## Intermet con-nection essay



The issue Is, people have limited ime, attention and accuracy" which means they are not very good at capturing data about things in the real world. Our economy, society and survival aren't based on ideas or information" they're based on things. Ideas and information are important, but things matter more. Yet todays Information technology Is so dependent on data originated by people that our computers know more about Ideas than things.

If we had computers that knew everything there was to know about things" using the data they gathered without any help from humans" we would be able to track and count everything, which would greatly reduce waste, loss and cost. It will become easy to know when things needed replacing, repairing or recalling, and whether they were fresh or past their best. We need to empower computers with their own means of gathering information, so they can see, hear and smell the world for themselves, in all its random glory.

WHAT IS IOT? Today the Internet has got everyone connected to many things like media, photos, information, etc. With multitude objects becoming embedded with sensors and gaining the ability to communicate, will it be possible to connect us to physical objects? can we launch appll-ca-. tlons on our com-. puter by just touch" Ing a hysaical object? Can one physaical object talk to another through an Intermet con-nection and comamand it to do a physaical act or feed it data?

The answer is a yes and this phenomenon is called "The Inter-net of Things".

Let us run you by an example. Imagine It Is 5 am on Monday morning, a

regular day when you have to get to work for an important meeting, and

your car has getting you to work at the top of IOF4 doesn't want to wake you, but it is concerned about the low level of fuel, which might be a setback, as you will have to make a pit stop at the gas station if you plan to get II the way across town to work.

Before causing any unnecessary fuss, your car decides to have a little chat with the digital planner on your smartphone to see if you have something else planned for Monday. The answer is no, communicated by your smartphone to your car. After checking your route to work for any unwanted delays which might affect the time line, your car relays a message to your alarm clock to wake you up 10 minutes early in order to compensate for the stop. Your alarm clock agrees, and informs your bathroom shower faucet, toothbrush, coffee machine and toaster of the change in plan.

All of this happens about 3 times faster than you can blink your eye. The Internet of Things (IOT) is a scenario in which everything has a unique identifier and the ability to communicate over the Internet or a similar widearea network (WAN). The resulting information networks promise to create new business models, improve business processes, and reduce costs and risks. Thus, IOT is a concept that describes how the internet will expand as consumer devices and physical assets are connected to the internet.

Key elements of the IOT which are being embedded in a variety of mobile devices include embedded sensors, image ecognition technologies and NFC payment HOW DOES IT WORK? Radio-frequency identification (REID), barcodes or 2D-codes are a prerequisite for the IOT. When this code or tag is read either by a RFID reader or scanned by an application run-ning on a

comaputer or mobile device it would prompt your device to open up a page of or send a comamand for an action to hapapen, like open-ling up an email client and sending a mesasage or it would call a ceratain per-son in your address book.

You can also Just attach data (like text or images) to the physaical object to describe it or have that object feed data into another roagram. Equipping all objects in the world with minuscule identifying devices could be transformative of daily life. For instance, business may no longer run out of stock or generate waste products, as involved parties would know which products are required and consumed. One's ability to interact with objects could be altered remotely based on immediate or present needs, in accordance with existing end-user agreements.

Early adopters will need to prove that the new sensor driven business models create superior value. Industry groups and government regulators should study rules on data privacy and data security, particularly for uses that touch on sensitive consumer information. Legal liability frameworks for the bad decisions of automated systems will have to be established by governments, companies, and risk analysts, in consort ith insurers. On the technology side, the cost of sensors and actuators must fall to levels that will spark widespread use.

Networking technologies and the standards that support them must evolve to the point where data can flow freely among No one knows exactly how the Internet of Things will ultimately look. The only certainty is that few people would believe it if you told them, because points of reference simply don't

exist yet. IOT is at a stage where disparate networks and a multitude of sensors must come together and interoperate under a common set of standards. This effort will require businesses, governments, standards organizations, and academia to work together toward a common goal.