CONTRIBUTION OF TECHNOLOGY IN SMART POLICING AND MODERN OPERATIONS IN INDIA: GLIMPSES

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ABSTRACT

Because of speedy urbanization and development in technology, crime rate is also rapidly rising. Police is state agency to take care and maintain law and order in state. Hence, police should be up to date with technology. Smart policing is one such initiative involving evidenceconstructed, data-driven law enforcement manoeuvres and strategies that are effective, smart, economical as well as efficient. Particularly speaking about India, the police force which is strict and sensitive, modern and mobile, alert and accountable, reliable and responsive, techno-savvy and trained. Technologies employed by the police are numerous and support diverse functions. Facial Recognition System, Body-Worn Cameras, Mobile Application Intelligence Collection, Cyber Crime, Community policing and predictive policing is crucial aspect of smart policing. Technology is an instrument, or a method, for accomplishing labour, and it can take many forms, including material, intellectual and social. Technology is ingrained in social structures and is imbued with social meanings; it shapes and modifies organizations and jobs. Currently all over the world, law enforcing agencies are using the technology for better functioning. There are cameras put in significant public sites such as railway stations, central bus stations, and other locations to collect facial photographs of people to aid in crime detection. Body-worn cameras for police officers are one of the most commonly discussed technology advancements in policing today. In Indian context, also the need of Body Worn Cameras are strongly suggested by various academicians and legal expert. Many states polices developed their application which enables citizens to report crime instantly using their mobile phones. For effective policing one important thing is records of criminals. This data can give easiness to police performance. Cybercrime is often portrayed as an unsolvable problem

because it can be perpetrated by users under the guise of secrecy and is based in certain areas without application of law. Therefore, forensic labs and Information Technology expert staff of police is need of time. Community policing means to understand the grievances of the common people in co-ordination with people itself to instill a sense of security, prevention and detecting of crimes. Predictive policing concentrates on using the power of geospatial technologies with a mix of info processing abilities as well as evidence based police response models to do crime analysis, prevention and detection. Thus technology is tool to achieve the object of effective and the complete policing.

Keywords: Smart Policing, Police and Technology, body worn cameras, Cyber Crime, Community policing etc.

INTRODUCTION

Every person wishes to live in best place in terms of safety and security. Where his all legal rights are protected. Where the law and order efficiently executing. Because of speedy urbanization and development in technology, crime rate is also rapidly rising, which is menace to progress and creates uncalled panic in the mind of citizens. The past decade has witnessed a steep rise in crime statistics in India. According to data from the National Crime Record Bureau, the number of reported crimes under the Indian Penal Code increased from 18,78,293 to 29,49,400 a significant boost, while 63% criminal offenses under special and domestic laws increased from 32, 24,167 to 43,76,699 it indicates raising point by 73%.ⁱ It is important to note that even in the advanced industrialized democratic context the role of the police is riddled with controversy and contradiction.ⁱⁱ If the police functions run smoothly with the need of people then, there are no controversies and contradiction. Therefore, it is very crucial that how police machinery is functioning in that particular state? Police is state agency to take care and maintain law and order in state. Hence, police should be up to date with technology, thus bridging the gap between policing and technology is much needed requirement of the time. Therefore, the concept of smart police is gradually arising in to the Indian context.

WHAT IS SMART POLICING?

Smart policing is a strategy approach that uses new applications of analysis, technology, and evidence-based procedures to bring more science into police operations.ⁱⁱⁱ The goal of the Smart Policing Initiative is to identify law enforcement tactics and strategies that are effective, efficient, and economical.^{iv} Particularly speaking about India, the police force is strict and sensitive, modern and mobile, vigilant and accountable, dependable and responsive, technologically aware, and well-trained. During the 49th annual conference of Directors-General and Inspectors-General in 2014, India's Prime Minister presented this notion at Guwahati.^v Prime Minister Narendra Modi's vision is to transform the police force of the country in to 'SMART' police force. He called for sensitivity and responsiveness of police force to the people. Being equipped properly, using technology that enables the police force to control the crime with speed and precision anywhere, with the proper training to police personnel.^{vi} His vision is right thought to the present police structure of India. Since the Police forces of many states are lagging behind in the use of advance technology for crime and evidence detection so also to maintain law and order.

This changing world brings everything as smart like smart phone, smart city, smart classrooms etc. So the term smart police is like that which gives the multi functionality. In India with the advent of technology and the internet, it became necessary to bring changes in the areas of technical management of the police. To progress the efficiency of results and outcomes in times of limited resources, smart policing is one of the steps that includes evidence-building, data-driven law enforcement and effective, intelligent, cost-effective police administration.^{vii} There are so many factors that constitute a police force as a smart police. In this paper light is thrown on various aspects of smart policing and how Indian states police are responding to this objectives.

