



Role of ICT in Police Force in India

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Abstract: *Crime has become very sophisticated as some criminals make use of the very latest technology. To handle this, the police have developed equally sophisticated methods of crime detection and prevention. Legislation has also been updated to allow the police to gather evidence on criminal activity carried out via the internet, for example. Information is the key word in crime detection and this information must be accurate and easily available. ICT has a huge role to play in this. As India transitions into the new world economy a number of factors are operating to make traditional ways of policing obsolete. In addition to traditional societal problems like crime, mob violence, civil disturbances, terrorism, insurgency, etc. new forms like cyber crime, internationally funded terrorism spanning continents, international crime syndicates, etc. are emerging. Criminals are one step ahead of the police in making use of the latest technology including ICTs in implement their nefarious designs. This makes it necessary that the police should also evolve to keep pace with the changing times. This research paper is an attempt to discuss the role of ICT in policing, its challenges and suggestions.*

Keywords: *ICT, Crime, Law and Order, CCTV etc.*

I. Introduction:

Security issues consistently rank among the most pressing concerns of citizens in India. Terrorism, organized crimes, drug and violence have an impact upon citizens' perception of their immediate surroundings and also shape their attitudes towards the state and its representatives. Police are one of the most ubiquitous organisations of the society. The policemen, therefore, happen to be the most visible representatives of the government. In an hour of need, danger, crisis and difficulty, when a citizen does not know, what to do and whom to approach, the police station and a policeman happen to be the most appropriate and approachable unit and person for him. The police are expected to be the most accessible, interactive and dynamic organisation of any society. Their roles, functions and duties in the society are natural to be varied, and multifarious on the one hand; and complicated, knotty and complex on the other. Broadly speaking the twin roles, which the police are expected to play in a society are maintenance of law and maintenance of order. However, the ramifications of these two duties are numerous, which result in making a large inventory of duties, functions, powers, roles and responsibilities of the police organisation.

II. Duties of Police Force in India:

According to National Police Commission set up by the Government of India in 1977, the duties and responsibilities of the police are as under:

- i. To promote and preserve public order
- ii. To investigate crimes
- iii. Identify problems and situations that are likely lead to crimes
- iv. Reduce the opportunities for the commission of crimes through preventive patrol and other police measures
- v. Aid and cooperate with other relevant agencies in implementing appropriate measures for prevention of crimes
- vi. Aid individuals who are in danger of physical harm
- vii. Create and maintain a feeling of security in the community
- viii. Facilitate orderly movement of people and vehicles
- ix. Counsel and resolve conflicts and promote amity
- x. Provide other appropriate services and provide relief to people in distress
- xi. Collect intelligence reports relating to matters affecting public peace and crimes in general including social and economic offences, national integrity and security.

Concept of ICT:

Information Communication Technology (ICT) is a generic name used to describe a range of technologies for gathering, storing, retrieving, processing, analysing, and transmitting information. The police force makes use of ICT in many areas of its operation such as records maintenance, surveillance through the CCTV technology and traffic through the speed cameras that are usually mounted on the police cars. The use of ICT in the police force has greatly enhanced service delivery to public.

III. Role of ICT in Indian Police Force:

Policing is a highly complex, information-led activity that requires the integration of multiple data sources, often in short time frames. The sensitive nature of most information and the severe consequences of possible errors further increase the relevance of adequate design and use of ICT. ICT systems present an opportunity for police forces to increase their capabilities. ICT concepts, architecture and design have matured significantly and are subject to continuous innovation. Relevant ICT may range from systems installed in public environments over PC-based systems in offices, to systems installed in cars and mobile systems used on-site. In addition to systems that are specifically designed for the police, ICT in use by the general public may offer the police new means of dealing with their tasks. Emerging ICT and their appropriation by society may also constitute a threat that demands new competencies and practices to be developed and integrated in existing police work. Offenders could use systems directly against the police or against the general public. The extended use of ICT turns out to be much more than just a technical innovation to make police work easier and more efficient. Technological innovations change the organisation and its environment in various ways. ICT in the police is closely regulated by laws, yet may go way beyond what is allowed for the 'normal citizen'.

