Interpretation of the Extent of Implementation	Descriptor of the Extent of Implementation
4	3.51-4.50	Strongly Implemented	100% all programs are implemented
3	2.51-3.50	Fairly Implemented	75% programs are implemented
2	1.51-2.50	Slightly Implemented	50% programs are implemented
1	1.0-1.50	Least Implemented	25% programs are implemented

Table 2. Extent of Implementation

### > Ethical Considerations

In this study, the participants were the Philippine National Police of Laoag City Police Station and the residents of the said city. Prior to the conduct of the study, this was openly communicated to the participants by indicating a letter to guarantee the confidentiality of their answers as well as their identity. The survey questionnaire is distributed to the participants and was honestly and voluntarily answered. Protecting the research participants, developing trust with them, and promoting the integrity of the research was crucial to the success of this study (Creswell, 2009).

## III. PRESENTATION, ANALYSIS AND INTERPRETATION OF THE DATA

This chapter presents the analysis and interpretation of data. This further presents the awareness of the community,

extent of implementation and problems encountered in the implementation of e-policing by the PNP personnel of Laoag City Police Station. The various results were presented in the succeeding tables with corresponding discussion and explanations.

## ➤ The Level of awareness of the community on e-policing in Laoag City.

Table 3, presents the e-Projects of the PNP wherein it was tabulated and computed according to the following orders, CIRAS/e-Blotter, CIDMS/Case Information Database and Management System, e-Subpoena System, e-Rouge Gallery System and e-Warrant System. It can be noted that the level of awareness of the community on e-policing is *slightly aware* on all of the variables presented therein. This simply states that the participants are somehow had a basic knowledge on the e-policing or programs of the PNP that are being implemented particularly the e-projects.

Table 3. The Level of awareness of the community on e-policing

Variables	
CIRAS/e-BlotterMean	<b>Descriptive Interpretation</b>
An electronic database system that facilitates crime documentation and systematic data storage and retrieval. It alsopresents a quick, fast and 2.47 reliable transmission of crime information from a police station to the provincial and regional offices and to the national headquarters.	Slightly Aware
Case Information and Database Management System	
It is a visual intelligence analysis environment that can optimize the value of massive amounts of information, allowing the analysts to quickly collate, analyze and 2.22 visualize complex data from different sources. It is the investigator's digital notebook and a database system used to monitor cases.	Slightly Aware
e-Subpoena System	
It aims for a cost-effective delivery of subpoenas and other court documents to the PNP units.	
This is accomplished online, the cost for paper and 2.14 courier is no longer a burden while there will be no more	Slightly Aware

delays, and the records are easily wit	thin reach.		
e-Rouge Gallery System			
An electronic rogues' gallery of wanted persons that will			
provide every police station in the country an access to data	2.18	Slightly Aware	
on criminals to include pictures that are in the files of			
police units in the country.			
e-Warrant System			
All warrants of arrest will be electronically documented so	2.10	Slightly Aware	
that they can be accessed through computers.			

As gleaned on the table 3, the highest mean of the level of awareness of the community on e-policing has 2.47 on the variable of CIRAS/e-Blotter which interprets as slightly aware while on the e-Warrant System has the lowest mean of 2.10 as slightly aware. The result proved that this could help the public to understand the programs of the PNP, as cited by John Ray, 2012, "community involvement counts in police matters". Dominique, W. 2010 further stated that e-Policing was adopted for community policing to promote better involvement of the public since community policing aims at enhancing police-community partnerships in crime prevention within their localities. As

perceived in the table, the PNP has been effectively disseminating information to raise the awareness of the public regarding the PNP e-Projects pursuant to the Memorandum Circular Number 2011-001.

➤ The Extent of Implementation of e-Policing in the PNP Laoag City Police Station.

Table 4 shows that the implementation of e-policing is *Strongly Implemented* on all variables provided. PNP e-projects policies and objectives were well observe up to its implementation specifically to those who were assigned in handling the account or system accordingly.

