Privacy and Security in Online Social Media

Course on NPTEL NOC21-CS28

Week 5.2

Ponnurangam Kumaraguru ("PK")

Full Professor

ACM Distinguished Speaker

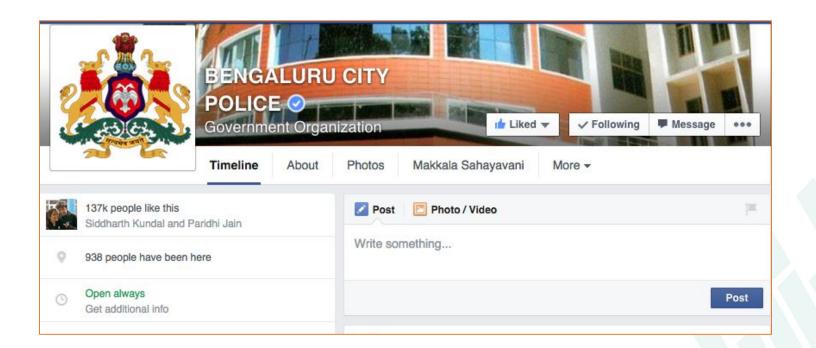
fb/ponnurangam.kumaraguru, @ponguru





Objective of Study

Whether OSN can support police to get actionable information about crime and residents' opinion about policing activities in urban cities of India.







Social Networks for Police n Residents in

India:Ex Crime F



PK

Social Exploring

Safety is a concern for in developing countries rial Networks (OSN) su

@ponguru

Our paper on Bangalore City Police FB page receives best paper award in the US precog.iiitd.edu.in/Publications_f... @CPBlr @goyal_abhei @niharikasachdev



3:45 AM - 1 Jun 2015

with the situation at hand) is available on OSN for police and b) how residents use OSN to express four of being victimized, polic-ing needs, and police performance in developing contries was to falsa. We study Facebook as it to considerably popular and most used OSN in companion to other scale streets in scale [23]. In the other of the other contribution of the other contribution of death on Facebook page of Banglacer Cly Police (PCP) in India. Banglacher Cly Police was stalisticat in 1950 and is responsi-ble for the overall policing in the Banglador city. Bangladore police

Updated: June 19, 2015 05:32 IST

'Social modice a great tool for arime prevention'

2015 Year Of www.tourism

Jun 08 2015: The Economic Times (Bangalore)

Study on City Police's Social Media Use Bags US Varsity Award

Bharath Joshi

Bengaluru

A paper presented by researchers with a Delhi institute shows how social media networks have forced the police become more accountable

The city police's impressive social media visibility caught the attention of participants at an academic event as far a place as the Arizona State University in the US last week.

It was an international conference on digital government research, where technology researchers Niharika Sachdeva and Ponnurangam Kumaraguru from the Indraprastha Institute of Information Technology, Delhi (IIIT-Delhi), walked away with the award for producing the best research paper. The paper showed how social networks have forced the police in India to be come more accountable.

This was also the first time the Bengaluru police experiment with the social media to promote community policing made its way into an academic institution.

K.V. ADIT

f Like Share

This is outco

The city police

Most posts by neighbourhoo said a study of

The study, 'So Crime Prevent Indraprastha city police as a

The study ana posts from cit cops about eve that most of th

The study found that if there was lack of information, police requested for more information and was provided in 29 follow-up posts. An analysis of the response of the BCP to the posts by residents reveals that cops have replied to 172 posts with an action-taken report on Facebook. The average response time was found to be over 30 hours.