COMBINATION OF POLICE & TECHNOLOGY

Technology is an instrument, or a method, for accomplishing labour, and it can take many forms, including material, intellectual and social. Technology is ingrained in social structures and is imbued with social meanings; it shapes and modifies organizations and jobs.^{viii} Coercion (weapons and martial arts), mobility (transportation vehicles), detection (forensics methods, such as DNA analysis), surveillance (closed-circuit television [CCTV], digital imaging for facial recognition, remote sensing devices), and analysis are just some of the technologies used by the police (data mining software). Clusters of technologies may come together to accomplish a certain job, such as crime prevention and issue solving, or data collection, processing, and communication.^{ix} In the matters of criminal investigation the technology assists by providing unique tools, such as software, smart cameras, and microscopic sensors that surreptitiously records keystrokes and sends them to the police.^x

Currently all over the world, law enforcing agencies are using the technology for better functioning. So also they are equipped with specially designed gadgets that are useful in keeping a check on crime. Anti-insurgency, child safety, community policing, cyber security, elder safety, human trafficking, road safety and traffic management, women's safety, and other policing initiatives are all covered by smart policing. There are some technical gadgets which are very useful in smart policing such as:

FACIAL RECOGNITION SYSTEM

There are cameras put in significant public sites such as railway stations, central bus stations, and other locations to collect facial photographs of people to aid in crime detection. These facial photos can be linked with the criminal database to aid in crime investigation and can also be used to construct a suspect database. Video can also be studied in a playback mode, where it recognizes the face in the video frame and compares it to one in the database.^{xi} This kind of technology is widely used in European countries by their law enforcement forces and proved to be useful. In India also this technology is been used but at limited extent. This needs to be further expanded.

Body-Worn Cameras

Body-worn cameras (BWCs) for police officers are one of the most commonly discussed technology advancements in policing today. The BWC records and captures activities, creating a permanent digital video/audio record of police interactions with people.^{xii} Body-worn cameras (BWCs) have been widely acclaimed as a positive development in police oversight, with information and communication technologies having the unique ability to shift power imbalances between people and law enforcement officials. Video recordings have the strength to present untampered acts of interaction between individuals and law enforcement personnel.^{xiii}

In Indian context, also the need of Body Worn Cameras are strongly suggested by various academicians and legal expert to control the incidents of assaults, misbehavior, rude behavior, arguments with police or by police. Like police in USA which widely used these cameras to ensure that their every activity is being recorded and it can use as evidence in a court trial. Especially these incidences are reported with the traffic police. For the first time in India, Hyderabad Traffic Police used Body Worn Cameras (BWCs) for all of their frontline traffic enforcement employees in order to build citizen confidence and promote socially desirable behavior among traffic enforcement officials. The following are some of the initiative's features: All traffic enforcement personnel have been instructed to employ the BWCs during enforcement. The officers can upload the captured data to the server using their PS system. The officers who do not use the BWC are monitored by the Traffic Command Center. The Traffic Command Center watches the footage and analyses the officers' behavior patterns on a regular basis. All law enforcement officiers are given regular briefings on how to practice people-friendly policing.^{xiv} So by the use of this Gadgets control can be brought both public as well as on police.

MOBILE APPLICATION FOR FIRST INFORMATION REPORT

Smart mobile phones are effective tool in the hands of the people. Lots of assignments easily can be done by using smart phones. There are so many applications which are popularly known as 'apps' developed by the software company in this regard. These applications are gradually

providing help in the matter of smart policing. Many states polices developed their application which enables citizens to report crime instantly using their mobile phones. One example of the same can be mentioned here of Rajasthan police, which has recently relaunched the upgraded version of 'RajCop Citizen', This is specifically planned to give people access to police personnel, for diverse crime reports, occupant authentication, employee authentication, women's assistance numbers and searches for stolen cars,. Citizens can also utilize this app to look for police help. Similar application is developed by the Delhi Police 'One Touch Away' it caters all the police related apps interface to the general public on a single touch. It is designed for mobile platforms to relive public use. It is also designed taking into account the requirements of the local police department and the community. People may not be cognizant of the government's existing Apps and websites, thus this app offers them with an interface through which they can air their problems.^{xv} Similarly, the state of Odisha launched the 'MO SAATHI' Android-based mobile application in Cuttack and Bhubaneswar for the safety and security of women. This application aims to make police assistance available to women who are in danger of losing their lives. Shake to alert, power button alert, single key SMS, call alert to modern control room, automatic recording and transmission of 30 second video depicting real-life situation, automatic emergency call to either police control room or family/friends, and victim's details location and time alert on phone and portal are just a few of the features. Similarly, the Delhi Police Department has launched the 'Himmat' android app, which is aimed at ensuring the protection of women travelling alone in Delhi/NCR.^{xvi} Such kinds of mobile applications give great relief to the common public because now police help is one click away from them.

