Application of Mobile Phones and Social Media to Improve Grievance Redressal in Public Services

Aaditeshwar Seth, Abhishek Katyal, Rohit Bhatia Dinesh Kapoor, Balachandran C, Vidya Venkat, Aparna Moitra, Sayonee Chatterjee, Mayank Shivam, Z. Koradia Praveen Naidu

Department of Computer Science
IIT Delhi

Gram Vaani Community Media New Delhi Action India New Delhi

Author for communication: Aaditeshwar Seth <aseth@cse.iitd.ernet.in>

Introduction

Most government departments exhibit poor grievance redressal performance. It is common to hear people complain about broken roads and poor drainage in their neighbourhoods, but their complaints often go unregistered, and even if they are registered and attended it often happens that the same problems reoccur because of systemic flaws in service provisioning. We approached this problem with the assumption that if the poor quality of grievance redressal was made public via different media channels, it could impose public pressure on government agencies to improve their functioning. Complaints could be collected in a structured manner through IVR and SMS systems, and statistics could be exposed transparently through the Internet and other media channels. This approach would be scalable both in terms of data collection for immediate action on complaints, and data analysis for identification of reoccurring flawed patterns to systemically improve the handling of complaints within government departments.

We next describe four initiatives we pioneered with this underlying philosophy in mind, and outline our learning and conclusions. Note that our approach is different from setting up MIS systems in government departments: MIS systems aim to automate internal workflows and management within different agencies, while we want to establish community driven processes external to government departments to impose public pressure on their functioning.

1. Public grievance campaign through mobile phones

In early 2011, the Municipal Corporation of Delhi (MCD) set up a Facebook page where people could submit photographs or videos of poor sanitation facilities, such as unclean garbage sites and overflowing drains. The public Facebook page was a transparent way to raise complaints and impose pressure on MCD to close the complaints. The complaint rate was however low, of the order of 5 complaints per day, because access to the page was restricted only to Internet Facebook users.

We worked with MCD to launch a voice-based IVR system so that non-Facebook users could also raise complaints. We set up a simple system where people could call and record a complaint message giving details about the problem and its location. A widely attended press release was made, and a deluge of 1100+ calls was received on the first day itself. MCD clearly could not cope up, and was bashed on its Facebook page and also in a follow-up media story after a week. This was taken up to the commissioner, and he personally instructed his staff to attend to complaint redressal. Detailed statistics of where most complaints were coming from, and redressal rates in different wards, further helped him put pressure on his subordinates to handle the problems. **This showed that soliciting mass feedback from people over mobile phones is indeed feasible, and**

operating in such a binge campaign-oriented mode in affiliation with newspapers and social media channels can impose pressure on public authorities to improve their functioning.

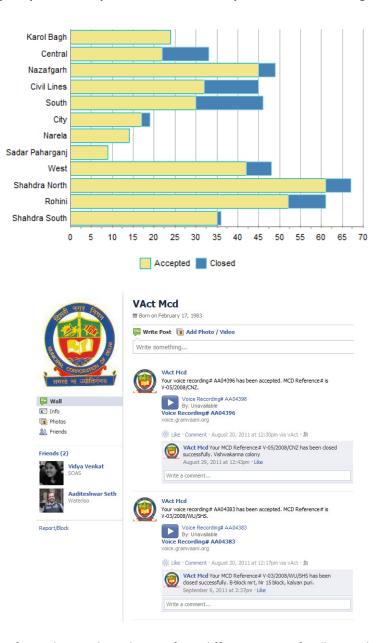


Fig. 1: Snapshot of complaint redressal status from different zones of Delhi, regularly published on Facebook along with recordings of interesting issues. Data from the graph was published in a leading national newspaper, which caused the MCD to issue notices to their officials

2. Citizen based monitoring of public services

The statistics generated through the complaint management system we put up for MCD convinced the authorities about the value of such internal tracking systems and metrics. We then put up another system, starting with the small niche of garbage monitoring, where various contractors of MCD would report when they cleaned a garbage site; citizens could access these reports and dispute them if the status reported by the contractors did not tally with the actual situation on the ground.



