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USE OF TECHNOLOGY-ASSISTED STRATEGIES IN UPHOLDING LAW AND ORDER IN SELECTED CITIES IN NCR: BASIS FOR AN IMPROVED CRIME SOLUTION EFFICIENCY

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Abstract

The study explores the use of technology-assisted strategies for crime detection in various cities within the National Capital Region (NCR). It highlights significant operational issues that impact the criminal justice system, particularly concerning the discriminatory nature of monitoring and the various profiling challenges associated with these strategies. The researcher employed a descriptive research methodology to collect and analyze quantitative and qualitative data about prevalent practices, conditions, and trends related to technology in crime prevention and detection. The purposive sampling technique was used to gather first-hand data from selected law enforcement personnel, Barangay officials, and community members through a researcher-modified questionnaire utilizing a 4-point Likert scale for measurement. The findings indicate a generally perceived lack of seriousness regarding the problems encountered with technology-assisted strategies, with an overall mean score of 2.20 across all groups surveyed. The police personnel (PNP) reported a mean of 2.34, whereas Barangay officials and community members reported means of 2.20 and 2.06, respectively. Notably serious issues included inadequate preparedness for emergencies (mean of 2.62), insufficient promotion of adherence to international laws protecting human rights (mean of 2.61), and inadequacies in maintaining transparent community selection processes (mean of 2.56). The responses indicated that while proposed measures to improve strategies were largely deemed 'less recommended' overall (mean of 2.25), certain recommendations stood out as important. Respondents considered it crucial to prepare adequately for emergencies (mean of 2.68), promote international legal adherence (mean of 2.66), and ensure the transparent sharing of community selection process results (mean of 2.58). In conclusion, the study identifies key areas requiring improvement in technology-assisted crime strategies, noting specific administrative and procedural deficiencies affecting efficiency. Accordingly, the researcher advocates for enhanced preparedness in emergency response, stronger adherence to human rights legislation, and better transparency in community engagement practices as essential next steps to improve crime solution efficiency.

Keywords: *technology-assisted strategies, criminal justice system, deployment and arrest*

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INTRODUCTION

As crime in cities becomes more complicated, police departments need to come up with new ways to deal with it that go beyond what they have always done. This means that they need to use cutting-edge technology (Arietti, 2023).

In the last few decades, police departments have added a lot of new technology to make their work more efficient and effective, especially when resources are limited and the public is paying more attention to how the police work. However, there is limited knowledge regarding the prevalence and utility of technology within law enforcement agencies nationwide, along with the factors that affect its selection and implementation.

The advent of sophisticated digital instruments and forensic technologies has fundamentally transformed contemporary policing, providing novel methodologies for the collection, analysis, and interpretation of evidence (ale et al., 2025). Police departments now use a lot of different technologies to keep people safe, speed up investigations, and come up with better ways to stop crime.These advancements in technology encompass real-time crime centers, predictive policing algorithms, sophisticated surveillance systems, and digital forensics (Byrne & Marx, 2011; Guerette & Przeszlowski, 2023). More specifically, it has been shown that better information and communication technology infrastructure and easier access to online information sources can help stop crime (Aguilar & Sánchez, 2019). Real-time crime centers make this deterrence even stronger by using different technologies and information to make it easier to find and deal with crimes (Arietti, 2023). These technological integrations also make it easier for police departments in the area to talk to each other and share information, which makes the law enforcement network more cohesive and responsive (Aguilar & Sánchez, 2019).

This study examines the implementation of technology-driven strategies in select municipalities within the National Capital Region to assess their impact on maintaining law and order and to propose enhancements for crime resolution efficiency. The national case clearance rates for violent crimes are still at record lows, even though police practices have gotten a lot better. This shows how important it is to check how well these technologies help solve crimes (Guerette & Przeszlowski, 2023).

AI can be used in real life to stop crime, and it can also help policymakers figure out how to make AI more widely used and deal with the problems that are already there in the area (Tarawneh et al., 2025). AI systems can use advanced data analysis, predict crime, and keep an eye on criminal activity to find and stop crime (Alakayleh, 2025). These AI-powered tools can look for hidden reasons for criminal behavior and small, regular patterns by combining different datasets, like crime history, socioeconomic indicators, and geographic locations (Mihna et al., 2024).