INTELLIGENCE COLLECTION

For effective policing one important thing is records of criminals. This data can give easiness to police performance. Police functioning is very much dependent on data, and presently there are various technologies that allow police to access information from sources that ordinary people has no access.^{xvii} One of such attempt is made by Mirzapur, Uttar Pradesh Police by *'Pehchan* App' which can create a data base to take the culprit while taking them to prison. Whenever police catch a suspect for interrogation or any other reasons police can check their

previous data base record and identify whether they are criminals or not.^{xviii} For data collection such practices was prevailed earlier but with the use of technology the data now easily be shared with the other police stations and other state's police also. Such initiatives saves the time of authorities as well as harden criminals can identify quickly.

CYBER CRIME

Innovation and technology have recently accelerated to various elements of life, such as education, safety, health, business and security. Regardless, these instruments are in the hands of irresponsible individuals or groups, who use them for illicit activity and exploitation. One of these crimes is cybercrime.^{xix} Cybercrime is often portrayed as an unsolvable problem because it can be perpetrated by users under the guise of secrecy and is based in certain areas without application of law. Intermediaries are presented as being broadly shielded from liability for their users' actions.^{xx}

Cyber-crime is exploding in the recent time. There are so many online banking fraud taking place in the recent time. So also social media based crimes are also increasing. Therefore, forensic labs and Information Technology (IT) expert staff of police is need of time. Police in many states are not equipped to investigate in these matters. One example of Hyderabad city of Telangana state can be quoted here which has set up a forensic lab consisting of state of art latest tools. This is proved to be very useful in detection of the cyber-crimes.

COMMUNITY POLICING

Community policing can be termed as one aspect of smart policing which are now initiated in some of states in India. In community-oriented policing, as in problem-oriented policing, police take a proactive role in problem solving, but they do so in partnership with the communities they serve. Community-oriented policing has been defined as "the idea of full-time police work where the same officer guards and operates in the same permanent position, from a decentralized place, working in a proactive partnership with citizens to identify and solve problems."^{xxi}

Community policing means to understand the grievances of the common people in coordination with people itself to instill a sense of security, prevention and detecting of crimes. In short meaning of community policing is 'policing by the people, for the people, of the people'.^{xxii} The concept of community policing can be traced back to the period of British conquest of India in 1669. When the Governor of Mumbai Gerald Ownger used to come to India, he used to be plundered and looted by the community residing near coastal areas of Mumbai. As remedial measure he set up militia group of the same community to protect the robbery by the coastal community.^{xxiii}

Community policing stresses the key role that, effective co-operation between the police and the community is very important in reducing offences, minimizing apprehension, and change the surrounding which can impede in the occurrence of offences. Community policing basically says that without the help of operational support and public, political support, the police will not accomplish their basic objective to maintain law and order and curb the crime rate.^{xxiv}

In India also this experiment has begun. One of laudable initiative taken by the Kerala police to establish the idea of community policing, *Janamaithri Suraksha* project has been initiated to transform the policing to abide by the democratic ethos of the country. It has been proved useful strategy by the police to control the offences. It has been recognized as an innovative way of police administration in the state of Kerala where co-operation between the community and the police proved to be very successful.^{xxv}

PREDICTIVE POLICING

Predictive policing is a relatively new concept. Police speculation promises to be a gamechanging concept. It is well known that the use of calculation and analysis methods will continue to be a key element in the pursuit of the police. Although it predicts the environment, this effort incorporates details of the increase in previous cases to predict and therefore in fact the police respond in a more efficient manner. Police specifically focus on the use of analytical techniques, especially computational methods to determine the most likely aspects of immediate police treatment and crime prevention or to help solve crime through statistical prediction and analytical skills.

Predictive policing concentrates on using the power of geospatial technologies with a mix of info processing abilities as well as evidence based police response models to do crime analysis, prevention and detection.^{xxvi} So predictive policing is advance method for future policing.

