SonSetLink™

A COMPLETE PUMP MONITORING SOLUTION

BACKGROUND

SonSet Solutions has pioneered a satellite-based, remote monitoring technology for clean water systems. SonSetLink is now a mature, end-to-end platform, bringing data from “the pump to your palm," with new use cases being added regularly. Using tailored edge devices and onboard sensors, SonSetLink collects pump performance data from hand pumps and solar-powered pumps alike. The data is transmitted via satellite and made available on our mobile app and ArcGIS Dashboards on the web. We now have edge devices for India Mark II, Afridev, LifePump, and any solar-powered pump system. We all need better data. Better data informs your decisions, allows you to better allocate your resources, and ultimately improves your ministry to the people you serve. SonSetLink gives you this data, and our online dashboards and mobile app make your data actionable.

EDGE DEVICES

Measures water presence and handle motion

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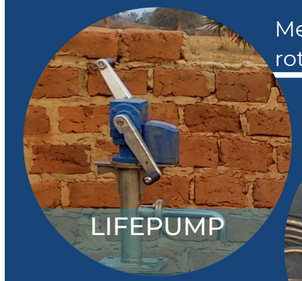
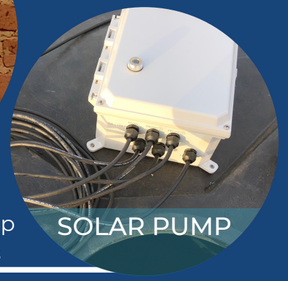


Measures handle rotations



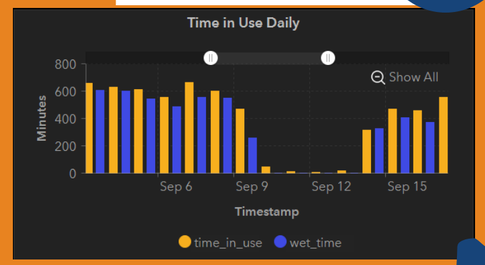
Measures flow and up to four other sensors

DATA ANALYSIS AND DISTRIBUTION

Dashboards easily display and analyze data

Customizable notifications via text, and email

Data that allows for predictive maintenance



EQUIPPING MINISTRY WITH SonSetLink

Minimize pump down time, inform need assessments and maintenance decisions

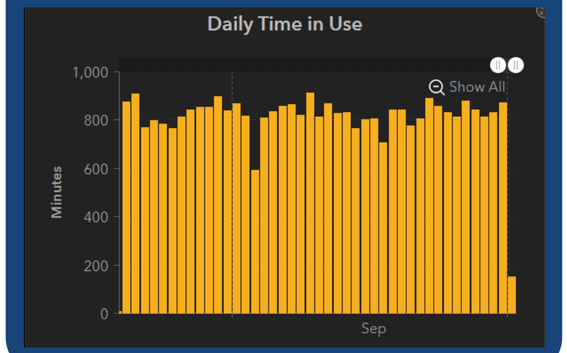
Communities have continual, unbroken access to clean water

Trust and relationships are strengthened, opening the door for the gospel

Increased engagement and accountability with donors

LIFEPUMP CASE STUDY

A village hand pump is most often used by women and children during daylight hours. However, when a LifePump for Kayenda in rural Malawi had a monitor installed, the data revealed that the surrounding clean water sources were inadequate for the size of the village. The graph below shows that the LifePump in question was, in fact, being operated for 12-15 hours per day. This indicates that neighboring villages were likely using this pump as well, requiring people to travel even at night to get water. The relevant stakeholders were informed of this situation.



AFRIDEV CASE STUDY

Pump efficiency can be determined and pump failures predicted with just two data points: “time in use” and “wet time”. This graph, from an Afridev pump, shows that on September 9 the amount of “dry time” (Dry Time = Time in Use – Wet Time) increased significantly just before a pump failure. On Sept 10-12, people tried in vain to get water, but the pump was broken. Efficiency metrics like this not only help to predict failures, but also indicate when human effort is lost, and pinpoint where failed pumps are located. SonSetLink will notify a stakeholder when the percentage of Dry Time compared to Time in Use is increasing so that repairs can be scheduled, making the best use of labor, time, and money regarding maintenance decisions.

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