



# “Role Of Technology In Police Organizations In India”

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## Abstract:

In today's world, technology has become an integral part of everyday life. We rely on it in nearly every aspect of our lives, from communication to entertainment and everything in between. This is especially true when it comes to law enforcement, as police departments are increasingly relying on technology to help them better serve the community. The concept of technology is basically the use of science in day to day life and Indian Police organizations today are thoroughly equipped with the technology, although a lot more is to be accomplished. The police in India is still carrying the legacy of the colonial rule in its structure, duties, work culture and expectations.

The functions of the police and their duties were limited in scope in early times, which by the winds of time have increased with population and means of communication. The times has changed and so is the police organization. The era when technology in the police organization was just a stick has now changed to wireless, radars and various other devices catering to the need of the twenty first century. Police using technology can be attributed under two broad categories, which are Police as users and Police against abuse. Police in today's world use the available technology to track the criminals and punish them, but in the course of doing so, they also face serious problems and threat to their life as well as most of times Indian Police do not possess the required arms and ammunition to fight the perpetrators of crime. Indian Police is still very backward with regard to the use of technology.

Technology is the need of the hour and the force has to be well equipped with technology to fight the intermittent dangers of the society. The paper shall focus upon the evolution of police organizations in India and the technological difference between the ancient and modern police and the means to overcome the hurdles to make a crime free society and at the same time the need of technology in the twenty first century in the police organizations.

**Key Words:** Police, Policing, Technology and ICTs (Information and Communication Technology)

**Introduction :**

The police have a very important role to play in a country. The principles underlying policing in a free, permissive and participatory democracy may be categorically assessed as –

- Uphold and protect human rights;
- Contribute towards winning faith of the people;
- Strengthen the security of persons and property;
- Investigate, detect and activate the prosecution of offences;
- Facilitate movements on highways and curb public disorder;

The other functions of policing are: -

- Serving and protecting the citizens.
- Engaging the citizens and gaining their cooperation.
- Patrolling.
- Collecting intelligence to support police work.
- Traffic Duties.
- Investigating and enquiring the cases reported to them and maintenance of police station reports, registers, records etc.
- Auxiliary duties such as technology support skill support and other outdoor duties.

Having understood the different aspects of police and policing it is desirable to know how the police force functions today and how technology forms an important and essential part of the entire police organization.

**Objectives of the Study:**

1. Understand the Technologies used in Investigations
2. Barriers
3. Upcoming technologies.

**Research Methodology:**

This paper is basically descriptive research based on secondary data collected from the books, research studies, research paper, websites and journals. In this paper an attempt has been made to understand the role of information technology in solving cases and the challenges behind it.

**CONCEPT OF ICT (Information and Communication Technology):**

Information Communication Technology (ICT) denotes 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.

**POLICE AS USERS OF TECHNOLOGY:**

Technology basically means the use and application of science in day to day activities and today the police use technology in a wide array of opportunities. Technology today plays a vital role in detecting the organised crime and combating terrorism which has become an universal phenomenon today. The challenge lies in the fact that today the police organisation has to work within the limited budgets and the introduction of new technology has to be tackled very carefully because these are resource intensive and very expensive.

The following table attempts to compare the past and the present technology used by the police:

<b>THE OLD TECHNOLOGY</b>	<b>THE MODERN TECHNOLOGY</b>
Rattles and Whistles	Sophisticated National Digital Radio Services in cases of Emergency
Handcuffs & Uniform with no protection	Side handled Batons, Bullet Proof Jackets
Signal Boxes, Telegraph	Mobile Phones, Internet, Video Conferencing
Locally based manual systems for collation of intelligence	Local and National Networked IT Systems
Manual Finger Print Checking	Forensic Checking
Resource Intensive Identification parades	Automated Video Identification Parades

It is important to note that although the following have not been categorically used in India, but definitely a major part of it has been used and is catering to the needs of the generation, but the drawback lies in the fact that there is inadequacy of funds and various other implications as a result of which these technologies is not been used competently in India today.

Policing is a complex amalgamation of various processes with specific social functions and it requires the integration of multiple data sources, in a very short span of time. The sensitive nature of work and the need for delivering results in a very short span of time increases the relevance of adequate design and use of ICT. ICT systems motivate the police forces to increase their capabilities. ICT concepts, architecture and design have matured significantly and are subject to continuous innovation and ICTs 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. Moreover, systems specifically designed for the police, include radars, GPS, mobile printers etc. 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. However, the risk does not lower down, as the offenders may 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.

The major ICTs that the Indian Police is using today can be evaluated as follows:

- **CCTVs:** Closed Circuit Television or CCTVs are one of the most important ICTs that the police use today. It is one of the most convenient and easily accessible modes of ICT used to detect the criminals. It is also known as video surveillance and is used to transmit signal to a specific place, on a limited set of monitors. It is used in conjunction with other devices to detect crime and penalise the criminals.
- **Radio Frequency Identification (RFID):** RFID is basically wireless use of electromagnetic fields to transfer data, for the purposes of automatically identifying and tracking tags attached to objects. 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 Breath Alcohol Test:** One of the most significant ICT that is being rampantly used in today's world, so that the rash and negligent driving can be stopped. The Home Guards and the traffic police are entrusted with the task of checking the people who are drunk driving at night so that accidents can be prevented and these are generally located in the highways and the accident prone areas of the states.

