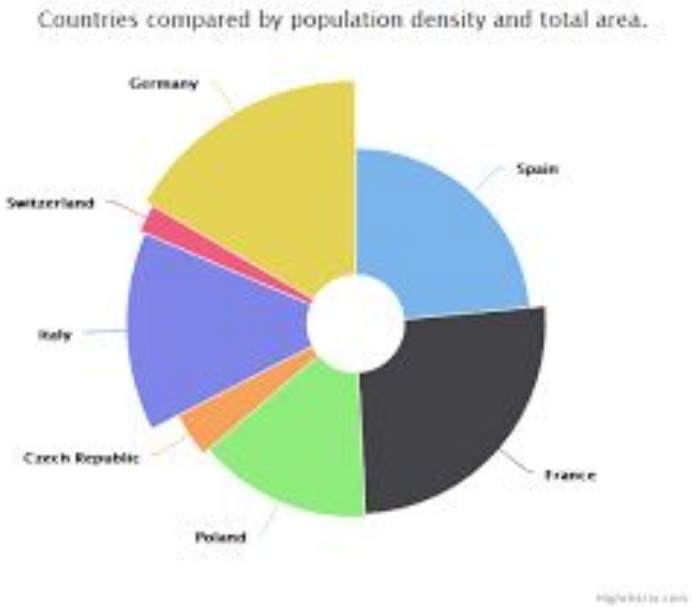
WeGot Utility Solutions

Data Visualizations screens

Admin Dashboards - updated

Meant for Admin Users to monitor the system

Different Water sources with their quantities



Example

A radius pie chart can be used for this use case.

Different water sources can be shown with their quantitative values.

No drill downs required.

Usage Log Day wise & Month wise - Total Spent

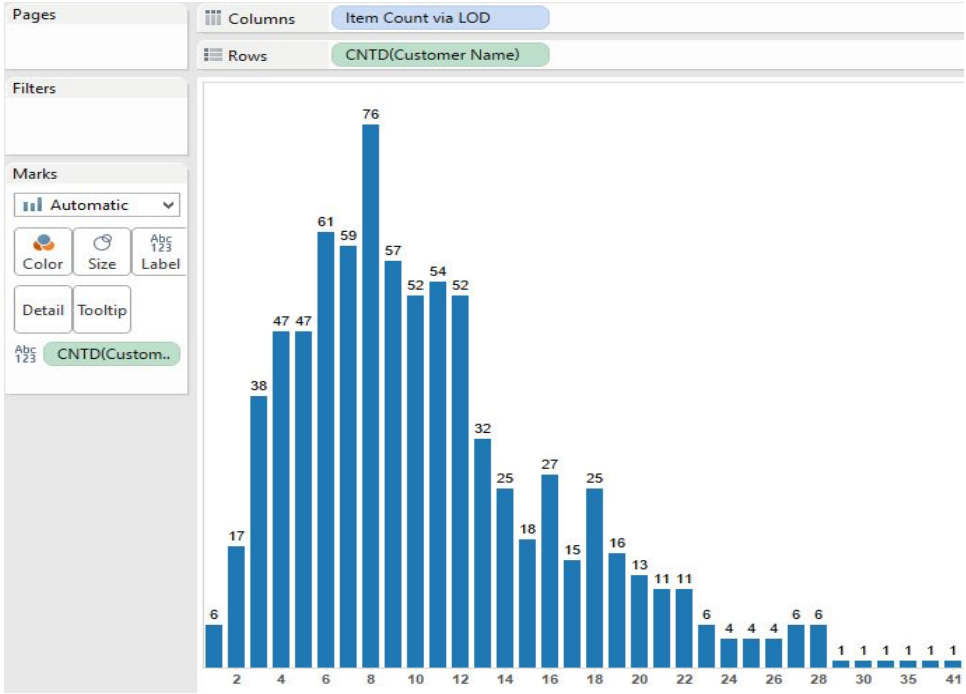
A Correlative example

This heat map is an example which gives a day wise comparison of each month and also month wise comparison of each day. Mainly the trends of each month and each day can be visualized.

The same can also be used to represent time of day vs Months

For each parameter there needs to be an individual heat map like this. This can be a visualization indicating the water usage for the whole year.

