

## Digital-Governance in Policing: A Way Forward towards Administrative Change

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### Abstract

*As 21<sup>st</sup> century is the age of digitalization in almost every aspect linked with humankind. So digital governance initiatives are influencing police sub-culture and working in different ways in developing countries. Although the e-police system is new for developing countries such as India and with the help of modern Information and Communications Technology (ICT) solutions, it is becoming the focus of the government to reduce malpractices and improve services for both policing as well the citizens. However, any innovation is not worthwhile if it is not evaluated in a proper way, therefore it is essential to evaluate the implementation of digital governance in police administration, focusing on its reach and benefits to the masses. In this paper, researchers will focus on the loopholes in this mechanism and the challenges in the process of its proper implementation. This paper will also try to evaluate the level of awareness regarding digital governance among police personnel and citizens with reference to India in general and Punjab in particular. To achieve the goals of the research, data will be gathered from both primary and secondary sources. A sample of 100 respondents (50 citizens and 50 police officials of different ranks or hierarchies) will be collected with the help of a random sampling method. The questionnaire and interview techniques will be used to collect the data from the selected sample. The primary objective of this paper is to enhance the state of policing in order to ensure that the advantages of technology are accessible to the general public.*

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**Keywords:** Police, ICT, Digitalization, Governance, Administration

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### Introduction

Police administration is an important part of the administration and needs reform like any other.

With the changing times and needs, the world has chosen technology development to save time and resources and increase efficiency (Singh & Sehgal, 2021, p. 30). The idea of using social media in police is not new. Social media has long been a tool utilized by Western nations like the United States and the United Kingdom for law

enforcement. Additionally, the development of e-governance had an impact on how services were delivered in several industries. In the modern world, e-governance initiatives are having a different impact on the police subculture in developing nations like India. The aim of governance is to cater to its citizens. According to the World Bank, e-governance refers to the utilization of information technology, including technologies like wide area networks, the

internet, and mobile computing, to engage with both individuals and businesses. It works as an additional branch of the government to improve service efficacy, cost-effectiveness, service delivery timeliness, and the development of a nation free of corruption. The transition from minimal government to maximum governance has been facilitated in large part by e-Governance. On the one hand, it has aided the government in boosting access, equity, and social empowerment while also raising transparency, improving citizen response, and cutting costs. One of the main focuses of e-government is police administration, which is essential to ensuring that those in need may easily and effectively access police services through a variety of e-police applications and to reduce the rising crime rate. The government is putting more emphasis on e-police in an effort to cut down on abuses and enhance services so that the police can function more effectively. In order to give a solution in the context of law and order, the idea's core now attempts to assure technology and raise awareness.

In terms of payroll and account management, e-government is crucial to how police departments operate administratively. By using such a system, handling and compliance costs can be decreased. It involves employing

information technology to plummet both the governmental workload from external sources and the workload within the government itself. Internally, computerization decreases labor costs and time commitments, assisting government agencies in becoming more effective. Externally, the automation of citizen contacts lessens employee and citizen stress, adding value to the economy. It is a department of government that aims to improve citizen interactions. E-Government aids in lowering staff workloads, pressure, and stress levels across all industries. In the same way, it supports police forces as well. E-governance in policing achieves a number of goals and objectives and is used to increase awareness, information, and service delivery to the public through a system for registering complaints.

The India Justice Report (IJR) 2020, with the backing of Tata Trusts, has examined the electronic portals of different state police agencies that offer services focused on citizens. These services encompass tasks like applying for or renewing various types of clearances, employee verifications, employment-related matters, passport services, registrations for senior citizens, and the provision for citizens to access essential forms. The Ministry of Home Affairs (MHA) has allocated a budget of more than Rs 20,000 crore for initiatives aimed at