Law enforcement can be proactive and find and stop possible threats before they get worse with these kinds of analytical tools. This analytical skill also includes automating the detection of strange behaviors and anomalies in large datasets, which makes computers work faster and adds to human intelligence (Jejelola, 2024). Artificial intelligence can also help fight crime in new ways when used with machine learning, big data, and geospatial technologies (Gummadidala et al., 2020). This makes it easier to solve problems and keep the environment safe. These systems use machine learning algorithms to look at complicated, multi-dimensional datasets, which is more advanced than traditional methods. This helps people find crime hotspots and patterns faster and more accurately (Tarawneh et al., 2025). This lets police use their resources better by stopping problems before they happen instead of just reacting to them (Kaur & Saini, 2024; Mihna et al., 2024). Intelligence-led policing and predictive policing are two new ways of policing that use a lot of internal data to help police make decisions and analyze crimes (Gummadidala et al., 2020).

Using AI in law enforcement is very important for the safety of communities and the country's goals for technological progress, especially for predictive policing and making better decisions (Al-Shamsi et al., 2024). These systems can look at a lot of different kinds of information, like crime rates, social media posts, and demographic data, to find patterns and make educated guesses about when and where crimes are likely to happen. This allows law enforcement to intervene prior to the commission of crimes rather than subsequent to their occurrence (Apene et al., 2024). AI has changed the way police work in a big way. It can handle a lot of data and guess what crimes might happen, which changes how police work (Apene et al., 2024). This allows police to go from being reactive to being more proactive and preventative, which makes better use of resources and speeds up response times (Vidaković, 2024; "Predictive Policing: The Role of AI in Crime Prevention," 2024). Asirit and Hua (2023) say that the planned use of AI in these areas could make law enforcement much more effective by helping them stop crimes before they happen instead of just responding to them. AI models are much better at finding crime hotspots and possible criminal activities by looking at past crime data than by using human intuition and basic statistical analysis (Kassem & Lodhi, 2024). These advanced analytical tools, which often use geospatial data and predictive modeling, help police departments guess where crime is most likely to happen and put resources where they are most needed (Ibrahim et al., 2024; Sejal, 2024). This proactive approach, also called predictive policing, tries to stop crimes before they happen by constantly watching and analyzing surveillance data to find and stop possible threats in real time (Dave & Sutaria, 2024). AI can also figure out how different types of crimes work and put them in order. This, when used with predictive modeling, lets you find out what crimes are likely to happen in the future and take steps to stop them (Mihna et al., 2024). These systems give police useful information about how to use their resources and plan interventions, which helps them solve crimes faster (Berk, 2020; Vu et al., 2025). Machine learning and deep learning, two types of AI, have been very helpful in finding things that traditional methods often miss and looking at complicated crime patterns (Lu et al., 2025). These advanced analytical tools help law enforcement find patterns and trends that people can't always see, which makes their work more accurate and useful (Apene et al., 2024). These advanced algorithms can help police look at a lot of data to figure out what might happen next. This will change how they run their business (Apene et al., 2024). This includes being able to guess how likely a crime is to happen and find areas that are more likely to be dangerous. This lets the police take action before it happens (Hitesh & Ranjan, 2023). These data-driven methods go beyond just looking at the data to make predictions about crime, like what kind of crime it will be, when it will happen, where it will happen, and who will do it (Du et al., 2023). We need advanced analytical methods because criminal behavior is very complicated. Deep learning and machine learning are great at finding complex patterns and guessing when they will happen again (Monika & Kumar, 2024). AI not only helps police departments figure out when crimes are likely to happen, but it also makes them work better by giving them better tools for managing cases and looking into crimes. This makes it easier and faster to catch criminals (Alakayleh, 2025). Deep learning algorithms, such as Convolutional Neural Networks and Recurrent Neural Networks, have demonstrated potential in real-time crime detection by analyzing surveillance footage to identify incidents of vandalism, theft, and assault (Sundari, 2024). These technologies help police not only find crimes but also sort them into groups. This helps them respond faster and better (Apene et al., 2024). Deep learning algorithms, such as those employed in facial recognition technology, can also locate individuals in densely populated areas. This helps stop crime and find people who are missing or who are wanted (Rane et al., 2024). Advanced analytical methods like LSTM and GRU models can help you find complicated, hidden patterns and long-term dependencies in large sets of daily crime logs without having to do a lot of manual feature engineering (Elseidi, 2025). This skill is very important for

understanding how criminal networks change over time. This is because they often have many actors and relationships that are hard to study with traditional methods (Chen, 2023). Also, big data analytics lets you work with large datasets quickly and without errors, which makes criminal investigations more accurate and better at making predictions (Rawat et al., 2023).

