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e- NEWSLETTER

EDITORIAL MEMBERS

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PRINCIPAL'S DESK

What inspires for Success?

Success is a journey which is never ending. To achieve the desired goals with this journey we need to get inspired within us. There are many things that can inspire us, but it requires a positive outlook about the life. Seeing the great accomplishments of people and listening some inspirational quotes from people are primary source. Sometimes even the sheer beauty of nature can remind us just how lucky we are to be alive and it helps us to do something worth for everyone.

Above to all, having a positive outlook on life is a crucial part of finding inspiration. Inspiration in our life comes in many forms and can strike randomly. Some days we have an abundance of creative energy which comes naturally, other days it's not so easy.

Within these perspective it is necessary to explore the positive aspects within as and value to get the desired goals with the journey of success.

- Dr A K Srivatava

Principal

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Internet of Things (IoT): A Technology for Smart Environment

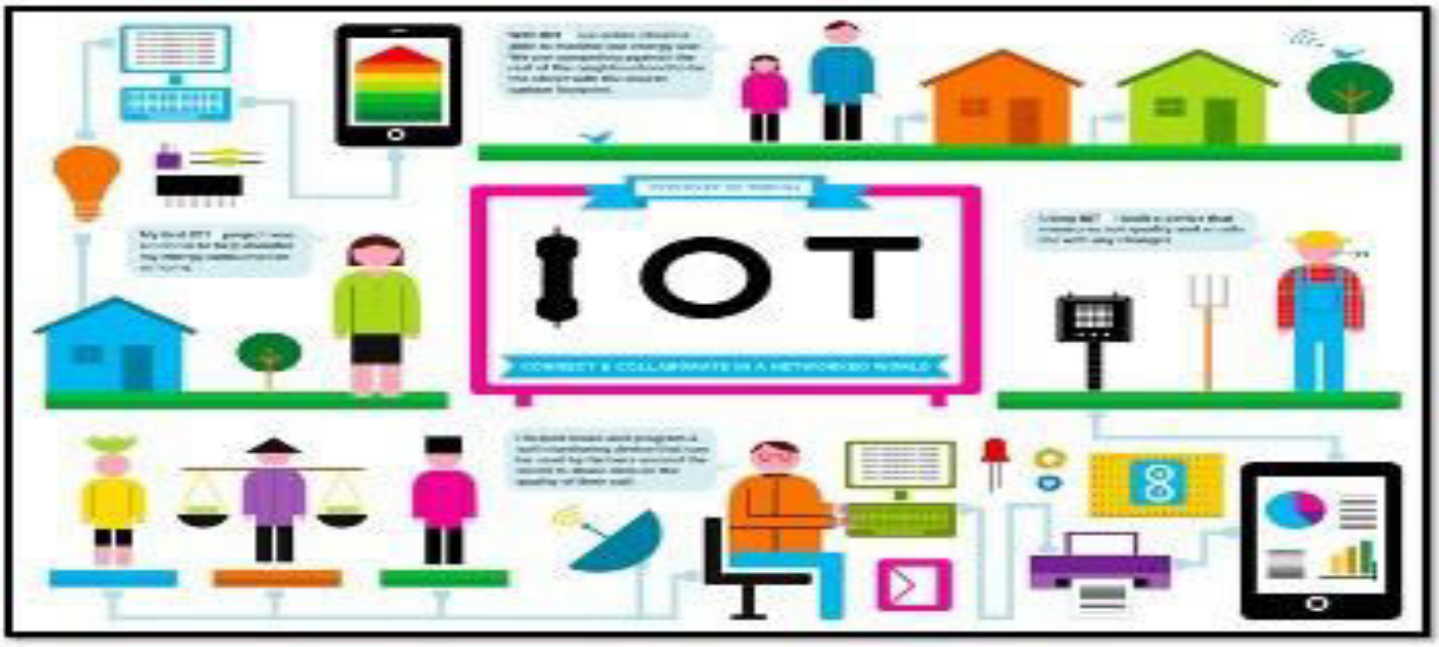
When people talk about "the next big thing," they're never thinking big enough. It's not a lack of imagination; it's a lack of observation. I've maintained that the future is always within sight, and you don't need to imagine what's already there. Smart devices, smart phones, smart cars, smart homes, smart cities and a smart world, these notions have been espoused for many years. Achieving these goals has been investigated, to date, by many diverse and often disjoint research areas. Five such prominent research areas are: **Internet of Things (IoT), Mobile Computing (MC), Pervasive Computing (PC), Wireless Sensor Networks (WSN), and most recently, Cyber Physical Systems (CPS).** Many people, including myself, hold the view that cities and the world itself will be overlaid with sensing and actuation, many embedded in "things" creating what is referred to as a smart world. But it is important to note that one key issue is the degree of the density of sensing and actuation coverage. I believe that there will be a transition point when the degree of coverage triples or quadruples from what we have today.

