

On Scene Crime Reporting System for Law Enforcement in Sri Lanka

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Abstract - Police may offer crime reporting also as a service. The number of reported criminal cases has increased over time. Law enforcement discovers a distinction between reported and unreported offenses, and a variety of factors could cause this gap. It is not an honourable thing to allow criminals to remain safely within the community as innocent persons, stimulating criminals to commit more crimes. This would result in the community being in grave danger of being victimized. Like criminal justice, members of the community would seem to be unable to do their tasks, although many crimes are not recorded. This may have an impact on ongoing investigations as well. In some cases, to cover this void from police killings, certain law enforcement authorities impact digital crime reporting platforms via the general public which could report offenses. This paper explains how crime reporting systems are assisting law enforcement and continuing investigations, and the general public's participation in any of these systems. The efficiency of the system in terms of policing is often explored in this study.

Keywords: *application, crime reporting, privacy*

I. INTRODUCTION

Public opinion now demands to know about safety alerts in their vicinity. In everybody's life, security is essential. For this aim, the function of the police in society is highly significant. The police is a government body and responsible for protecting the country's people lives and riches.

Many tourists visit Sri Lanka but have difficulty locating police station phone numbers. People are reporting offenses to police-provided evidence as just a solution. Users have turned

into peacekeepers, attempting to prevent awful events from occurring, which is a huge relief for law enforcement. It is difficult to locate adjacent police stations or their corresponding locations in Sri Lanka. Frequent traffic offenses occur; however, police frequently fail to apprehend them due to a lack of evidence. People should report more crimes than ever been whether there is a place to transmit information and videos to those same police anonymously. The goal is to develop a "PROTECTOR" on-the-scene criminal reporting system. The focus is to eliminate the number of crimes, violence, and unlawful activities (Jayasinghe and Perera, 2021). Fake identities and false alerts confuse law enforcement and ongoing investigations. This seems to be expected, but there is no method of determining whether the reports are accurate or fake unless investigated. Current programs use a variety of methods to address various challenges. However, they are ineffective. As a result, among those situations, actual patients had to rush as well. Moreover, because it takes much time for police to investigate or respond to reported crimes or clues, the public is discouraged from reporting the incident to the police. Unless a victim reports a crime, they expect the police to be sympathetic. However, when the police take their opportunity to answer, people are dissatisfied.

It might happen because of far too many crimes being reported, but perhaps the problem would be that it discourages victims. As a result, people demand effective and convenient responses to their cases through such a violent crime system. The Section II of this paper includes the literature review of this study. The Section III discusses the research methodology, while the Section IV gives the complete details about the data analysis and results. Finally, the

Section V includes the implications and recommendations to the followers, limitations of this research, future directions, and the conclusion.

II. LITERATURE REVIEW

A crime is defined as an offense that should be condemned and punished by the community. It can often be separated from such a tort, which seems to be a criminal prosecution brought against a private individual. The state or the Commonwealth usually prosecutes criminal offenses. In most cases, it is left to a government employee to file civil legal proceedings. Some offenses would both be capital crimes and civil misdeeds simultaneously (Dhinakaran and Ambikapathy, 2020).

This is commonly agreed that perhaps the necessary equipment concerning any crime has become a voluntary effort subsequently lack, despite the usage from a particular cognitive regime. However, a workout can also maintain any framework beyond spontaneous ethical behaviour. Motions performed during an emotional breakdown do not appear towards being movements, neither do strikes launched by either a somnambulist before awakening, so salvo that consequence of either the number of casualties upon every person. The criminal burden, like a consequence of either the result, furthermore necessitates that the harm done be preserved as having originally produced either by the defendant (Deri et al., 2020).

There is an area of interest between took place crimes and crimes get reported. Police should fill this hole and the public points a prior record of information leading to the public from the enforcement. Many Asian international locations have this difficulty of no precise thanks to document street visitors violations (Omondi, n.d.). The victim is willing; they think about the privateness and protection of their lives. The media constantly searches for warm information and victims do not want to be warm inside the news. The victim is effortless to talk about the incident to the family, friends, and relatives. Because they continually are favourable for the victim (Raza et al., n.d.). Recent research exhibit that willingness is exclusively supported by gender and age. Older victims are going to be greater likely to record crimes to the police than youthful victims. Privacy issues, consent, and police brutality will pave the way for the more extended period of these technologies. Police want to discover a way higher way to take care of human beings to continue to be safer (Gopalakrishnan, 2012). Update their structures

well-timed with the most recent technological know-how and guarantee privateness of the information (Lakshmi, n.d.). Police should motivate society to use their crime reporting system (Shetty et al., 2018).