Table 4, The Extent of Implementation of e-Policing of the PNP Laoag City Police Station.

Variables	Mean	Descriptive Interpretation
e-Blotter		_
1. The complaint or information of citizen is encoded directly to the computer.	3.77	Strongly Implemented
2. the complainant can get update by showing the incident record transaction receipt.	3.77	Strongly Implemented
4. Police stations have crime registrars whose main responsibility would be to encode		
crime information into the e-blotter system	3.77	Strongly Implemented
Case Information and Database Management System		
1. Records of case by digitizing case folder to have a case folder repository/backup	3.86	Strongly Implemented
2. Conduct case folder cross-referring cases to aid in solving cases	3.68	Strongly Implemented
		Strongly
3. Conduct case monitoring and reports	2.60	Implemented
	3.68	0. 1.7.11
4. Check criminal records for reference	3.86	Strongly Implemented
5. Update all case records and add the recipient Investigator with date handled from being the date of turnover and the date handled to as To Present.		
the date of turnover and the date handled to as 10 Present.	3.81	Strongly Implemented
6. The Chief Investigator will submit a memo to RIDMD, DIDMD, PIDMB, CIDMB		
signed by the Chief of Police/ Head of unit, indicating the name of the outgoing		
Investigator, his previous unit and his new unit	3.77	Strongly Implemented
7. All information are treated confidential.	3.81	Strongly Implemented
e-Subpoena System		
Ensure concerned personnel faithfully attend court duties.	3.86	Strongly Implemented
2. Ensure the use and utilization of the e-Subpoena System in the police station.	3.81	Strongly Implemented
3. Concerned police officer is properly informed and that they personally report to the		
Police Station to receive the subpoena.	3.77	Strongly Implemented
4. Subpoena is forwarded to the concerned police station where the PNP personnel	3.86	Strongly Implemented
5. Maintain an official logbook where the concerned PNP personnel signs as a	2.55	
confirmation of receipt of the issued subpoena.	3.77	Strongly Implemented
e-Rouge gallery System		
1. The police station provide access to data on criminals to include pictures that are in the	2.00	Ctuan ala Incular a tana 1
files of police units in the country.	3.90	Strongly Implemented

e-Warrant System		
1. The system automate the issuance of arrest warrants by our courts for a speedier and		
more effective service by our law enforcement agents.	3.86	Strongly Implemented

As gleaned in table 4, among the five indicators the highest has a mean of 3.90 on the e-Rouge Gallery System as interpreted Strongly Implemented, while in the Case Information and Management System particularly on indicators 1 and 2 has the lowest mean of 3.68 is likewise interpreted as Strongly Implemented. Hence, the result of the study supports the work of Wright (1978, p. 306), that technology used in law enforcement aims to facilitate and provide efficiency in policing and will also lift the perception of the police and changed the character of traditional policing. Although, in the case of Zambia this concept has been very slow with a concentration on internal police modernization for improved case analysis (Joel, et al., 2016). (Manning 1992a; Ericson and Haggerty 1997) argued that police may only enhance their professional status and organizational legitimacy by adopting the new technologies focused on police management, flexibility, and key modes of organizing.

As seen in the result, Koper et al. 2009, relates that e-policing system specifically the PNP e-projects is an innovative approach not only in crime prevention and reduction technology further could result in improving crime detection, analysis and investigation. These e-projects upgrade the PNP's investigative equipment, installation of case tracking system, institutionalize the crime reporting from all PNP units reflecting the true crime situation in real-time, the implementation enhanced crime reporting system in the country.

According to Stewart et. Al., 2008, Implementation is a means of the execution of the law in which stakeholders, organizations, procedures, and techniques work together to put policies into effect to attain goals.

## ➤ Problems encountered during the implementation of e-Policing by the PNP personnel.

The following are the common problems encountered by the PNP personnel during the implementation of epolicing: (a) Intermitted connection and; (b) Lack of trained personnel.

