The internet of things in water resources management for South Africa

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Abstract
This paper reports on potential applications of IoT technologies that could contribute to water resource management in South Africa. The authors visited South Africa's Department of Water and Sanitation website and the South African government website on S.A. water affairs to gain insight into water resource management in South Africa. From this information the research then identified areas in which IoTs can be adopted. These areas have been categorised as water treatment, water conservation, hydrology, meteorology and environmental monitoring. A literature review was conducted to identify applications of the IoT that fall into the categories presented above. The purpose of the paper, therefore, is to showcase the potential of IoT as a possible contributor to sustainable water resources management in South Africa. This is in line with South Africa's Department of Water Affairs and Sanitation's mission of "leading effective management of the nations' water resources to meet the needs of current and future generations." The question that this research answers therefore is, "What IoT technologies should be adopted in South Africa to make an impact on water resources management?"