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IOT WITH ADVANCE USES AND LIMITATIONS OF SMART OBJECT

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ABSTRACT - This paper is based on internet of things (IOT) and IOT is a type of network of physical devices, vehicles, software, sensors, actuators, and network connectivity that enable these objects to collect and exchange data in less time. With help of this paper we can discuss about advance uses and limitation which is very helpful in today life. There are number of research paper are published in the field of IOT. This research paper is very helpful for future authors to do their research in the field of IOT.

Keywords: Physical devices, actuators, sensors, vehicles

I. INTRODUCTION

Internet of Things (IOT) refers to devices or smarter objects that are connected through the inter-networking between devices, like your smart watch, Smart Bands, or even your car. These devices are able to collect and transmit data by means of the Internet. Smart, connected devices are already indicate how fast this sector is growing and what will be an impact on future. IOT includes the technologies and solutions that enable integration of data and facilities into the informative networking technologies. It connects all things with internet, so it called "the Internet of smart -objects". It enables the user to communicate with other users in less time. IOT describes a technology which allows the internet to reach out into the real world of smart objects. It provides the connectivity to everything. With the help and by using IOT, people can easily communicate anytime at any location. It gives us the ability to communicate with real world in interactive way. It maintains better relationship between human and nature and forming intelligent entity by managing society of human and system of physical objects. IOT helps in Dynamic control of industry and daily life, Improve the resource utilization ratio and acts as technology Integrator. Technologies integrator. IOT has become more relevant to the practical world due to the growth of mobile devices, embedded and cloud computing and data analytics.

II. RESEARCH METHODOLOGY

IOT is basically based on the concept on wireless communication between smarter objects. Internet of Things (IoT) is a concept and a paradigm that considers the environment of a variety of things/objects where wireless and wired connections and unique addressing schemes are able to interact with each other. Moreover, in this world the real, digital and the virtual are converges to create a smart environments. It connects any device to the Internet and to each other. This includes smart phones, cars, washing machines, earphones, wearable devices. This also works same to components of machines as it works for devices, for example: with the help of nodes to connect with gateway and provide cloud access to different type of devices like laptop, desktop and smart phones.

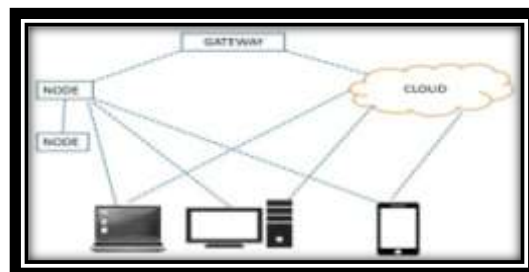


Fig. 1: Access Data with help of IOT devices

III. DATA ANALYSIS

We have collected data related to various kinds of technologies in field of IOT and it helps the future author for further type of research.

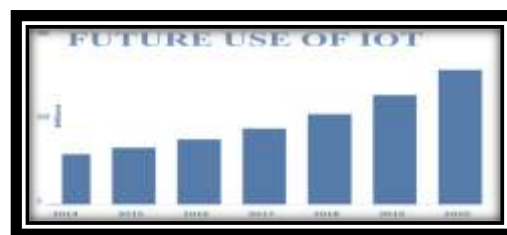


Fig. 2: Future Of IOT



IV. EXPERIMENTAL RESULTS

4.1 ADVANCE USES OF IOT



Fig. 3: Uses of IOT

1. Automotive: It supports automotive applications and help to communicate data with user.
2. Trading: IOT supports marketing and helps to user to easily new investment in sector of marketing.
3. Education: In this sector, IOT helps teacher and students to share their views and find new type of technology in less time.
4. IT & Networks: It is the backbone of IT network without IOT it is not possible to communicate data with other devices and maximum Companies support the IOT things to communicate data with another organization.
5. Military: The large demand of IOT in defence sector, it helps military to do research of new type of weapon.
6. Farming: In the sector of farming, it helps the farmer to adopt new type of farming methods which helps the farmer to increase the growth of crops.
7. Energy: With the help of IOT, we can convert electrical energy into mechanical energy.
8. Health: In the sector of health, its demand is very high .It helps the doctors to detect incurable diseases which are not possible with traditional machines.
9. Retail: It also supports retail market without IOT it is not possible For user to buy and sold any type of things in today's market.

4.2 Limitations of IOT

1. Secrecy concerns: The information to be transferred can be accessed by government organizations and hackers. This might not only part with the privacy of the concerned individual, but also pose a security threat to the same. The personal information might get passed to the non-intended recipient, which might get misused and eventually cause security breach. After all, no one really likes to get watched all the time .In this case, network security devices such as network guards and firewalls, are essential to meet the security requirement. The adoption of technology specifically designed to prevent information leakage is also necessary.

2. Cyber threats: The interconnection of various types of devices can make it much easy for a malware or worm to spread via the whole interconnected system and it will affect the security. These kinds of devices can easily become a victim of security attack. A hacker can easily change the operation of any device and cause physical damage to the whole system.

3. Unsolicited intrusions: Data transferred through the IOT can be leaked. This will be a threat with the personal privacy of the individual and become a threat to public security. It is very essential to ensure security of private data to be transferred. Security protocols can be used to provide an effective solution to the private data.

4. loss of jobs: IOT will have a destructive effect on the employment of workers. For example, people who maintain accounts will lose their jobs because devices can not only communicate between each other, but transmit that information to the owner. One example of it is ATM.

V. CONCLUSION

In this paper we find out the advance uses of IOT which will be very helpful for the future generation .In this paper, we have discussed working, different types of uses and limitations of IOT. This research paper will be helpful for the future authors to implement new research in field of IOT and find out new ways of communicating with smart objects.

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