

# Public DATA Devthon

(May 7<sup>th</sup> & 8<sup>th</sup>, 2016)

# **Event Report**

#### **Partners**









#### Introduction

The event was conducted over two days (May 7<sup>th</sup> & 8<sup>th</sup>, 2016). The first day started with an introduction to the 5 datasets that were being used. Then the participants were split into teams and the prototyping started. Day one also had Checkpoint #1 where the developments of the prototypes were discussed.

Day two started with checkpoint #2 where again feedback was given to all the teams. After the teams were ready with their final presentations, there was a practice session where all the teams presented their prototypes and final changes were made before the final presentation. In the final showcase, the teams presented their prototypes to Mr. Jayesh Ranjan and took his feedback.

# Day One

The Prototyping Stage of the Public Data devthon was conducted at T-Hub on the 7th and 8th of May. The event was supported by the Government of Telangana and T-Hub. Rakesh Kumar Dubbudu, founder of Factly and co-convenor of NCPRI was the curator for this edition of devthon. The focus for this event was exploring the possibilities of Public Data.



Many of the participants were attending the Devthon for the first time. After a long wait, the event was finally about to start. By 10 AM, the hall was full of participants eager to learn and explore the possibilities of Open Public Data.

At 10am, Rakesh started by welcoming everyone present to the Public Data Devthon. He continued to explain about the scope of Open Data in India. Harish Krishnan, founder of Devthon took a few minutes to explain about the goals of Devthon and how this event came



to be. This event was conducted jointly by Factly/Devthon with support from Manoj and Uday from Factly and Abraham from Devthon.

Then came the time to discuss about the datasets that were going to be used. Rakesh helped the audience understand the following five datasets that were being used:

- **GHMC data:** Based on grievance data from GHMC for the last one year (Apr 2015 to March 2016), can we find out the most common grievances, officials who are loaded with work, areas from where maximum grievances are coming from etc.
- Village Dashboard based on Maa Bhoomi Portal: Based on the Village level Pahani on the Maa Bhoomi portal, can we build a dashboard for micro level planning at a village level on land holding size, type of land. water sources etc
- **NITI Aayog district data:** Based on district data from NITI Aayog, can we build a dash board for comparing districts on various parameters and find sister districts?
- MNREGA Data: Based on the MNREGA works done in a district since the inception of the scheme, can we find outliers in terms of wage/material expenditure, works done etc?
- **PDS data:** Based on closing balance reports and key register reports of FPS, can we throw light on the FPS that may be diverting food grain meant for the poor.

#### **Splitting into Teams**

At 11am, all the participants were given the choice to join any of the 5 groups which were using the different datasets. There was a round of introductions where each one of the team members shared their name, experience and skill sets. After that it was jumping into the datasets that were on offer. The basic ideas were discussed that each one of them had in mind. But the interesting part was the unique perspectives each one had to offer. There were programmers, UX designers, database developers, journalists, activists and data enthusiasts that had come together to create a diverse team.



**GHMC Data Analysis Team** 





MNREGA Dataset Analysis Team



**District Dashboard Team** 





Village Dashboard (Maa Bhoomi Portal) Team



PDS Data Analysis Team

After 2 hours of brainstorming of different ideas that could be pursued, all teams took a break where the discussions continued over lunch. When they came back at 2 pm, the prototyping started in some teams while others were still finalizing their ideas. In each team, one or two team members focused on cleaning the data and ensuring that they were uniform in structure. Rakesh and Srinivas moved from one team to the other and checked the progress while offering their feedback.



# **Prototyping Begins**





After two hours of sketching and tinkering, the teams reached their first checkpoint. They had to share the developments that had happened and could ask for feedback from other teams. The experts at the venue chipped in with inputs to help the teams get better clarity of their goals. As the representatives from each team stepped forward to explain the prototypes that they were building, there was excitement in the room as the participants listened to what the other teams were up to and looked at ideas that they could incorporate into their own prototypes.



# **Checkpoint #1**





As the checkpoint ended, the team members huddled together to discuss what changes they wanted to make to the prototype. Also, the responsibilities were divided among the team. Each one started working on the part they were assigned and constantly consulted their team members for feedback. Two hours flew by and everyone was happy with the work that they were able to do within 5 hours. Day 1 ended with the teams being more than half way in completing their prototypes.



### **Day 2 Starts**

#### Checkpoint #2



Day 2 started at 10am with teams working on their presentations that they would be using to explain their prototypes. The work on the prototypes was also going in full swing. There was a checkpoint 2 at 1pm where the teams again shared their progress and took a final round of feedback. After lunch, the teams spent a good two hours in refining their work and getting it ready for presentation.