Tip Submit approves residents to post crime suggestions securely and anonymously. The survey confirmed that the public would utilize an online machine, with nearly 64% of those interviewed. 53% of crime victims take over an hour ready at the police helpdesk to solely document their crimes. Violating visitors' guidelines violation may be a crime that nobody reviews to the police until an accident. If these crime reporting structures can document visitors' violations which will be an exquisite comfort for police and other regulation enforcement units.

The public asks authorities to trade the way of policing as a reality of that. Road visitor's accident in India is growing regardless of Current legislative amendments, attention applications and enforcements of site visitors' rules. Enforcement devices introduce a gadget to supply recommendations or records about site visitors' rule violations. People will record crimes if the gadget gives all fundamental privations and facts defensive measures to shield sufferers and witnesses (Daubs and Manzerolle, 2016). Every party expects to form a safer place to remain and catch each criminal who dwells amongst society (Boateng, 2018).

Policy Strategies

The FIB funded RTI International, and therefore the Law Enforcement and judicial Research Forum, to investigate the types of technology that US law enforcement officials are acquiring and implementing. The major purpose would have been to conduct a large-scale investigation into the harshness of police technology. Instead, the data from national and browser references have been combined to form the goal: reading on the subject foundation to guide police personnel in emerging technologies (Jesil and Basant, n.d.).

A. Smart Police Station System

Cloud computing appears to be an effective programming paradigm for on-demand consumption. Law enforcement plays an important function in communities in terms of maintaining silence. However, due to a complete lack of resources, the police are frequently reluctant to carry out their tasks and obligations

appropriately (Nicolosi et al., 2020).

Table 1 Summary of Existing systems

Topic	Variables
Willingness of reporting crimes	<ul style="list-style-type: none"> • Marital status • Age • gender
Existing crime fighting application	<ul style="list-style-type: none"> • Advantages • Use of application
Privacy and protection of the user	<ul style="list-style-type: none"> • Anonymity
Android base proposed crime fighting applications	<ul style="list-style-type: none"> • Disadvantages of existing applications • Attraction on android base crime reporting
Road rule violation	<ul style="list-style-type: none"> • Accidents • Road rule violations
Importance of reporting a crime	
Enhancing crime reporting and monitoring	<ul style="list-style-type: none"> • Use of web and mobile technologies
User privacy protection	<ul style="list-style-type: none"> • Cloud storage
Secure crime reporting	

B. Existing Systems

With time each crime reporting gadget desires to be up so far or exchange the system. That does an advantageous impression on humans as formerly Canadian research confirmed a declining willingness to record crimes [6] makes communities hazardous and obtain tougher to try topolice within the vicinity for regulation enforcement units. So, they observe a definite machine to inspire humans to document crimes. To contain them in policing, this is often an exact trick to urge extra crime reporters alternatively than not reporting. Every one of us of America got to defend its citizens to try to do that, and they need to require some precautions.

The latest cell software named Mobile Vic PD was once launched through the Victoria police in Canada for struggle crime. The cellular utility is often wont to file minor crimes, provide nameless recommendations to police, remain up so far on crimes ongoing, acquire lacking infant reviews or take a glance at on transferred property because the crook

records are not reachable remotely there is a conversation hole between the police investigating any case. The downside of this utility was once that it wont to be inclined to pretend to report a crime and there was once no different thanks to affirming that the incident was once real (Tundis et al., 2020). This software was once in a position to reap the aim of Canadian regulation enforcement gadgets expected. To trade public willingness to record crimes. As within the past discussed, utility this software additionally anonymously crime reporting to police. However, these purposes are not any longer use for emergency purposes. They want to assist regulation enforcement gadgets to preserve the world safer. Not contacted for emergencies or to document a significant crime. These purposes can motivate the general public to remain vigilant and support the regulation enforcement devices to police, raiding, and assist for ongoing investigations (Avdija, 2019). These reporting details are saved on the database. After a politician confirms the details or guidelines, they got. They dispatch those facts to the applicable parties. If these functions are capable of affirming the knowledge, proper after they mentioned the price of the statistics would be excessive and it will assist in expanding the effectiveness of the crime reporting structures effectively. Many nations use structures to seize the crimes above table 1 summarized crime-fighting applications (van de Weijer et al., 2019).