Objectives

This study assessed the use of technology-assisted strategies in upholding law and order in selected cities in NCR and to recommend an improved crime solution efficiency.

Specifically, the study answered the following problems

1. How do respondents assess the importance of the following technology in upholding law and order in terms of:
    1.1. age;
    1.2. Gender;
    1.3. Civil Status; and
    1.4. Educational Attainment
2. What is the effectiveness of technology-assisted strategies in upholding law and order in terms of:
    2.1. deterrence and crime prevention;
    2.2. increasing the sense of security;
    2.3. improving the ability to analyze and decipher crimes; and
    2.4. monitoring and regulating law enforcement resources
3. Is there a significant difference between the assessments of respondents on the technology-assisted strategies in upholding law and order when grouped according to the aforementioned variable?
4. What are the problems encountered in the use of technology-assisted strategies in upholding law and order?
5. What measures can be proposed to address the problems encountered?
6. Based on the findings of the study, what action plan can be recommended to enhance the use of technology-assisted strategies in upholding law and order?

METHODS

In this study, the researcher used the descriptive method of research. Descriptive research, also known as statistical research, describes data and characteristics about the population of phenomena being studied. Descriptive research answers the questions of who, what, where, when and how. It will be concerned with condition relationships that exist, practices that prevail, beliefs and processes that are developing. This research defined for the purpose of processing gathered data, analyzing, classifying and tabulating data about prevailing conditions, practices, beliefs process, trends and cause-effect relationship and then making adequate interpretation about such data with or without the aid of statistical methods. The purpose of employing the descriptive method is to describe the nature of a condition, as it takes place during the time of the study and to explore the cause or causes of a particular condition. The researcher opted to use this kind of research considering the desire to acquire first hand data from the respondents so as to formulate rational and sound conclusions and recommendations for the study.

Population and Sampling

The researcher used the purposive sampling technique as the sampling design. As defined by Easton & McColl, purposive sampling (also known as judgment, selective or subjective sampling) is a sampling technique in which a researcher relies on his or her own judgment when choosing members of a population to participate in the study.

Instrumentations

To collect quantitative data on use of technology-assisted strategies in upholding law and order and to recommend an improved crime solution efficiency, the used a structured Likert-scale questionnaire with an emphasis deterrence and crime prevention, increasing the sense of security, improving the ability to analyze and decipher crimes; and monitoring and regulating law enforcement resources. As a result of their input, the tool was improved to better reflect operational realities and facilitate accurate statistical analysis through changes that increased clarity, relevance, and structure.

Data Collection and Analysis

The study followed specific steps for data collection, including obtaining permission, administering questionnaires personally, and assuring respondents of confidentiality. The researcher distributed survey questionnaires, with responses analyzed individually or summed to create group scores, often using Likert scales. The collected data was then tallied, tabulated, analyzed, and interpreted.

Ethical Considerations

To guarantee the protection of participants' rights, privacy, and general well-being, this study was carried out strictly in accordance with ethical guidelines. The following guidelines were closely adhered to:

1. All participants gave their permission freely and in full after being fully informed about the goals, methods, and purpose of the study.
2. Right to Withdraw: Respondents were not subject to fines or other repercussions if they chose to withdraw at any time.
3. Anonymity and Confidentiality: To avoid traceability, data were anonymized and personal identifiers like names, ranks, or roles were eliminated.
4. Non-maleficence: To ensure that participants would not suffer any harm or discomfort, survey questions were crafted to steer clear of delicate or upsetting subjects.
5. Data Protection and Security: After the study, the data was properly disposed of or archived in locked, encrypted systems.
6. Transparency and Accurate Reporting: All limitations and potential conflicts of interest were explicitly stated, and the results were presented honestly.
7. The study maintained the validity and integrity of its findings while protecting the participants' rights and dignity by adhering to these ethical guidelines.

