once and updated only as menu items change. The menu analysis system itself will track changes in price (assuming pack sizes do not change).

Banquet costing is simpler since there are more fixed menus. Giving the sales managers access to the menu costs can be a great help when a client is negotiating prices, since they'll know how low they can go and still return a profit. The banquet checks, however, will still need to be run through the POS to track sales against production.

Retail POS systems, in contrast, are very tightly integrated with I/P systems, both for stock control and due to the higher count of different items sold. Retail POS workstations are frequently populated with new items received for sale in the I/P system, which generally does not happen with F&B systems. However, with a growing number of outlets offering retail items, clothing and other souvenir merchandise, there's a movement towards combining retail and F&B items on the same system. This is especially so in stadiums, but it's handy in resorts, too, so that logo-wear and spa product sales can be as tightly integrated with a guest's folio as F&B and room charges. As a result, F&B modules are being integrated with I/P more often.

CENTRAL PURCHASING

Central purchasing arrangements are still a mixed bag. Multi-property operations clearly benefit from leveraging their purchasing volume to maximize discounts; the difficulty lies in defining common item standards for geographically diverse properties. This isn't so much of a problem for general items but local F&B variations are common, making it difficult to accumulate significant volumes. Even if a chain has standard mixed-drink recipes, for example, the actual brand available for a particular ingredient can easily vary from region to region. Consequently many chains' centralized systems tend to focus principally on non-F&B items, as do the hotel-sponsored purchasing companies such as Avendra and Birch Street.

Nevertheless, even without wide commonality of individual items central systems can make a major contribution to operating efficiency by consolidating spending in various categories for the chain as a whole. They also help track and therefore manage the various outlets' compliance with national contracts, a major concern for chains. One property taking a good deal from a local vendor may jeopardize significant discounts if it results in the chain falling short of its quantity commitments to the national provider. It's not unknown for outlets in a small regional cluster not to be allowed to place orders at all, and be restricted to sending requisitions to a corporate purchasing office for action.

As consolidation continues in the industry both between hotel operators and between vendors, procurement standards for regional operations—or even corporation-wide—will become more common, driven by the demand

for greater control and efficiency. The use of centralized purchasing operations is thus likely to gain momentum.

As an IS concern, multi-unit restaurant companies that utilize centralized purchasing and/or commissaries should treat the commissaries and centralized warehouses just as large hotel properties treat their own warehouses. Requisitions should not be expensed or added to the inventories of the individual outlets until they are requisitioned. The technology used to effect the transfer should be exactly the same (electronic requisition or purchase order, bar code scanners, etc.).

REPORTING AND BUSINESS INTELLIGENCE

Back- and front-of-the-house systems may interface by transferring data to and from the central server. Profit (or loss) statements, budgets and variances, daily reports, and balance sheets are prepared with the aid of software programs. The advantage of this technology is that information is provided in real time, enabling operators to make informed decisions quickly. Quicker decisions allow managers to "keep their fingers on the pulse" of the restaurant. When the back- and front-of-house systems are interfaced, it is easier for management to monitor service times, POS food costs, labor costs, and guest counts. Again, this compilation of information helps managers make more informed decisions.

Both POS and I/P systems have extensive report options and can produce good management insights into potential problems. POS sales data provide item popularity reports; combining these with I/P costs produces item profitability as well. Analyzing sales volume by 15-minute periods is a huge help in scheduling staff efficiently. Again, selecting an enterprise management system that provides all of these capabilities in a single package makes reports generation a far easier task and almost all such systems allow managers to create custom reports.

On the cost side, checking for inaccurate inventory extensions can catch bad data entries quickly. Sorting the inventory list in both ascending and descending order allows for a quick reality check on the most and least expensive items. There shouldn't be any flour, sugar or rice valued at thousands of dollars; T-bone steaks shouldn't be priced for pennies.

POS sales totals can be tracked against inventory usage and waste/void write-offs in the I/P system. If beef tenderloin, for example, is being "used" faster than it's being sold, customer returns and possible menu specials should be checked in the POS system data against the spoilage/waste reports from the I/P system to narrow down the actual variance. Excessive waste and customer returns must be documented and the problems resolved quickly, and having access to system data gives you a much better chance of managing this.