The research on ICT in COMPOSITE is guided by the understanding that "computer technologies are not neutral—they are laden with human, cultural and social values" and is focused on socio-technical issues that arise from ICT within the context of police work. Thus, we focus on issues that arise in the interaction between technology, on the one hand, and police organisations, individual actors, private companies and the general public, on the other.

The Police Force may get the following benefits using ICT tools:

CCTV:

CCTV alone cannot reduce or detect the crime, but used in conjunction with other methods it can assist in the detection of offenders. The benefits of CCTV are as under:

- Track the movements of criminals
- Locate victims of crime
- Identify potential witnesses
- Identify any suspects
- Provide corroboration for evidence
- Prove or disapprove alibis
- Help to determine the seriousness and context of any offence, particularly in court cases
- Monitor public order disturbances
- Provide surveillance of critical locations

Radio Frequency Identification:

Radio Frequency Identification (RFID) is a gift of modern technology, which incorporates the use of electromagnetic or electrostatic, coupling in the radio frequency (RF) portion of the electromagnetic spectrum to uniquely identify an object, animal, or person. This technology is used by the police authorities so that transportation systems can be verified to prevent movement of unauthorized materials which can affect the public safety.

Electronic Transport:

The major activities related with the transport system can be handled easily with the electronic devices. E-Transport aspect covers number of activities such as: registration of all types of motor vehicles, Issue of driving licenses, Issue of Permits for the light and heavy vehicles, Tax and fee collection through cash and bank challans and control of pollution through checking etc. Thus, electronically saved data will be useful for the effective traffic management.

E-Identification:

The Electronic Identity Card is a government-issued identity card for online and offline identification. Apart from online authentication many EIDs also give users the option to sign electronic documents with a digital signature. The EID has the format of a regular bankcard, with printed identity information on the surface as well as an embedded microchip.

Police can find any person quickly to maintain security in the society with EID.

IV. Online Verification and Fingerprints Reader:

A biometric check can identify an individual or verify identity. Identification is the ability to locate somebody in one-to-many searching. Verification tends to be more of a one-to-one application to confirm that you are in fact the person who you represent yourself to be. Both of these terms apply to law enforcement applications. Police can verify the arrestee's identity and determine if that person has a criminal record. A biometrics-based identification search may be necessary if the arrestee has disguised his or her identity.

Real Time Information Access:

Advanced technology greatly enhances a police officer's ability to fight crime but presents challenging constitutional issues. One particularly helpful new tool is the global positioning system (GPS) tracking device, a computerized unit that police can attach to a suspect's vehicle and then monitor to track the vehicle's movements. The GPS device is similar to a traditional tracking device but GPS provides more precise and detailed information. For example, the GPS unit can be

programmed to transmit an electronic signal via a cell tower to a base unit approximately every five seconds. The officer monitoring it can determine the latitude and longitude of the vehicle, tell how long the vehicle remains at its location, view a computer screen containing a map of the area where the vehicle is located, and see where the vehicle is headed all without leaving police headquarters.

Crime, criminals, victims, and most of what law enforcement deals with has a location: a specific address, building, street corner, block, or similar geography. This information is vital not only in the day-to-day deployment of increasingly scarce resources but is extremely important in developing strategies for deterring and preventing crime as well as developing tactical plans for dealing with today's issues. Data-driven policing through geographic information systems (GIS) enables agencies to leverage their analysis of crime and intelligence information to proactively focus scarce resources in solving community problems, preventing crime and apprehending criminals.

V. Police Public Interface:

ICT may become interface between police and public. Some states have taken the initiative to use ICTs in this regard. Rajasthan has introduced the innovative project called "Aarakshi" that aims to improve the efficiency of police procedures. Each complainant is given a token number at the time of registration of a complaint which can be used for further referencing. The supervising officer can monitor the progress in investigation. This brings a greater degree of accountability investigation. Andhra Pradesh has a state wide computerized network of police stations-"e-cops" (e-Computerised Operations for Police Services). Thus, after a case is registered in the computer of the nearest Police Station, a print out of the FIR is given to the complainant. Once registered, the status of the FIR can be checked through e-cops from anywhere.