RESULTS and DISCUSSION

Table 1. *Percentage Distribution on Demographic Profile of the Respondents in terms of age*

Age	PNP Personnel		BRGY		Community		OVERALL	
	F	P	F	P	F	P	F	P
30 and below	12	16	14	19	37	25	**63**	**21**
31-40	38	51	41	55	55	36	**134**	**45**
41-50	18	24	11	15	25	16	**54**	**18**
51 above	7	9	9	11	33	23	**49**	**26**
Overall	**75**	**100**	**75**	**100**	**150**	**100**	**300**	**100**

Table 1 shows the Percentage Distribution on Demographic Profile of the Respondents in terms of age. 134 of the respondents or 45% were 31-40 years old, 63 or 21% are 30 and below, 54 or 18% are 41-50, and 49 or 26% are 51 above

Table 2. *Percentage Distribution on Demographic Profile of the Respondents In terms of gender*

GENDER	PNP Personnel		BRGY		Community		OVERALL	
	F	P	F	P	F	P	F	P
MALE	63	84	57	76	86	57	**206**	**69**
FEMALE	12	16	18	24	64	43	**94**	**31**
OVERALL	**75**	**100**	**75**	**100**	**150**	**100**	**300**	**100**

Table 2 gives the Percentage Distribution on Demographic Profile of the Respondents In terms of gender. 206 or 69% of the respondents are male and the remaining 94 are female.

Table 3. *Percentage Distribution on Demographic Profile of the Respondents in terms of Civil Status*

Rank	PNP Personnel		BRGY		Community		OVERALL	
	F	P	F	P	F	P	F	P
Single	31	41	28	37	66	44	**125**	**41**
Married	39	51	41	54	71	47	**151**	**50**

Widowed	4	5	6	9	9	6	**19**	**6**
Separated	1	3	0	0	4	3	**5**	**3**
Overall	**75**	**100**	**75**	**100**	**150**	**100**	**300**	**100**

Table 3 displays the Percentage Distribution on Demographic Profile of the Respondents In terms of gender. 151 or 50% of the respondents are married, 125 or 41% are single, 19 or 6% are widowed, and 5 or 3% are separated.

Table 4. Percentage Distribution on Demographic Profile of the Respondents in terms of highest educational attainment

HIGHEST EDUCATIONAL ATTAINMENT	**PNP Personnel**		**BRGY**		**Community**		**OVERALL**	
	F	**P**	**F**	**P**	**F**	**P**	**F**	**P**
Elementary	0	0	0	0	17	11	**17**	**5**
High School	0	0	22	29	66	44	**88**	**29**
Bachelor's Degree	55	73	47	62	51	34	**153**	**51**
Master's Degree	18	24	6	9	13	8	**37**	**12**
Doctorate Degree	2	3	0	0	3	3	**5**	**3**
Total	**75**	**100**	**75**	**100**	**150**	**100**	**300**	**100**

Table 4 shows the Percentage Distribution on Demographic Profile of the Respondents in terms of highest educational attainment. 153 or 51% answered Bachelor's degree, 88 or 29% are high school, 37 or 12% have master's degree, 17 or 5% answered elementary, and 5 or 3% have doctorates degree.

Table 5. *Significant difference among the perceptions of three groups of respondents on Technology-assisted strategies in upholding law and order in terms of:*

Indicators		**Sources of Variance**			***F* test**	***F* Value at 0.05**	**Interpretation**
		(SS_b)	*(SS_w)*	*(SS_t)*	*(Computed)*		
Deterrence and Crime Prevention	*Sum of Squares*	0.095	0.157	0.252	**3.69**	**3.89**	***Not Significant***
	Df	2	12	14			
	Mean Squares	0.048	0.013	0.061			

Increasing the sense of security	*Sum of Squares*	0.262	0.468	0.73	**3.36**	**3.89**	***Not Significant***
	Df	2	12	14			
	Mean Squares	0.131	0.039	0.17			
The ability to analyze and decipher a crime	*Sum of Squares*	0.198	0.482	0.68	**2.48**	**3.89**	***Not Significant***
	Df	2	12	14			
	Mean Squares	0.099	0.040	0.139			
Monitoring and regulating law enforcement resources	*Sum of Squares*	1.817	1.162	2.979	**9.37**	**3.89**	***Significant***
	Df	2	12	14			
	Mean Squares	0.909	0.097	3.985			

