International Journal of Interdisciplinary Innovative Research & Development (IJIIRD)

ISSN: 2456-236X

Vol. 03 Issue 01 | 2018

IoT (Automobiles)

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ABSTRACT

As technology has been moved towards automation it is a principle to make our lives easier few things are to be explicitly done by us. Technology has made human being lazy but still there are many people who don't use automated things they think that it is good to do things buy us whatever may be the effect there is no doubt that automation is the future it will be happening the most significantly is right in our home .

Keywords: Big Data, IoT , Embedded , automated , remotely , monitoring , diagnostics

1. INTRODUCTION

IOT has been used in our daily life and it is going to change the world in future. Example, people put an alarm for reminding us the work we need to do, for scheduling many things such repairing ,updation etc. Data analysis also help metropolitan and cosmopolitan cities to manage traffic management, pollution control and other major function efficiently

Upgrading it to the next level the device linked that help everyone to get alert from refrigerator that vegetable tray is empty. It also helps to ON AC before you are reaching home, it helps to open door if someone is waiting out before you reach you can open door by connected device . There is massive change or update in the devices day by day, the amount of data will be generated would be large amount of data.Big Data and IOT go hand in hand.

Big Data manage large amount of data generated using technologies. The Internet of Things(IOT) and big Data are essential things in commercial ,industries and many other application. Big Data refers to the world of machines or device connected to the Internet. The large amount of big data is collected ,stored and managed. Big data is use to produce the result. The aim of IOT and Big Data is to analysis the data for consumer activities in order.

In future the things that are done by us will be done by automated device such as coffee machine, when you wake and you shower knowing the weather outside and adjust the temperature of water accordingly and now we have moved towards technology to achieve all that has been around for a while and has become affordable .It is not so shocking that many automated things are happening in the word.

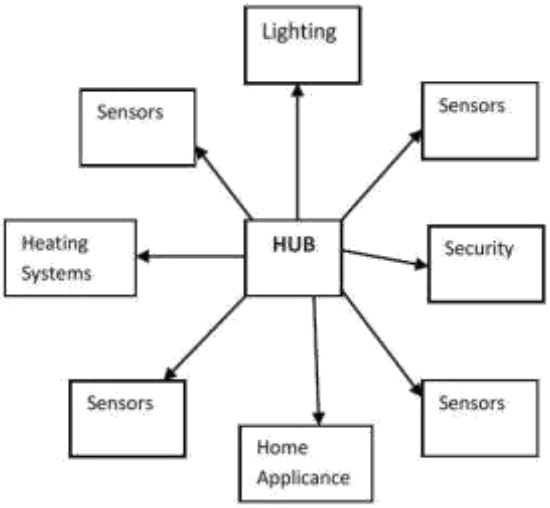
2. HOME AUTOMATION SYSTEM

Now cell phones and instrument for automation and controlling things for electronic objects with the help of hardware device that are remotely controlled. People who usually don't use automation device the start simply with ON or OFF of the device. But when people start using smart device and start using internet to record and analysis usage of patterns of devices .People using the automated device to reduce the electric bill and energy expenditure.

While setting up a home automation system, the best place to start investing in is your personal nuisances, for many people, the most obvious problem is their electricity bill, so most people purchase a few smart lights as their first home automation product. Or if you are the kind of person who is constantly paranoid about whether they left the geyser on, smart switches would ease your paranoia. From there, you slowly build up a full lighting system that can be remotely controlled and would respond to human presence, or an automated home theatre comprising a smart TV with smart ambient lighting.

Any smart home automation system today is generally a central hub that can be configured to control a bunch of smart devices, sensors and switches, all of which communicate with the hub using certain communication protocols. The hub, in turn, is instructed through an app or the web. The main takeaway is the distribution of monitoring and computing functions between the hub and the remote app. For example: in smart

lighting system, a hub would act as the central interface between multiple smart devices, say, a bulb and a door contact sensor.



The smart devices and hub communicate using certain common communication technologies, and an app would be used to control the lighting system. If you are still unclear about the role of the Hub, you can draw close parallels between it and a standard Wi-Fi router. In simple terms, both are devices that route signals from multiple sources to one another. In a few products, the hub and router are integrated together, thus reducing the need for two devices. However, in the cases when are separate, the hub, which needs to be internet enables to function, is connected to the they router, so basically, a smart hub provides a centralized method to control all your smart devices, as they can connect all your devices to the cloud and consolidate all apps into the one provided by the hub manufacturer.

3. IOT IN FUTURE

The connected cars with the help of 5G Network the sending and receiving messages will be 10 time faster. The global connected car markets is 5.1 Million units in 2015 and expected 37.7 million units by 2022. In new era of growth for connected cars globally the adoption of telematics units and advances in tech with emphasis on driver and passenger experience along with safety and cyber security are ushering. For such vehicles India is expected to emerge as huge market. Only few cars are connected with embedded system. The Mask adoption of technology with smartphones can happen fast provided we are comfortable with price tag

3.1 Safe Driving

The insurance company can offer incentive to drivers to drive well in return for low premiums with the help of connected cars. Our roads will make driving experience more improving and safer. To evaluate and improve their driving skills drivers can use this information. With the help of Big Data the car will soon help you someday to soon wakeup early to remind you that if you don't reach office early because you will deal with more traffic. With Data from each vehicle adding up The Big Data will bring in more predictability in traffic management.

3.2 Predictive Maintenance

Drivers and fleet managers provide inputs for diagnostics of vital vehicle leading to detection of issues which can turn into major problems. With hassle free driving as well as improved mileage the vehicle breakdown will reduce. Well maintained vehicles also minimize emissions.

3.3 The Data Opportunity

Single connected vehicle has the potential to generate more revenue than 10 conventional non connected vehicles it is according to recent research. The market share of OEMs not based on units sold but on data generated per vehicle and data revenue. IoT context in case of Data monetization is infancy and plenty of actions on this front to see in near future.

4. CONCLUSION

A connected car can dig into its database to come out with suggestions on your favorite number or best route available to pick up your child from her piano class every Friday. With the arrival of 5G, connectivity issues will be a thing of the past. 5G will enable connected cars to send and receive messages faster (up to 10 times a second). 5G will also enable more situational awareness and provide advance warning in case any roadblock or hindrance were to appear on the road you are driving on thereby giving you more time to react.

5. REFERENCE

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