PREDICTIVE POLICING BY BHABINKAMTIBMAS AS A SOLUTION TO ADDRESS CRIMINALITY IN CILEMPUNG VILLAGE, PASIRJAYA, KARAWANG

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Keywords	ABSTRACT
Predictive policing, Bhabinkamtibmas, crime	The Karawang Regency faces a significant increase in the number of crimes, being a major concern due to its disruptive impact on the community as well as serious challenges for law enforcement and local governments. In order to respond to the various problems faced by Bhabinkamtibmas in the field, support and strengthening are needed with the right policing program. The research contributes to the field of public security by introducing a Predictive Policing framework tailored to the needs of Cilempung Village, Karawang, utilizing information technology and data analysis to identify crime patterns and predict potential crimes. The study provides insights into the factors influencing crime rates and offers practical strategies for implementing predictive polcing in local communities, ultimately aiming to enhance public safety and maintain social order.

INTRODUCTION

Crime is a social problem that affects the stability and security of a region. In various regions in Indonesia, crime rates continue to increase, including in rural areas that were previously relatively safe. Cilempung Village, located in Pasirjaya Village, Karawang, is one of the areas that has experienced an increase in crime rates in recent years. Crimes that often occur include theft, fights, and acts of thuggery, which disturb the community and disrupt environmental security. The increase in crime in Cilempung Village is influenced by several factors, such as rapid population growth, urbanization, and economic problems. In addition, the limited security infrastructure and the lack of presence of law enforcement officers in the area make crime handling less than optimal. Traditional approaches to reactive law enforcement are often incapable of preventing crime early.

One of the innovative approaches in handling crime is predictive policing. Predictive policing is a method that uses data analysis and technology to predict the location and timing of crimes, so that law enforcement can take more effective preventive measures. In many developed countries, predictive policing has been shown to significantly reduce crime rates. In Indonesia, the application of this concept is still limited, but it has great potential to help improve security in areas with high crime rates, such as Cilempung Village (Ems, 2022).

This research began with concerns about the high level of crime in the jurisdiction of the Karawang Police. Crime is considered to be the product of a number of complex factors, including economic disparities, armed conflict, political instability, and poverty (Fahmi et al., 2021). Uneven social and economic conditions often create an environment that supports the development of crime (Adri et al., 2019). In a broader discussion, criminality is considered one of the factors that affect the national security of a country. However, on a smaller scale, crime can disrupt order, stability, and security in certain areas (Aprillia, 2022). In the perspective of "risk", crime is considered a "catastrophic event" that changes the dynamics of the system. Each complex, self-contained system has a complex cause-and-

effect relationship, where a single event can trigger a series of significant changes that affect the entire system (Prokofieva-Yanchylenko, 2021).

Karawang Regency faces a significant increase in the number of crimes, being a major concern due to its disruptive impact on the community as well as serious challenges for law enforcement and local governments. The level of crime vulnerability in Karawang Regency also shows an alarming trend, reflected in the number and severity of reported cases (Astrawiguna, 2023). The spike in crime in Karawang Regency is not limited to one type of crime, but rather covers various categories, including theft, fraud, and physical and psychological violence (Maulana, 2024). This has created deep concern and undermined people's sense of security and trust. This phenomenon can be observed through the increase in the number of crime cases in recent years, which can be identified based on the following types and levels of crime vulnerability in the region:

Table 1. Crime Data in Karawang Regency in 2022-2023

Types of Crime	Year			
	2020	*2021*	*2022*	*2023*
1	2	3	4	5
Kabul	10	14	17	22
Curanmor	61	59	71	65
Cures	5	7	9	22
Clean	26	29	31	29
Domestic violence	10	22	28	18
Sexual Harassment	4	8	9	6
Forgery	2	4	6	23
Combustion	1	0	2	0
Murder	2	4	6	5
Rape	5	7	8	6
Theft	1	9	11	26
Theft and Embezzlement	7	11	20	28
Persecution	23	29	12	17
Demolition	19	23	20	11
Destruction	2	4	1	3
Embezzlement	24	29	30	27
Deceit	54	89	92	103
Fraud and Embezzlement	19	43	55	67
Child Abuse	3	2	0	2
Sum	278	393	428	480