Punjabi Bagh

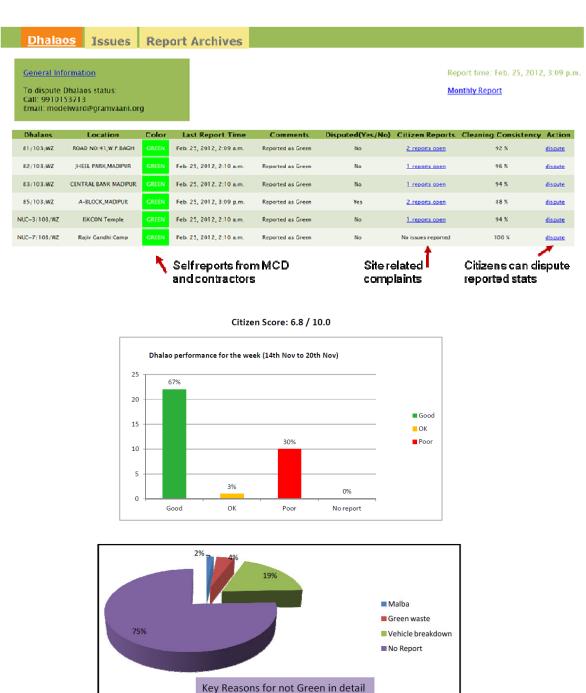


Fig. 2: Snapshot from http://mericity.in – a status reporting website for garbage sites. Citizens can query the status reported by MCD contractors, and dispute the status if it does not match the actual situation on the ground

There is significant anecdotal evidence that citizen monitoring has improved the cleanliness status of different garbage sites. The system is now being expanded all across Delhi. Monthly reports

generated by the system are reviewed in weekly meetings by the MCD commissioner. We plan to extend the initiative to citizen-driven monitoring of other public services as well, including street cleaning, electricity power cuts, water cuts, teacher attendance in public schools, etc. The statistics generated from the system will be used to generate performance report cards for the concerned political representatives and government departments, as we explain next.

Internal adoption of the system by MCD showed that **government departments indeed do value such performance monitoring systems**, and the improvement in cleanliness of the garbage sites showed that **citizens can indeed engage collaboratively with government agencies to improve their processes.**

3. Community driven complaint management system

Similar to MCD's deployment, we set up another IVR system for an NGO Action India, operating in slum colonies of East Delhi. The NGO would process the complaints collected through the voice system, and take them up with the municipal councillors in the slum colonies. The councillors then followed up with heads of different government departments to redress the complaints. But this time rather than use the mainstream or social media channels for public transparency, we chose to use wall-newspapers published by Action India to display performance reports of the sanitation status of different colonies. The reports contained comparative statistics and photographs of the councillors to convey a competitive message to the councillors and urge them to perform better. In the future, we will expand the statistics generated by the system to create performance report cards for different councillors based on their effectiveness to negotiate better living standards for their constituencies.

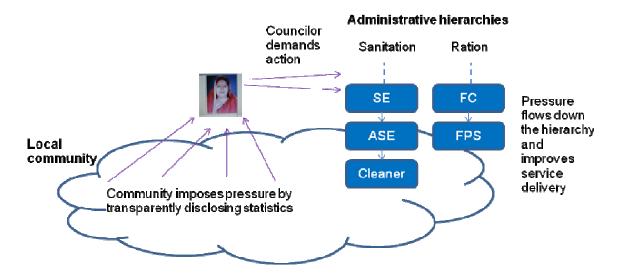


Fig. 3: Illustration of power relationships between different stakeholders. The system helps citizens put pressure on their political representative, who in turn puts pressure at different levels in the administration hierarchy to improve the delivery of public services

The project brought out valuable anecdotal evidence which showed that there is considerable potential to play upon power relationships between councillors, MLAs, and government officials. Several community members also claim to have felt empowered, now that their problems could reach the right officials who otherwise would not even talk to them.