Table 5 illustrates a significant difference among the perceptions of three groups of respondents on Technology-assisted strategies in upholding law and order in terms of the above-mentioned variables. In terms of Deterrence and Crime Prevention, Increasing the Sense of Security and the Ability to Analyze and Decipher Crime, the null hypothesis is accepted where their computed f-value of 3.69, 3.36, and 3.48 respectively are less than the critical f-value of 3.89 at 0.05 level of significance and 14 (2 and 12) degree of freedom. This means that there is no significant difference among the perceptions of three groups of respondents on Technology-assisted strategies in upholding law and order. It is highly effective. In terms of Monitoring and Regulating the Law, the computed f-value of 9.37 is greater than the critical f-value of 3.89, at 0.05 level of significance and 14 (2 and 12) degree of freedom, reject null hypothesis. It means there is a significant difference among the perceptions of three groups of respondents on Technology-assisted strategies in upholding law and order in terms of the said variable. It was highly effective to the PNP and Community but effective to the Barangay Officials.

It also shows no significant differences in perceptions of deterrence/crime prevention ($F=3.69$), sense of security ($F=3.36$), and crime analysis ($F=2.48$), but significant for resource monitoring ($F=9.37$, $p<0.05$). This aligns with Philippine National Police (PNP) implementations of real-time crime centers (RTCCs) via enhanced NCAP with AI-assisted CCTV, which improve response times (e.g., under 3 minutes in tests) but reveal group variances in resource regulation due to integration challenges (Dharmaraj, 2025; Guzman, 2025). Advanced crime mapping by PNP in NCR-adjacent areas like Lucena City using GIS and hotspot analysis supports high effectiveness in analysis/deterrence, though training gaps affect uniform perceptions across PNP, barangay, and community groups (Acuña et al., 2024).

Table 6. *Problems encountered on Technology-assisted strategies in upholding law and order*

Indicators	PNP Personnel		BRGY		Community		Overall	
	M	VI	M	VI	M	VI	M	VI
Transparent community selection process and shared results is not properly observe and practiced.	2.88	S	2.57	S	2.24	LS	**2.56**	**S**
Does not promote and monitor adherence to international treaties, laws and other mechanisms to protect human rights.	2.81	S	2.73	S	2.3	LS	**2.61**	**S**
Does not respond safely to an emergency including actions taken to save lives and prevent further property damage in an emergency situation. Response is putting your preparedness plans into action.	2.57	S	2.21	LS	2.16	LS	**2.31**	**LS**
Lack of preparation in handling emergencies including plans or preparations made to save lives and to help response and rescue operations.	2.65	S	2.72	S	2.49	LS	**2.62**	**S**
Does not map community priorities and identify community leaders through community assessments.	2.14	LS	2.04	SL	2.01	LS	**2.06**	**LS**
No preliminary meetings with community leaders and enlist their support to mobilize community participation are done.	1.94	LS	1.81	LS	1.78	LS	**1.84**	**LS**
Lack of plans to create, implement and monitor a national action plan for violence prevention.	2.24	LS	2.18	LS	2.05	LS	**2.15**	**LS**
Does not allow communities to prioritize and select quick impact projects to solidify support and galvanize local participation.	2.04	LS	2.01	LS	1.90	LS	**1.98**	**LS**
Does not integrate violence prevention into social and educational policies, and thereby promote gender and social equality.	2.08	LS	1.82	LS	1.77	LS	**1.89**	**LS**
No enhancement capacity for collecting data on violence.	2.10	LS	1.96	LS	1.97	LS	**2.01**	**LS**
OVERALL	**2.34**	**LS**	**2.20**	**LS**	**2.06**	**LS**	**2.20**	**LS**

Legend: Verbal Interpretation (V.I.) of the computed weighted mean (M):

3.50 – 4.00 = Very Serious (VS) 1.50 – 2.49 = Less Serious (LS)

2.50 – 3.49 = Serious (S) 1.00 – 1.49 = Not Serious (NS)