Methodology: Data Collection



Collected public posts, 21 July - 21 Aug 2014



Filtered



Posts & Comments

1600 comments on 255 posts

Filtered = Posts from citizens to Police

Methodology: Data Coding

Thematic Inductive Analysis

24 categories (Public)

Content

- Missing: Missing people complains
- Query: Ask how to get police assistance
- Traffic: Report Traffic menace on roads

Style

- Formal
- Informal

2 Categories (both)

Type

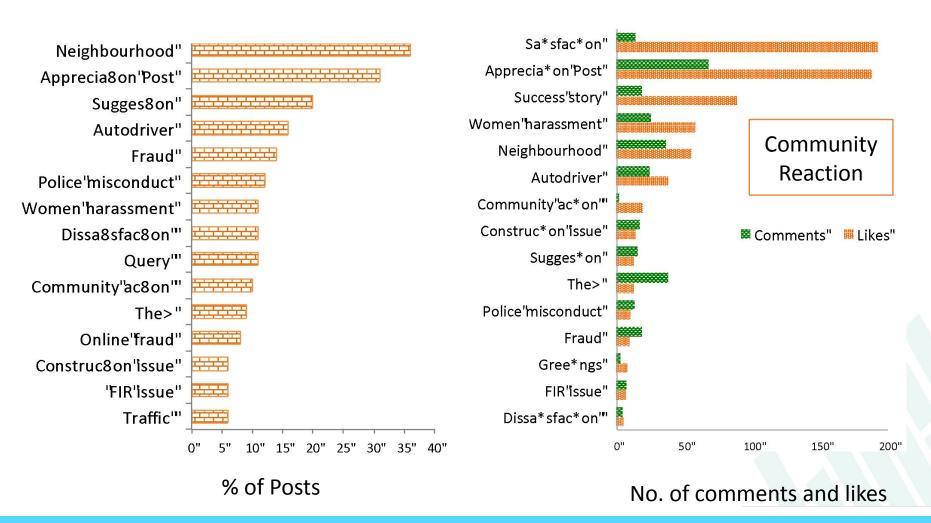
- Acknowledge to: Like or say thanks
- Reply to: Suggest a solution
- Follow-up by: Ask for further details
- Ignored by: No reply

4 Categories (police)

Lexical analysis using word trees

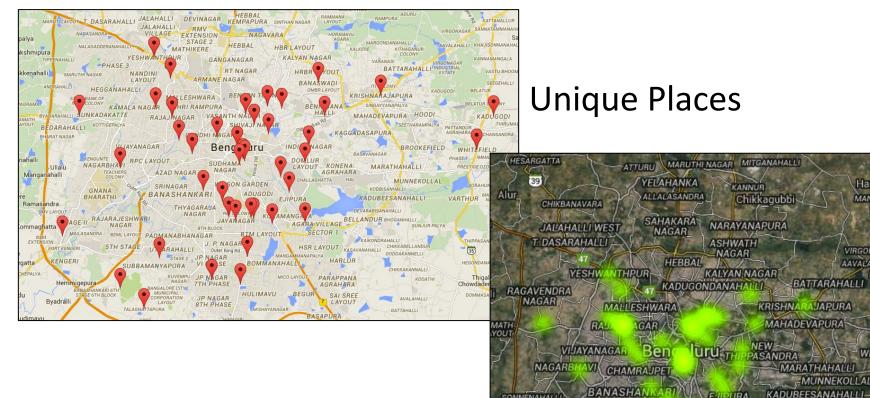
Results

Know persistent, direct, and apparent concerns



Actionable Information

Spatial Data



RAJARAJESHWARI

NAGAR

BANASHANKARI 6TH

Intensity of complains

Hancharahall

KANNAMANGALA

THIPPASANDRA-

HEGONDANAHALLI Chambenahal

DOMMASANDRA Sompura

SEEGEHALL

VIRGONAGAR

BELLANDUR

KONAPPANA

MANAHALLI

BEGUR

Actionable Information

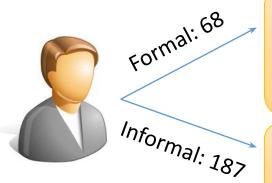
Temporal data



Saturday evening.

"Time – between 5.30 pm and 6pm. Location: The circle between Freedom Park and the route that goes into Cubbon Park, towards Century Club. Not a single police posted here. I was waiting for an auto at the circle and these two guys rode by asking if they could drop me. Please ensure there are police put here for safety . . . "

Communication Style



"Dear Sir, Request to take action on Railway Station parking contractors they are not issuing parking slips . . . today @Yashwantpur Railway Station Tumkur Roadside Entrance Parking."

