E-CUSTODIAN AN ANDROID APPLICATION

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ABSTRACT: *The aim an application that enhance the efficiency of records that are maintained in Police Department. This application provides FIR Registration and flow of charge sheets. It is mainly used for enhance the efficiency in terms of manipulation and way of maintaining the database in the system. It restricts the change in data in database from the unknown sources. It also enables the cloud storage option for the better access method.*

Key Terms: FIR registration, Charge sheet, FIR tracking, e-governance, android application, database.

1. INTRODUCTION

E-Custodian framework is an e-government related administration and it makes the correspondence procedure a probability, an incredible accomplishment for cutting edge time which expands the expert effectiveness for the administration police organization. A new area where mobile integrated with technology is useful for crime reporting since readily accessible information is not available at any point in investigation this is a key drawback for communication in police department. Thus, using cloud, we will try to make all the information related to the criminals available on the android application to the police during their investigation which would speed-up the entire process of tracking down the criminals. A mobile application is made available to common people in order to track down the safest path to reach their destination by giving notifications when chosen a crime affected area and also providing an alternate route this enhance the efficiency and avoid the redundancy of the data stored in database.

In this paper we concentrate on the foundation of an e-custodian framework and also its means, difficulties of execution and its need. E-custodian is to give absolute modernized data framework support for the work of the police. This framework enrolls the protestations from individuals through online and is useful to the police division for further process. The point of this undertaking is to build up an E-custodian reporting and administration framework which is effortlessly open to people in general, police office and the managerial office. An online protestation enlisting framework will unravel the feelings of dread of open and will likewise help the police office in getting offenders. An online arrangement is extremely helpful as the arrangement is inalienably distributive.

The Indian Police Department has ever since remained manually driven for most of its routine chores. The officials have been adopting the basic fundamental methods of carrying out the proceedings with the traditional "pen and paper" method being highly prevalent. These traditional practices were comfortable in earlier days, when population was far less, and the crime rates were also comparably minimal. But in today's India, when the evil elements of the society are in a boom and so many cases being registered every day, it has become a very tedious task to manage the case and all its related documents, manually. Digitization in Police department is the need of the hour. The traditional method of visiting a police station for registering a police complaint and getting updates needs to be replaced with an online process. Hence an E-police system is being developed which will collect complainant's data through a mobile application, sends the information over to the Police department on their web portal, and in this way the entire interaction occurs online, with information exchanges over the application and the web portal.

1.1 ORGANIZATION

The remainder of this paper is organized as follows, Section 2 introduces related works. Section 3 briefly presents system architecture. Section 4 describes the conclusion. Section 5 describes the future enhancements. Section 6 contains the reference and Section 7 contains Biographies.

2. RELATED WORKS

Proposed e-police system for enhancement of e-government services of Bangladesh", In this paper the future vision the investigators and constables will also have mobile workstations which are linked to the digital files as well as join to the Inter-Poll and databases so that the police personnel will immediately get answers from their databases as well and also plan to software solution.

"Survey on the Police Tracking System", in this paper the system help to surveyor in them work for handling such accounting part of fine pay and policemen location to know surveyor. This application will be useful for the remote access of criminal data which will be helpful for the investigations carried by police department. Also, it will provide the general users with the facilities like reporting any incidents which would lead to traffic jam. Moreover, it will also provide an alternate safe path on

user's demand before entering the crime area.

The advancement of computer technologies has led to the advancement of computer technologies has led to more effective ways of detecting and fighting crime in society [39]. Today, engineers and researchers have proposed and developed a number of computer based systems, especially for crime detection and reporting. This section presents an overview of some of the most powerful computer based crime fighting systems developed within the past six years. The overview pays attention to functionalities and principles of operations of these systems.

