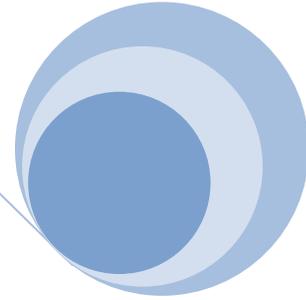




Project  
On



**“Establishing Social Media Labs  
&  
Collection of Intelligence from the  
Social Media”**

Prepared

By

**National Police Mission**

**Micro-Mission: 03 (Communication & Technology)**

# Project Report

## “Establishing Social Media Labs & Collection of Intelligence from the Social Media”

### 1.0 Introduction/Background:

Internet provides easy accessible information and multifarious source of data are available from social media network sites, people, news agencies, website of government and commercial agencies and variety of other organizations. Communication is witnessing a paradigm shift with the proliferation of people communicating on social media and network sites which has shortened and almost obliterated the geographical boundaries and internet has evolved as one of the most preferred mode of communications which will certainly grow in times to come.

However, easy access and anonymity in communication have also made internet and social media vulnerable for misuse by anti social elements, interested groups and even criminals. Exploitation of internet for unethical, criminal activities and spreading disharmony is not only significant threat to the society but is also becoming a serious concern for the law enforcement agencies.

Social Media networks in India are growing exponentially at an annual rate of fifty percent. More than 120 million users are hooked to social sites and internet growth is main-streaming communication and connectivity in India. With over 250 million internet users and expected growth to over 400 million, every third internet user is having a personal profile on Facebook, Twitter, Orkut, LinkedIn or on email. Increased penetration to smart phones has seen shift towards WhatsApp, Instagram and Tumblr. As per existing trend, it is evident that online advertisements, shopping, e-commerce will dominate the mind space in the digital world in near future.

Internet has created communities and sub-community user groups which use this unbounded medium to access, share and transmit information openly. This information should be studied by police and law enforcement agencies. The study of information flow on social media has helped police in various countries and analysis of Facebook, Twitter and other social media will provide fundamental advantage to police in understanding the buzz on the internet and can be used as an investigating tool in collecting actionable intelligence and even criminal intelligence.

Nevertheless, misuse of internet may aid the law enforcement agencies in identifying behavioural profile, tracking of suspicious alarming communication pattern over internet which has significant connotation on ground.

This project aims to increase capacity building of police forces in appreciating the immense power of social media and provides a blue-print to set up a social media lab to cover actionable intelligence and provide a template for police forces in States and districts to emulate.

## **2.0 Overview**

### **2.1 Project Title:**

“Establishing Social Media Labs & Collection of Intelligence from the Social Media”

### **2.2 Vision:**

Building police capacity in understanding information available on social media platforms and to convert the existing openly available information into actionable intelligence and suggest timely intervention through real time analysis to prepare police forces in handling sensitive issues, protests and mischief.

### **2.3 Project Objective:**

The objective of the project is to provide workable template which can be used as a standard for establishing a Social Media Lab which can be used to gather intelligence through social media platforms in any State or District in the country.

- Analysis of internet content may also provide actionable inputs to police by collecting and analyzing on public domain
- Criminal profiling of suspects and tracking online communities by segregating public open source data
- Identifying network communities and sub-communities of criminals by linking his or her associates from various communication channels on the web
- Monitoring social media platforms, blogs and other public forums for malicious, violent, deleterious discussion and sentiments which may lead to public disaffection, agitation, riots, etc

## **3.0 The Project**

### **Purpose of the Project :**

The Social Media Lab shall track public views and sentiments on various social media platforms enabling police to enhance its preparedness in handling sensitive issues and protests. The Social Media Lab shall provide public sentiment analysis, identify

behavioural pattern, influences and advocates, track the change and increase in chatter and generate alerts in real time for police to take suitable action.

The advanced social media monitoring tools shall help in gauging and analyzing the public media and sentiment, draw-up predictive analysis of projected events and provide indicators to police regarding the size and seriousness of these public emotions. It shall provide pre-actionable intelligence regarding increase in digital chatter and participation of general citizens or community groups on social media websites. Police shall be able to find out anti-social groups, actively participating in creating disturbance and take timely and preventive measures such as deployment of force as well as providing direct information to curb rumours and to even alter the manipulated mood and emotion of citizens and take early corrective actions. The idea of this project shall be to raise red flag over any inflammatory posting which might have bearing on the law and order situation.

#### **4.0 Situation Assessment and Problem Statement :**

The rapid growth of internet and social media network allow constant sharing of information and social media platforms have created communities and sub-communities and their online interaction impact public sentiments and has law & order implications. However, while police forces across the globe have embraced social media networks in community engagement and collection of openly available information for police response and action in India barring few cities is negligible. Presence of police on social media networks is negligible as social media networks can be used by police to gain real time information and the analysis can provide public sentiments and opinion. The monitoring of social media is the need of the hour and cannot be over emphasized.

#### **5.0 Critical Assumptions and Constraints**

##### **Assumptions:**

It is assumed that no such infrastructure is available with State Police Organizations especially in the Districts at present.

It is also assumed that computer literate police officer upto the rank of ACP/Dy.SP are available for training and participation.

It is assumed that government will provide adequate resources to police to enable the setting up of Social Media Lab for effective interventions by police at appropriate levels.

### **Critical Constraints:**

Non-availability of adequate funds, difficulty in identification and standardization of resources, lack of consistent administrative will and time delay in execution.