Source: Polres Karawang, 2024

So far, the Karawang Police have played an important role in efforts to deal with the increase in crime in the region. They have actively implemented various strategies and tactics, including in order to create a safer environment and avoid criminal activities (Khumaini, 2024). The move is carried out proactively to address the increase in crime that focuses on preventive efforts by holding crime prevention programs that aim to increase public awareness of the risk of crime and ways to prevent it. They also make preemptive efforts through counseling campaigns, seminars, and workshops, and the dissemination of information to convey to the public on how to secure their homes, vehicles, and themselves from crime. In addition, the Karawang Police also increased their presence and visibility by increasing patrols in areas prone to crime. Strict repressive actions are also taken in handling criminal cases that have occurred, by conducting investigations and law enforcement against the perpetrators of crimes to provide a deterrent effect for those who violate the law (Risdiana, 2024). The Karawang Police continue to be committed to enforcing the law fairly and efficiently, and emphasized that violations of the law will not be tolerated in their area. In addition, the Karawang Police have also collaborated with various related parties, including local governments, non-governmental organizations, and the private sector, in a joint effort to overcome the problem of crime. This collaboration helps increase the effectiveness of efforts carried out and expand the reach of prevention and law enforcement (Risdiana, 2024).

As proof of the first step in preventing crime in the jurisdiction of the Karawang Police, Bhabinkamtibmas was deployed to carry out active patrols in the community. This is in line with the mandate of Law No. 2 of 2002 concerning the National Police of the Republic of Indonesia which emphasizes the main task of Bhabinkamtibmas as part of the members of the National Police tasked to protect, protect, serve, and protect the community. The assignment of Bhabinkamtibmas is also based on the Regulation of the National Police Chief No. 7 of 2021 concerning Bhabinkamtibmas which has the task of fostering public security and order at the village, sub-district, or other equivalent area levels. Based on Article 1 number 4 of the National Police Regulation No. 3 of 2015 concerning Community Policing (Polmas), Bhabinkamtibmas also carries out duties in policing the community who are in charge of the community or community at the village or sub-district level. Therefore, the Kawarang Police in carrying out this task mandates Bhabinkamtibmas as the front line of the National Police to hold a great responsibility in maintaining security and order in this area.

In an effort to prevent crime in the jurisdiction of the Karawang Police, Bhabinkamtibmas not only patrol to monitor potential crimes, but also interact directly with the local community. Through their presence, Bhabinkamtibmas is able to build strong relationships with residents, understand social dynamics, and detect potential security threats early (Wahyurudhanto, 2018). In addition, they also play a strategic role in providing counseling and education about security to the community and encouraging active participation of residents in maintaining the safety of the community environment (Sawir et al., 2023).

Although so far Bhabinkamtibmas has made proactive efforts in preventing crime in the area, but from the results of this pre-research observation, various problems are still found such as Bhabinkamtibmas in Cilempung Village, Pasirjaya Village, Cilamaya Kulon District, Karawang Regency which are experiencing several problems related to the effectiveness of their performance due to being constrained by limited resources and facilities owned by Bhabinkamtibmas, which includes limited patrol equipment, lack of adequate training, and limited access to communication and transportation. In addition, Bhabinkamtibmas also encounters challenges stemming from the complexity and diversity of security issues in the environment, which requires a more targeted and specific approach.

In order to respond to the various problems faced by Bhabinkamtibmas in the field, support and strengthening are needed with the right policing program. The goal is for Bhabinkamtibmas to obtain clear guidelines and directions to carry out its duties effectively and efficiently, so that Bhabinkamtibmas can understand task priorities, standard operational procedures, and steps that must be taken in dealing with various security issues (Syahputra et al., 2023). In addition, with the right policing program, it also helps Bhabinkamtibmas in analyzing the situation more deeply, identifying the root of the problem, and planning appropriate and effective solution steps more systematically (Wahid & Putra, 2021). With the right policing program, it is also possible to carry out better coordination and collaboration between Bhabinkamtibmas and other related parties, so that all parties work synergistically to overcome various security problems in the region. In addition, this policing program can also be the basis for measurable and documented continuous evaluation and improvement, so that Bhabinkamtibmas can evaluate its performance periodically, identify areas that need to be improved, and make necessary improvements to increase effectiveness and efficiency in carrying out crime prevention tasks in the field (Ismail et al., 2022).