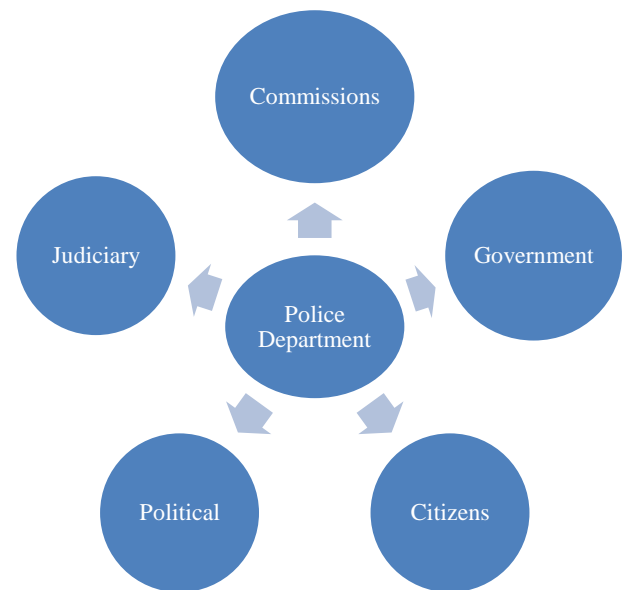
modernizing the police force, which include projects like the crime and criminal tracking network and system (CCTNS), police wireless, and e-prisons, spanning from 2017 to 2020. This allocation enables states to adopt this crucial method of delivering services.

Both busy citizens and overworked beat and police station staff can benefit from e-governance. User-friendly citizen portals have completely changed how passports and driving licences are obtained. Police started the new millennium off strong, but it's likely that they gradually lost interest. There are two elements at work. Citizens often lack an understanding of the challenge's individuals encounter at the police station level, and they also tend to overlook our responsibility for not effectively utilizing technology. This has to change. (e- Governance, n.d.)

### E-Governance

E-governance involves the application of information technology to mechanize both the internal operations of the government and its interactions with the general public and external organizations. Internal activities that are computerized are more efficient and less expensive, and they also go more quickly. This allows for more complex government processes. Automation of contacts with citizens lowers administrative costs for both the

public sector and its constituents, generating benefits for the economy. Any state's police force is essential to keeping things in order and sustaining law and order. High levels of citizen and government contact occur there. Major points related to Police Departments are as follows:



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[https://academicjournals.org/article/article1381231579\\_Shastri%20et%20al.pdf](https://academicjournals.org/article/article1381231579_Shastri%20et%20al.pdf)

### Objectives

1. To evaluate the level of awareness of e-governance in policing
2. To study the use of e-governance mobile applications
3. To study the level of awareness regarding registering complaints

### Research Methodology

The primary objective of this study is to evaluate the implementation of digital governance within police administration, with a specific focus on its accessibility and

the advantages it offers to the public. This study combines both analytical and descriptive elements. The research materials utilized in this study encompassed both primary and secondary sources. To obtain primary data, researchers employed a random sampling approach, involving 100 police officers representing all ranks within the district police, as well as 100 individuals from the general population as the study's sample. Data collection was carried out through the administration of questionnaires. Secondary sources of information, such as books, the internet, newspapers, journals, and research papers, were also used as references in this study.

### **Significance of the study**

Digital-Governance in Policing: A Way Forward towards Administrative Change is the title of the current study. The Punjab Police's previous organisational structure was purely paper-based. During the time, there was no Internet. Governance is a phenomenon that first appeared in an effort to increase effectiveness and decrease corruption. We advanced in the direction of good governance over time. In order to achieve the goal of good governance, we are moving towards e-Government, which not only saves time and money but also helps to improve overall performance. In an effort to establish quick

and effective justice that not only punishes offenders and wrongdoers but also deters crime, the Indian Police finally started providing services to the general public under the e-Government banner after multiple failed attempts. That will be advantageous in increasing public understanding of the law. The public and police officers will both gain from the Indian government's adoption of e-Governance at each police station. It is vital to look at the difficulties Indian police personnel face and offer suggestions for remedies. So, the current work is crucial.

### **Mobile based Applications by Police Department**

As a topic and a complement to e-government, mobile government (m-government) is another crucial area that is gaining steam. The Punjab Government has created a large number of mobile-based applications in order to give services to the people. It consists of PP Saanjh, PAIS, Know Your Police, and Shakti.

