Optimize the Main Running Water Supplier of the City by the Help of New Data-Based Framework Focusing on Control and Maintenance

Data Definition

❖ Consumption:

- Costumer segmentation based on volume of water usage.
- Costumer segmentation based on Geographic localization.
- Costumer segmentation based on costumer cost to the company.

❖ Encountered problems

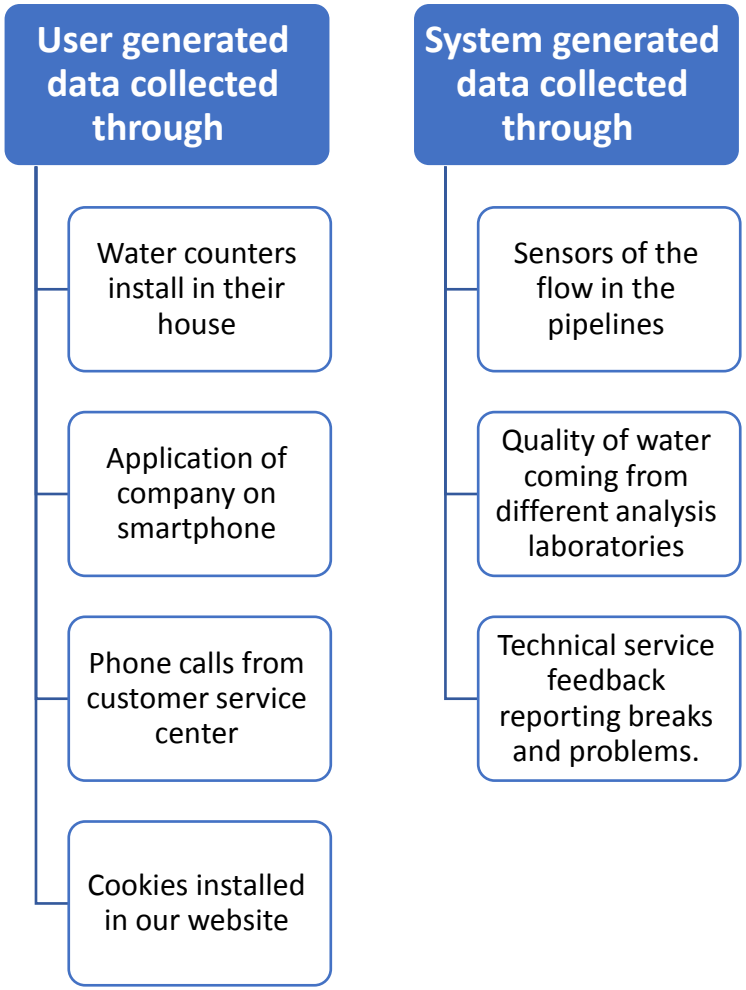
- The frequency of water cuts should be Identifying.
- Finding out where and when “Rationalization” of water consumption might occur.
- Finding out where and why Pipelines breaks or water floods might occur.
- The main sources of encountered problems should be segmented.

❖ Relationship to the costumer services

- Frequency of contacts
- Segmentation of happy or unhappy costumers based of geographic localization
- How fast and responsive the company’s action was.

Data Source

This process would be divided in two section



Data Usage

- **Smart counters:** understanding flow, habits of our customers, time of peak or the bottom water usage.
- **Applications:** identifying new needs problems and demands of customer.
- **Costumer Service:** identifying the need of costumers who do not use the application.
- **Sensors:** allowing us to identify the hotspots after installing them on pipelines.
- **Laboratories:** informing us about the water quality and noticing about the seasonal quality problems.
- **Technical service:** identifying the main source of problem can be happen after receiving feedback.

Values and Availabilities

	Data value	Data availability
smart counters	5	2
Applications of Smart phones	3	5
Costumer Service	4	5
Website	5	5
Sensors	5	2
Laboratories	3	5
Technical Service	5	4

Data priority