One of the solutions that can be adopted by Bhabinkamtibmas is to build a Predictive Policing framework. The concept of Predictive Policing integrates the sophistication of information technology and data to analyze crime patterns, predict potential criminal events, and develop more effective prevention strategies (Saputra et al., 2023). Through big data analysis, artificial intelligence, and geographic-based crime mapping (GIS), Bhabinkamtibmas can gain deeper insights into the dynamics of crime in the region (Doly, 2023). This information can also be used to develop a more efficient and effective patrol strategy, by placing Bhabinkamtibmas in strategic locations based on predictions of crime patterns (Zulfian, 2022). In addition, the implementation of Predictive Policing can also help in a more optimal allocation of resources, by identifying areas that are vulnerable to crime and allocating patrol personnel and equipment proportionally (Prasetio, 2024). This will help overcome the resource limitations that are often experienced by Bhabinkamtibmas.

Not only limited in helping to analyze crime patterns and predict potential crime events, Predictive Policing can also provide other benefits for Bhabinkamtibmas, namely allowing Bhabinkamtibmas to carry out preventive interventions more effectively based on more accurate information about crime-prone areas, so that Bhabinkamtibmas can carry out preventive measures such

as security counseling to the community, increasing patrol in the area, and implement social programs to reduce crime risk factors. In addition, Predictive Policing improves the accountability and accountability of Bhabinkamtibmas by providing robust data on crime patterns and the effectiveness of preventive measures (Pramudita & Meirinawati, 2022). This allows them to monitor their own performance and identify areas where prevention efforts need to be improved. Furthermore, Predictive Policing helps Bhabinkamtibmas build better relationships with the community by developing more targeted prevention strategies, demonstrating understanding of community needs and concerns, and committing to better protecting and serving the community (Hadomuan, 2022). According to this explanation, it is known that Predictive Policing has a broader role, not only providing predictive information about crime, but also becoming a powerful tool to assist Bhabinkamtibmas in carrying out crime prevention tasks more effectively and responsively to the needs of the community.

With an understanding of the importance of predictive policing as a framework for Bhabinkamtibmas, this can be applied to build a predictive policing framework that is in accordance with local scopes, such as in Cilempung Village, Pasirjaya Village. Cilempung Village, Pasirjaya Village is an area known as "Begal Village" (Nilakusuma, 2022). This is because for more than a decade, this area has been the target of police operations in arresting perpetrators of crimes such as begal and robbery. Cilempung Hamlet is one of the centers of illegal activities related to the fraudulent motorcycle trade in the Karawang area. Motorbikes stolen from Karawang and its surroundings are often stored in the Cilempung Hamlet area before being resold. As a result, the reputation of Cilempung Hamlet is increasingly famous as the main place for stolen motorcycle trading activities, so that finally the community knows it as Kampung Begal (Sarwindaningrum, 2023). Furthermore, the Merdeka.com Editorial Team (2024) explained, as a result of this practice, not a few local residents keep stolen motorcycles, then they are involved in the same practice, and as time goes by, those who were initially only buyers of stolen goods now begin to be involved in motor vehicle theft, with the area of operation not limited to Karawang, but also penetrating to the surrounding areas in West Java until reaching Jakarta.

This problem is certainly a serious challenge for Bhabinkamtibmas in Cilempung Village, Pasirjaya Village, because it requires a more structured and data-based approach in carrying out crime prevention tasks. With the region's growing reputation as "Kampung Begal" and the expansion of the stolen motorcycle trade network, a comprehensive and proactive solution is needed to address this increasingly complex security problem. In addition, the adoption of Predictive Policing as a framework can provide a strong foundation for Bhabinkamtibmas to conduct more in-depth analysis of crime patterns, map vulnerable areas, and develop more effective prevention strategies. Thus, the implementation of Predictive Policing by Bhabinkamtibmas in Cilempung Village can be a strategic step in facing the security challenges that continue to develop in the region.

The Cilempung Village Bhabinkamtibmas are developing a Predictive Policing framework to enhance public security and order. This system uses information technology and data analysis to identify crime patterns, predict potential crimes, and develop effective prevention strategies. The goal is to create a safer environment for local communities and maintain order. The study aims to explain factors affecting crime rates, implement Predictive Policing, and emphasize the importance of collaboration between Bhabinkamtibmas, local governments, and the community in enhancing Predictive Policing effectiveness.