Histogram - Drill down any Heat Map cell to show the trend on selected day



On Click of each of the cells in the heat map, the trend of the day can be visualized using a histogram.

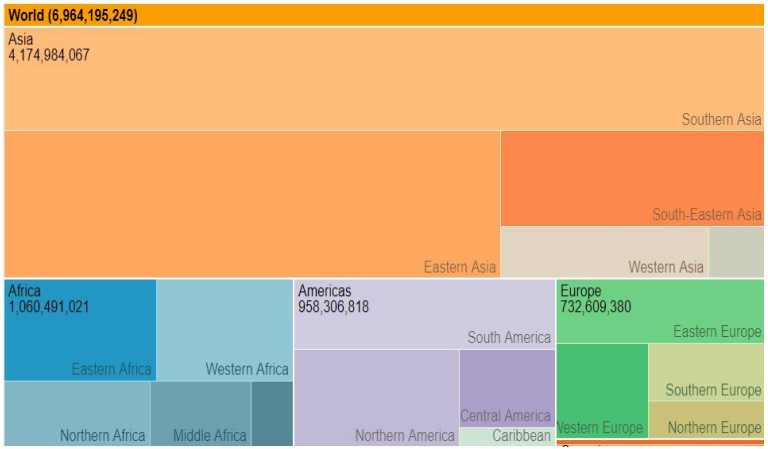
The x-axis would be the time of day and the y - axes the quantity.

Block level comparison of water consumption

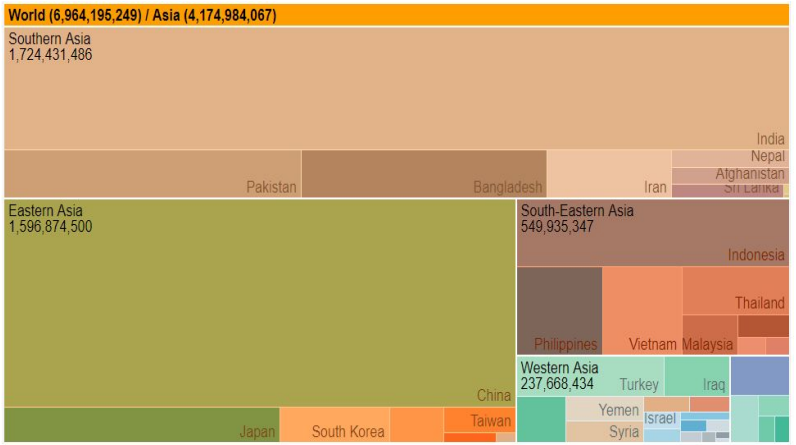
The Zoomable Treemap gives an option to visualize the block level comparison and then drill down to resident level from there.

http://bl.ocks.org/ganeshv/6a8e9ada3ab7f2d88022

All Blocks



On click of any one block



Demand vs Time - Raw , Treated, STP

Comparative charts of three parameters with respect to time. The idea is to get all the three parameters visualized with respect to time at the same screen

Hot Water component added after the discussion on 3/7/2018

Time Wise comparison

https://www.highcharts.com/demo/synchronized-charts/grid-light

Month Wise comparison - Not required

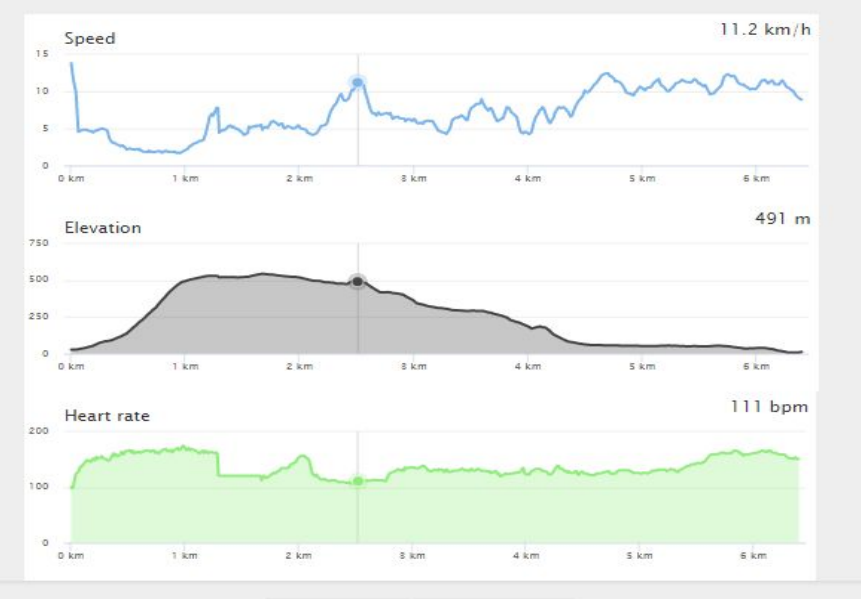
https://www.highcharts.com/demo/column-basic/grid-light

