

## IT is the future

*Machines and computers cannot be creative in themselves, because creativity requires something more than the processing of existing information. It requires human thought and spontaneous intuition*

-Akio Morita, Founder Chairman, Sony Corporation

What is electronics?

Is it transistors, diodes and ICs bundled onto a printed circuit board? Is it semiconductors? Or is it simply a manifestation of silicon in all its hues?

All the above describe electronics. But well, not completely. At least not in today's info-age. Agreed that electronics of yester-years acted as a precursor to the emergence of information technology. Today it is the turn of information technology to lead the way for electronics. Electronics is no longer just transistors and diodes. Electronics of today is system intelligence, embedded software, multi-layered communication protocols, smart networks and a whole lot of other information rich elements.

Take the case of a process control system. Mechanical controls are things of the past. Even electronic controls are getting outdated. The modern control systems are smart intelligent systems capable of providing total control of all processes at a single terminal. Not just that, the modern systems offer high-speed digital communication, scalable, redundant and highly flexible process controls. While the electronic controls remain almost the same, the software that powers the system and the choice of digital communication architecture makes all the difference to the performance of the system. This fact has been clearly elucidated in the article 'Is your Control System suited for a Smart Plant?'

It is precisely this potential for software development that India needs to focus on concerted. Instead of believing that electronic hardware manufacturing is the break-all and make-all of electronics, we have to climb up the software value chain to create application software. Our software development capabilities are well known across the globe. What we really need to do is act as software product development partners for large companies and eventually graduate into software product developers.

Two senior professionals from the electronic industry Mr. Ashish Sanyal and Mr. Ashwin Panemangalore who have similar views on this subject feel that reconciling ourselves to the present day realities and changing our outlook towards electronics is the only way to succeed in today's business. In fact this understanding would be crucial for India's chances to stay in the reckoning for a share in the global electronics business. Sooner this understanding dawns on us, the better it is for the electronic industry in India.

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