The research contributes to the field of public security by introducing a Predictive Policing framework tailored to the needs of Cilempung Village, utilizing information technology and data analysis to identify crime patterns and predict potential crimes. It emphasizes the importance of collaboration between law enforcement (Bhabinkamtibmas), local governments, and the community in crime prevention. The study provides insights into the factors influencing crime rates and offers practical strategies for implementing Predictive Policing in local communities, ultimately aiming to enhance public safety and maintain social order.

METHODS

This study employs a qualitative approach to describe the results of the research, particularly focusing on IT-oriented predictive policing, the development of a sustainable predictive policing framework, and analyzing the factors that hinder the establishment of an IT-based or AI-based sustainable predictive policing system. The research is exploratory and descriptive in nature, aiming to

both explain the phenomenon in greater detail and explore less understood areas related to predictive policing, with the goal of offering deeper insights and potential strategies for overcoming challenges.

The data used in this research includes qualitative data collected through interviews, observations, and document analysis. These sources provide insights into IT-oriented predictive policing, the development of a sustainable framework for predictive policing, and factors that hinder the effective implementation of such systems. The analysis technique employed is thematic analysis, which involves identifying, analyzing, and reporting patterns (themes) within the data. This technique allows the researcher to explore underlying meanings and relationships between different aspects of predictive policing, while also providing a detailed understanding of the challenges and opportunities for its implementation.

RESULTS
Factors Affecting the Crime Rate in Cilempung Village, Pasirjaya Village

The crime rate of a village is the number and frequency of crimes that occur in the village area in a certain period of time. This includes various forms of crime, such as theft, robbery, persecution, drug crimes, and other acts of violence. Crime rates are typically measured through police report data, community surveys, or official government statistics. In addition, this data also reflects the level of security and sense of security felt by residents in the region (Laudon & Laudon, 2021).

The factors that affect the level of crime in a village are very diverse, including economic, social, and environmental conditions. In general, villages that experience high economic pressure, such as poverty and unemployment, tend to have higher crime rates. Limited access to education and employment opportunities often leads some individuals to choose shortcuts through criminal acts. In addition, social problems such as lack of social control, weak community ties, and family disintegration can also contribute to the high crime rate in the village.

The physical environment of the village also plays an important role in influencing the level of crime. Villages that lack adequate security infrastructure, such as poor street lighting, minimal police or security forces, and limited access to security technology (e.g. CCTV), are more vulnerable to crime. The lack of public facilities that support positive activities can also increase the risk of crime, because the public, especially young people, are more likely to fall into illegal activities (Maharani, 2023).

In addition to internal factors in the village, external dynamics such as urbanization can also have an impact on the level of crime. Villages that were previously quiet experienced a spike in crime along with the movement of residents from urban areas which brought social and economic problems. The phenomenon of urbanization is often accompanied by the spread of urban problems, including crime, to the suburbs or rural areas.

The crime rate in Kampung Cilempung, Pasirjaya, Karawang, is influenced by several complex factors related to social, economic, and weak aspects in the law enforcement system. The main factors affecting the increase in crime in the region include:

1) Population Growth and Urbanization: One of the main factors affecting the crime rate in Kampung Cilempung is the rapid population growth and increasing urbanization. With the increase in population and the influx of newcomers, there have been changes in the social and economic structure of the local community. Villages that were previously relatively quiet are now experiencing an increase in economic activity and population mobility, which is often accompanied by an increase in the potential for conflict and crime. This population growth creates pressure on available resources and facilities, such as jobs, housing, and access to public services. This condition ultimately increases the vulnerability of the community to crime, due to the emergence of social tensions due to competition for limited resources.

2) Economic Problems: Economic factors are one of the fundamental causes of the increase in crime in Cilempung Village. Problems such as unemployment, poverty, and economic disparities between low- and high-income groups create fertile conditions for crime to grow. Many residents do not have access to decent and stable jobs, so some of them choose shortcuts by engaging in illegal activities such as theft, robbery, or the trade in stolen goods, such as the case of fraudulent motorcycles that are rampant in this region. The high unemployment rate and low level of people's welfare trigger despair, which then encourages them to commit crimes to meet their needs.