### **Suggestions:**

It is suggested that the social media lab may be housed in the Special Branch unit of the State Police Organizations. It can also be housed in the CB/CID in case of criminal intelligence is to be tracked.

Social Media Lab shall only collect information available in open source media and has no issues with invasion of privacy.

### **6.0 Implementation Strategy:**

Setting up of Social Media Labs will consist of creation of civil infrastructure such as air-conditioned rooms, access control, furniture, work stations with computers along with dedicated internet connection linked to network printers and server. This project of creation of Social Media Lab will be a minimum standard lab with possibilities of scalability and additional consoles network to enhance capabilities.

#### **i) Civil Works:**

		Amount in Rs.
Room	One Room 15 ft. x20 ft. with false ceiling & lighting	4,00,000
Air Conditioner	Two nos., Split ACs with 3-star rating and their installation complete with electric wiring/stabilizers/MCs	1,50,000
Access Control	Providing of one Biometric Finger Touch Sensor for Security access door control complete with electromagnetic lock, wiring and UPS complete	1,25,000
	Providing of one Swipe Card Security Access Door Control System complete with electromagnetic lock, wiring and UPS complete.	
	Providing of 02 Nos. Remote emergency switch for access control lock complete with wiring	

ii) **Work Station :** (Modular Work Station) - **06 in nos.**

		Amount
Chair	10 Nos. Computer Chairs	38,000
Visitor Chair	02 Nos. medium back	25,000
Executive Table	01 - 5 ft. x 2 ½ ft.	
Work Station	06 in Nos.	65,000
Wooden Storage racks	62 Sq. ft. 1-6" deep	1,25,000
Metal Locker	01 having 10 lockers and shoe racks	
Glass Partition		1,20,000
Toughened Glass Door		

iii) **Computer and Printer**

Computer	06 Nos. Desktop Computer Model No. HP/3330 or equivalent with pre-loaded operating system.	2,45,000
Printers	03 in Nos. HP Laser Jet Pro M1136 multi-functional printer or equivalent (Print Copy and Scan)	34,000

iv) **Network Printer:**

Colour Printer	Laser	2,30,000
Print Speed	Min. 35 ppm for colour 35 ppm for black/white	
Print quality	Max.1200x1200 dpi colour as well as black and white	
Connectivity	1 Hi speed USB 1 10/100/1000 T	

v) **Internet Connection**

Internet	One 30 GB internet connection	@Rs.2500/Month = 30,000
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Total: Rs. 15,87,000

vi) **Server:** 01 number. Specifications as per **Annexure-A.** Rs. 14,00,000

**Grand Total: Rs. 29,87,000**

**Rounded off to: Rs. 30 Lakhs**

## II **Manpower:** (All staff should be computer literate)

Manpower will be made available along with training infrastructure for two weeks training and hand-holding.

**Three Shifts :** (i) 6.00 a.m. to 2.00 p.m. (ii) 2.00 p.m. to 10.00 p.m.  
(iii) 10.00 p.m. to 6.00 a.m.

**Overall In-charge:** Assistant Commissioner of Police/Dy.Suptd. of Police

Shift	Inspector	Sub-Inspector	HC	Const.
Morning	01	06	06	06
Evening	01	06	06	06
Night	01	06	06	06
Total	03	18	18	18

\* 15% of the above staff may also be kept as reserved for the leave etc.

## III **Training:**

10 days training on social media monitoring and analysis by different agencies ( i.e. Indraprastha Institute of Information Technology, Delhi, Google, Microsoft or any other operator)

### 6.2 **Deliverables**

Advanced Application for Social Media Analytics (AASMA) is the tool developed at IIT Delhi and funded / supported by Department of Electronics & Information Technology (DeitY). The tool is currently being used by 5+ Central and State law enforcement / intelligence agencies in the country. AASMA shall be given **for free** for installation and hardware and Internet bandwidth shall be provided. Some of the salient features of the tool are:

- Live data collection and analysis of topics done 24x7 eg. #KissOfLove, burdwan blast etc.
- Live tracking of user posts eg. @narendramodi, @ponguru
- Multiple social networks monitoring – Twitter, Facebook, YouTube, Flickr, and Google+ and more
- Advanced search to monitor and track content on the basis of location, time, language is possible
- Sends alerts to officers through email and SMS depending on the criteria set by the officers eg. 100 tweets or more in a given time like 10 mins for the next 15 days
- Built on Ruby on Rails, MongoDB, Node.js, HTML5, CSS, JavaScript, Bootstrap, D3.js, jQuery
- Multi-user support with multiple roles i.e. Admin user and Normal user
- Gives Single Dashboard view of all information in the system. Supports starting, pausing, deleting the data collection from the Dashboard. Entire Dashboard is

based on the philosophy of finding Who, When, Where and What.

- Supports various operators (AND, OR, etc.) that can be used in search queries
- Supports queries in other languages (Urdu, Bangla, etc.) for analysis
- Can analyze common followers between any number of given user handles
- Users can download the data of interest, download the analysis / output in an image format and generate a complete report of all the analysis present in the Dashboard
- Some sample Analyses done: Source (device used for posting), Tweet vs. Retweet, User location, Post location, Network analysis, Top users, Top URLs, Geo analytics on world map, Word Tag cloud, Sentiment analysis (positive and negative sentiments) etc.
- Entire system is Desktop friendly, and can be used in Mobiles as well as Tablets

The IIIT Delhi team can visit the organizations interested in making use of the tools and provide training to the officers and installation of the tool. (The user organization shall take care of the expenses including TA / DA, logistics, accommodation etc. for the visit.)