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2004 – Uncertainty Makes Most Predictions Impossible

Gary Breed
Editorial Director

Will the return to a strong economy continue? Will consumers continue to spend on new technology? Will the government continue its renewed spending with little concern for deficits? Will we still be in Iraq in 2005? Is there life on Mars?

Who knows? I have desires, opinions and rough ideas on these matters, but that's all. Too many matters are in flux to do anything but make a wild guess.

Fortunately, there are a few easy predictions. The economy will continue to operate reliably, whether it gets better, worse or stays about the same. As long as Alan Greenspan is running the Fed, and as long as inflation stays away, we're likely to have low interest rates for the rest of the year. Products will continue to be designed and manufactured by our readers and their companies.

Some of the other predictable things in 2004 include activities and events. Trade shows and technical conferences will continue to be an essential part of the interaction among engineers, and between vendors and their customers. We will have our biggest participation in the Wireless System Design Conference, the IEEE MTT-S International Microwave Symposium and European Microwave Week. But, you may find some of the *High Frequency Electronics* staff at the WCA Broadband Symposium, the CTIA Wireless 2004 show, the NAB Convention and Exhibition, and some of the excellent conferences that take place throughout the year.

And there's one more: *High Frequency Electronics* will continue to deliver timely and diverse technical articles and other essential information for engineers whose work requires them to increase their expertise and knowledge. We will keep covering the principles unique to high frequency product design, the tools and equipment to accomplish those designs, and the components that go into them.

We have survived the toughest economic conditions of the past 25 years. Since we're still here and enjoying what we do, it does not take a crystal ball to predict that we'll continue.

A prediction I hope comes true is that all of you have a prosperous 2004! May your personal careers get a boost; your companies succeed (and the value of your stock options soar); and may every commercial, military and consumer product you make be a hit in the marketplace!

Government, Committee or Proprietary Standards?

This issue's Technology Report updates the status of a few standards activities that are of interest to our segment of the electronics industry. One of the topics that arises from time-to-time is the value of committee-developed standards like these—when do they work best, when do they get in the way, and when does a proprietary specification have the advantage?

The argument for standards is *interoperability*. The idea is that, if component suppliers and equipment manufacturers understand exactly how a system is supposed to operate, all their products will work together. The combination of cooperation and competition is supposed to speed time-to-market, give customers more choices and make everybody happy.

Some standards are mandated by regulatory bodies. The argument for this is simple: *efficiency*. If there is only one standard with no discussion, a "shakeout" period is not required. This was the normal procedure from 1934 to the 1990s, creating log-running standards such as NTSC color television.

About the 1980s, growth in electronic technology was proceeding so fast that government regulators could no longer keep up. In the U.S. the FCC has almost entirely abandoned mandated standards, and government telecom agencies worldwide have loosened their tight control of technology. (I'm limiting this discussion to radiated technologies that have treaty agreements and laws requiring their management.)

As noted first, some standards are carefully crafted by industry committees because they are deemed so important that a standard is essential for that particular market to develop. IEEE 802.11 is a good example of the success of this approach. The market took off quickly as soon as "Wi-Fi" standards were agreed upon.

The third method is a specification developed at a single company. Of course, others may or may not choose to jump on the bandwagon and make it a *de facto* standard. Bluetooth and Zigbee are two of these types of specs that are in the news today (MS-DOS is a perfect example in the computer world).

Each of these methods comes in and out of favor, yet despite arguments by their proponents, none is the single best way to create a standard. As measured by their marketplace success and lasting impact, each has created great successes and dismal failures.

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