3) Limited Security Infrastructure: Limited security infrastructure is also a significant factor in the increase in crime in Cilempung Village. This area is not equipped with adequate security

facilities and infrastructure, such as active security posts, good street lighting, and CCTV camera surveillance. In addition, the presence of law enforcement officials, such as police patrols, is still limited. The limitations of these facilities make the area more vulnerable to crime because criminals feel more free to operate without fear of being caught. Inadequate infrastructure also makes it difficult for law enforcement officials to respond quickly and effectively to crime, so criminals are often able to escape without being caught.

4) Lack of Presence and Effectiveness of Law Enforcement: The lack of presence of law enforcement officials, especially Bhabinkamtibmas in the Kampung Cilempung area, also contributes to the increase in crime rates. Although Bhabinkamtibmas have been deployed to patrol and coach the area, limited resources such as lack of personnel, lack of training, and supporting facilities such as patrol vehicles and communication equipment hinder their effectiveness in carrying out their duties. In addition, the sporadic and inconsistent presence of the apparatus makes people feel less protected, so their trust in the security system decreases. This creates a loophole that criminals take advantage of to continue to carry out their actions (Hasibuan et al., 2021).

5) Regional Reputation as "Kampung Begal": The reputation of Kampung Cilempung as "Kampung Begal" has long been known as it is often the center of illegal activities, especially related to the trade in stolen motorcycles. This reputation has grown as criminal networks have become more and more involved in motor vehicle theft and fraudulent motorcycle trafficking. This phenomenon creates a crime ecosystem that continues to grow and is difficult to eradicate. In addition, the involvement of some local communities in these illegal activities has worsened the situation. People who were originally only consumers of stolen motorcycles gradually became involved in the theft itself. This reinforces the criminal culture in the region and makes it more difficult to tackle.

6) Complexity of Social Problems: Another social factor that affects the level of crime in Cilempung Village is the complexity of the security problems faced by the local community. The diversity of social problems such as juvenile delinquency, intergroup conflicts, and thuggery further complicates the situation. The existence of certain groups that dominate criminal activities, including thuggery, creates fear and social pressure in society. This complexity requires a more in-depth and comprehensive approach, not only in terms of law enforcement but also more intensive social development efforts.

The increase in crime in Cilempung Village is triggered by a combination of social, economic, and weak security infrastructure factors, which mutually reinforce and exacerbate the situation. Effective handling requires proactive, data-based, and collaborative strategies, such as the implementation of predictive policing that is able to analyze crime patterns and formulate more appropriate preventive measures (Perry, 2013).

The crime rate of a village reflects the socio-economic conditions and security of the community. High crime rates can lead to feelings of insecurity among citizens, lower quality of life, and exacerbate other social problems. Therefore, efforts to understand and address crime at the village level require a holistic approach, involving a wide range of stakeholders, including communities, law enforcement officials, and local and central governments.

Implementation of Predictive Policing by Bhabinkamtibmas in Crime Prevention in Cilempung Village, Pasirjaya Village

Predictive Policing by Bhabinkamtibmas is a law enforcement method that uses data, technology, and statistical analysis to map and predict crime-prone areas, thus allowing for more effective preventive measures. Within the scope of Indonesia, Bhabinkamtibmas (Bhayangkara Pembina Security and Public Order) is the spearhead of the National Police at the village or sub-district level. They are tasked with getting closer to the community, maintaining order, and preventing potential crimes. By using a predictive policing approach, Bhabinkamtibmas can conduct early identification of areas that are vulnerable to crime based on past crime patterns and current trends.

Predictive policing relies on the use of technologies such as geographic information systems (GIS), analytics software, and crime databases to identify locations with higher levels of crime risk. By analyzing historical data on crime, behavior patterns, time of events, and environmental conditions, Bhabinkamtibmas can determine areas that need more attention. For example, if data shows that there

is an increase in theft cases in an area at night, Bhabinkamtibmas can increase the presence of police patrols in the area at vulnerable times (Ferguson, 2019).

Mapping crime-prone areas is the process of identifying and analyzing locations that have a high potential for crime based on patterns and data on crimes that have occurred. This process aims to prevent criminality by understanding where and when crimes are most likely to occur, so that law enforcement can take preventive measures effectively. The mapping of these crime-prone areas provides significant benefits for crime prevention. By using predictive data, Bhabinkamtibmas can proactively prevent crimes before they occur, rather than simply reacting after they occur. This increases the effectiveness of law enforcement efforts and provides a greater sense of security for the community. As part of the prevention strategy, Bhabinkamtibmas can coordinate patrols, increase surveillance in specific areas, and work with the community in community-based security programs, such as Siskamling

In addition to mapping vulnerable areas, Bhabinkamtibmas can also utilize predictive policing to identify potential perpetrators of crimes or groups that are vulnerable to involvement in criminal activities. For example, with data showing high unemployment in an area or an increase in youth activities that do not have positive activities, Bhabinkamtibmas can take a community approach through socialization, community development programs, and other prevention activities.