#### **Presentation Practice**

At 3pm, all the teams were ready for the presentation practice. They came forward to explain their goals that they were trying to achieve with their respective prototypes and the users who it will benefit. They also elaborated on the need for this product and the impact it will be having. The experts at the venue suggested some changes and corrections that were carefully noted by the team members. They just had 2 hours to make the final changes before they were ready for the final presentation before the IT Secretary, Government of Telangana, Mr. Jayesh Ranjan.

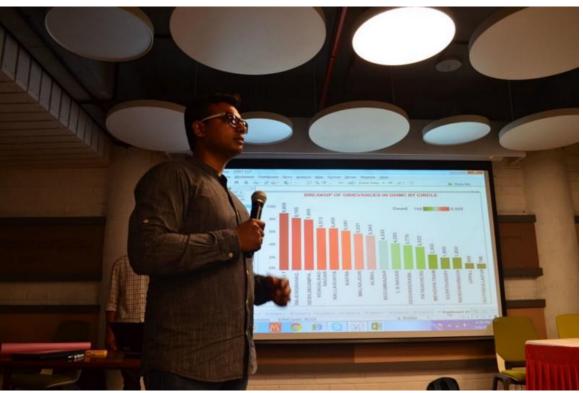












At 5 PM, the stage was set for the outcomes of the event to be presented. The chief guest, Mr. Jayesh Ranjan reached the venue. A short <u>video</u> was played to showcase the problem statements that were being tackled at this event.





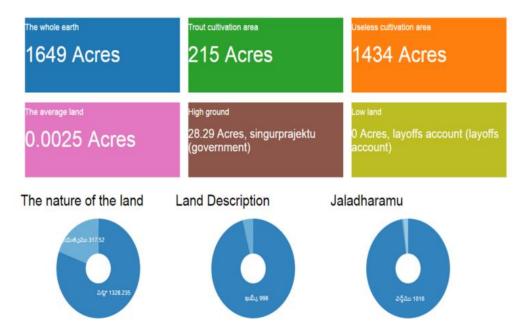
# **Final Presentation Starts**

Rakesh gave a brief introduction on the work put in by the teams and the goal of this Public Data Devthon. He also spoke about the datasets that were used and welcomed Mr. Jayesh Ranjan and Mr. Dileep Konatham.





Team #1—Village Dashboard with data on Maa Bhoomi Portal

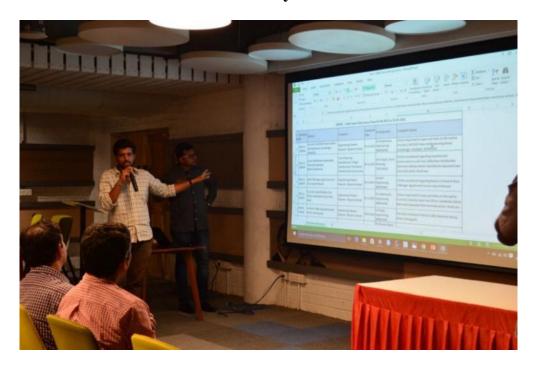


The first team to present was the team that was using the data from the Village Pahani in the maa bhoomi portal. They created a dashboard that could show, compare and calculate the data from the Village Pahani records. It could calculate the average land holding per person in a village, highest/lowest land holdings in village, type of land, water resource and barren/cultivable land in a village. This dashboard could be used by the common man and also an official like the district collector to measure the rural development metrics and find insights.





# **Team #2 GHMC Grievance Dataset Analysis**



The team worked to visualize the complaints that the GHMC has received in the last year. It could show which were the areas that registered the most number of complaints and also the types of works that were requested the most number of times.

They were also able to build a demo for an App that would be able to visualize the status of complaints in a particular region. This would be a handy tool for all decision makers who were part of the GHMC. They could easily monitor if the efforts they were putting in were showing positive results and make changes accordingly.

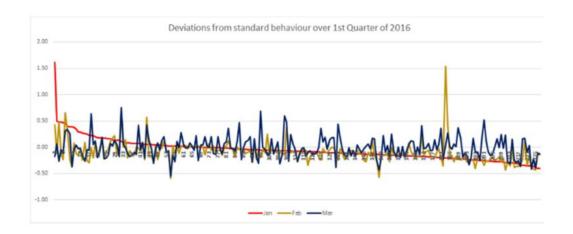




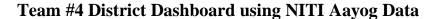
# **Team #3 PDS Dataset Analysis**



The main problem that the team focused on was Identification of leakages in the Public Distribution System. For achieving this goal, they created visualizations that showed the deviations in the behaviour of ration shop owners who showed huge variations of leftover food grains in the shop across months. By using this visualization, the closing balance variations across shops can easily be spotted. This can be used by officials to find fraudulent practices and investigate these shops wherever required.