- **Global Positioning System (GPS):** A space-based navigation system that provides location and time information in all weather conditions, anywhere on or near the Earth where there is an unobstructed line of sight to four or more GPS satellites. This enables the police to track criminals through their mobile phones and detect their location and conduct raids which are essential part of police investigations and also conduct sting operations as well.
- **Mobile Cameras:** These cameras help in detecting and tracing the running cars which break the traffic rules and regulations or run away after an accident without helping the persons with severe injury. These cameras help in tracking the criminals who do away crimes in the wee hours of the day and think that they are saved, but they forget that crime never lets you free and always pays.
- **Wireless Internet:** Another very useful means of ICT is the wireless internet by means of which message and data is transferred and at the same time finding the cases and searching pertinent information on relevant topics are also very useful and it can be used anywhere and anytime. Thus, it serves as an important means to help the police in carrying out their functions of general supervision and crime prevention.

- **Mobile Printers:** A very useful ICT are mobile printers as they allow the printing of prima facie photographs on the crime spot and also allow fast transmission of data and other photographs through the means of wireless.

Police force also use software's in training and other sensitizing programmes about technology and in service trainings. These programmes help in making the officers aware about the recent trends in crime and the latest technological advancements which suit the need of their work the software programmes also include the various mechanism of online redressal of the grievances of the general public, thus all these programmes help in the development of better police public relationships, however, there are certain limitations which are assessed below:

- Senior police officers are technology shy and desist from using technology.
- The police officers suffer from the laid back attitude and as a result of it; they do not use the most updated technology.
- The in service training programmes in most cases lack the sufficient amount of training to be imparted for using the latest technology which serves to be another reason as to why the police force detach themselves from these ICTs.

### POLICE COMBATING THE ABUSE OF TECHNOLOGY:

This segment categorically enumerates the instances where police is seen combating the abuse of technology. No doubt, the measures and methods mentioned above aid the police not only in detecting crime but also combating them, but the major hurdle for the police today is combating cyber crime which is increasing rampantly in the modern era. Some of the various forms of cyber crimes are mentioned below:

- **Spamming:** When any person sends unwanted bulk emails so that the user at the other end is unable to access the emails for their own personal use is called spamming is a serious cyber crime which needs to be controlled.
- **Phreaking:** Trapping the telephone lines illegally is phreaking and it is another aspect of cyber crime which needs to be controlled at the grass root level.
- **Cyber Stalking:** When computer technology is used as a means to torture someone, it is known as cyber stalking and the mechanisms may involve false assertions, transmission of threats, obscene mails, abusive phone calls and many more.
- **Computer Damage:** When the hardware of any computer is damaged.
- **Mouse Trapping:** Whenever a person clicks on the back button of the mouse, in order to go back and avoid viewing the further pages, instead of going back he is further sent to the view other unwanted pages, and in turn the person has to turn off the computer or open a new browser.
- **Phishing:** When a person attempts to acquire sensitive information like user names, passwords etc. By disguising a trustworthy source as he believes that the information will be shared because the general public believes it to be trustworthy, the act is known as phishing, and is a very emerging cyber crime these days.

- **Information Tampering:** When a person intrudes into and damages information stored in various storage devices of the computer so that the relevant information by which he can be put behind the gallows is saved is tremendously increasing with the advancement of the time in today's world.
- **Identity Theft:** The act is very similar to cheating by personation under The Indian Penal Code, 1860. In this crime a person basically uses the identity of another person claiming it to be his own and thereby gets all the benefit of online transactions which he is not legally bound to receive, which is a very serious cyber crime. The act involves stealing money and obtaining other information with the use of false identity.
- **Unauthorised Entry:** When a person gains illegal access to the information in a computer system without the knowledge of some other person, it is known as hacking which is once again a very serious cyber crime.

Thus, the police officers with the help of these technology help to combat the crimes which are going on in the outside world, however, these threats are not totally controlled because the police today still lacks the technology required for combating such serious crimes.

## **BENEFITS OF TECHNOLOGY:**

The new age technology is a boon the modern policing and serves a variety of benefits which may be assessed as below:

- Technology will lead to transparency as manual work is manipulated at times.
- Technology will also enhance the speedy registration and disposal of cases and also help to combat crime and aid investigations as well.
- More accuracy will be preferred if technology is used in day to day work.
- More accountabilities will be assured and police personnel will look forward to work more efficiently.
- It will aid to easy retrieval of storage data as well and records will be categorically maintained.

## **Suggestions:**

The extent of police technology continuous to evolve, it is also creating opportunities for those interested in the policing profession. It also has started increasing the need for compassionate, analytical, creative thinkers able to use technology to protect and serve their community.

1. A separate cyber-crime cells for all the states must be established as the crimes in this area is increasing day by day.
2. Awareness programs on information technology must be carried out on effectively and efficiently in all cities.
3. The police commissioner should also take the task of imparting significant knowledge to the general public so that they can use the database more efficiently which is beneficial for their safety.
4. Every police website must be well designed and be user friendly so that the database may be effectively used to lodge complaints.
5. Police department must also use internet when tackling online crime. This can include sharing of illegal material such as pirated commercial movies or music and other forms of identity theft that use email or internet must also be addressed using computer technology, as must attacks using viruses and hacking attacks.

## **Conclusion:**

The new technics will bring more crime to justice for the fair judgments with the help of a modern and efficient policing process. ICT not only promise to improve effectiveness and efficiency of the police force in controlling and detecting crime, this may also increase their professional qualifications, status and organizational legitimacy. This will build confidence in public that the police force is effective and can serve the community efficiently.

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