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# A OFFICE AUTOMATION SYSTEM USING PICONET AND GSM TECHNOLOGY

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## ABSTRACT

*The main aim of this technology is give security and curtail time management problem in the offices. In regular day to day time peoples are abiding the problem in the offices. The main aspiration of this technique is only that to curtail people problem regarding office time management system .Aim of this technique is only that to decode the management related issue and give some security to the office cabin. For precaution purpose we are using HX-711 and piconet technology.*

***Keywords:-RFID, Piconet , RS232 , HX-711 ,etc***

## I INTRODUCTION

Now-a-days, in our day to day, people abide many issues related office automation system. Abnormally in the high professional multinational companies the issues of office management system is the huge need. Many times a employee/office member like Boss , HR or any other office employee come in the office after that work is being started like office open , cabin open and room management as well as it checks the cabin ventilation . To reduce the time on this regular work is the main moto of this paper through smart intelligence system.

## II HISTORY

We have seen in the office when main office chair person has come in the office cabin then he will open the door then light, fan and AC. For regular routine, it is time consuming process. But using this Technology we can easily handle the time management through the smart techniques. Proper time management in the office and employee will give more time for work rather than avoid this silly things is main intension of the paper.

## III SYSTEM DESIGN

In this ,When Employee will enter in the office then via RFID he/she will recognized it. After that control room send the message to the particular their cabin or room to automatically lights on and it checks cabin ventilation also through sensor . When Employee will seat on the chair then Fan will be on as per employee requirement. It is possible with the help of using the HX-711 Sensor.