Kudos to the Banasawadi Traffic Police Team. My Salute and sincere thanks to the Banasawadi Traffic Inspector XXX. . . . An ANGEL in disguise



Always formal
Instrumental
Approach

Dear XXX, Please provide the exact landmark.. Thank you."

Facebook can become an efficient instrument that help police always stay visible and connected with residents.

Response Time

	Time Taken to	
	Respond	
Average time	30.53 hours	
Maximum time	211.16 hours	
Minimum time	4 minutes	
Std. dev	41.26 hours	

Engagement Type

Acknowledged (21.3%)



Dear XXX, We will take all possible legal measures in this regard. Thank you.



Reply 22% 44.3%

Dear XXX, Please lodge a complaint at your nearest police station with the details and co tact police inspector in this regard. They will assist you further in this. Thank you.

Dear XXX, This post has been forwarded to appropriate Police Station for taking necessary action on this. Thank you.

Follow Up (10%)

Dear XXX, Please provide the police station details. Thank you.

225 – 172 = 83

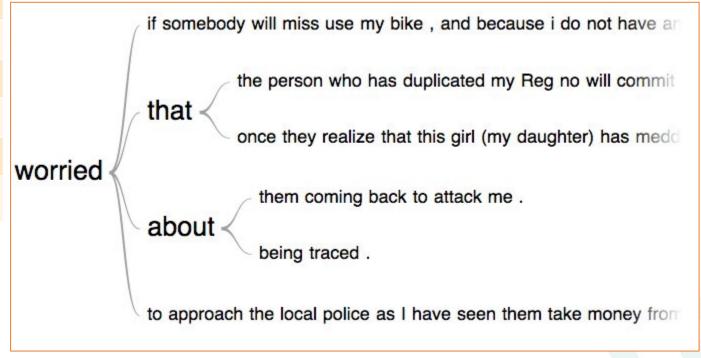


Received no reply; E.g., wishing to share something good about a task undertaken by Police in

Kerala...http://www.youtube.com/watch?v

Understanding Victimization

Word	#
Fear	7
Worried	6
Concerned	8
Notice of	13
Issue	22
Trouble	4



Direct v/s Indirect



My Vehicle KA-02-HW-3183 white color Honda Dio was stolen from Kadamba Hotel (Near Modi Hospital), RajajiNagar on Friday (25th July) evening between 6:30-7:45PM. Please help in tracing my vehicle.

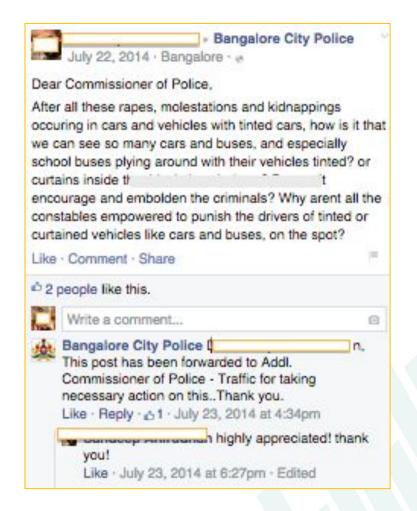


Dear BCP, though I stay at JP Nagar, but being part of KSFC Layout RWA (Banaswadi Police station), I got to know that there are frequent problem at KSFC Layout near BBMP Hall . . . 8-10 youths were creating a public nuisance > (shouting, boozing, manhandling, etc.) yesterday i.e. on 27/7/14, Sunday night 9 pm. We need your support to help avoid a molestation scenario at KSFC Layout. Thank you



Write a reply...

- Police responds and allows itself to be held accountable
 - Maintains formal communication style even for frustrated people



 Citizens accept that they are also accountable to make city safe



It is the duty of every citizen to keep a watch around his surroundings, be cautious of isolated and dark places, and to inform the police of anything wrong going on and not keep mum about it or scared about it, and ensure that the citizen helps the police in their act of keeping the society and the city safe. After all, Bangalore is our city, our pride. Our support to Bangalore Police in its endeavor to bring the notorious criminals, anti-social elements, and wrong-doers to book should always be continuous just as the efforts of the Police Officers who sacrifice their family time, personal leisure for the sake of us all. It is because of them that we are safe. Respect and Salute to the Police Department.

