# Smart object

The smart object is a device that has at a minimum the Following four defining character.

## (1) Processing unit

A smart object has some type of processing unit for acquiring data, processing and analyzing sensing information received by sensors, co-ordinating control signal to any actuator and controlling a variety of functions on smart object including communication and power systems.

## 2) Sensors and Actuators

A smart object is capable of interacting with physical world through sensors and actuators, the sensors learns and measures its environment, whereas an actuator is able to produce some change in physical word.

#### (3)Communication device

The communication unit is responsible for connecting smart objects with other smart object and outside world (via Internet) Communication device for smart object can be either wired or wireless

## (4) Power Source

Smart object has component that need to be powered. The most significant power consumption usually comes from the communication unit of smart objects.

### Classification of Actuator:

- 1) Electric Linear
- 2) Electric Rotary.
- 3) Fluid power linear
- 4) Fluid power Rotary.
- 5)Linear chain actuator
- 6) Manual linear
- 7) Manual Rotony