

Impact of IOT on Education System

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Abstract: In current era of digital revolutions, IOT Techniques of educations helped to increase the scope of education, literacy percentage and interest of education in students. It will be economical model for students, working humans. This is Transformation of education from physical -> Video conferencing -> IOT. Traditional education is currently physical one to one teaching and learning model in which both the physical entities has to available and It will be conducted for that during the specific timings. Various ways has been initiated to educate people and make more people literate but there are limitations due to various factors such as money, time availability, physical presences etc. In this paper we have focused on the applications and benefits of the IOT over the traditional education system..

Keywords : IOT, Traditional education system, Student

I. Introduction

IOT means Internet over things. This is new information technology concepts raised in last few years in era of digital revolutions. Things refer to various electronics gadgets available in the world via which they are connecting within the given network infrastructure. It has emerged as concepts by which now different companies are utilizing and implementing. Now a days students learns new items or explorer new topics but those should be available easily, hassle free, economical and without time constraint.

Current Education system

1. Now a days education institutes are required to have infrastructure, transportation and other investments for giving the educations which leads to various issues of increasing the cost of education, burden on the transportations and increase in the environmental pollutions
2. Human resources are physically required at place to provide the education.
3. The revision of lectures not possible every time and it lead to less understanding of the sessions and creates the understanding gaps between the students.
4. Theoretical teaching is given to the students; visual representation is very less this leads to lack of operational as well functional understanding of lessons.
5. The learning via specific lecture will not have alternative to understand different views.
6. It is difficult to learn for students at remote location, working people and different age group people.

II. Changes After Implementation Of IOT

The education will be given in digital way i.e. it will be accessible through various digital gadgets. People use the IOT to get the education from any part of the world which helps to reduce the big investment cost in infrastructure, transportations and pollutions. Human resources are not required physically to present at location for giving the educations Revision of lectures is possible for nth time which leads to better understanding Visual representation of the topics will leads to more clear understanding of operation and function of lessons. Availability of various lectures have alternative to understand lessons in various ways.

Ease of availability of education over IOT make education hassle free for students at remote location, working people and different age group.

III. Components Of IOT

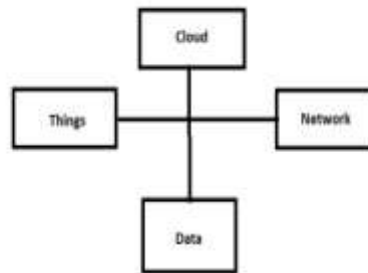


Fig1: Components of IOT

IOT consists of four Components:

1. Things
2. Network
3. Cloud
4. Data

1. Things

As expressed, Things are the electronic gadgets which are used as device for connecting with internet and used as device for making use of applications. Now a days electronic gadgets like Tablets, laptops, Desktops, mobile which are used for accessing internet, browsing of various website, education sites, different applications.

2. Network

It is infrastructure required to build to communicate on internet. Building strong network infrastructure is backbone for internet and IOT education.

3. Cloud

Cloud is new concept emerged in last few years and becoming one of the strong trends in new era. This Cloud aspect is become so popular in short duration because of its ease of access, hassle free service, easy for maintenance as maintenance of any website, learning portal, various sites is challenging for educational institute as it require to create a network infrastructure, support etc. but now Cloud based architecture made all the maintenance hassle free. It helps education institute to focus on delivery of education.

4. Data

It is used to do coordination of all the components of IOT and make hassle free inter related communication. It stores and stimulates all the required information within various components and works to make the model more efficient.

Applications

Retail:

The first large scale application of the Internet of Things technologies, will be replace the bar code in retail. The main barriers so far have been the much higher cost of the tag over the bar code, some needed technology improvement are what concerns transmission of metals and liquid items, and privacy concerns. Nonetheless, the replacement has already started in some pilot projects and although one may expect to see co-existence of the two identification mechanisms for many years into the future, advances in the electronics industry will render the RFID tag ever cheaper and more attractive and accessible to the retailers.

IV. Conclusion

In this digital revolution, implementation of IOT in campus will help students to interact with different worldwide instructors, educators, mentors. The design and pattern of the text books, practical's, assignments and feedback ways will change. The collaborative operation and team work will increase in students. Safety of the students in campus and outside also will increase. Most important school and student's management will become easy, more efficient and hassle free. This will make things automatic that will save a lot of time and

efforts. Considering the growth of the IOT the future will be very wide and trust worthy. This will helps students and learner also to learn new technologies and subjects very easily. This will play important role in rural and women educations where they have strong desire to learn but not have the environments. This will bring a new era in the education sector as it is growing in other sectors. Easy availability of education will definitely lead to increase in literacy percentage and also helps in moderation of country.

References

- [1] Juhi Bhatt1 and Anurag Bhatt2, *IoT Techniques to Nurture Education Industry: Scope & Opportunities*, International Journal on Emerging Technologies, 128-132(2017)