Therefore, the scope and objectives of policing are increasing day by day due to the diversity and complexity of the world. Police have used a number of tools in recent decades to improve policing outcomes and their relationships with the community including community engagement, volunteers and problem-solving police using preventive and systematic ways to focus on high-quality, responsible, new, empathetic and satisfied police personnel are need of hour, who could work assiduously and meticulously for the perpetuity of their multidimensional roles in different areas in the 21st epoch encapsulating the aspect of complete policing.^{xxvii}

CONCLUSION

The police are one of the main agencies responsible for criminal justice. Police has an important function that works to provide solace and comfort to people by looking at their affairs. They are ready to help the community with protection, support, intervention, resolution and immediate response. The police can be seen as a pillar of every nation that provides a solid basis for maintaining peace and order.

Policing will become a less obvious and more integrated component of the urban environment as cities become 'smart,' linked, and attentive. The use of technology and artificial intelligence is game changer in the administration of police. In Indian scenario gradually police is becoming smart. Many states have introduced newer technologies. This proved to very useful to citizens. As well as to the police administration. Therefore, the smart policing needs to use more and more technology to achieve the object of effective and the complete policing.

REFERENCES

- Aulakh Rupinder, Administering the Challenges of 21st Epoch towards Effective Indian Policing, International Journal of Research in Social Sciences, Volume: 8, Issue: 3, P 701. (2018)
- Charles M. Katz, Mike Kurtenbach, David E. Choate, and Michael D. White, Phoenix, Arizona, Smart Policing Initiative Evaluating the Impact of Police Officer Body-Worn Cameras. September 2015 US Department of Justice, office of justice program, P.1
- Ezeji, C. & Olutola, A, The use of Intelligence-led Policing in Combating Technologybased Crimes in South Africa. *Journal of African Foreign Affairs*, 5(2), 167-188. Retrieved September 5, 2021, from https://www.jstor.org/stable/26664068, (2018)
- Gupta K.N 'The People's Friendly Police & Community Policing' The Indian Police Journal, Vol.LXIII.No.1, p 211, 219., 2016
- Hinton, M.S., & Newburn, T. (Eds.). Policing Developing Democracies (1st Ed.). Routledge. P.5(2008)
- https://bprd.nic.in/WriteReadData/Bannerpdf/Compilation[last accessed on 15/9/2021]
- 7. https://journalsofindia.com/smart-policing [last accessed on 7/9/2021]
- https://www.insightsonindia.com/2019/11/05/rstv-the-big-picture-smart-policing [last accessed on 7/9/2021
- https://www.niti.gov.in/writereaddata/files/document_publication/Strengthening-Police-Force.pdf [last accessed on 7/9/2021]
- 10. https://www.ojp.gov/sites/g/files/media/document/smart_policing[last accessed on 7/9/2021]
- Kelly E. Stone, Smart Policing and the Use of Body Camera Technology: Unpacking South Africa's Tenuous Commitment to Transparency, *Policing: A Journal of Policy and Practice*, Volume 12, Issue 1, , P 109–110, March 2018
- Kesari, A., Hoofnagle, C., & McCoy, D. (2017). Deterring Cybercrime: Focus on Intermediaries. *Berkeley Technology Law Journal*, 32(3), 1093–1134. https://www.jstor.org/stable/26488978, P,1130

- Kode N.S. 'Community Policing The Need of The Hour' Orient Journal of Law And Social Sciences, Vol. X, Issue 2, p.44, 2016
- Koops, B.-J. Law, Technology, and Shifting Power Relations. *Berkeley Technology Law Journal*, 25(2), 973–1035. http://www.jstor.org/stable/24118603,P.978, (2010).
- Manning, P. K. Information Technologies and the Police. *Crime and Justice*, 15, 349–398. http://www.jstor.org/stable/1147621. P. 351, (1992).
- Mastrofski, S. D., & Willis, J. J, Police Organization Continuity and Change: Into the Twenty-first Century. *Crime and Justice*, *39*(1), 55–144. https://doi.org/10.1086/653046) P.79-80., (2010)
- Michael S. Scott, Smart Policing Initiative, Problem-Oriented Guides for Police Response Guide Series No. 13, available at https://www.portlandoregon.gov/police/article/ [last accessed on 7/9/2021]
- O'Brian.R,J, 'Policing in the 21st Century' The Indian Police Journal, Vol.LVIII.No.4, , p.26., 2012
- Palmiotto, M. Community Policing: A Police-Citizen Partnership (1st edn.)., Routledge.P.27, 2011
- Popper, Steven W. "Effective Policing for 21st –Century Isreal", Rand Corporation, (2014)

