# Crowdsourcing Pattern for Project Monitoring

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#### Context

Crowdsourcing as an essential element of project monitoring could result in ensuring data veracity of the parameters being monitored. It would also ensure prioritizing the resource deployment given that the affected party would protest the most, akin to a crying baby getting the milk. In a project, say construction of a road, if the project affected persons and stakeholders have a say in the reporting the progress and a mechanism is provided within the project's implementation unit to receive the inputs from the stakeholders, the responses received from the persons affected persons could be safely assumed to be the most accurate description of the situation on the ground. This pressure from the people would result in greater management attention towards better planning, timely completion resulting in better quality of work being executed and a safer construction in the said case. The pattern can be generalized to any type of project wherein the output parameters and the outcome indicators would only differ but the resultant impact of crowdsourcing would result in improved monitoring.

## **Thumbnail**

If

- Demand aggregation of services to be delivered is necessitated in a project
- Prioritizing the resource deployment in a project is an issue
- Challenges exist in ensuring data veracity of the output parameters of a project

#### Then

- Communicate the project output parameters to project affected persons and stakeholders
- Solicit inputs from the above crowd
- Create mechanism within project implementing unit(PIU) to receive the inputs
- Go public on how these inputs are handled within the PIU
- The increased transparency and accountability will ensure better quality of deliverables

#### **Problem**

Traditional forms of project monitoring involves the PIU creating a monitoring mechanism developed in isolation based on their perception of services to be delivered and the timelines for such delivery is not challenged in real terms. Most of the time the methods used for establishing outcome indicators, output

parameters as well as the quality of the deliverables is debatable and beyond reasonable doubt opaque to the persons directly affected by the project. Generally the key parameters do not go beyond monitoring physical and financial progress of the project. At best some projects include monitoring of work quality based on engineering test parameters and adherence to these acceptance criteria forms the basis for certifying the progressive payment of the work.

For example, a project involves improvement of about 7500km of state highways where the work is spread across the state and comprises of widening, strengthening and resurfacing the existing highways in selected reaches. The challenge is to monitor the timely completion and ensure adherence to the specified quality standards of a project where the works are not in one continuous stretch but in selected reaches of work and geographically wide spread. The traditional methods of monitoring would have involved a very large project implementation team stationed at various locations across the state to monitor the 7500km of road works. Coordination of this team itself would been a major challenge in addition to the challenge of collating all the project related data into comprehensible Management Information System(MIS) reports. The larger problem would have been in getting real-time information to help in timely decision making.

#### **Forces**

- Lack of transparency and accountability as well as corruption in execution of public works
- Project affected persons being kept in the dark on the output parameters of the project
- Maintaining quality of public works in order to reduce operational cost
- Maintaining project schedule in order to avoid cost overrun due to delay

### **Solutions**

Use cost effective social media channels to publicize the project information and its output parameters. Create a complaint handling and redressal mechanism in the PIU. Solicit views, opinions and suggestions regarding the works being implemented from the people at large. The inputs thus received from the crowd are used to reframe or refined the output parameters iteratively until the resultant solution mostly covers the inputs received.

In case of the example cited above, a small team of 25 could effectively managed the whole project by adopting a web based project monitoring solution integrated with specific mobile applications for work inspection and reporting. The information about the project was published on the project web site and also on social media website like Facebook. The public were encouraged to publish photos or post comments. The project web site also had a complaint response system which directed the complaints to the concerned officers within the PIU and also published the status of the complaint, number of days the complaint is pending and the name and phone numbers of the person handling the complaint.

## **Resulting Context**

Monitoring of the project is enhanced by the inputs received via crowdsourcing resulting in a better quality of the work which is closer to the requirements of the affected persons. The increased crowd attention on the project results in best behavior being exhibited by the PIU. Overall the increased transparency results in greater accountability and ultimately delivers best value for the money spent in a project. This is the positive effect of the adopting the crowdsourcing pattern.

However it is possible that on the negative side crowdsourcing can deteriorate into 'herd'-sourcing when crowd responses are deliberately manipulated or skewed to get a desired result. This is more likely where issues are politicised. In some extreme situations crowdsourcing can become 'mob'-sourcing resulting in strikes, violence or destruction of public property.

## **Acknowledgement**

We would like to acknowledge Prof K V Dinesha of International Institute of Information Technology – Bangalore for enlightening us on PLoP and encouraging us in the preparation of this paper by holding the preparatory writers workshop. We also thank Mr Chin-Yun Hsieh for shepherding this paper.