**Intoduction**

Water is one of the primary sources of survival for all life forms on earth. A lot of our day to day activities such as bathing, cooking is dependent on the use of water. Water plays an important role in the world economy. Approximately 70% world is freshwater that used by humans goes to drink and etc.

The world is increasingly looking forward to adaptation and use of new technologies to improve quality of life as well as reduce impact of human activities and consumption patterns on environment. Availability of water, its increasing demand from urbanization and growing population in cities, cost for management of water transmission, storage informatio, distribution and billing for consumption with pay fee are serious issues in. underdeveloped and developing countries. Rapid changes in lifestyle and increased paying capacity have impacted. the end-users of water and related overheads on monthly.

Therefore, this study investigates and identifies the change of flow of the water through a microcontroller system for telemetric measurement of water consumption using IoT and web technology. The system collects data from a water meter, which is equipped with a flow sensor, and sends information over the internet to a server such as Firebase for storage and presented through the website to get live data of water usage.

Also, the authorities’ user can see the changes in the flow of the water used. via Dashboard, and is presented the real-time monitoring system. the old manual system is ignored that was to go to every the end-user water. also, for The users, an invoice will be sent each monthly.

**Motivation of the study**

This study of Smart water monitoring and data collection to end-user consumption using IoT and web technology.

We are encouraged to do this system, when we saw the water companies of challenges, that is the collection of data users water usage and The cost for management of water transmission, storage information, distribution, and billing for consumption with pay fee are serious issues. and also The manual system to be used by more staff in collecting the information for each end-users, High-cost workers are also paid.

There is also the staff who do not accurately record the number of hours or the flow of water, which is another challenge.

If this system is used by water companies. there will be ignored by more employees to collect information, then the high cost will be reduced.