At that time there will be a qualitative change. For example, today many buildings already have sensors for attempting to save energy; home automation is occurring; cars, taxis, and traffic lights have devices to try and improve safety and transportation; people have smart phones with sensors for running many useful apps; industrial plants are connecting to the Internet; and healthcare services are relying on increased home sensing to support remote medicine and wellness.

However, all of these are just the tip of the iceberg. They are all still at early stages of development. The steady increasing density of sensing and the sophistication of the associated processing will make for a significant *qualitative change* in how we work and live. We will truly have systems-of-systems that synergistically interact to form totally new and unpredictable services. What will be the platform or platforms that support such a vision? One possibility is a global sensing and actuation utility connected to the Internet. Electricity and water are two utilities that can be used for a myriad of purposes. Sensing and actuation in the form of an IoT platform will become a utility. IoT will not be seen as individual systems, but as a critical, integrated infrastructure upon which many applications and services can run. Some applications will be personalized such as digitizing daily life activities, others will be city-wide such as efficient, delay-free transportation, and others will be worldwide such as global delivery systems. In cities perhaps there will be no traffic lights and even 3D transportation vehicles. Smart buildings will not only control energy or security, but integrate personal comfort, energy savings, security and health and wellness aspects into convenient and effective spaces.

Individuals may have patches of bionic skin with sensing of physiological parameters being transmitted to the cloud which houses his digital health, and to the surrounding smart spaces for improved comfort, health, efficiency, and safety. In fact, smart watches, phones, body nodes, and clothes will act as personalized input to optimize city-wide services benefiting both the individual and society. Consequently, we will often (perhaps 24/7) be implicitly linked into the new utility. Some examples of new services include immediate and continuous access to the right information for the task at hand, be it, traveling to work or a meeting, exercising, shopping, socializing, or visiting a doctor. Sometimes these activities will be virtual activities, or even include the use of avatars or robots. Many outputs and displays for users may be holographic. Credit cards should disappear and biometrics like voice or retinas will provide safe access to buildings, ATMs, and transportation systems.

A sensing and actuation utility will not only exist in public spaces, but also extend into the home, apartments, and condominiums. Here people will be able to run health, energy, security, and entertainment apps on the infrastructure. Installing and running new apps will be as easy as plugging in a new toaster into the electric utility. One app may help monitor and control heart rate, another perform financial and investments services, another automatically ordering food and wine, or even predicting a impending medical problem that should be addressed early to mitigate or even avoid the problem. Humans will often be integral parts of the IoT system. Consequently, in the future the scope of IoT is enormous and will affect every aspect of all our lives.



Compiled by: Mr. Shailesh Saxena
Asst. Professor (CS Deptt.)

