

Energy Efficiency

Throughput capacity management can make quick-serves more efficient and profitable. By Frederick Burger

The goal of any business should be to boost profits by improving efficiency. In the quick-service restaurant industry, achieving those goals is particularly difficult because nearly every process in the business already aims for speed.

So how do you make a food-delivery system that already focuses on being fast even faster—and more profitable?

to delivering the product to the customer as Throughput Capacity Management.

"There are a lot of standard processes in quick-service," Sill says. "They use the same equipment, the same menu items and, therefore, the work time is relatively consistent regardless of drastic differences in facility layouts. The name of the game in quick service is cook-cutter design as much as possible."

hope of improving efficiency.

Sill estimates that 20 to 25 percent of the functions performed by employees at quick-service restaurants represent inefficiencies, about half of which can be eliminated.

"You can't capture 100 percent of the inefficiency because the world is too imperfect, and you have to have a minimum level of productive readiness," Sill says. "But we think you can capture about half of that. Deterministics' whole ethos is based upon actual facts and data, not on gut intuition but on work measures and point-of-sale data and systems."

Staffing makes up just one part of the equation that leads to increased efficiencies. Physical layout makes up another part of that equation. Does the design of a restaurant make it easier for an employee to perform one task but more difficult and time consuming for another em-

ployee to do his job? Finding ways to make both jobs easier and more efficient to perform is the obvious goal. And part of that is the way cooking areas are more accessible to front-counter operations.

"We're seeing the whole production center, the service counter, being squeezed down and pushed ever closer to the customer," Sill says. "As a result, everything is more visible. Quick-service is more a forefront leader in the area of designing for efficiency. And the reason is that efficiency and speed are a function of perceived service quality."

Many quick-service chains address these issues with their own in-house industrial engineers, who work to incorporate new ideas into their new restaurants. Retrofitting older restaurants and making them more efficient, of course, can present a whole series of challenges, not the least of which is the cost of re-design.

"We're trying to find ways to open up or tweak a box so you can get more throughput without having a huge investment," Sill says. "Some of the real challenges are in older facilities that were designed for an earlier era." ☐



Brian Sill, a principal with Deterministics Inc., a consulting firm based in Kirkland, Washington, thinks he is on the track to finding the answers. In fact, he thinks the answers lie in the kind of study and analysis that his firm has been conducting for the better part of twenty years. Of course, it's not a new science. Industrial engineers have devoted their attention to such things for years. But with the quick-service industry ever competitive, the margins of difference in management and customer service become critical when it comes to attracting customers and turning a profit.

With a growing body of analysis and the aid of software his company developed, Sill tracks the efficiencies (or inefficiencies) of any restaurant. More often than not, though, the work begins by watching how a client's restaurant function.

The starting point also can begin with a more elementary approach: putting a stopwatch to the various functions each employee performs to conduct a time-and-motion study, then looking at ways to improve efficiency. Sill describes the way a quick-service restaurant goes from preparing food to taking an order

Sill observes that the quick-service industry has been making significant moves toward greater efficiency for the better part of a decade. Before that, for instance, a wall separated the front counter from the food-preparation area, which created an obstacle to employees who needed to quickly shift from one task to another, depending on the flow of customers. In the last decade, however, that wall has slowly disappeared, enabling customers to watch the full process of their order being filled and permitting employees to move about as they adjust to workplace demands.

Increasing efficiency, however, entails a range of duties that management and employees must be quick to address. For instance, staffing levels must meet peak demands. Further, management must be attuned to ways to meet those demands. Sill is quick to point out that increasing counter service to take more orders quickly can be unproductive if it simply increases orders but does nothing to speed the cook's ability to fill orders.

Thus, if a manager adds a person to take orders but does not add a cook to process the orders, he creates bottleneck and loses any