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## IV DIAGRAMS

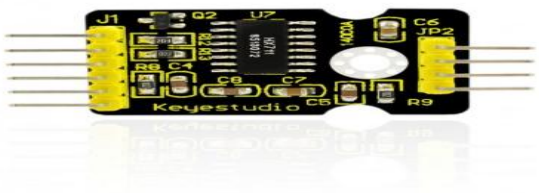


**Fig. HX-711**


Fig. Architectural Diagram

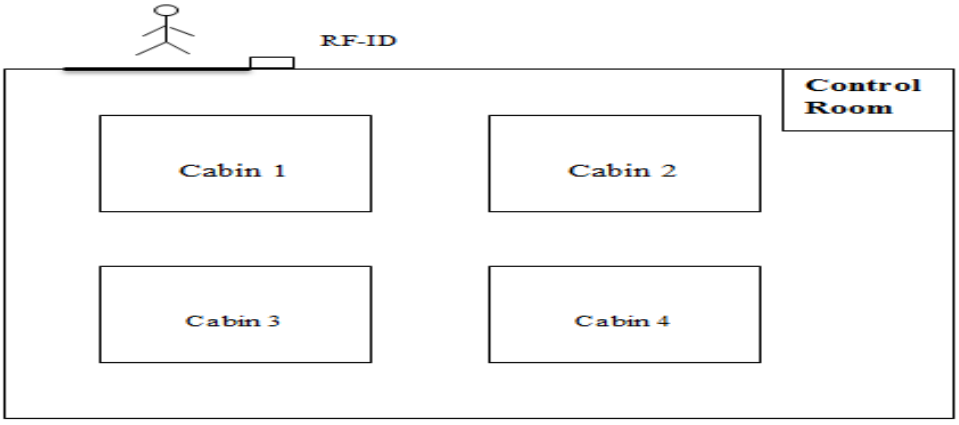


Fig. Structural Diagram

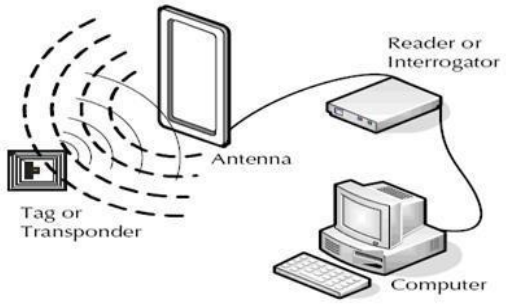


**Fig. RFID**

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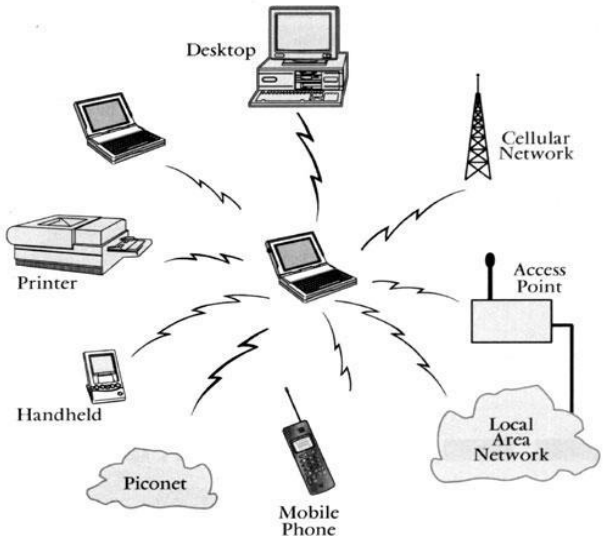


**Fig. Piconet**

## Sensor

### HX-711

HX711 is a 24-bit analog to-digital converter (ADC) designed for weight scales applications to interface directly with a bridge sensor

**Features**

Two selectable differential input channels On-chip active low noise PGA with selectable gain of 32, 64 and 128 On-chip power supply regulator for load-cell and ADC analog power supply.

On-chip oscillator requiring no external component with optional external crystal On-chip power-on-reset Simple digital control and serial interface: pin-driven controls, no programming needed selectable 10SPS or 80SPS output data rate Simultaneously 50 and 60Hz supply rejection Current consumption including on-chip analog power supply regulator:

Normal operation mode < 1.5mA, power down mode < 1uA

Operation supply voltage range: 2.6v to 5.5V

APPLICATIONS of HX-711:- Weight Scales and Industrial Process Control.

### Piconet

It is an ad-hoc network which communicates a wireless user groups of devices. It consists of two or more devices occupying the same physical channel. Piconet range varies according to the class of the devices. Data transfer rates is about 200 to 2100 kilobits per second It allows one master device to interconnect with up to seven active slave devices. Up to 255 further slave devices can be inactive, or parked, which the master device can bring devices into active status at any time but an active station must go for parked first.

### RFID

Radio-frequency identification uses electromagnetic fields to automatically identify and track tags attached to objects. In this it is used for identify our object i.e. Man/woman is as shown in fig. It is also used to store data

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electronically.

**RS232**

RS-232 is a standard for serial communication transmission of data. It defines the signals connecting between a DTE such as a computer terminal and a DCE. RS-232 is impeded by low transmission speed, large voltage swing as well as large standard connectors. It is used for networking system.

**GSM**

It is used for communication purpose only.

## V Result

With the help of this technique , it will help to reduce the time for regular daily work in the office as well as office Employee also.

Performance ratio of this technique is

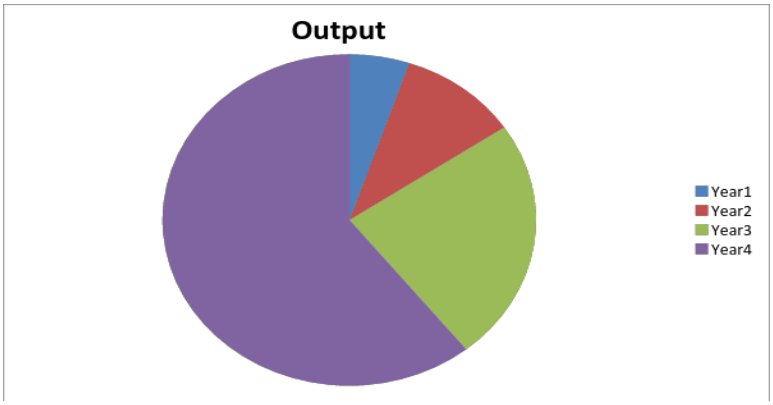


**Fig. Result in chart Format**

## VI CONCLUSION

It is concluded as ,It reduces the employee work and manages the time of daily routine work.

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