Available at

```
http://www.gov.11/blobfolder/reports/i.e_17_21st_cen_policing/en/effetive%20Polici
ng% 20for%2021st%20Century%20Isreal.pdf. [Last accessed on 15/9/2021]
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ENDNOTES

- ⁱ Available at https://www.niti.gov.in/writereaddata/files/document_publication/Strengthening-Police-Force.pdf [last accessed on 7/9/2021]
- ⁱⁱ Hinton, M.S., & Newburn, T. (Eds.). Policing Developing Democracies (1st ed.). 2008 Routledge. P.5
- ⁱⁱⁱ Michael S. Scott, Smart Policing Initiative, Problem-Oriented Guides for Police Response Guide Series No. 13, available at https://www.portlandoregon.gov/police/article/ [last accessed on 7/9/2021]
- ^{iv} Available at https://www.ojp.gov/sites/g/files/media/document/smart_policing[last accessed on 7/9/2021]
- v Available at https://journalsofindia.com/smart-policing [last accessed on 7/9/2021]
- vi Available at https://www.insightsonindia.com/2019/11/05/rstv-the-big-picture-smart-policing [last accessed on 7/9/2021]
- vii Available at https://www.samvidhi.org/post/evaluating-smart-policing-in-india-glitches-and-proposedreforms [last accessed on 15/9/2021]
- viii Manning, P. K. Information Technologies and the Police. Crime and Justice, (1992). 15, 349–398. http://www.jstor.org/stable/1147621. P. 351
- ^{ix} Mastrofski, S. D., & Willis, J. J, Police Organization Continuity and Change: Into the Twenty-first Century. *Crime and Justice*, (2010). 39(1), 55–144. https://doi.org/10.1086/653046) P.79-80.
- ^x Koops, B.-J. Law, Technology, and Shifting Power Relations. *Berkeley Technology Law Journal*, (2010). 25(2), 973– 1035. http://www.jstor.org/stable/24118603,P.978
- xi Available at https://bprd.nic.in/WriteReadData/Bannerpdf/Compilation[last accessed on 15/9/2021]
- xii Charles M. Katz, Mike Kurtenbach, David E. Choate, and Michael D. White, Phoenix, Arizona, Smart Policing Initiative Evaluating the Impact of Police Officer Body-Worn Cameras. September 2015 US Department of Justice, office of justice program, P.1
- xiii Kelly E. Stone, Smart Policing and the Use of Body Camera Technology: Unpacking South Africa's Tenuous Commitment to Transparency, *Policing: A Journal of Policy and Practice*, Volume 12, Issue 1, March 2018, P 109–110

xiv Supra note 11

^{xv} Ibid

^{xvi} Ibid

- ^{xvii} Joh, E. Policing the smart city. International Journal of Law in Context, (2019). 15(2), 177-182. doi:10.1017/S1744552319000107
- xviii Supra note 11
- xix Ezeji, C.& Olutola, A, The use of Intelligence-led Policing in Combating Technology-based Crimes in South Africa. *Journal of African Foreign Affairs*, (2018). 5(2), 167-188. Retrieved September 5, 2021, from https://www.jstor.org/stable/26664068
- ^{xx} Kesari, A., Hoofnagle, C., & McCoy, D. Deterring Cybercrime: Focus on Intermediaries. *Berkeley Technology Law Journal*, (2017). 32(3), 1093–1134. https://www.jstor.org/stable/26488978, P,1130
- xxi Palmiotto, M. Community Policing: A Police-Citizen Partnership (1st ed.). 2011, Routledge.P.27
- ^{xxii} Kode N.S. 'Community Policing The Need of The Hour' Orient Journal of Law And Social Sciences, Vol. X, Issue 2, 2016, p.44

^{xxiii} Ibid.

- ^{xxiv} O'Brian.R,J, 'Policing in the 21st Century' The Indian Police Journal,Vol.LVIII.No.4, 2012, p.26.
- xxv Gupta K.N 'The People's Friendly Police & Community Policing' The Indian Police Journal, Vol.LXIII.No.1, 2016, p 211, 219.
- ^{xxvi} Aulakh Rupinder, Administering the Challenges of 21st Epoch towards Effective Indian Policing, International Journal of Research in Social Sciences, 2018, Volume: 8, Issue: 3, P 701.
- xxvii Popper, Steven W. "Effective Policing for 21st –Century Isreal", (2014), Rand Corporation, available at http://www.gov.11/blobfolder/reports/i.e_17_21st_cen_policing/en/effetive%20Policing% 20for%2021st%20Century%20Isreal.pdf. [last accessed on 15/9/2021]