In predictive policing, some commonly used technologies include:
1) Geographic Information System (GIS): This technology is used to map and analyze crime sites. GIS allows for the visualization of geographic data, such as the distribution of crime incidents, which helps identify crime hotspots.
2) PredPol (Predictive Policing): One of the most well-known predictive policing software. PredPol uses algorithms that analyze data from previous criminal incidents to predict where and when crimes occur in the future.
3) CompStat (Computer Statistics): A system used to map, track, and manage crime in cities. CompStat combines statistical and geographic data to assist the police in allocating resources more effectively.
4) IBM Predictive Analytics: An artificial intelligence (AI)-based solution that analyzes historical crime data and socioeconomic data to help law enforcement predict the location and time of possible crimes.
5) HunchLab: A predictive policing technology that uses mathematical models to predict crime hotspots. HunchLab considers not only criminal data, but also social, economic, weather, and human behavior patterns.
6) ShotSpotter: A technology used to detect the location of a shooting through sound analysis. While not directly predictive, ShotSpotter helps police respond to incidents in real-time and provides data that can be further analyzed.
7) Palantir: A big data analytics platform used by law enforcement agencies to collect, manage, and analyze data from various sources, assisting in the identification of crime patterns and making predictions.
8) CrimeMapping: A web-based application that allows the public and law enforcement to visualize crime scenes in a specific area, based on real-time data from police reports (Doly, 2023).

These technologies help in making better strategic decisions and increase efficiency in preventing crime before it happens. However, the success of predictive policing by Bhabinkamtibmas depends on the quality of the data and its ability to understand local coverage. Accurate data collection, proper mapping, and collaboration with the community are needed to maximize results. Another challenge is limited resources and access to modern technology, especially in rural or remote areas, which requires strategy adaptation.

The implementation of Predictive Policing by Bhabinkamtibmas in Cilempung Village, Pasirjaya Village, Karawang, aims to map crime-prone areas more effectively and proactively in the context of crime prevention, through several steps, namely:
1) Use of Data and Technology for Crime Pattern Analysis: The first step is to collect data related to crimes that have occurred in Cilempung Village. This data includes the type of crime (such as theft, robbery, robbery), time of occurrence, location, and characteristics of perpetrators and victims. This information can be obtained from police reports, community complaints, or the results of Bhabinkamtibmas patrols. Once the data is collected, Bhabinkamtibmas can use

Big Data technology and Geographic Information Systems (GIS) to analyze crime patterns in the region. By mapping the locations of previous crimes, Bhabinkamtibmas can identify areas that have a high level of vulnerability. GIS-based mapping also allows them to see the time and frequency of crime, which can help predict when and where crime is most likely to occur (McDaniel & Pease, 2021).

2) Identification of Crime-Prone Areas: From GIS analysis, Bhabinkamtibmas can identify "hotspots" or points where criminal activity is frequent. In Cilempung Village, areas such as black markets, stolen motorcycles or poorly monitored places can be the main focus. For example, areas where counterfeit motorcycles are often stored and resold can be marked as areas that need more attention in patrolling. In addition to hotspots, Bhabinkamtibmas can also map specific types of crimes, such as motor vehicle theft (*begal*) that often occurs in this village. By understanding the specific patterns of these crimes, Bhabinkamtibmas can develop more targeted strategies to deal with this crime problem.

3) Strategic Deployment of Patrols and Police Presence: Based on the results of predictive analysis, Bhabinkamtibmas can place patrols more strategically. Patrols are not only carried out randomly, but are focused on high-risk areas based on the prediction of the time and location of the crime. For example, patrols at night in areas where stolen motorcycles are stored can be intensified. The physical presence of Bhabinkamtibmas in vulnerable areas can increase the community's sense of security and provide a preventive effect on criminals. This presence also allows Bhabinkamtibmas to interact directly with the community and get additional information from residents related to criminal activities.