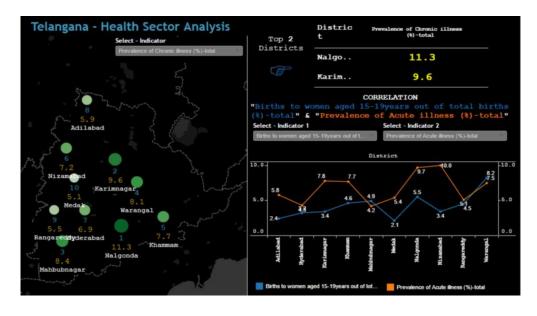








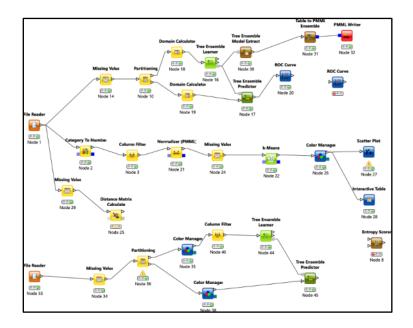
This team presented their visualization that they have created to analyze District Level Quality of Life Data. They created visualizations to compare districts on key sectors of development like health, education, water and electricity. Combining this information, they wished to rank different districts on the quality of life. These visualizations could be useful to NGOs, activists, district and state administration to find the deficiencies in key development areas and work towards filling the necessary gaps.





#### **Team #5 MNREGA Dataset Analysis**

Team MNREGA had two prototypes to showcase. The first one was a decision tree that would be used to understand if all the criteria were being met and thereby understanding whether the final goals of the NREGA scheme were being achieved. So all the data would be checked if they follow 4 rules and for each step the next step would be based on the condition.



Also the team created a visualization to show the comparison between wages and materials. With the help of the visualization, they were able to clearly show the number of villages that showed a deviation from the average. They were able to find more than 300 villages that had spent more on the materials than the wages deviating from the norms of the scheme, thereby defeating the whole purpose of the scheme. These visualizations could be used to analyze the way villages were using their NREGA funds and easily spot the places where they were being misused.





#### **Feedback**

Through the presentations, Mr. Jayesh was sharing his inputs and asking questions. After the presentations ended, Mr. Jayesh spoke about the importance of such an event and how the government was interested in such ideas and the power of such ideas to create better governance. He said he liked all the presentations and wished they would be improved over further events like this. He wished the participants the best for their efforts in Open Data and promised them more such opportunities to implement their ideas.



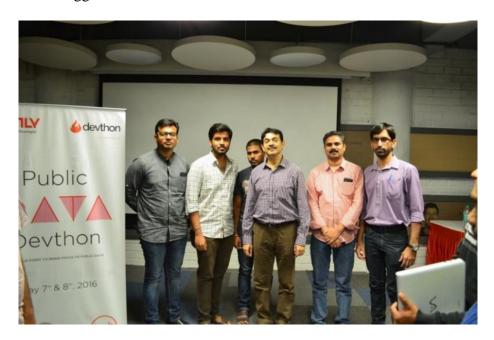
The feedback that Mr. Jayesh gave was also keenly noted by the participants.

For the *Village dashboard* prototype, he pointed out the gaps and nature of deficiencies in the data. He also asked the team to look at other datasets that can be correlated with this data like banking and electricity, crop productivity for better holistic understanding of rural development. He also suggested a pilot with multiple data sets to better understand it's working.





As part of the discussions with the *GHMC grievance data analysis* team, the points which came up were the tracking and filing of the closure report. Also the need for resolution data needs to be opened up as next step. The grievance website form also needed to be reordered for address entry for better user experience. There was also no facility for reopening a grievance ID which was a big problem for users. He agreed with the team that finding correlations was going to be the main step forward in using open data to its maximum capacity. He also suggested if the data could be correlated with other datasets.



For the *PDS dataset analysis* team, he spoke about the importance of overlaying vigilance data. He also suggested that social audits can be conducted whenever spikes are observed so that such incidences can be avoided.

Also with respect to *NREGA dataset Analysis*, he spoke about the time of work availability and the importance of capturing all the outliers and presenting them to the concerned department.





# **Final Thoughts**

At the end of the event, we were only able to cover few but very important possibilities with the number of datasets we worked on in this event. There are so many other possibilities that are waiting to be explored with more access to public data. The participants were excited at the prospects of more such events where they would get access to more Public Data using which they could implement many more of their ideas and create impact.

For any details/clarifications about the event or this report, you could get in touch with Rakesh on  $\underline{rakesh@factly.in}$  or  $+91\ 9885419012$