Citizen hold police accountable

these illegal practices are not being stopped. are you harassing us on roads? isnt the traffic police doing anything to stop the menace of Eunuchs es everyone is overlooking the clear culprit. did he do it? he want to verify my name he hang up the call . when i tried calling ba because we blindly trust those ppl without meeting face to face, pleas can t we? should he give an FIR for my negligence. ru collecting my data base everyday, so show the same enthusiasm to now? am I being the spoil sport? don't you stop < Tobacco? you the Police or the Excise Department Allow Bars to be Open till

Word Tree visualizations of posts in which residents questioned police using the word why.

Understanding Needs / Wants

- Police can encounter fear and anxiety if they know:
 - residents expectations like needs and wants
 - Expectations, if met, can increase feeling of safety

Understanding Needs

justice, not just the parents.

punished, keep doing raids and check...may help but rather than pumping out water why not to stop leakage. strict law system as well .. these kind of fellow must not escape from Law cross check for previous offenses in order to prevent such perverts from harming society again ! discuss with their higher ups to file an FIR? mend der manners . sorrow thinking about the cause for Bandh .. can we ensure that criminal gets punishment at the earliest and ensure that these thir done, please do not ignore the fact that the teachers of that school were locking up kids in dark rooms, this is a torture method. booked too . also , the previous school , deens academy had covered up malpractice by the same perpetrator , please book the cl upgrade our laws...like if a person involved in more then 2 affencess, if its been proved with evidence, ... then don't send him to the jail...t do more research on why that is . hang this guy atleast put him in bars for lifetime . . amend the criminal laws . put our foot down to such behaviour understand that for such genuine greivances most search sites like google and vahoo are very helpful provided their is genuineness of the know wat is there in his PC or MOBILE phone ist show his face to public and make sure the laws are amended. react to another incident provide their states identity card as proof and must be submitted during their travel . taken on school authority . punish this loofer like that , they will hit very hard and cut neck separately or hang or shoot , then others will also affirmed to do same misl need people can take a instant picture and it will reach u in seconds to identify the crime and the criminals along with the locations. good leader like cp & addl cp now what they are having now improvement prompt action on every case to prove Indian police is the best . a rule in india against rape that even by the word or thought of it the person intending to do such a heinous crime should have shiver down his spine. residential permit to park in residential areas for longer times given only after you show proof of residence. they r very arrogant. help we are new to bangalore our girls in PGs to be safe...period more such things to happen . is to take some cue from saudi arabia and china where justice is delivered with in 30 days. CCTVs in police stations more than we need the COP on social media . the COP on social media . same kind of patroling ...! safety . all your support any sort of help from the citizens of Bangalore, pls let us know. change the person who framed this was unawre of future, till day we cannot follw the same rules, we need changes, we cannot keep saying no our law doest: changes , we cannot keep saying no our law doest say this , i wont allow that , come on amend it Give justice , Make my country a safe place , I know writing long a rule to shoot or hang such rapists in public . for them to do the business.

Understanding Wants

hear more of these . the punishment to such rapist. See < this monster !!!! and delete the rest? know. say thanks to BCP SIR. to tell this to our parents because my friend marriage is going to happen ask you one question if those teachers of vibgyer school prooved gull read in papers about all the solved cases and the next, we dont wan want work not people who want to beg and make children beg I sugges beg and make children beg I suggest u take up the issue of giving protect that bastard ... why you dont have any daughters you dont save your daughters from like this bastards ... why you are protecting BCP to seriously look into this issue . details i can give a safe city and we are dependent on you .. his spouse, daughter, parents and relatives to see his face in T.V and

Discussion: The way forward

- Observable OSN for Actionable Information and Collective Action
 - Tools to mark posts as follow-up, reply etc. does not exist
- OSN for Mutual Accountability
 - Much needed for overworked departments
- Understanding fear and Victimization effects

Thank you

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