4) Collaboration with Communities and Stakeholders: Predictive policing does not only rely on technology, but also on the active participation of the community. Bhabinkamtibmas can work with residents through the Community Policing (Polmas) program, where the community is involved in monitoring security in the surrounding environment. Information from residents can help enrich the data and analysis carried out by Bhabinkamtibmas. In Cilempung Village, cooperation between Bhabinkamtibmas, the village government, and related institutions such as Satpol PP or other community organizations is urgently needed. These parties can provide support in the implementation of patrols, surveillance, and crime reporting (Mohanty & Mohanty, 2014).

5) More Targeted Preventive Measures: Using the results of predictive analysis, Bhabinkamtibmas can identify the areas and times that are most prone to crime, then provide specific counseling to the community on how to protect themselves from potential crime at certain times and places. For example, security campaigns on how to secure motor vehicles in areas prone to theft. security counseling, Bhabinkamtibmas can also initiate social programs that aim to reduce crime risk factors, such as providing economic support to at-risk communities or developing positive alternative activities for youth in the area to prevent them from criminal activities (Russell & Norvig, 2020).

6) Continuous Evaluation and Development: Predictive policing doesn't stop at initial implementation. Bhabinkamtibmas needs to routinely evaluate the effectiveness of the prevention strategies that have been implemented. This evaluation is carried out by monitoring whether the crime prediction is appropriate and whether the steps taken have been effective in reducing the crime rate. Crime is dynamic, so it is important for Bhabinkamtibmas to update crime data regularly and adjust strategies based on changing crime patterns. This will ensure that the precautions taken remain relevant and effective.

7) Solutions to Resource Limitations: While resource limitations can be challenging, Bhabinkamtibmas can take advantage of available technologies, such as simple mobile apps to record community reports, monitor crime reports, or use social media for direct communication with residents. This technology can help cover limitations in patrol equipment or other physical infrastructure. Limited resources can be overcome by involving citizens as security partners. By educating the public to be more vigilant and participate in maintaining environmental security, Bhabinkamtibmas can expand the reach of crime prevention even with limited resources (Egbert & Leese, 2021).

The implementation of Predictive Policing by Bhabinkamtibmas in Cilempung Village, Karawang, involves the use of data analysis and technology to map crime-prone areas. Thus, Bhabinkamtibmas can place patrols in the right place and time, conduct targeted counseling, and involve the community in

maintaining security. Despite resource constraints, this approach can help improve the effectiveness of crime prevention and address security issues in the region in a more strategic and measurable manner. Predictive policing by Bhabinkamtibmas has the potential to be a very useful tool in mapping and preventing crime in vulnerable areas. This approach not only increases the effectiveness of law enforcement, but also strengthens the relationship between the police and the community in creating a safer and more orderly environment.

Collaboration Between Bhabinkamtibmas, Local Governments, and Communities Can Increase the Effectiveness of Predictive Policing in Dealing with Crime

The collaboration between Bhabinkamtibmas, local governments, and the community is a form of cooperation that involves three parties to create a safe and orderly environment. In predictive policing, this collaboration is very necessary because each party has complementary roles and responsibilities. Bhabinkamtibmas as representatives of the police at the village level have direct access to information and dynamics that occur in the community. They function as a bridge between the police and the community, convey information, and provide education about security. By understanding the characteristics and problems that exist in their environment, Bhabinkamtibmas can identify potential criminal threats and community needs.

Local governments play a role in providing the policies, resources, and support needed to support policing activities. Through development programs, local governments can help create better social and economic conditions, which in turn can reduce crime rates. In addition, local governments can also allocate budgets to support community security activities, such as counseling, public facilities, and technology that supports predictive policing. Meanwhile, the community, as the party most affected by security issues, has an important role in this collaboration. Community involvement in environmental surveillance, reporting of suspicious incidents, and participation in security activities, such as Siskamling, can increase the effectiveness of policing. A community that is proactive in maintaining environmental security will help Bhabinkamtibmas in identifying potential threats and increasing a sense of security in the community.

This collaboration improves the effectiveness of predictive policing in several ways. First, by sharing information, Bhabinkamtibmas can obtain more accurate data on patterns of criminal behavior and social conditions in the community. This information will increase accuracy in mapping crime-prone areas. Second, with support from local governments, Bhabinkamtibmas can access the resources needed to implement predictive policing strategies, such as information technology and training. This allows them to be more effective in analyzing data and formulating appropriate preventive measures. Third, by involving the community, predictive policing becomes more adaptive and responsive to local needs. People who feel involved will be more likely to provide useful information and actively participate in efforts to maintain security (Salmon, 2022).

