**LITERATURE SURVEY**

**TITLE:** “Using blockchain to improve data management in the public sector,”

**ABSTRACT:** Blockchain is a new general-purpose technology that poses significant challenges to policymaking, law, and society. Blockchain is even more distinctive than other transformative technologies, as it is by nature a global technology; moreover, it operates based on a set of rules and principles that have a law-like quality—the lex cryptographia. The global nature of blockchain has led to its adoption by international organizations such as the United Nations and the World Bank. However, the law-like nature of the technology makes some of its uses by international organizations questionable from an international law and foreign affairs perspective. In this light, the article examines the effectiveness and legitimacy of the use of blockchain for international policymaking.

**TITLE:** What is Blockchain Technology? - IBM Blockchain,”

**ABSTRACT:** Blockchain is a shared, immutable ledger that facilitates the process of recording transactions and tracking assets in a business network. An asset can be tangible (a house, car, cash, land) or intangible (intellectual property, patents, copyrights, branding). Virtually anything of value can be tracked and traded on a blockchain network, reducing risk and cutting costs for all involved.

**TITLE:** Cyber Attack - What Are Common Cyberthreats?,”

**ABSTRACT:** A cyberattack is where an attacker tries to gain unauthorized access to an IT system for the purpose of theft, extortion, disruption, or other nefarious reasons.Of course, a large number of security incidents are caused by insiders – whether through negligence or malice. However, for the sake of simplicity, let’s assume that a cyber-attack is carried out by someone who is not, or was not, a member of your organization.

**TITLE:** “Criminal Record Management System In the Perspective of Somalia,”

**ABSTRACT:** Project Report from the year 2019 in the subject Computer Science - Software, Southern University Bangladesh (Department of CSE), course: Computer Science Engineering, language: English, abstract: The project Criminal Record Management System in the perspective of Somalia is a criminal record management system that uses to record crime activities of criminals. It can be used to report crime activities. This project is mainly useful for law and enforcement agencies in Somalia. The law and enforcement authority can preserve records of the criminals and search any criminal using the system. This is an online web application with database system in which police will keep the record of criminals who have been arrested. We have used HTML, JavaScript, CSS, PHP, MySql and Bootstrap to develop this project. We also used binary search algorithm to find a criminal from database. The project's interface is very user friendly and helpful for authority.

**TITLE:** “CRAB: Blockchain Based Criminal Record Management System”

**ABSTRACT:** Criminal records are highly sensitive public records. By incorporating criminal records in a blockchain, authenticity and rigidity of records can be maintained; which also helps to keep the data safe from adversaries. A peer to peer cloud network enables the decentralization of data. It helps prevent unlawful changes in the data. This paper introduces a criminal record storage system by implementing blockchain technology to store the data, which helps to attain integrity and security. Our system presents ways in which the authority can maintain the records of criminals efficiently. Authorities (e.g., Law enforcement agencies and courts) will be able to add and access criminal data. General users (e.g., selected organizations and/or individuals, airports, visa application centers etc.) will have access to the data so that they can look up criminal records. Proper and timely access to authentic criminal records is essential to enforce the law. The effect of corruption on the law enforcement forces will also decrease, as this will cut off an entire scope of corruption by removing any possibility of tampering with criminal records data by thorough accountability.

**TITLE:** Proposed E-Police System for Enhancement of E-Govemment Services of Bangladesh”,

**ABSTRACT:** E-government is the ICT based system of government service delivery for achieving good governance which is necessity for good and corruption free nation. 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, so we can apply this system in Bangladesh. The aim of this paper is to upgrade the country's police administration to the world standard. The home ministry would be connected with the several police units of the city in a fiber-optic based metropolitan area network and a database will be setup for warrant notices, examining the finger prints using the latest electronic device etc. There have to be set up a 'Third Eye' software in the special branches of the police department so that it helps the police supervisors to monitor crime and criminal records. There have to be set up an electronic database and an interactive website which will contain daily press releases, supplement, list of top terrorists and criminals, lists of people under police custody and people injured in road or other accidents etc. In this paper we focus on the infrastructure of an e-police system as well as its steps, challenges of implementation and its necessity. For implementing the software we can use JAVA, PHP (especially AppServer) and MySQL.

