

E-Police Police Record Management System

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Abstract—E-police system is an e-government related service and it makes the communication process a possibility, a great success for modern era which increases the professional efficiency for the government police administration. In this paper we focus on the infrastructure of an e-police system as well as its steps, challenges of implementation and its necessity.

E-police is intended to provide total computerized information system support for the work of the police. This system registers the complaints from people through online and is helpful to the police department for further process. The aim of this project is to develop an E-police reporting and management system which is easily accessible to the public, police department and the administrative department.

E-police would also help provide division heads and senior officers with management information about crime control, and about administration and support services such as accounting and personnel management. This helps to higher authorities of police to have an overview about the progress of the investigation; feature is made available to public for interaction with police indirectly.

Keywords-FIR, RTI, IPC

I. Introduction

According to World Bank definition, "E-government refers to the use by government agencies of information technologies like wide area network, the internet and mobile computing that have the ability to transform relations with citizens, businesses and other arms of government [1]". It contributes to public security. The police personal would also be able to identify any criminals and this is possible if a database is available for any citizens including criminals' and innocents' all information. For the public safety there would be record about the wanted persons, suspected criminals' history, wanted cars, stolen cars, cases, news and events, contact details, recommendations and so on.

The objectives of this work are free access of the citizens for their queries and complaints, establishing database for citizens and police personnel. The normal public in India are afraid to give a complaint in police station because they are filled with a false fear about the police department. An online complaint registering system will solve the fears of public and will also help the police department in catching criminals. An online solution is very useful as the solution is inherently distributive. E-police is intended to provide total

computerized information system support for the work of the police. Its primary activities are not transparency-related, but help provide police officers with information on criminal cases and on criminals.

The person who registered the case could also get access to case details and progress at any point, either by going to any police station and requesting an officer to access their case on E-police, or by accessing their case details online via the application using an FIR code number that is issued at the time of registration. Available case details would include the FIR, actions taken, actions pending, other crime details, etc. The victim could lodge a complaint if they see from accessing case details that the case has not been registered properly, or that there has been no progress made on the case since it was last accessed. Finally, senior officers in the police service could also use E-police to monitor case details and progress. All of this affects the transparency of case handling, and the accountability of police officers. According to e-government ranking released in the survey conducted by Institute of e-Government, Waseda University, Japan, United States of America, Singapore and Canada are top three E-government countries amongst 34 surveyed countries [2].

II. Application Drivers/Purpose

The main purpose behind the E-police system was to improve the effectiveness of policy performance; to

improve the efficiency of police procedures; for example, by eliminating redundant processes in the registration of criminal cases; and to improve the quality of management information provided for senior policy decision-making, particularly through integration of previously separate information systems.

TABLE I. POLICE TO PEOPLE RATIO OF SOME COUNTRIES

Serial No	Country	Police -People Ratio
1	India	1:728
2	Philippines	1:665
3	Pakistan	1:625
4	Japan	1:563
5	New Zealand	1:416
6	Singapore	1:295
7	Malaysia	1:249
8	Thailand	1:228
9	Hong Kong	1:220

Within the focus on effectiveness, there was a concern about the non-transparent, even dishonest nature of police work, which had become synonymous with corruption and delay. The intention was that the new system - through its automation of previously human processes, and through its state-wide and online accessibility - would make the registration, processing and follow-up of criminal cases more open. Under the existing regime, many police require a bribe before they are willing to register a case, and also require a bribe to be paid before they answer any query about the case, such as its progress, or other information held on file.

III. Recommendations

A. Ensure data privacy and security, and system reliability . Data is the bedrock of any e-transparency system, and it must be duly cared for. Proper controls must be put in place to ensure the integrity of the data on the system. These will include technological controls such as application controls (helping eliminate errors in data entry); access controls (such as password systems and other authentication mechanisms); and communication controls (such as encryption). However, they must also include 'softer' elements such as personnel controls (e.g. separation of duties), and administrative controls (such as data audit,

backup and recovery processes). None of this will be effective, though, unless a proper regime of incentives and disincentives is put in place to ensure stakeholders are motivated to uphold data quality.

B. Conduct public awareness campaigns . Most e-transparency applications involve citizens, but citizens will not make use of those applications if they are unaware of them. Therefore, there needs to be a significant investment in raising public awareness. In cases like the one described, this can also act as a lever to encourage greater uptake of the application by government employees.

IV. Advantages of E-Police System over Present System

There are several advantages of e-police system for and these are given below:

1) *Establishment of E-government:* Since the ratio of police-people of India is 1: 728, that is not sufficient for public security and safety, that means on the perspective of people the police personnel is too much less, that is why the police cannot handle everything always and the general citizen feel insecure always. So the ratio problem may be decrease if the government follows the e-police system.

2) *Public Accessibility:* Since e-police system is the world standards that follow the e-technology as well as technology the citizen of the country has the free accessibility, they could make a diary about any criminal as well send any information about any matter by e-mail.

3) *Secured Data Communication:* Since the whole police system is interconnected as a Wide Area Network (WAN) topology and this not connected to internet anyone can not hack or access illegally.