This paper exhibits purposes every software offers specific facets to the victims and witness anyway their remaining purpose is to aid enforcement gadgets to continue to be safer the world. As an impact, we strive to use this function to guarantee their safety (Singhal and Shukla, 2012). The recurring element in most of the functions supplies danger to record anonymously. People like to be nameless and grant the data to guard their identity so that they do not want to fear their safety. Some purposes use a sincere technique to affirm the knowledge. By verifying the expertise, the usage of the broader public as an instance if they acquire an anonymous tip about the endured robbery, they notify the closest tipsters spherical the situation. So, these tipsters can additionally inform anonymously

is genuine or false, the use of the equipment so, it is an environment-friendly technique to reply to matters shortly as possible. Every software makes use of exceptional techniques to acquire information. Mostly these facts shop in cloud storage. Security of these strategies is excessive and shortly can retrieve the info.

Many Asian nations nonetheless use file base guide systems. These do not seem to be fine when examining these applications. These present purposes can show that we constantly remain nameless and document crimes. In Canada, the app known as “Mobile Vic PD” is equipped to show that due to the fact there is research indicates that people do not incline to record crimes (BinDhim and Trevena, 2015; Mathur and Sharma, 2020). After this software is launched, willingness is modified. This lookup indicates human being’s attitudes toward the prevailing device and technology-based system. There may be a survey therein paper that proves society is inclined to document crimes on technological know-how base structures alternatively of a fashionable machine (Tundis et al., n.d.). If the gadget presents anonymity so, human beings are inclined to record police. Albeit it is about police brutality. A man or woman who cannot attend the police and file a crook offense towards the police will know not to be inquired. However, in software that proved safety, human beings do not hesitate to file incidents. Police additionally understand that if they did not inquire, it would purpose a multitude. Now truly can see that except for these kinds of structures, police cannot manipulate all the items alone. However, if these structures exist, police additionally getting into bother if they broke the law. In southeast Asia, USA regulation enforcement uses a guide technique to file a criminal offense. Mostly use the eBook to write down. However, if the e-book is free or a person tears the online page within the book. Relevant inquiries will and crime reviews will disappear. Due to that, the sufferer will discourage from recording crimes to the police which will lead criminals to remain safe as innocents amongst the society, public and police relationship will fail, the wide variety of crime case reviews will limit evaluation to actual crook cases and additional regularly

public will misplace the willingness to file crimes.

When police verify the rules from the tipster, they need to motivate them to file extra crimes. Until the public and police preserve their relationships closer, the vicinity that lives will find safer for all. Not solely tips. Crime reviews also do an incredible influence because a proper investigation can trap criminals easier. Technologies do an excellent job of contemporary policing the world. Within the survey, the bulk invites online structures thanks to the fact that they trust this is often superb thanks to informing regulation enforcement devices about the crimes and providing guidelines about the crimes. Within the current file base crime reporting processes, the citizenry remained for a longer duration to try to whole the method. When it involves the online system, they are doing not need to waste their time. Quickly they will respond. Following table 2 illustrates the existing system technologies with relevant applications.

Table 2 Existing system technology

Application	Advantages and technologies	Platform
Submit tip	<ul style="list-style-type: none"> • Allows Anonymous tips • Tracks location of uploads • Use PL/SQL for Database 	Android/iOS
Web Cast	<ul style="list-style-type: none"> • Associates crimes with places where they occur • Use Google maps and cloud services for Database 	Web based
Mobile Vic PD	<ul style="list-style-type: none"> • Allows Anonymous tips • Allows updates of crime in progress 	iOS
Accurint	<ul style="list-style-type: none"> • Verification of information in the field 	iOS
Cop link	<ul style="list-style-type: none"> • Quick situational awareness and geospatial searches 	Android/iOS
IPOL Mobile	<ul style="list-style-type: none"> • Latest crime awareness • Vehicle-ownership checks 	iOS

Because of the amplitude of a visitor's breach, policy violations because of visitors, corruption trouble, amongst many other issues arise. Until every device operates manually, and no one runs to grab the nice automatically. As nothing more than a result, corruption is on the rise. If somehow the gadget is computerized, high-quality devices will be given robotically to the person who violates the law. Corrosion is also decreasing rapidly.