Research Publications

1. A paper has been presented with the title "Performance Comparison of Position Based Routing Protocol and Topology Based Routing Protocol in Vanet" by Mrs. Kirti Shukla in the 2nd International conference (**ICAREMIT-2016) Sponsored by TEQIP-II and IEEE and organized by M. J. P. Rohilkhand University, Bareilly (Campus) Uttar Pradesh, India on 9th -11th Dec, 2016.**

2. A paper has been presented with the title "A Comparative Study On Data Gathering in Wireless Sensor Network Using Aerial Vehicles" by Mrs. Meenakshi Pathak and MS. Arti Mishra in the 2nd International conference (**ICAREMIT-2016) Sponsored by TEQIP-II and IEEE and organized by M. J. P. Rohilkhand University, Bareilly (Campus) Uttar Pradesh, India on 9th -11th Dec, 2016.**

3. A paper has been presented with the title "A Futuristic Approach of Feature Extraction" by Ms. Shikha Arya and MS. Arti Mishra in the 2nd International conference (**ICAREMIT-2016) Sponsored by TEQIP-II and IEEE** and organized by **M. J. P. Rohilkhand University, Bareilly (Campus) Uttar Pradesh, India** on **9th -11th Dec, 2016.**

4. A paper has been presented with the title "Road Map to Pharmaceutical Packaging: Transition from Eco-Destructive to Eco-Friendly Packaging" by Mr. Sumit Saxena in India International Science Festival IISF 2016 (young scientist conclave) on **7th -11th Dec, 2016.**

5. A paper has been presented with the title" Kinetics of oxidation of o- toluidine by Potassium dichlomate" by Dr. Ritu Singh in International journal of Scientific and Research Publication val 6, Issue 12, 2016.

6. A paper has been presented with the title "Road Map to Pharmaceutical Packaging: Transition from Eco-Destructive to Eco-Friendly Packaging" by Mr. Mohit pant in India International Science Festival IISF 2016 (young scientist conclave) in CSIR, New Delhi on **7th -11th Dec, 2016**

SILENCE

Silence is a good quality
We all need it in large quantity
Silence gives us peace of mind
Through it, we can find
That nature also talks to us,
In different little ways.
The sweet song of birds,
The softness of sea breeze at night,
Can make us glad when we are sad
We need silence during prayer
It brings us near GOD.
And makes us feel that, it is our true Lord.
Therefore SILENCE is important for our life

Gestures of a dynamic speaker

- Gestures are reflections of every speaker's individual personality. Following six rules are helpful for one who seeks to become a dynamic speaker-
- Be Natural
- Always respond naturally to what you think,feel and see.
- Create The Condition For Gesturing Not The Gesture
- Your gesture should be motivated by the content of your presentation.
- Suit The Action To The Word And The Occasion
- Every gesture you make should be purposeful and reflective of your words.
- Make Your Gestures Convincing

Harshit Saxena
CS Ist Year

THE NEXT BIG THING

The memristor, a microscopic component that can "remember" electrical state even when turned off. It's expected to be far cheaper and faster than flash storage. It has now been built in labs and is already starting to revolutionize everything we know about computing, possibly making flash memory, RAM, and even hard drives obsolete within a decade.

It will remember exactly what was going when you turn on your computer back, and return to work instantly. This lowering of cost and consolidating of components may lead to affordable, solid-state computers that fit in your pocket and run many times faster than today's PCs.

Someday the memristor could spawn a whole new type of computer, thanks to its ability to remember a range of electrical states rather than the simplistic "on" and "off" states that today's digital processors recognize. By working with a dynamic range of data states in an analog mode, memristor-based computers could be capable of far more complex tasks than just shuttling ones and zeroes around.

When is it coming?

Researchers say that no real barrier that prevents implementing the memristor in circuitry immediately. But it's up to the business side to push products through to commercial reality. Memristor made to replace flash memory (at lower cost and lower power consumption) will likely appear first; HP's goal is to offer them by 2018. Beyond that, memristor will likely replace both DRAM and hard disks in the 2018-to-2022 time frame. The memristor is just one of the incredible technological advances sending shock waves through the world of computing.

Aishwarya Agarwal
CS III year