With the help of the PAIS application the Punjab Artificial Intelligence System, Punjab police were able to digitize criminal records, automate criminal searches, and perform numerous essential analyses right away. PAIS was able to instantly obtain criminal information from records using features like facial recognition. Innovative tools like gang analysis, phonetic search,

and others help police officers even more. As of the present time, the PAIS (Punjab Artificial Intelligence System) boasts an extensive digital repository containing records of over 90,000 offenders. This resource has proven instrumental in aiding the state police in capturing and bringing to justice over 100 criminals. (Ujaley, 2018). Numerous tech-savvy young law enforcement officers have demonstrated a deep enthusiasm for leveraging information technology to enhance internal effectiveness, management oversight, and service delivery. This interest persists as they continue to explore ways to optimize their operations. ("Punjab Police Nab 2 criminals using face recognition App", 2020)

The Punjab Police has introduced the "Shakti" mobile application, thereby placing the "power" in the hands of the populace to defend themselves. The software, which was created specifically for women, aims to assist victims at difficult times like snatching, robberies, or other criminal activities. The Punjab police would be at your disposal after you downloaded the app, which is accessible for both android-based mobile phones and i-phones, registered yourself, and submitted it. The "help" button within the "Shakti" application instantly triggers an alert to both the

Punjab Police and the user's family and friends with a single touch. Location data is immediately transmitted to the Punjab Police control room and the designated contacts as soon as the Shakti app user initiates the SOS alert. The victim can then quickly receive the closest Police assistance from Punjab Police. (Malik, 2017).

***The Know Your Police App.*** Acquiring information about the Punjab police has been simplified to just a tap on your smartphone. The police force is introducing the Know Your Police app as a component of the Saanjh (cooperation) initiative, facilitated by the recent foray into the digital sphere. This application provides information concerning nearby police stations, personnel stationed at various tiers within, ranging from station house officers (SHO) to the inspector general of police (IGP), and also encompasses the Saanjh Kendras (police service centers). (Vasudeva, 2018).

***Saanjh App-*** Through Sub-Division Saanjh Kendras and Police Station Saanjh Kendras, police and the community are working together to bring philosophy to the local level. It was started with the intention of making the Punjab Police's services widely accessible to the general public. The

general public can report theft and other complaints on this app, and in addition, information about vehicle untraced copies, police clearances, NOCs, complaint statuses, tenant verifications, passport statuses, information about stolen vehicles, details about missing people, and information about unclaimed vehicles can be provided on mobile devices. ("Saanjh App launched by police in city", 2018).

### ***Punjab Police Khidmat***

This application offers comprehensive details (fees, office locations, necessary paperwork, online booking, etc.) about 14 services provided by Punjab Police to the public at freshly opened Police Khidmat Markaz (offices) around Punjab. The offered services encompass a range of provisions, including character certification, general police verification, issuance of learner driving license, renewal of driving licenses, issuance of international driving licenses, endorsement of licenses, replacement of lost driving licenses, tenants registration, employee registration, vehicle verification, filing loss reports, reporting crimes, documenting cases of women's violence, and obtaining copies of First Information Reports (FIRs) (Punjab, n.d.).

### **Major e-Governance Initiatives**

State governments have developed a

roadmap for implementing IT and providing services to residents online, among other creative measures to enhance e-Government. The following list contains major e-governance efforts:

### **Crime and Criminal Tracking Network and System (CCTNS)**

The Crime and Criminal Tracking Network and System (CCTNS) was envisioned and financially supported by the Ministry of Home Affairs (MHA) as a Mission Mode Project. Its objectives is to enhance the results of crime investigations and criminal tracking, along with improving the operational effectiveness and efficiency of police departments in every state.

### **CCTNS Objectives**

- Swift and convenient generation of reports and documents.
- Substantial decrease in manual record-keeping at Police Stations.
- Eradication of duplicated and contradictory record maintenance.
- Simple access to crime and criminal records to aid investigation and prosecution efforts.
- Centralized repository for crime and criminal data, including images and fingerprints, equipped with advanced search functionalities.
- Improved capacity to analyze crime trends and methods.

The Indian government uses the PRAGATI (Pro-Active Governance and Timely Implementation) method to monitor the CCTNS Project on a monthly basis to ensure that it is being implemented effectively in all of the States and UTs.

### **Analysis of Police Personnel (On the basis of Questionnaire Method)**

#### ***Designation of respondents***

According to the study, a sample of 01 Senior Superintendent of Police (SSP), 07 Deputy Superintendent of Police (DSP), 07 Inspector (I), 07 Sub-Inspector (SI), 07 Assistant Sub-Inspector (ASI), 07 Head Constable (HC) and 14 Constable (C) were selected.

