Research The Need

ASSIGNMENT

Research the Need for one of the following products/designs/systems:

- A sensor system designed to detect Carbon Monoxide (CO) at harmful levels inside an automobile, near incoming air vents where CO is most likely to enter the vehicle.
- A network of multiple temperature sensors designed to track the temperature in the cargo/rear compartment of an SUV and set off a warning or alarm when the temperature remains too high for too long (thereby affecting the safety of a pet in the vehicle).
- A humidity sensor installed near a wood stove or other wood burning appliance in a home designed to detect moisture levels in the air at low enough levels that respiratory function for people or pets may be impaired.
- A sensor that detects whether or not safety goggles are being worn in industry situations where such goggles are required for safety.
- A sensor (and system) that reads the force of an impact to the head in order to determine if someone is at risk of having received a concussion (as applied to football players, bicyclists etc.).
- A portable sensor system for airline travel that analyzes air quality in terms of known harmful parameters (e.g. particulate concentration, hydrogen sulfide concentration, fuel vapors, etc.).

Based on your research, (and including at least five highly credible sources to justify your research), make a case for or against the need being significant enough to address with a new product or engineering design. Include the potential number of users (how many people own the product or type of space in which you are considering installing the sensor or sensor system), environmental or other regulations that might mandate the need for the sensor, current sensors and systems in place to address the need, and any market research that would support additional development of sensors in the chosen application area.

For this assignment, submit a response that is a minimum of one page long, single spaced, with 1" margins and font no larger than 11 pt. The length requirement does not include title, graphs, figures, extra white space, or other additions that are not text.   Engaging photos or other figures are appreciated, but should be cited appropriately to give credit to the author/creator of these visual aids.   Sources should be cited in APA format and a formal APA bibliography should be included at the end of the document (not included in the page length limit).