4) *Crime Reduction:* It is possible to reduce any types of crime in any section of the country where police personnel could be able to interfere the police administration can and handle this but in normal police system is seemingly impossible.

5) *Safety and Security increment:* For increment of the country and country citizens' safety and security any kinds of the section our system plays an important role but if the system is the normal police system than that is not absolutely possible.

6) *Standardization:* In order to making the countries police administration world standard the e-police system must be essential but that is completely quite impossible by follow the normal police system.

V. Implementation

A. Data flow diagram

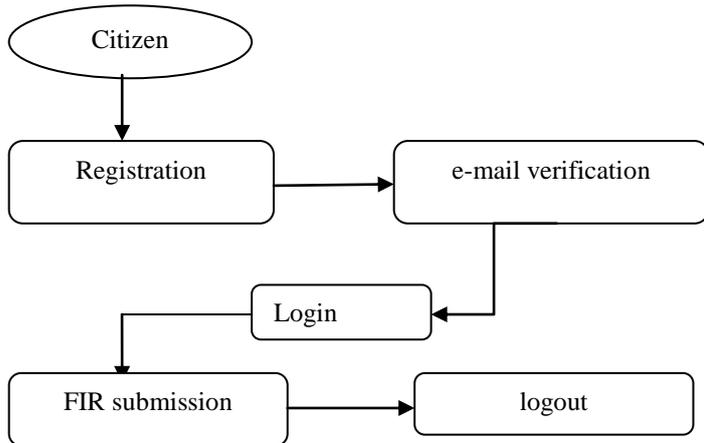


Fig.1. DFD for user

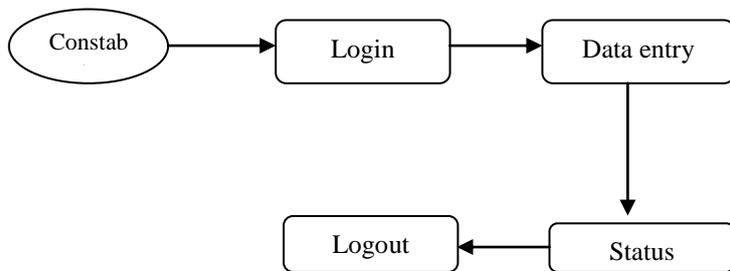


Fig.2. DFD for constable

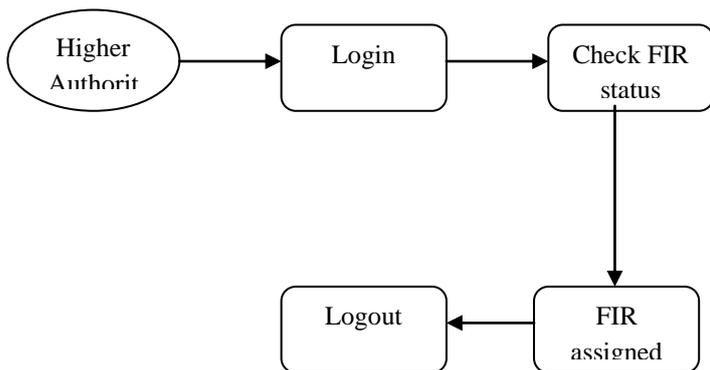


Fig.3. DFD for Higher authority

VI. USER SYSTEM

There are total three main parts included in user system first is user then constable and last is higher authority. Let us see brief about each starting with user.

A. USER

The user first have to do registration on site, this include email verification. After doing registration it's email verification is automatically done by the system and after verifying it's email it provide ID and password to user with the help of this the user will permit to enter in the system, that means after entering correct id and password the user will allow to login in the system.

B. CONSTABLE

Constable first have to login in the system, then there are three sections on which constable have to work these are data entry then search engine is there and status update. In data entry section the constable enter any newly added data in the system. Search engine is to search any information about user in the system, with the help of search engine the constable searches any information about FIR then with the help of status update the constable will permit to update the status of recent case in the system.

C. HIGHER AUTHORITY

The last part of the system is higher authority area in this the higher authority first have to login in the system. The higher authority first check out the fir submitted by the user is there any fake information present in it or not. It would check the importance of FIR and an assigned to level of authority according to their importance. Then the image base verification is performed by higher authority and he will also give the progress report on the fir on which the police working is properly done or not is there delay in the work etc in short the higher authority will give the feedback on the fir i.e. he will give progress report on the FIR on which police work.

VIII. Conclusion

This paper will definitely help the police system in making the police work more efficient through equipping the police with modern solutions i.e. it aims to ensure solutions and means for the police officers that support their main activity and it will be interesting for audience in the context of law and order situation in our country. The main intent of this paper is to upgrade the developing countries' police administration to the world standard by using modern information and communication technologies. At last we recommend to developing countries that to take necessary steps for upgrading the present police system to e-police system by overcoming the issues and challenges. In future we can add and use new technologies, wireless communication systems, modern IP networks [3] etc. This project has also provided facilities of RTI act, link

verification and encryption algorithm that will help validate users identity as well as secure document given by user. An image comparison algorithm is written to help cops check an existing person online.

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