VI. Centralised Information Storehouse:

National Crime Record Bureau (NCRB) is mandated to empower the Indian Police with Information Technology for modernization of Indian Police. NCRB has the proud distinction of installing 762 server - based computer systems at every District Crime Records Bureau and State Crime Records Bureau, across the country, 'Crime Criminal Information system (CCIS)' project, with a view to maintain a National - level Database of Crimes, Criminals and Property related to crime.

NCRB is implementing Crime and Criminal Tracking Network and Systems (CCTNS), which is a mission mode project under the National e-governance plan of Government of India. Cabinet Committee on Economic Affairs (CCEA) approved CCTNS Project on 19.06.2009 and an allocation of Rs. 2000 crores has been made. It has the following objective:

- a Make the Police functioning citizen friendly, transparent, accountable effective and efficient by automating the processes and functions at the level of the Police Stations and other police offices at various levels.
- b Improving delivery of citizen-centric services through effective usage of Information & Communication Technology (ICT).
- c Provide the investigating Officers with the tools, technologies and information to facilitate faster and more accurate investigation of crime and detection of criminals.
- d Improve the Police functioning in various other areas such as Law & Order, Traffic Management, curbing organized crimes, resource management etc.
- e Facilitate collection, storage, retrieval, analysis, transfer and sharing of data and Information among Police Stations, Districts, State headquarters and other organizations/agencies, including those at Government of India level.
- f Enabling and assisting the senior Police Officers in better management of Police Force.
- g Keep track of the progress of the crime and criminal investigation and prosecution Cases, including progress of cases in the Courts.
- h Reduction in manual and redundant Record keeping.

CCTNS will cover all the Police Stations in the States/UTs and also the higher offices up to State/UT Hqrs. All these locations will be networked by providing appropriate high-speed connectivity for data transfer and sharing of information amongst various Police offices.

VII. Intelligent Sensors:

With the increasing population and urbanisation the numbers of vehicle on the roads are also increasing, the main purposes of the traffic police are: to decrease in road accidents, provide easy traffic flow and enforce traffic rules and regulations. Intelligent sensors provide real-time information to for better traffic management. Camera system in cars has become an important instrument to record video of events which is improving and becoming more cost effective to control the crimes.

Challenges before the Police:

The police have always been recognised as a vital arm of the state whether in ancient times, during the British period or even today. Earlier the job of the police was to maintain law and order and establish the sovereignty of the state. In recent

times accelerating economic and social changes accompanied by increasing globalisation and the communications revolution have put enormous pressure on peace and social harmony threatening to disrupt the social fabric. In such times the police force has to face unprecedented challenges.

As India transitions into the new world economy a number of factors are operating to make traditional ways of policing obsolete. In addition to traditional societal problems like crime, mob violence, civil disturbances, terrorism, insurgency, etc. new forms like cyber crime, internationally funded terrorism spanning continents, international crime syndicates, etc. are emerging. Criminals are one step ahead of the police in making use of the latest technology including ICTs in implement their nefarious designs. This makes it necessary that the police should also evolve to keep pace with the changing times.

Suggestions:

The Government of India has launched a number of projects viz. CCTNS, Natgrid, NCTC, CMS. Law Enforcement Agencies must be aware of both technical as well as legal requirements in order to get maximum benefit of the projects. To update the skills and expertise of police officials, they must be provided technical training on regular basis. Their technical skills must be examined time to time. The Law Enforcement Agencies should improve Integrated Information System. Each and every Police Station / Chowki should be provided latest technologies so that they can improve their skills and ability to analyse the collected information to control the crime. The need of the hour is to purse the commitment till the same are accomplished as the many crucial projects in India have failed because till end neither planning nor commitment survived.

VIII. Conclusion:

To meet the challenges of the coming decades it is essential to have a police force which is up-to-date with ICTs in its daily work. This will build the confidence of the public that the police force is effective and can serve the community efficiently. It will help bring more offences to justice through a modern and efficient process. Employees will also get benefit. Not only does technology promise to improve police effectiveness and efficiency in controlling crime, it may also enhance their professional status and organisational legitimacy.

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