Technology Corner

by Jacqueline Hike

Globalization, competition, regulation, technology ... things are changing fast. To keep up, PSAPs also need to change so that they can run faster, smoother, leaner, and smarter.

Take technology for example. One estimate indicates that 63 "technology years" have passed during the nine calendar years since 1988 when companies started considering introducing PCs into the PSAP! Just how many human years are equivalent to one technology year? If this estimate is accurate, then the comparison can be equated to the growth rate of a dog, a ratio of 7 to 1. Although, a completely different animal, technology is probably just as frisky and can be just as difficult (but not impossible) to tame.

So what does that mean? When technology changes so fast, how important is it to stay on top of it? What are the consequences of lagging behind? In keeping theme with the previous issue of the "Technology Corner" and the emergence of the PC into the PSAP, in this issue we'll explore the future of technology, the pace at which the industry changes and the need to challenges to keep up.

The public safety communications industry faces a lot of challenges. Managing constant change in the telecommunications and wireless technology marketplace is of the utmost importance. So is reducing the costs of implementing and maintaining a technology infrastructure. Increasing efficiency and doing more with less is important. Upgrading legacy communications systems that are no longer capable of meeting today's needs and implementing modular, open, applications that work well as an integrated solution are major issues.

To meet the challenges imposed by an industry that experiences change at such a rapid rate, the industry must consistently invest in methods to successfully maintain an intimate relationship with technology. With the ever-changing innovations, PSAPs want to take advantage of the most innovative and technologically advanced solutions possible.

What are some of the technology changes expected during the next five years (35 "techno-years")? Here's some of the things being talked about: PCs with multiple user interfaces, selectable for socio-geographic profiles; low-earth orbiting satellites that will deliver data bandwidth on demand to anyone, anywhere on earth. Smart cards will become the standard for telling the cyber world who people are and what they want. Voice recognition will be commonplace. People won't think twice about placing their hand onto a scanner or looking into a retinal/iris checking window.

Does this mean anything to public safety? Consider voice recognition for example. Imagine processing a 9-1-1 call and having the workstation automatically select and/or dispatch an available fire truck after the caller reports a "fire on Main street?" Realistic? I don't know. But, those things are still a ways out. So, you might ask, "What are the computer changes right around the corner that affect the public safety industry?" How about Windows NT 5 versus Windows 98. What's the difference? Does it matter?

Again, are these things even important to public safety? Well, in previous issues, we talked about the Intelligent Workstation, or IWS and its benefits. Consider the operating system. Is an IWS running on a Windows NT platform better than a system running on Windows for Workgroups? The answer is an

unequivocal YES. Technology is an important thing to consider in a system. When evaluating potential systems, there are a lot of things to consider. Does the application have the features that I am looking for? Is it user-friendly? Those are obvious considerations. But, you also have to investigate if it has a clear migration path? Does it exploit the features inherent in the computer hardware, the operating system? The advantages of computer technology are not limited to the application features themselves. Systems need to address issues such as open architecture and integration, performance and reliability, scalability, and support for industry standards.

Keeping pace and taking advantage of technology changes does matter. Deploying systems that evolve with these changing technologies will deliver significant bottom-line benefits: unprecedented value and long-term investment protection for the PSAP; more reliable, more easily maintained systems; less training burden; more productive users; and finally more innovative business solutions. You never know, voice recognition may be here sooner than we realize and it probably won't be supported on Windows 95.

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