**TITLE:** “E-FIR using E-Governance”

**ABSTRACT:** This feature is made available for the public for better interaction with the police. The E-FIR system is proposed to public for indirect interaction with police and to improve the E-governance facility. E-FIR system with E-portal. E-portal is specially designed website that brings information together from diverse sources in a uniform way. Usually each information source gets its dedicated area on the page for displaying information. Generally, many crimes seen by the citizens but they are afraid to complaint in police station due to fear of police department, lack of time and insensibility. Due to this fear many crimes not reported to the police station. Many cases are registered but due to lack of proofs and evidences and lack of collaboration of public they are not properly investigated. The aim of this study is to develop an online system which is easily accessible to police department, public and administrative department and to achieve e-transparency at various levels like publication, reporting, openness, accountability etc. The main objective of the study is to increase police and citizens interaction without going to nearby police station. It will help to reduce crime percentage and will save the time of people. It will also increase government and citizen interaction and will built an informed society.

**TITLE:** “A Transparent Blockchain for Tracking Police Complaints,”

**ABSTRACT:** Blockchain technology is one the emerging technology today. Using blockchain the primary goal that is achieved is security. Along with security many other aspects can be achieved using blockchain. Blockchain is nothing but a chain of blocks which are connected by hashing. We can see that every new technology has become a part of our life. This technology is proving to be helpful in all the fields like education, agriculture, business, government and many more. We can also understand how beneficial it is, as it saves the time, money and human power. But this never-ending technology is lacking to provide security. The Indian Police Department has replaced the manual system with the centralized online process to register the complaint. There are many malpractices in resolution of complaints. So, to avoid them a system is proposed which helps complainer to track the complaint, get ongoing details, and enforce police officers to solve the complaints within stipulated time to avoid unnecessary delay. The main objective of this system is to provide a method to secure the FIR system using blockchain technology. The principal components of blockchain technology viz. security, transparency, decentralization, immutability prove to be helpful for securing this digitalized process. The system uses transparency of blockchain technology as the user can track the complaint at any time. The system uses hashing to provide immutability so that no one can tamper the data entered by the complainer. Smart contracts are used to avoid delay in solving the case. This will avoid malpractices and provide satisfiable results.

**TITLE:** “BLOCKCHAIN BASE CRIME RECORD MANAGEMENT SYSTEM AUTHOR NAMES,”

**ABSTRACT:** Criminal records are highly sensitive public records. By incorporating criminal records in a blockchain, authenticity and rigidity of records can be maintained; which also helps to keep the data safe from adversaries. A peer to peer cloud network enables the decentralization of data. It helps prevent unlawful changes in the data. This paper introduces a criminal record storage system by implementing blockchain technology to store the data, which helps to attain integrity and security. Our system presents ways in which the authority can maintain the records of criminals efficiently. Authorities (e.g., Law enforcement agencies and courts) will be able to add and access criminal data. General users (e.g., selected organizations and/or individuals, airports, visa application centers etc.) will have access to the data so that they can look up criminal records. Proper and timely access to authentic criminal records is essential to enforce the law. The effect of corruption on the law enforcement forces will also decrease, as this will cut off an entire scope of corruption by removing any possibility of tampering with criminal records data by thorough accountability.

**TITLE:** “Analysis of implementing blockchain technology to the argentinian criminal records information system,”

**ABSTRACT:** Blockchain is an innovative technology that allows a untrusted node network to share transactional data consistently while removing the need of a centralized authority. In this paper we propose a system to store citizen criminal records in a decentralized way by using a permissioned blockchain, taking advantage of some of its characteristics to ensure privacy, security, immutability, and disponibility of stored sensitive data. This system would overcome the current one since it can cryptographically guarantee that data, once stored, had not been modified but by a competent authority. It also improves the delivery of the records to its destination which can be geographically spread throughout the territory.