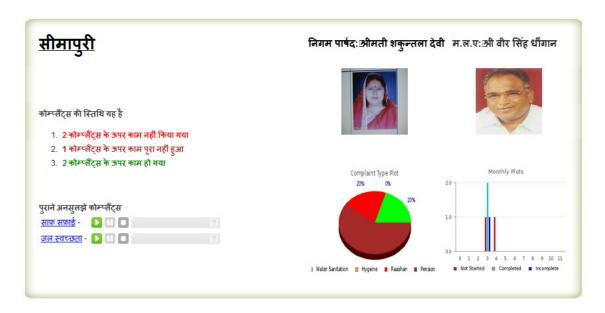


Fig. 4: Screenshot of report generated using complaint data on sanitation, pension, and ration problems faced by the slum community of Seemapuri. Showcasing photographs of the local municipal councillor and MLA further helped convince them to participate in the system

4. News-over-phone service for rural areas

In a similar vein, we launched a news-over-phone service for rural areas of the state of Jharkhand in India. People could call into an IVR system attached to a toll-free number and leave a news item, or listen to items left by other callers. We would validate and moderate all reports before publishing them on the phone and the Internet. People called in to report incidents such as malaria outbreaks in remote villages, corruption in the PDS system, poor records maintenance of NREGA works, etc. We also forwarded incidents of corruption and human rights violation reported on the service, to social workers and government officials at the local and state levels to translate the reports into real impact. In the first one month of its usage, the service logged over 40,000 calls with an average duration of 3 minutes, attracted over 5,000 unique callers, and over 150 reports were filed.

We realized anecdotally that government officials were actually **afraid of these reports being published online**. Some lower level officials even called us requesting for removal of reports filed specifically against them. There were also incidents where we have forwarded some complaints to higher level officials, who got the issues rectified from the government staff. We also partnered with the local newspaper, Prabhat Khabar, which further took up a few important stories for publication and imposed additional pressure for grievance redressal.

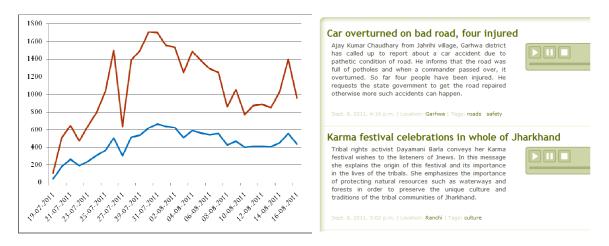


Fig. 5: Call-statistics from Jharkhand mobile news, and a screenshot of citizen journalism reports filed on the platform

What works

As a result of these experiments, we have evidence for the following ways in which mobile phones and social media can improve grievance redressal:

- **Government officials are afraid of transparency:** A system that makes complaint status transparent can be used to put pressure on government officials so that higher authorities do not come to know about a lapse of service from their end.
- Statistics can help senior-level government officials: Due to poor internal processes within government departments, senior-level officials can use statistics published by third-party agencies to monitor the functioning of different departments under their jurisdiction.
- Media can put pressure on politicians: Politicians are the only people answerable to citizens, and are concerned about how the media portrays them in front of the public. They would like to give public the impression that they are leaving no stone unturned in helping their electorate, thus opposing media stories can leave them concerned.
- Media pressure need not just be through mainstream media: Alternative channels such as publishing news over the phone, or on pamphlets and wall-newspapers, attain a media character of their own once they become sufficiently popular.
- Mobile phones are an effective mass-outreach medium: Given the wide proliferation of mobile
 phones and their ease of access to even poorly-literate populations, IVR systems seem suitable
 to engage large groups of people from the bottom-of-the-pyramid and provide services to them
 equivalent to those provided via the Internet.

And what does not: How to sustain such initiatives?

There are two additional points worth mentioning to ensure sustainability of these initiatives:

- Insider networking: A fair amount of insider networking within systems is necessary for external platforms to be effective. Our work with MCD would not have been successful had we not had good relationships with the commissioner directly. Similarly, grievance redressal through mobile news in Jharkhand would have been harder had we not approached government officials at the block and state levels to deal with the problems. These linkages are not hard to establish in practice though we have found senior-level government officials to be fairly approachable and open to new ideas.
- Closing the loop: Citizens can lose interest if they do not see any results emerging from their participation. If people begin to file grievances but these grievances are not redressed, or they report on incorrect statistics published by government agencies but it does not stop false reports, they will quickly lose trust and stop participating. We have found this happening frequently in our projects. Therefore, insider networking or other methods will be required to close the loop.

Conclusions

To summarize, we would like to reiterate that social media and mobile phone technologies can be used to help citizens engagement with governments, but to create long lasting stable systems the government will have to respond adequately to the citizens. Taking the political route, or using media pressure, can help close the loop but ultimately the system will have to be institutionalized by the government departments to create long lasting impact.