An Internet of Things Smart Washroom Framework

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Abstract : This research report will look at how to make a smart washroom to increase public hygiene and cleanliness. The system would use IoT devices to pick up various activities in the washroom and notify the appropriate stakeholders or devices to regulate the condition of the washroom. As more people are required to physically go back to the office or school, ensuring a clean and sanitized washroom is even more important now than before. It would help prevent virus outbreaks and safeguard the organization from shutdowns or slowdowns in their business. A framework of the suggested smart washroom was introduced to help reduce the chances of a virus outbreak. Most organizations outsource renovation or implementation to an external party. Using the smart washroom framework, we looked at vendors that provide smart washroom solutions. There are IoT vendors that cannot match the framework, and there are vendors that can support the framework design. This segment is a niche market, and most of the devices are similar in their basic functions. However, all the vendors have unique characteristics to give them a competitive advantage over the rest of the IoT washroom companies. Ultimately, the organization would need to decide if they want to add IoT devices to enable smart capability or renovate the washroom to create a fluid IoT smart washroom design. The report would introduce an IoT smart washroom framework to help organizations design a cohesive preventive measure network for the daily maintenance routine. The framework is designed to help understand how to manage washroom cleanliness more efficiently and to provide guidance in achieving this goal. The leading result is eliminating potential viral outbreaks that could jeopardize the organization.

Keywords : IoT, smart washroom, public hygiene, cleanliness, virus outbreaks, safeguard

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