Table 6 displays the mean distribution on problems encountered on Technology-assisted strategies in upholding law and order: Basis for improved crime solution efficiency. Problems are less serious with an overall mean of 2.20. They are less serious to all groups where the PNP personnel have mean of 2.34, Barangay officials have 2.20,

and community have 2.06. Majority of the indicators are interpreted Less Serious. They are the following indicators along with their mean: "Does not respond safely to an emergency including actions taken to save lives and prevent further property damage in an emergency situation. Response is putting your preparedness plans into action" with a mean of 2.31; "Lack of plans to create, implement and monitor a national action plan for violence prevention" with a mean of 2.15; "Does not map community priorities and identify community leaders through community assessments" with a mean of 2.06; "No enhancement capacity for collecting data on violence" with a mean of 2.01; "Does not allow communities to prioritize and select quick impact projects to solidify support and galvanize local participation" with a mean of 1.98; "Does not integrate violence prevention into social and educational policies, and thereby promote gender and social equality" with a mean of 1.89; and, "No preliminary meetings with community leaders and enlist their support to mobilize community participation are done" with a mean of 1.84. It is serious in terms of: "Lack of preparation in handling emergency including plans or preparations made to save lives and to help response and rescue operations" with a mean of 2.62; "Does not promote and monitor adherence to international treaties, laws and other mechanisms to protect human rights" with a mean of 2.61; "Transparent community selection process and share results is not properly observe and practiced" with a mean of 2.56. Problems are less serious overall (mean 2.20), with serious issues in emergency preparation (2.62), human rights/international law adherence (2.61), and transparency (2.56). These mirror challenges in Philippine smart surveillance systems, where AI-CCTV aids crime prevention but raises privacy/human rights concerns without robust monitoring of international standards (Dharmaraj, 2025). Emergency response lacks due to uneven tech readiness (Jain et al., 2023), as seen in PNP drone patrols and NCAP, exacerbating disparities between PNP (mean 2.34) and community (2.06).

Table 7. *Mean distribution on Measures Proposed by the Three Groups of Respondents to Address the Problems on Technology-assisted strategies in upholding law and order: Basis for improved crime solution efficiency*

Indicators	PNP Personnel		BRGY		Community		Overall	
	M	VI	M	VI	M	VI	M	VI
Transparent community selection process and share results must be properly observed and practiced.	2.88	R	2.60	R	2.27	LR	**2.58**	**R**
Must promote and monitor adherence to international treaties, laws and other mechanisms to protect human rights.	2.83	R	2.79	R	2.36	LR	**2.66**	**R**
Must respond safely to an emergency including actions taken to save lives and prevent further property damage in an emergency situation. Response is putting your preparedness plans into action.	2.62	R	2.19	LR	2.23	LR	**2.34**	**LR**
Must have enough preparation in handling emergencies including plans or preparations made to save lives and to help response and rescue operations.	2.63	R	2.82	R	2.61	R	**2.68**	**R**

Must map community priorities and identify community leaders through community assessments.	2.03	LR	2.14	LR	2.07	LR	**2.08**	**LR**
There should be preliminary meetings with community leaders and enlist their support to mobilize community participation.	1.97	LR	1.91	LR	1.68	LR	**1.85**	**LR**
Must have enough plans to create, implement and monitor a national action plan for violence prevention.	2.28	LR	2.28	LR	2.25	LR	**2.27**	**LR**
Must allow communities to prioritize and select quick impact projects to solidify support and galvanize local participation.	2.14	LR	2.09	LR	1.97	LR	**2.06**	**LR**
Must integrate violence prevention into social and educational policies, and thereby promote gender and social equality.	2.12	LR	1.92	LR	1.87	LR	**1.97**	**LR**
There must be enhanced capacity for collecting data on violence.	2.16	LR	1.93	LR	2.01	LR	**2.03**	**LR**
OVERALL	**2.36**	**LR**	**2.26**	**LR**	**2.13**	**LR**	**2.25**	**LR**

Legend: Verbal Interpretation (V.I.) of the computed weighted mean (M):

3.50 – 4.00 = Highly Recommended (HR) 1.50 – 2.49 = Less Recommended (LR)

2.50 – 3.49 = Recommended (R) 1.00 – 1.49 = Not Recommended (NR)

