

# A SURVEY ON IOT:CHALLENGES AND ISSUES

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## Abstract

Internet of Things is the Connections of inserted innovations that contained physical articles and is utilized to convey and insightfulness or cooperate with the internal states or the outer surroundings Rather than individuals to individuals correspondence, IoT accentuation on machine to machine correspondence. This paper familiarizes the status of IoT growth In India, and also contains security issues challenges .Finally, this paper reviews the Risk factor, security issues and challenges in Indian perspective.

**Keywords**—Internet of Things (IoT), Challenges, Interoperability, Authenticity.

## I. INTRODUCTION

In the ensuing coming years, it will have most essential consequences for plans of action, framework, security, and, exchange gauges, amid the total IT registering and organizing frameworks. The Internet of Things is another light of innovation movement in the beginning times of market development. IoT can possibly accelerate the "sharing economy". So as offering new strategies to oversee and follow minor things, it will likewise permit the sharing of new, minor and practical things outside the networks, flying machines, autos and motorbikes. As it patterns go on, it will offer solely novel applications that will drive new business models and benefit prospects.

It pushes devices and sensors to more granular levels and enables the creation of new uses, new applications, new services and new business models that were not previously economically feasible. It will also dangerous for lots of current industries. Today, in worldwide IoT Technology is among top 5 technologies according to Gartner's Chart. That means, It is highly used in different sector in different role either it is in smart homes or vehicle tracking, kids and old age peoples monitoring or daily routine job. However at present the actuality is that these segments hire several IoT enabling devices, and future is already fragmenting of the new revolution.



Fig 1: Scope of IoT

## II.ROLE OF IOT IN INDIA

Activities are finished by the Government for supporting condition, great expectations for everyday comforts and expanding endorsement of brilliant applications assumes the essential jobs in the development of market. COMSNETS in 2015 [1] report says that Government consider to put resources into IoT for creating rough 100 Smart urban areas its assessed proposed cost is Rs.7060 centers'



**Fig 2: Future of IoT in India**

Albeit as per Indians prerequisite, IoT item are valuable in every area and different organizations put resources into heaps of division and this rate is increment step by step [2], but focus on Smart Water Management, Smart Environment, Healthcare, Smart Agriculture, Smart Waste Management, Smart Safety, Smart Supply Chain, etc. Supporting environment and Indian Infrastructure like power supply, poor pollution, extreme temperatures, high levels of humidity and dust, No clean and poor telecom coverage. The most noteworthy evaluated need venture by Indian Government is Digital India Program which is utilized for support of digitalization, and makes India as an advanced enabled nation and learning economy, is relied upon to give the expected inspiration to extension of the IoT productiveness environment in the nation.

### III Challenges of the Internet of Things

#### A. Security:

Security is important of the Internet while the major challenge for the IoT. As the time goes the trend of IoT blow up from millions of devices to tens of billions. As expanding the quantity of associated gadgets, the opportunity to misuse security vulnerabilities is additionally increment, as in shoddy or low standard planned gadgets, because of fragmented information streams the odds of information robbery is expanded by which individuals' wellbeing and wellbeing can be dangerous. Numerous IoT plans will likewise incorporate accumulations of comparative or adjoining comparative gadgets. This homogeneity grows the potential effect of any single security shortcoming by the complete number of gadgets that all have similar highlights.

#### B. Privacy:

As Authenticity, trustworthiness and Confidentiality are important aspects there are some other requirements also important like discriminatory access to certain facilities, preclude them from shared with other things at certain Times and business communications involving smart objects would need to be secure from opponents'. The information systems are as yet fragile and furthermore expensive in correlation of other created nation. From an Indian point of view, the distributed storage task is still in the developing stage. Transmit the information to a cloud administration for handling, once in a while incorporates an outsider. The gathering of this information leaks legal and regulatory challenges facing data protection and privacy law. In order to realize the opportunities of the IoT, Some new strategies will be required for privacy choices through a broad range of expectations, while still development innovation in new technologies and services.

#### C. Standards:

Absence of standards and documents can assist Senseless activities by IoT devices. Low standard or cheap designed and configured devices have undesirable consequences for the networking resources. Without standards to guide developers and manufacturers, sometimes design products that operate in disruptive ways on the Internet. When any technology have standard development process then it can be easily available everywhere and can used by all applicants, and increase the growth also. While in today's world, global standards are followed by every local station.

#### D. Trained workforce:

Implementation of every technology requires team of skilled persons those have ample knowledge of network, hardware, software and about that technology. And India is backward in this point where manpower think when technology is spread they lose their job and there is no life of new technology. So they don't show any drive to lean about it. So every association face heaps of issue amid their changeover stage from the

inheritance frameworks to IoT empowered frameworks. Similarly Scalability, Fault tolerance and Power supply are also big challenge in India.

#### IV.CONCLUSION

Finally, the future of IoT becomes a worth but massive amounts of data increased its complexity in detection, communications, controller, and in producing awareness but its growth will be increased day by day. Although future of Io will be predictable to be integrated, all-in-one, and ubiquitous. Service organization required to be enclosed in a set of standards. So, As an Intelligent system, progresses of IoT can be decided with the cooperation of interoperability, awareness, skilled, teamwork, energy sustainability, privacy, trust, confidentiality, and security. IoT have become an expected trend of development of information industry. This will outcome in quality of lifestyles. This paper surveyed some of the most important issues and challenges of IoT in Indian perspective like what is being done and what are the issues that require further improvement. Some possible improvements include adding a facility to handle unified, seamless and universal internet connectivity, standardization, With interoperability. Energy sustainability, privacy, and security are also major point on which research can go on. In the coming years, improving these challenges will be a powerful and bold step for networking and communication in commercial, industrial and academic area.

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