The general Citizens survey shows the digital application for police is useful for the all situation instead of the face-to-face interaction with the police.
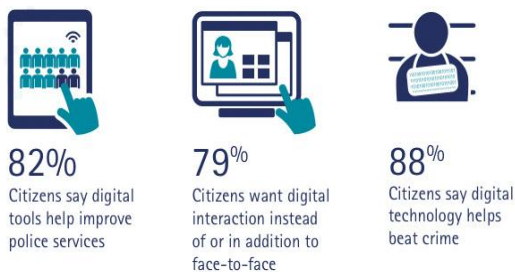

Fig. General Survey of Cops Application

"Fundamental upgrade of the internal network system within the National Police Agency of Japan.", In this paper The National Police Agency of Japan has contributed to the construction, maintenance, and management of its info-communications network, and has been devoted to modernizing its police information infrastructure for improving the efficiency and effectiveness of police activities.

A. Crime Patten Around the World in Developing Countries: Asia In this subsection, we look at the crime pattern in most developing countries around the world. We begin our analysis with Asia. In Malaysia, The ten year (2004-2013) archival analysis showed that a total number of 314,675 violent crime incidents were recorded. In general, violent crimes occurred in a fluctuating pattern [12]. The highest number of violent crime incidents were recorded in the year 2009 (42,365 cases) followed by the year 2008 (35,159 cases) [13]. In the Philippines, The total crime volume for the last four years has been fluctuating. It registered 80,108 in 2000, 76,991 in 2001, 85,776 in 2002 and 83,704 in 2003. For the period January to November 2004, the total crime volume registered is 8.5% lower compared with the same period last year. Out of the total crime volume, 55% are index crimes and the rest are non-index crimes. [14].The most common crimes in the Philippines are street crimes, illegal drug trafficking, violent crimes against women and children, terrorism and smuggling and trafficking in human [15]. In Japan, during the period from 1960s to early 1990s, the crime

rate in Japan remained stable and at a low level, with the number of recorded penal code crimes being in the proximity of 1.5 million cases per year [16]. In 1 991 however, this situation changed, with the number of recorded penal code crimes rising above 1 .7 million for the first time, and then climbing above 2 million in 1998 [16] [17]. The financial crisis was followed by another increase in crime, with penal code crimes peaking at approximately 2.85 million in 2002, which was the highest number ever recorded [16] [17]. Overall, the increase in the crime rate during the 5-year period between 1998 and 2002 was a startling 40.3 % [16] [17].

3. SYSTEM ARCHITECTURE

E-Police System is an android based application which helps to file complaint online anytime and from anywhere. In this system there are three units which are as follows:

1. E-Custodian
2. Server Interaction
3. Police
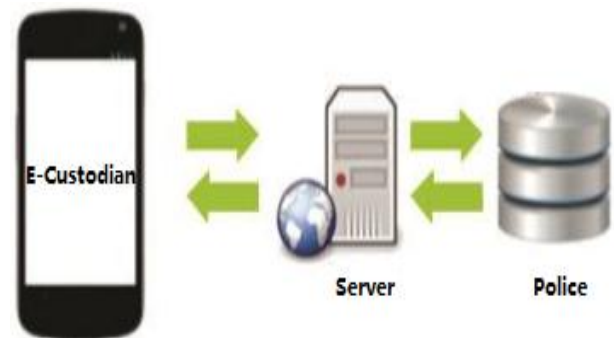
The architecture diagram of the proposed system consist of two user interfaces one for the general public and the other for the police. The data of these android applications will be stored on the cloud. Cloud will consist of the server and database which will be created in MY SQL.

The Normal Way: The will able to log in the Mobile App, Select the type of crime they want to report and add a description. The nearest police station will be able to pick it up.

The Panic Mode: The user will be able to press a Incident Button on the app and the nearest police will be able to pick the incident report. The user will also be able to view the crimes they reported. It shows the interaction between the citizens, the police and the mobile platform.

The system allows the common public to register an FIR with the police by using the E-Police System's Android application. The complainant is supposed to create an account to access the application. On creation of account on phone application, the IMEI number of the

phone is retrieved by the application and saved into the database. Once the complaint has been registered the police officials are able to see those on their side of the application. Police officers too are required to have a unique account. The cases are assigned to the officers. They can make updations and provide details of the progress on a particular case. These details are available for the complainant on his app which he could check by logging into his account.