Table 1.1 Level of Awareness regarding e-Governance in Policing

Responses	SSP	DSP	I	SI	ASI	HC	C	Total	%
Fully Aware	1	6	7	6	5	4	9	38	76%
Partially Aware		1		1	2	2	2	8	16%
Little Aware						1	2	3	6%
Not Aware							1	1	2%
Total	1	7	7	7	7	7	14	50	100 %

When asked how much they were aware of e-Governance in police, the respondents' responses revealed that 76% were totally informed, 16% were moderately knowledgeable, 6% were only slightly aware, and surprisingly, only 1 respondent was not aware of the topic.

Table 1.2 What is the source of knowledge on e-governance in law enforcement?

Responses	SSP	DSP	I	SI	ASI	HC	C	Total	%
In Schedule work		1	2	4	6	7	8	28	56 %
In Official Training	1	4	3	1			4	13	26 %
From higher Officials		2	2	2	1		2	9	18 %
Total	1	7	7	7	7	7	14	50	100%

In response to a question about where they first learned about e-Governance in policing, 56% of respondents said they learned about it while doing their schedule work, 26% said they learned about it through official training, and 18% said they learned about it from higher officials.

Table 1.3 Are you aware about the services given by e-Governance applications?

Responses	SSP	DSP	I	SI	ASI	HC	C	Total	%
Yes	1	7	7	5	3	4	7	34	68 %
No				2	4	3	7	16	32 %
Total	1	7	7	7	7	7	14	50	100%

This table displays how well-informed police officers are about the services offered by e-governance applications. It was discovered that 32% of respondents were uninformed of the services provided by e-Government programmes, whereas 68% of respondents were aware of them.

Table 1.4 Are you aware about Crime and Criminal Tracking Network and System?

Responses	SSP	DSP	I	SI	ASI	HC	C	Total	%
Yes	1	7	7	7	6	5	12	45	90 %
No					1	2	2	5	10 %
Total	1	7	7	7	7	7	14	50	100%

This table displays respondents' knowledge of CCTNS, which attempts to digitise criminal records. It's interesting to note that 90% of respondents knew about the CCTNS, compared to 10% who didn't.

### **Analysis of Citizens (On the basis of Questionnaire Method)**

#### ***Gender of Respondents***

There were 67 % of respondents who

were male, 33% of respondents were female and there were no transgender respondent.

Table 2.1.1 Do you know about the online system for registering complaints?

Responses	No. of Respondents	Percentage
Yes	36	72 %
No	14	28 %
Total	50	100%

The table illustrates that 28% of the participants were not aware of the online complaint registration method, whereas the majority, comprising 72% of the respondents, were informed about it.

Table 2.1.2 Have you ever registered a Complaint Online?

Responses	No. of Respondents	Percentage
Yes	22	61.11%
No	14	38.89%
Total	36	100%

This table demonstrates that, of the 36 respondents who were aware of the online complaint registration mechanism, only 61.11% have ever submitted a complaint online, while 38.89% have never done so.

Table 2.2 Do you believe that the use of e-Governance has made police more approachable?

Response	No. of Respondents	Percentage
Yes	35	70
No	8	16
May be	7	14
Total	50	100%

According to the data in this table, 70% of respondents believe that the deployment of e-Governance has made police more approachable to the public, while 7% of respondents were unsure. Only 8% of those polled claimed that its adoption had not resulted in police becoming friendlier to

civilians.

### Major Findings of the Study

1. It is crucial to be informed of e-Governance in order to make the most of it. In this regard, the study found that the majority (76%) of police officers were completely aware of the phrase "e-Governance in policing," whereas only 2% of officers were not.
2. The administration will not be successful in delivering services to the public at their door without knowledge of mobile-based applications. According to the results, (68%) of police officers are aware of the mobile-based applications that the Punjab Government has developed to offer services to its citizens.
3. As per the survey findings, a significant majority of police officers, accounting for (90%), were knowledgeable about the Crime and Criminal Tracking Network & System (CCTNS). This system was developed with the objectives of enhancing police performance through e-Governance.
4. Online complaint submission is another function offered by e-government in policing. In this regard, the majority of citizens (72%) were found to be aware of the mechanism for registering complaints



online, and of those, 61.11% had ever done so.

