current move to more open architectures and XML-based interfacing. Modern systems that have embraced this approach have more flexibility in which systems they interact with, and to what degree of depth and detail.

Integration with property management and other guest-focused systems is better thanks both to client demands and to better interface technology, but can become still more seamless. Many PMSs can already look up the POS check detail for charges originating in an F&B outlet or spa, but it's still not as common as it could be to have dining reservations show up on the guest's complete stay itinerary in the PMS.

Again, the optimal solution is a complete enterprise management system, as this eliminates any compatibility issues. Such systems are readily available for restaurants, but are more difficult to find and often impractical for very large properties with their far greater number of departments. Integrating an I/P system with a restaurant POS system is not terribly difficult when all the I/P system has to do is manage the inventory of the restaurant. However, if the I/P system also has to manage an inventory of linens, shampoo, uniforms, and other sundry items, integrating this system seamlessly with a restaurant POS is far more difficult. Oftentimes large properties will maintain separate I/P systems for each of their divisions.

WIRING, INFRASTRUCTURE, AND IMPLEMENTATION

Implementing a POS system requires careful planning in the placement of the workstations, printers, video monitors and cabling. Work flows must be thoroughly reviewed to make sure that the right number of workstations are in the right places, and that kitchen video monitors (for example) can be viewed easily from the appropriate workstations. Some systems connect check or order printers to a cable from the nearest workstation; others drive them from the central server, requiring a very different cable run. When at all possible, cables should be run above ceiling panels, through walls, or inside conduit in order to protect their integrity. Hot liquids, corrosive cleaning chemicals, and grease can all eat away at a cable. Do not run cables along the floor unless they are inside metal conduit. Also, any cable inside a wall or in any other place that is extremely difficult to access should be inside conduit. Replacing a cable can be time consuming and expensive. Anything that can be done to protect cables—within reason—should be.

Space is always at a premium in any F&B outlet, and it can be hard to find appropriate room for workstations. Fortunately, many modern units are all-in-one self-contained devices, but some systems do use PC-based workstations, either full PCs or thin-client units with more compact processing units. Either way, it is essential for system reliability and maintainability that workstations and their processing units are incorporated into hostess kiosks, bar counters, server stations, etc. in such a way that they have

adequate ventilation, that their cable connections are protected and that other items cannot be stacked on top of them. Cables must also be run tidily and protected appropriately from what can often be a hazardous environment for electronics. Always place work stations away from heat sources.

Every vendor has horror stories of PC workstation CPUs being stuffed sideways into cabinets under bar sinks, of damp dish cloths being stored in a heap on top of an uninterruptible power supply, of cables being draped across (or through) the ice tray under a bar, and so on, all with the expected devastating impact on reliability. Systems are absolutely critical to the operation of any F&B outlet. While vendors are constantly working to make them more rugged and reliable, it's essential to do everything possible to protect them and maximize their reliability. Downtime costs money.

WIRELESS NETWORKS

Wireless networks are becoming much more common in F&B outlets, both for the staff using handheld terminals for order-taking in spread-out operations and, in appropriate environments, for guests' Internet access. Although they seem to offer much more freedom of installation, in reality the transmitter/receiver base stations/access points must be carefully positioned to ensure complete signal coverage, especially in larger outlets. A signal strength survey must be done prior to installation to identify the best locations for the access points, and cabling must be run from those positions back to the system server or network hub.

INTERNET

We have already discussed a number of ways in which Web-based applications can be used to help in the profitable operation of restaurants. A few more points bear mentioning. Installing Internet access for an F&B outlet is a necessity these days. The internet is the primary way in which the public searches for dining and entertainment options. All restaurants and bars will benefit from at least a point-of-presence Web site with contact details, and managers and chefs will need Internet access for e-mail and for research. It's also both important and valuable to make full use of search engine optimization to drive business via your Web site. Restaurants have to fight for visibility along with every other guest destination.

Installing broadband service at an outlet with appropriate firewall security can also provide public high-speed Internet access (HSIA) for all kinds of guest services as well as for other use such as credit card settlements. For example, wireless terminals at the Kentucky Derby allow patrons to place F&B orders, but also to bet, check handicapping data and watch videos from other tracks.

