TECHNOMOBS
Inspiration Innovation and Smile

INTERNET OF THINGS
The New Dimension of Technology

Executive Summary

In earlier days what we saw is, human beings removed many equipment from its actions and digitized all those things. Now the time has changed and it seems the human beings themselves losing the roles. Have you embarrassed??? Even Though a little exclamation is there, the truth is not far away from that. Device to device communication without human involvement is now possible with the latest concept called Internet of Things (IOT). IOT creates an environment where objects can transfer data over a network without human to human or human to computer interaction.

Here, we are trying to bring out the possibilities of the internet of things in front of you. Internet of things is actually an advanced level of connectivity. It opens thousands of doors into the future of technology. If used in right manner in the right place it will smoothen the complexity of the worldly tasks and provide support to the business operations. IOT is on its budding stage. So we would like to put forward our ideas based on the studies conducted in our R&D department to make you aware of the possibility of internet of things. We would also like to substantiate our part with our work experience.

Internet of things - A brief description

Internet of things is a concept in which an environment is created where inter device communication becomes possible without human to human and human to computer interaction. Here devices are networked together and enables information transfer. Internet of things works in different ways. It can be a location tracer, sensor, security system, chips and so on. It is possible to apply iot in large number of areas such as shopping malls, homes, vehicles, office and so on. Experts keep on proving that it is possible to implement an iot solution for every problem. Identification of the problem is the only thing which is needed. With every problem or need born an iot solution too.

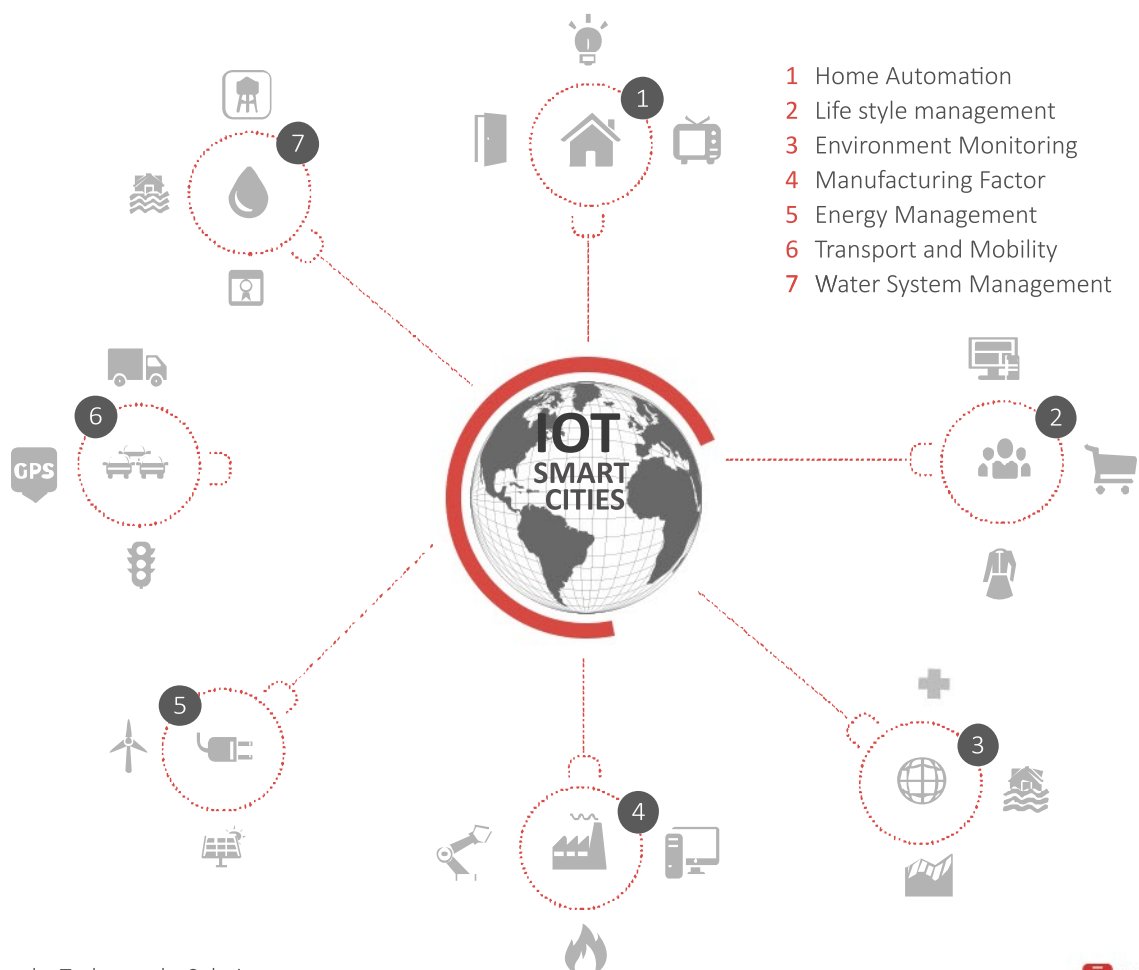# Internet of Things - Working pattern

Here in IOT, the devices are networked using the standards such as Wi-Fi, Bluetooth, NFC, RFID, ZigBee, and Z-wave and so on. There is also the use of some sensors to make this work. Based on the use and the device the use of method varies. For example in case of home appliances mostly Wi-Fi connectivity and sensors were used. In shopping malls chips integrated with connectivity being used. In some cases a central hub connects various devices together. The thing which makes iot popular is that it facilitate the involvement of smartphones. The alerts, messages or information from the devices can be tracked through the mobile apps. So it reduces the gap between the virtual world and the real world.