Because cheating is difficult. These kinds of structures will help to start reducing visitor concerns and reduce visitor policy infractions. Most present criminal reporting purposes were never intended to document infractions committed by street site users. However, this would frequently be an important aspect that just about every utility should contain. For example, many visitors violate the rules in Sri Lanka. In urban locations, such as Colombo, three-wheelers are known to breach site visitor guidelines ("International Journal of Scientific Research in Science, Engineering and Technology, IJSRSET," 2018). These movements can cause traffic congestion on the site. So, because the existing functions should be expanded to include that function, it will become a massive help to drivers, law enforcement, and pedestrians. No count how top the gadget is launched. It is all remembered of willingness to record crimes. People will record crimes if the machine gives all vital privateness and records protecting measures. That geared up to defend sufferers and witnesses. As enforcement difficulty is about the understanding, they get hold of if the gadget is equipped to show the reliability of the understanding that received, the device will be approving the enforcement productivity. Inside the end, each party expects to structure a safer location to measure in and caught each crook who lives inside the society. That was once the most purpose to realize. To realize it public, enforcement, victims, and witnesses should work collectively and maintain a higher relationship. These varieties of crime reporting structures assist in striving to do that. Technology helps to continue to be all safer. They have an impact on these structures that is extraordinarily high. It assists in providing top exceptional of existence and offers a threat to measure barring fearing anyone. Family, kids, females, elder human beings can stay safely and fortunately due to these systems. Those that figure out to commit crimes get worried about attempting to crimes. Because they comprehend these structures are existed to caught them. It is hard to stay secure after doing a crook offense. Subsequently, crime-free societies are going to be created for all.

III. METHODOLOGY

This literature review evaluates previously

utilized articles, journals, and papers. Previous crime reporting relevant research was used for this paper through reading. Those study records were acquired, examined, and revised to be entered into the current research. In addition, previous surveys done by various researchers were utilized. Due to all the pandemic conditions, it is not practical to collect primary data; therefore, this article relied on secondary records for its study. All information was taken from publications. Numerous of them are being received through the lookup gate net application, along with all the information received was formatted precisely to keep the flow of such lookup to form interest, important, and clear for readers. Every one of the sorted statistics is sorted according to the importance, including its knowledge to be evaluated, and some are excluded since they are not relevant to the query only within publications. When selecting information, consider the reliability as well as the relevance of the data to the research. This could help to boost the research's productivity. The purpose of this paper seems to be to discuss the significance and influence of crime monitoring mechanisms to authors, including citizens who have been involved in this controversial issue.

IV. ANALYSIS

This article addresses how crime reporting systems can assist law enforcement units in making the community safer. When a victim or a witness reports a crime, the actions of law enforcement forces have an impact. People's willingness to report it to the police is the most important aspect in determining whether to report a crime. Encourage the public, criminal justice units must increase security and privacy, and a crime notification system is essential. These systems provide anonymity and other security characteristics to safeguard people and report more incidents to the police. These systems outperform old manual solutions in terms of effectiveness and efficiency. It increases the trustworthiness of crime reporters. Victims can file a crime report in a short amount of time. Another advantage of this crime reporting method is that it is simple to authenticate information, and current offenses will be reported to confirm the information. Various systems employ various ways.

V. CONCLUSION AND FURTHER WORKS

In the investigation of large and large-scale crimes, a computer is a tool. Investigate any category; apart from i2 and Watson, the bulk of the existing systems are meant to be utilized and have specially developed for a specialized market. When assessed against its intended application, each system works effectively. The systems, however, rely largely on users who ask for issues to help in the research process. The user cannot determine specifically in the context of mass crime which issue is significant and cannot link comparable incidents effectively in a series.

Across both criminal categories, the human investigator is responsible for asking the correct questions or interpreting the information processed. These demands growing sophistication and expertise to achieve the greatest software outcomes and establish trust in the methods. Most police officials of Sri Lanka use detective officers' specialty teams, assisted by qualified Civil Support personnel, including trained crime analysts, to obtain the best outcomes. The degree of skilledness with different parts of crime requires time for development and might vary. There is need of a crime reporting system in Sri Lanka, because there is no existing system to report a crime. In future planning to build a crime reporting system for law enforcements. AI methods should now be used to review and provide information automatically. This would be partly because computer literacy is often not adequate and because systems need considerable information that users might disagree with and that the knowledge could be up-to-date and difficult to upgrade.

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