Authentication implementation: All the users who want to access e-cop system should authenticate using the Authentication page. For authentication the personal Identity and password are mandatory. If these details are matched (ID and password) with corresponding data stored in the users' database then they are provided the access to the system. Data from other database are extracted and used to enrich the data warehouse while studying the criminal behavior in addition to criminal records. It is necessary to know the information regarding civil life of the criminals. By identifying the root causes and then eliminating will help to make as far as possible crime free and it provides a service to the e custodian customer's.
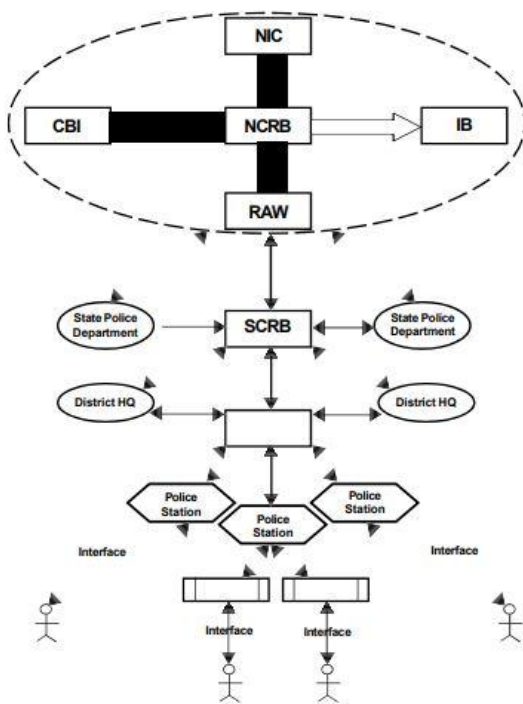

Fig. System Architecture

This information can be extracted from data bases of National Information Centre or State Information Centers. Various techniques like search algorithms, decision trees, neural networks or ever simple SQL are applied to the data warehouse in order to extract hidden knowledge. Visualization techniques like cluster charts, 3D charts, visual reality techniques etc. are applied on output to have meaningful representation of the knowledge extracted. The data mine has a specific

function that a complete statistics of different types of crimes committed in a particular period, in a particular region would be available, which would help to form crime index. In will help the concerned police department to maintain Crime Index. Each police department maintain their own Crime Index. All the services provided to the people like registering of FIRs, lodging complaints, looking for security are made more effective with speed by use of ICT. The inter department or transactions have a very good scope of automation, and it is apparent that the crime rate will be reduced. Police can monitor and detect the criminal activities by scanning through emails etc. with the help of data mining techniques. It will prevent crime even before its occurred. Even after the crimes are committed, the criminal investigation becomes easy as the investigating agencies will have access. The data base of criminals are used in the area to find most possible criminals. The crime investigation processes can be faster to a great extent. A variety of data base will be available with different organizations, one can study the common social, economic and psychological aspects of particular type of criminals and try to identify the root cause behind than behavior. Therefore Database has an important role to play in e-custodian. It will form a most essential component of e-custodian Architecture.

4. CONCLUSION

This paper aims to help the public and the police officers alike. It overcome the problem of communication gap between the police during their investigation. The updates about case details are notified directly to the complainant through the application. The ease of access of the android application by the citizens of India will encourage a more judicial and lawful society. This framework enlists the dissensions from individuals through online and is useful to the police office for further process. In addition to that the crime report is automatically generated based on the crime report data stored in the system database. The point of this task is to build up an E-police reporting and administration framework which is effectively available to people in general, police division and the managerial office. This paper proposes to simplify and speed up the process of FIR registration and tracking. This framework are more effective for the general population and police.

5. FUTURE ENHANCEMENTS

In our future work, we would like to add the Payment options that provides the medium to pay directly victim's account at the each stage case. The other feature that can be incorporated into the application is a live chat option with the police. This will allow the crime reporters or tipsters to engage in live chats with the police. This feature will eliminate a lot of false negatives because a live chat will enable prior engagement with the crime reporter before the police

move in. The online chat will also offer a platform for citizens to just find out general information about the police and community they live in. This will lead to reducing the mistrust that is currently there between the police and the general public. And also some other security algorithms can be used to provide better security measures for the criminal database.

6. REFERENCES

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