Collaboration between Bhabinkamtibmas, local governments, and the community is urgently needed to increase the effectiveness of Predictive Policing in dealing with crime. This can be done through several steps, namely:

1) Information Synergy: Bhabinkamtibmas as the frontline can collect information from the community about potential threats and crime patterns in their environment. This data can be used for further analysis. Local governments can provide statistical data and reports on crime rates and socio-economic conditions of the region, which will enrich predictive policing analysis. The community also plays an active role in reporting suspicious incidents or potential crimes, so that the information obtained is more comprehensive.

2) Education and Community Awareness: Bhabinkamtibmas must conduct counseling on the importance of community participation in environmental security. Educated people will be more proactive in protecting themselves and their environment. Local governments can support by holding training programs to increase public awareness of security and preventive measures. People who are aware of potential risks can work with Bhabinkamtibmas to carry out security activities such as night patrols or environmental security groups.

3) Training and Capacity Building: Bhabinkamtibmas should receive adequate training on the use of technology and data analysis in predictive policing. Local governments can facilitate this training by collaborating with educational institutions or non-governmental organizations that are experienced in data analysis and security management. The community

can also be involved in training programs related to security, so that they can help in preventive activities.

4) Action Coordination: Bhabinkamtibmas needs to work with local governments in formulating policies that support public safety based on the results of predictive policing analysis. Local governments can facilitate regular meetings between Bhabinkamtibmas, government officials, and community leaders to discuss security issues and effective handling strategies. The public can be invited to participate in security discussion forums, so that their voices can be heard in decision-making.

5) Utilization of Technology: Bhabinkamtibmas can utilize geographic information systems (GIS) to map crime-prone areas and allocate resources more efficiently. Local governments can support the necessary technological infrastructure, such as the provision of communication devices and training in their use. The public can engage in community-based applications to report crime incidents directly, speeding up the response of authorities.

6) Evaluation and Feedback: Bhabinkamtibmas must routinely evaluate the strategies implemented and their impact on crime rates. Local governments need to provide a platform for feedback from the public on the effectiveness of the measures taken, so that continuous improvements can be made. The public can also participate in this evaluation by providing their opinions and experiences regarding the security conditions in their environment (Albertus et al., 2022).

For example: Bhabinkamtibmas conducts a survey of residents to collect data on the types of crimes that often occur, the time of the incident, and the locations that are often the targets of crimes. This data is then fed into the Predictive Policing system. Together with the IT team from the Karawang Police, Bhabinkamtibmas analyzed the data that had been collected and identified crime patterns, for example motorcycle theft most often occurred at night around the highway. Based on the results of the analysis, Bhabinkamtibmas increased patrols along the highway at night, collaborated with community leaders to form kamling posts, and conducted socialization to residents on how to secure vehicles. The local government provides a budget to install CCTV at strategic points, improve street lighting, and build small police posts in vulnerable locations. Residents actively participate in night patrols, provide information to Bhabinkamtibmas about suspicious strangers, and participate in socialization activities.

Collaboration between Bhabinkamtibmas, local governments, and the community creates a solid security ecosystem. This integrated approach not only helps in crime prevention, but also increases public trust in law enforcement officials, which is a key element in creating a safe and orderly society. With close collaboration between Bhabinkamtibmas, local governments, and communities, predictive policing can be implemented more effectively and responsively to local security needs and challenges. This cooperation will result in a more holistic approach to tackling crime, increasing public trust in law enforcement officials, and creating a safer environment.

CONCLUSION

The crime rate in Kampung Cilempung Pasirjaya Karawang is influenced by factors such as inadequate social, economic, and security infrastructure. Bhabinkamtibmas in Cilempung Village, Karawang, implements Predictive Policing using data and technology to map crime-prone areas and plan patrols strategically. Collaboration between Bhabinkamtibmas, local governments, and the community is key to increasing the effectiveness of this approach. Future research should explore the long-term effectiveness of predictive policing in rural or semi-urban areas, integrate it with local cultural and social norms, and assess the role of technology literacy in implementing and achieving these goals.

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