Internet of Things - Application

Even though iot is in its budding stage, its reach to the outer world is high. Within this short time it conquered many active areas. Let us examine some of the area where iot is applicable.
One major area is water management. We could use iot in water systems management to check water quality, leakages, chances of floods etc. Another application area where iot actively used is health sector. IOT enabled devices support physically disabled people. It help to detect diseases in early stages

and support in analyzing the performance of sportsmen. Iot enabled devices support hospitals very much and helps in treatment of complex diseases. Thus ensures an overall surveillance of patients. In life style management, iot reduce the complexity of day to day life. Now the shopping experience has changed from old customs to new ones. In such a scenario iot speed up the actions. Searching and finding products from an outlet is now outdated. Now when you reach a product the systems are in such a way that the product identifies you and keep you alert using the smart phone apps. This ultra-modern shopping experience became true only through the concept of iot. Another area where iot changed lifestyle of people is through making smart home systems. Today, the home systems are capable of handling home in its own terms. When a necessary time comes, it could inform the house owner and make them aware. This intelligence which home systems shows is the impact of iot enabled devices. Smart environment monitoring was another major contribution of iot enabled devices. It helps to detect disasters in its starting time itself. It includes forest fire, earthquakes, floods, Tsunami and so on. The greatest advantage of iot is that it helps in rescue process when any disaster happens. Remote sensors which are capable of collecting, processing and communicating data without manual control were examples for this. The contributions of iot to manufacturing sector is great. It makes the smooth flow of production line operations. It creates a smart atmosphere in production centers. It smoothen monitoring and management of production line. RFID, sensors, remote information management, cloud solutions etc. were some tools to implement iot into manufacturing sector. Automated environment created by iot enabled devices ensure efficient working of production houses. Effective utilization of energy is another contribution of iot. It influences almost all wings of energy management. Monitoring and analyzing the flow of energy in different power plants such as wind, solar, photovoltaic etc. can be done smoothly using iot enabled devices. It can also accomplish less energy wastage. Internet of things now facilitates smart transport and mobility. Location based activities are now being conducted in a smart way. Cloud connected systems ensures an integration of such activities. Smart fleet tracking, item location, NFC payment are the results of iot enabled devices. Effective vehicle management is another advantage of iot implementation.

1 Home Automation
2 Life style management
3 Environment Monitoring
4 Manufacturing Factor
5 Energy Management
6 Transport and Mobility
7 Water System Management

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The above mentioned applications of the concept IOT is just a brief. It is impossible to mention it like this. Iot benefits are numerous and it will be a step ahead in future. Our intention is to give a picture of the impact of iot. If used well iot enabled devices will give a solution to all our needs and wants.

Project TriggerSmart – An IOT Experiment by Technomobs

Clubbing the virtual world with real time objects is the new phase where technology reached. IOT is such wing of technology. Large studies being happening in Technomobs on this area. TriggerSmart is actually a result of such a study. TriggerSmart is a project which is intended to ensure the safety in the use of guns. Triggersmart prevents unauthorized use of guns.

We would like to share our experience, in the development process, of TriggerSmart. TriggerSmart provides guns which is fully in the control of its owner. It works with IOT enabled devices. Let us go into the working of TriggerSmart guns. The connection between the gun and the owner is established through a micro controller fixed in the gun and a ring in the hand of the owner. This ring contains a chip which act as an identifier of the owner. This mechanism makes TriggerSmart guns a safer option. TriggerSmart ensures two conditions. First one is that the owner should wear the ring while using the gun. It is because the ring should be in contact with the gun within a short proximity of space. The gun should be used inside a specified premise or else it will not work. It is the second condition. If this two conditions being satisfied then the gun works. The mechanism of TriggerSmart works with the latest R.F.I.D and wireless technologies. This connectivity is integrated with passive and active transmitters and receivers.

We are heard of many cases in which guns took away from owners and created serious issues. Especially in places like U.S, children are mishandling the guns and creating problems. So TriggerSmart will be a solution for all such issues.

TriggerSmart is just an example for iot enabled devices. It proves that IOT can contribute very much to the wellbeing of the society.

Conclusion

Internet of things is technological movement which is hard to track because it is growing day by day in high speed. A lot of experiments were happening in this section. Success of such experiments will impact the world in a great way. IOT creates a situation where inter devices communication is possible without human to human or human to computer interaction. Here an intelligence is added to devices so that they can communicate with others without much human involvement. They are capable of responding to situations. Such responses will be in the form of alerts, messages etc. Internet of things (IOT) is actually an initiator of a smart way of doing things. It is sure that iot will creates smart cities around the world very soon.

About Technomobs

Technomobs is a leading service provider for cloud, mobility as well as web solutions all over the world. It has grown its enlarged wings to a greater extend with a perfect and pre-structured backbone of advanced technolgies with respect to adaptation within a short period of time.

"Delivering clients their desired products with an innovative touch" – is the dream for every company. We Technomobs have made the dream into a realization with 0% failure and 100% reliability and satisfaction to our clients.

In the past 2 years we have overcome most of the technical barriers raised while development is going on with a smart smile. We have got stable clients in 100+ countries in total around the globe. We have now equipped with highly skilled, talented and innovative programmers and designers with us to challenge even the technology giants. We follow a special way of tactics behind each and every project / each and every client, so that others get envy upon our strategy and implementation of smart things.

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