Demand vs Time - Raw , Treated, STP

Time Wise Comparison

Month wise comparison - Not required

Hot water component addition as 4th



Borewell Utilisation: Overall Average and Current week

A sparkline chart will give a clear idea of all the borewell performance and their trends with their performances.

If required, the current week's numbers are to be shown as each columns.

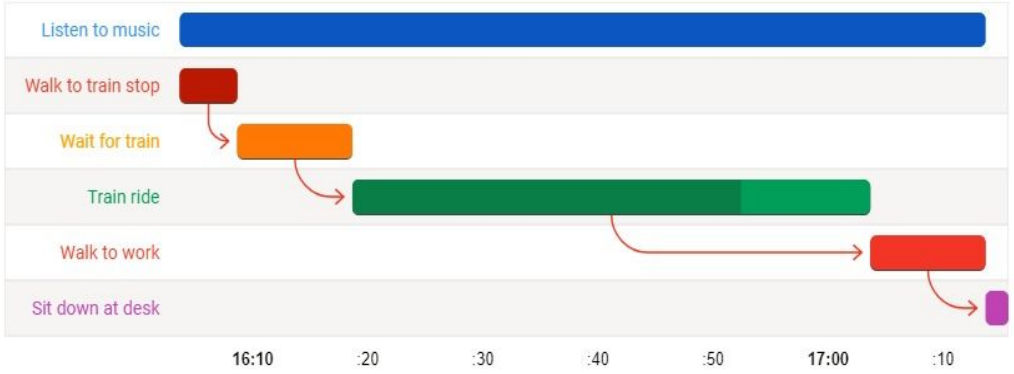
Team Member	Total Tasks Completed		w1
Julie		▲ 46%	13
John		▲ 45%	11
Jabba the hut		▼ -20%	15
Johnson		▲ 6%	18
Jeremy		▲ 43%	14
Josh		▼ -33%	15

Pump Utilisation - ON/OFF states

A Gantt chart is required to show the ON/OFF states of a pump along with the number of hours it has run on that interval.

Points to note:

1. No arrows required.
2. ON/OFF states at intervals
3. No. of hours run as text



High Users Ranking

Bubble charts can be a good option. Can be categorised for each blocks as well. This can easily highlight high consuming users.

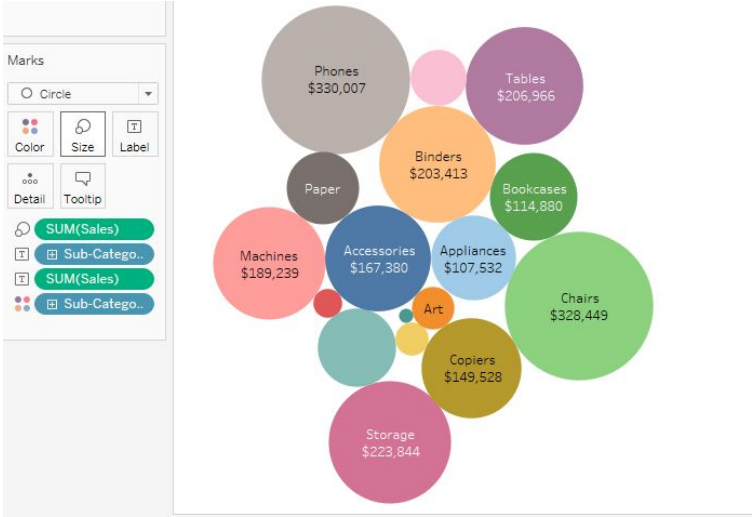
Examples and samples references

https://bl.ocks.org/mbostock/4063269

Clarifications:

1. Time ? Is it overall? Current week?

Time measure to be added as filters



Tasks and End results - Macro level

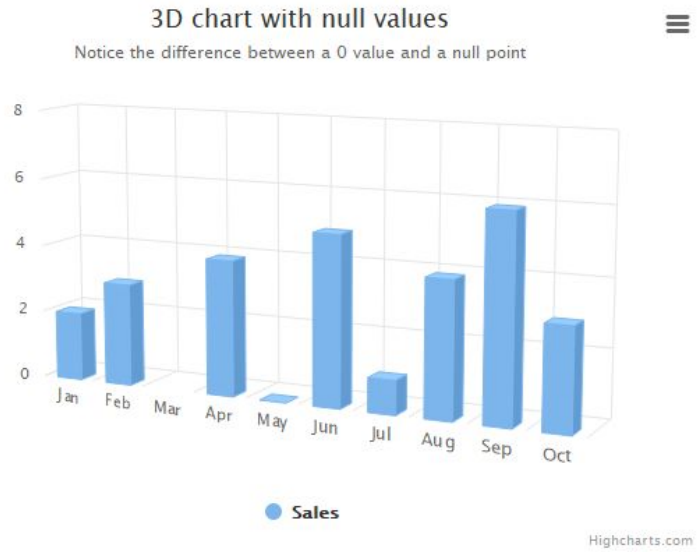
Tasks	End Results	Review/Approve
Understand each problem statement and define corresponding visualizations	Sample visuals correlated to each problem	Sandeep,Mohideen
Angular app to be installed and sample tested once with all dependencies and plugins	Run and Test app and discussion of a full app walk through	Sriram
App is reviewed to identify screens/layouts/filters where the visualizations fit in and design the screens accordingly	Screen Mock up for each visualization	Sandeep,Mohideen
Preparation of request and response json data for the api call by understanding data availability	Request and response json for the api call	Sriram,Sandeep
Develop the visualizations in the Angular app with sample data	Angular app local version with the visuals integrated with sample data	Sandeep,Mohideen,Sriram
Integrate the visualizations with the API.	Angular app local version with the visuals integrated with API data	Sandeep,Mohideen,Sriram
Review and Testing of all cases for each visualization	Test cases tested and their results	Sandeep,Mohideen
Support for bug fixes and minor changes in requirements during testing	Maximum bug free and deployable app	Sandeep,Mohideen,Sriram
Final deployment and after deployment support as expected (usually a month)	Functional visualizations in app with live data	Sandeep,Mohideen,Sriram

User Dashboards - Not in Scope now

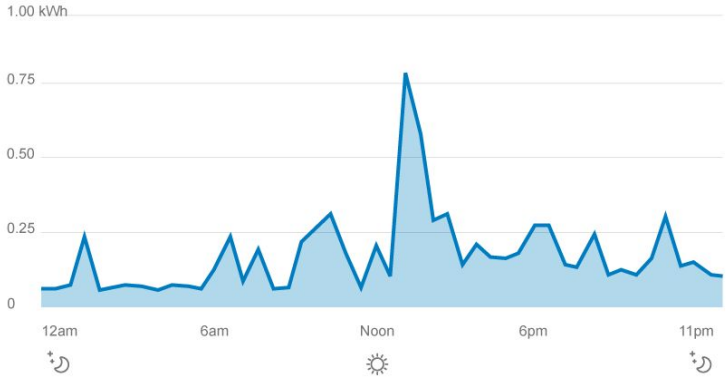
Meant for consumers to check their usage levels

Usage log for Users - Day wise and Month wise

Month wise



Time of Day wise



Abnormal Usage alert for Each User

Based on thresholds the changes are shown in the visualizations

Examples and samples references

http://bl.ocks.org/brattonc/5e5ce9beee483220e2f6