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# Editorial

## Internet of Things – An Evolving Super Highway

Internet of Things is the theme chosen for the current number of the Science Magazine Vidurava. The Editorial Sub-committee has invited four key players in the field to provide an insight of what is referred to as the Internet of Things (IOT) for the benefit of the reading clientele of Vidurava. Internet of Things is a new gateway leading to a super highway in wireless information and data transmission. It is a developing super highway in a technologically inter-linked computer-based network capable of remotely probing a variety of physical devices and sources, and transferring almost an unlimited amount of data and information.

Many definitions and explanations have been given to IOT by the relevant contributors to this publication. One of the simple explanatory definitions that may be considered is that – “The Internet of Things” is a system of interrelated computing devices, mechanical and digital machines, objects, people or animals that are provided with “unique identifiers” with ability to transfer data over a network without requiring human-to-human, or human to computer interaction.

Among the “Things”, referred to in IOT are devices or sensors such as human heart monitoring implants, biochip transponders (a device for receiving a radio signal for automatic transfer in a different signal, and attached to farm animals), electric clams in coastal waters, automobiles with sensors for automation, DNA analysis devices, environmental, food, pathogen monitoring or field

operation devices that assist firefighters in search and rescue operations etc.

Although the phrase Internet of Things was first coined in 1999, by 2013 the vision of IOT had evolved into a convergence of multiple technologies ranging from wireless communication to the internet, and from embedded systems to micro-electro-mechanical systems. This would technically mean that the traditional fields of embedded systems, including wireless sensor networks, controlled systems, automobiles and others all contribute to enabling the Internet of Things. The expansion of internet connected automation into a plethora of new application areas, generating large amounts of data from diverse locations with the necessity for quick aggregation and collation of information which would then require indexing, storing and processing, is considered to be one of the platforms of the concept of Smart Cities.

Finally, discussing large scale deployment of IOT, Wikipedia in a recent note claims that South Korea has embarked on a fully equipped and wired Smart City, considered to be the first of its kind in the world. Here nearly everything in this City is planned to be wired, connected and turned into a constant stream of data that would be monitored and analysed by an array of computers, with little or no human intervention. It is likely that the Ministry handling Sri Lanka’s first Megapolis development plan in the Western Province may have taken note of this development.

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