Table 7 illustrates the mean distribution on Measures Proposed by the Three Groups of Respondents to Address the Problems on Technology-assisted strategies in upholding law and order. They are less recommended with an overall mean of 2.25. They are less recommended with the three groups where the PNP personnel have a mean of 2.36, Barangay officials have 2.26, and community have 2.13. Most indicators are interpreted as Less Recommended. These are the following indicators along with their mean: "Must respond safely to an emergency including actions taken to save lives and prevent further property damage in an emergency situation. Response is putting your preparedness plans into action." with a mean of 2.34; "Must have enough plans to create, implement and monitor a national action plan for violence prevention." with a mean of 2.27. "Must map community priorities and identify community leaders through community assessments." with a mean of 2.08; "Must allow communities to prioritize and select quick impact projects to solidify support and galvanize local participation." with a mean of 2.06; "There must be enhancement capacity for collecting data on violence." with a mean of 2.03; "Must integrate violence prevention into social and educational policies, and thereby promote gender and social equality" with a mean of 1.97; and, "There should be preliminary meetings with community leaders and enlist their support to mobilize community participation." with a mean of 1.85. However, the following are recommended: "Must have enough preparation in handling emergencies including plans or preparations made to save lives and to help response and rescue operations." with a mean of 2.68; "Must promote and monitor adherence to international treaties, laws and other mechanisms to protect human rights." with a mean of 2.66; "Transparent community selection process and share results must be properly observed and practiced." with a mean of 2.58. Measures are less recommended overall (mean 2.25), recommended for emergency preparation (2.68), human rights promotion (2.66), and transparency (2.58). Enhanced NCAP integration with PNP command centers directly addresses transparency/response by enabling real-time dispatch,

supporting these top recommendations. Crime mapping studies advocate community assessments for better prioritization (Acuña et al., 2024), aligning with less recommended items like mapping leaders (2.08). Fernando Acero (2020), Improving the law enforcement community's knowledge of technology. The center received strong and repeated calls to improve the dissemination of knowledge about technology in general. Specific needs for doing this include having a federally sponsored repository of best practices and technology information; links to technology guides, information, and practice experts; and links to (or centralized repositories of) free and inexpensive tools.

Conclusions

The following are conclusions formulated by the researcher after the investigation.

1. The problems encountered on Technology-assisted strategies in upholding law and order: Basis for improved crime solution efficiency in general was less serious but serious in other ways.
2. There is a lack of preparation in handling emergencies including plans or preparations made to save lives and to help response and rescue operations.
3. There is a lack of promoting and monitoring adherence to international treaties, laws, and other mechanisms to protect human rights.
4. There is no proper observation and practice of transparent community selection process and shared results.
5. Measures Proposed by the Three Groups of Respondents to Address the Problems on Technology-assisted strategies in upholding law and order: Basis for improved crime solution efficiency, in general, are less recommended but recommended in some way.

Recommendations

The researcher recommended the following after the study.

1. They must be prepared in handling emergencies including plans or preparations made to save lives and to help response and rescue operations.
2. Adherence to international treaties, laws and other mechanisms to protect human rights should be promoted and monitored.
3. It is necessary to have a proper observation and practice of transparent community selection process and share results.

Suggested Action Plan

Action Plan	Objective (s)	Strategies
Target Hardening	Creating a plan harder for an offender to foresee.	Upgrading tactical plans by integrating firewall on sensitive information. Using secure access to prevent criminals accessing sensitive tactical information.

Access Control	Looking at measures that will control access to a location, a person or object.	Locking your doors and windows to both your house and your vehicle. Ensuring that fencing, hedges, walls and other boundary treatments are in a good state of repair Putting a security system in place at a commercial site (entry barriers, security guards, ID cards)
Surveillance	Improving surveillance around homes, businesses or public places to deter criminals.	Removing high hedges / fences at the front of your home that allows an offender to work unseen Consider adding CCTV to a commercial site or public place Establishing a Neighborhood Watch Scheme in your street
Increase the Chances of Being Caught	Increasing the likelihood that an offender will be caught to prevent crime occurring.	Making use of dusk to dawn security lighting is in place and in working order. Using good quality CCTV and/or alarm systems, especially on commercial sites and public places. Upgrading security to delay an offender, meaning they have to spend more time to gain access
Deflecting Offenders	Using timer switches to make our homes look occupied if vacant after the hours of darkness	Using timer switches to make homes look occupied if vacant after the hours of darkness. Running youth diversionary schemes with partner agencies. Referring offenders to drug rehabilitation programs.

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