5. Due to increased communication and accessibility, e-Government in policing also aimed to improve the conduct of police and strengthen interpersonal relationships with citizens. According to the report, 70% of the populace believes that e-Governance has improved police accessibility.

### **Suggestions**

The current study demonstrates that, despite the Punjab Police's efforts to improve performance in the state of Punjab through quick crime detection and prevention, the police force still has several flaws and limitations that require immediate change. The researchers have provided the following recommendations based on the study's findings that should be considered to enhance Punjab Police operations and ensure the success of e-Governance.

1. The work should be done manually or through e-Governance, but the police department is currently duplicating it by completing work both ways, which places an ethical duty on the personnel. Additionally, it takes up time that, if spared, may be used for other tasks.
2. As was previously highlighted

regarding the advantages of PAIS, Police Administration should concentrate on boosting its registration among the police employees for optimal use of this application in Crime detection, prevention, and arresting offenders.

3. Citizens should have access to an online and mobile application-based grievance redressal system that is based on the Police Complaint Authority (PCA). Police need to be more watchful and have quick response systems.
4. Despite the fact that the police are already making efforts to increase public awareness of e-Government through the media or social media. Nonetheless, it is imperative to introduce additional initiatives employing diverse approaches to ensure that the general public gains comprehensive access to all information concerning e-governance services.
5. To improve the perception of law enforcement organizations, police personnel are urged to interact with the public on social media.
6. Although many services are offered via mobile applications, such as PP Saanjh, there is no proper way to submit feedback on the services. There should be an online feedback mechanism, which is crucial for

improving functionality by closing any gaps.

7. More social media education is necessary for law enforcement personnel. We must therefore train more police detectives in the proper use of websites. Officers should receive training on how to gather information from social media platforms and guidance on how to legally and ethically obtain evidence from these websites from an investigative standpoint.
8. Data is extremely important in the twenty-first century, and when it comes to data related to policing, there is no risk because the data cannot be compromised. Therefore, accurate and effective software must be there to keep the data safe, secure, and out of the hands of hackers or cybercriminals.
9. Departments should create and implement detailed written policies for the use of social media and text messaging. A solid policy should clearly outline the rules for using social media and text messaging, as well as how these interactions will be recorded.
10. Despite improvements in police behaviour towards civilians following the implementation of e-governance

in policing, there is still a need to make officers more approachable by imparting the concepts of ethics, tolerance, and compassion.

11. There is a need of proper training for the police personnel regarding the usage of e- governance and its applications.
12. In order to move towards a sustainable future, emphasis should be placed on reducing the use of paper by emphasising the use of e-mails, which should be used to the fullest extent possible in place of paper.
13. To provide helpdesk facilities to the citizens.
14. To make greater use of online services, Punjab Police should observe how the Chandigarh Police operate.
15. Digitizing all past records from every police station, prisons, traffic police stations, and similar sources, gathering information about citizens, and then inputting this data into databases.
16. Setting up a Cyber Crime Detection Cell and expeditiously create a cohesive framework of cyber laws and regulations.

### **Conclusion**

With the development of technology, e-governance has also broadened its application in the form of m-governance, which is quickly rising to the top of the

people's priorities for service delivery. Mobile technology has given society as a whole a solid foundation for equitable progress and has been an effective medium for a more connected society. Social media is currently being utilized as a platform for citizens to interact with the government and participate in political processes, social reforms, and financial inclusion. With the use of e-Government, developing nations can improve themselves in numerous ways. E-governance has undoubtedly had an impact on practically every industry. Similar to this, its impact on policing is enormous and unquestionable. It has enhanced the way services are delivered and even the way that police are done in particular. Without the confluence of e-governance with other administratively

significant factors in the era of information and technology, survival and good administration are impossible. Even in the recent ten years, significant advancements in the form of reforms have been made in order to start the transition to e-policing. However, there is still a pressing need to concentrate on important issues related to the operation of e-policing, since doing so would improve policing, governance procedures, and in particular, our society.

By leveraging government-citizen interfaces and enhancing transparency in administrative processes, effective implementation of e-government has the potential to offer significant advantages to the populace.

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