

FUTURE of EMC Engineering

Obsolescence of Technology

BY MARK MONTROSE

In our continuing series on what the future of engineering may be like, we examine our environment and the needs or desires of humanity. Advances in technology are outpacing the ability of users to integrate new products into their lifestyle, many of which may become obsolete within a short period of time.



Many engineers do not understand where technology is taking us and how it relates to their future. Their creative engineering skills must help humanity since customers worldwide buy products and services. Advances in technology are outpacing the ability of users to integrate new products into their lifestyle, many of which may become obsolete within a short period of time.

An example is wireless communication. We now have 4G networks. There are many portable products still in use using 2G and 3G technology. In today's wireless environment, 2G and 3G systems still work fine, yet some manufacturers, service providers, and marketing professionals believe they are a burden on our infrastructure and that everyone must upgrade to 4G. Support for legacy products is being discontinued in lieu of driving the current customer base to a higher level of functionality, generating significant revenue for companies that support this technology.


Let's assume for purpose of discussion, that 5G becomes available late 2012, and 6G is released 6 months later (2013). By the reasoning above, our dependence on 2G, 3G and 4G should be phased out quickly in lieu of 5G, which is then quickly followed by 6G. Customer support for what is considered outdated technology will be discontinued although millions of wireless devices are still in use. In the future we can expect xG to be developed. Those who must have the latest in technology may spend a night sleeping in front of a store to be the first to own a new product that may only bring incremental improvement in performance over their current device. Others will also update their interactive systems at the same time (i.e., iPads, and wrist watch size high-definition television with 3D capabilities) because they too must have the latest in technology. What new

technological advanced can we expect in the future if only incremental increase in performance is being achieved with today's level of engineering?

The most widely used aspect of technology is delivery of content. Delivery of content means the ability to have instant access to information anywhere in the world. I am amazed to see how many must upgrade their phones yearly to get the latest in super high-speed technology so they can text each other at finger typing speeds or use social networking site which requires minimal processing power.

Engineers of the future will know that having a faster processor gives only

incremental improvement yet users still demand more content delivery, such as high-speed streaming video on a small screen. To give users what they want based on market demand, engineers must focus more on content deliver along with an easy to use interface. At the same time, product safety and EMC engineers must become involved during the design cycle.

Imagine the technology that we will use 25 or 50 years from now. Engineers of the future must look forward to an exciting career of creating products that provide a quantum leap in functionality and performance instead of incremental increases that we see with current technology. 

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