Internet Of Things

The Internet of Things, or IoT, refers to the billions of physical devices around the world that are now connected to the internet, collecting and sharing data. Thanks to cheap processors and wireless networks, it's possible to turn anything, from a pill to an aeroplane, into part of the IoT. This adds a level of digital intelligence to devices that would be otherwise dumb, enabling them to communicate without a human being involved, and merging the digital and physical worlds.

Shortcomings of IOT

- 1. *Compatibility:* As of now, there is no standard for tagging and monitoring with sensors. A uniform concept like the USB or Bluetooth is required which should not be that difficult to do.
- 2. *Complexity:* There are several opportunities for failure with complex systems. For example, both you and your spouse may receive messages that the milk is over and both of you may end up buying the same. That leaves you with double the quantity required. Or there is a software bug causing the printer to order ink multiple times when it requires a single cartridge.
- 3. *Privacy/Security:* Privacy is a big issue with IoT. All the data must be encrypted so that data about your financial status or how much milk you consume isn't common knowledge at the work place or with your friends.
- 4. *Safety:* There is a chance that the software can be hacked and your personal information misused. The possibilities are endless. Your prescription being changed or your account details being hacked could put you at risk. Hence, all the safety risks become the consumer's responsibility.

Summary and Conclusion

The IoT has the potential to dramatically increase the availability of information, and is likely to transform companies and organizations in virtually every industry around the world. As such, finding ways to leverage the power of the IoT is expected to factor into the strategic objectives of most technology companies, regardless of their industry focus. The number of different technologies required to support the deployment and further growth of the IoT places a premium on interoperability, and has resulted in widespread efforts to develop standards and technical specifications that support seamless communication between IoT devices and components. Collaboration between various standards development groups and consolidation of some current efforts will eventually result in greater clarity for IoT technology companies.