### > Intermitted Connection

In this time of modern policing, the internet has become a vital part of policing nowadays. It became a necessity for every institution or organization especially in law enforcement in terms of monitoring, reducing crime but also for records purposes. However, the PNP personnel reported that one of the problems in implementing e-policing is the internet connection. Participants reported:

"The internet connection is weak which causes the delay of sending reports or encoding data on the database system."

However, under the PNP Memorandum Circular Number 2014-019, the Test and Evaluation Procedures and Guidelines on PNP Internet Connectivity for Voice and Data Communications are established to monitor the internet connection of each PNP office. This is to ensure compliance to requirements on internet connectivity subject for procurement, evaluation, and/or acceptance by the Philippine National Police. Besides, the conduct of different test under the Terms Reference of Internet subscription for the Directorate for Information and Communications Technology Management (DICTM) is provided to support effective, efficient, and innovative services according to the Integrated Program-Performance Transformation Governance System (ITP-PGS) or the PNP Peace and Order Agenda for Transformation and Upholding of the Rule of Law (P.A.T.R.O.L.) Plan 2030 envisions a more professional, effective, and credible police service by the year 2030 (Command Memorandum Circular 28-13 (PNP Information and Communications Technology (ICT) Management Eligibility).

## ➤ Lack of trained personnel

In the case of Laoag City Police Station reported that these trained personnel were usually reassigned to another unit or station therefore, systems/accounts were not updated on time.

## Participants stated that:

"The programs are progressing, however; the station needs IT expert or trained personnel to continuously update and monitor the systematic flow of the program accordingly."

E-Policing applications bring substantial improvement to an institution but often face challenges in implementation and functionality problems with the new system. One of the major concerns within an organization implementing technological policing is the lack of technical support or a lack of trained personnel. This may not only affect the effectiveness of these e-policing programs but will likely create a negative impact on job satisfaction and productivity. Concerning this, frontline implementers are the focal resources in policy implementation. They need a commitment to policy objectives and necessary skills in using available resources to achieve policy objectives since the incompetency of frontlines implementers may lead to implementation failure (Mazmanian & Sabatier, 1989).

## > Findings

The awareness of the community on e-policing is perceived as slightly aware specifically of the PNP e-projects of the Laoag City Police Station. It is deemed that CIRAS/e-Blotter is primarily well-observed although the e-warrant system is the least observe among the five PNP e-projects.

As to the implementation of e-policing by the PNP Laoag City Police Station, it was reported as strongly implemented on all the e-projects. The e-Rouge gallery system is the highest indicator that is being implemented followed by the e-warrant system; e-subpoena system; Case Information and Database Management System and; the CIRAS/e-Blotter.

However, there were two identified problems during the implementation of e-policing; the intermittent internet connection and; lack of trained personnel. Both concerns are the primary issues of the personnel in terms of updates and monitoring the system.

## IV. CONCLUSION AND RECOMMENDATION

This chapter presents the conclusion and recommendation of the study.

#### ➤ Conclusion

The following conclusions were extracted from the answers to the statement of the problem of the study.

The implementation of e-policing is a proactive approach to build a strong connection and interactions with the community in which it actually enhanced the information dissemination of the PNP e-projects employing social networking sites.

The PNP Laoag City Police Station is currently on its effectual implementation of e-projects however, personnel of the stations struggled with the implementation in terms of technical support and training.

Evidently, e-Policing has greatly influenced the traditional process of policing system into a way more technical operations in the law enforcement agency but seems to be the most challenging for every personnel given the fact that it requires a long process in learning to operate the new system.

## ➤ Recommendation.

The PNP Regional Training Unit may provide enhancement training for the PNP personnel before the appointment on specific PNP e-projects.

The PNP Regional Training Unit may assign at least one IT expert personnel who will be in-charge in monitoring the internet connection when needed and maintain the performance flow of the system to avoid clogging of the system.

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