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Analyzing the Audience

Characteristics of the Audience:

The assumptions I am making about my general reader is that they are interested in learning more about smart objects but don't have technical background about the working of the same. This article will help them be better informed about smart objects, use of smart objects in their product. The audience of my informational piece is a healthcare facility owner and they are looking to understand what a smart vitals monitoring system is and how one can be built. The person presenting the idea is a healthcare device manufacturer.

Informational Piece:

Hospitals do have a lot of services based on RFIDs like patient tracking systems, asset management systems, etc. but these RFID fitted devices have a lot of downsides to them like restricted application area, lack of coordination with other services and thus having a very small application area. Smart objects take away those pitfalls by being connected through a network of services. What is a “smart object”? A smart object is a device that can act according it’s input. Smart objects are “aware”. Simply put they can be categorized as being those which know what activity to perform, certain set of rules they are programmed with and perform activities according to those and the ones which represent the output based on input thus being aware of the interaction. The way they work is by having sensors or chips which are connected to the internet. The data collected can be sent to doctors, nurses or the patient's kin. Sensors can make you informed as a provider.

Everyday we can see some breakthrough in the medical field so a real-time vital monitoring system would be a device which can keep up with such a fast evolving field [1]. In healthcare a smart vital monitor for a hospital admitted patient would serve a similar purpose. Being a smart device the monitor will possess the ability to make decisions based on input and interact with the user by generating feedback. The feedback in our case would be like an alert system on vitals changing to non-desired levels [1].

A vital monitoring device will be fitted with different types of sensors and will record and compute in general the heart rate, respiratory rate, weight changes, sleep cycle, blood pressure etc [1]. The device can be configured with a range of acceptable values for all of the above parameters. If the device observes inconsistency in the values rapidly it can alert a nursing staff to tend to the patient.

Usage of this device will improve the quality of patient care standards followed by a hospital, reduce human error, and optimize the admittance to relieving process. Around holidays nursing and physician staff might be scarce and limited in those scenarios particularly these smart vital monitors can come in handy. I would like to conclude by stating that this real-time monitoring framework can cater to challenging scenarios in patient care.

References:

[1] P. Jangra and M. Gupta, "A Design of Real-Time Multilayered Smart Healthcare Monitoring Framework Using IoT," 2018 International Conference on Intelligent and Advanced System (ICIAS), 2018, pp. 1-5, doi: 10.1109/ICIAS.2018.8540606.