FOODSERVICE EQUIPMENT reports

SHORT REPORT

Welcome To THROUGHPUT CAPACITY MANAGEMENT

There must be a better way to gage throughput and match it to demand. One consultant says he's finding new answers in industrial design techniques.

By Emily Pacifico, Contributing Editor

If you're like most people in facilities design, you already have the *general* idea on throughput: Match up the kitchen, the menu, the service system and the seating capacity. Nothing exactly new there.

And if you're with one of the really big quick-service outfits, maybe you've refined that idea to a near-science. But for most of the industry, throughput analysis remains, shall we say, imprecise. So even if you have a smooth-running facility, you know it's, well, smooth. But you still don't know how smooth and fast it *could* be.

Or how about your service system? Think through how you coordinate your busser-server-runner routine *in the context of your layout*, and figure out how *that* system influences not only sales but speed of table turns. You get the idea. The factors impacting your throughput are far too numerous to list here.

Say Yes, I Want More...Or Less

But what if you could get hold of a set of tools that would let you measure and analyze every aspect of your operation,

One believer in TCM techniques, Ponderosa, adjusted its new prototype and ops plan for substantial gains in throughput and labor efficiency.

Harrumph, you say? Challenge yourself. You know, for example, your checks or covers by daypart. You probably know your sales mix by food product. But do you know your mix by cook station? Ask yourself how much product gets grilled per hour, for example. Now figure the variances by daypart. Now compare that to your grill area capacity. Now, how do those factors relate to your seating capacity?

from production workload to service delivery to equipment placement? And what if the results led to increased peak period table turns by as much as, say, 25%, and, without adding staff, increased kitchen throughput speed by hundreds of dollars per hour?

Those are just two of the potential benefits of applying a rigorous, systematic approach to "tuning" design and oper-

ations that consultant Brian Sill, FCSI, has been working on. He calls the process Throughput Capacity Management.

Sill's been on the circuit for a year or more now, showing operators and facilities consultants alike what he's found out about fine-tuning foodservice—and urging everyone to take a second look at their operations. Along the way, he's conducted panel discussions around the country with execs from such clients as London-based Bass Restaurant Group, which runs five concepts and 460-plus units; Metromedia Family Steakhouses, parent to Ponderosa and Bonanza Steakhouses; and Red Robin, describing what TCM studies have done for them.

"TCM's a process for quantifying brand standards and reworking them to achieve their full potential," says Sill, principal and cofounder of Deterministics, a management systems and foodservice consulting firm based in Kirkland, Wash. Or, described another way, "TCM is industrial design for foodservice operations."

Defining your positioning in precise terms—your food product, your sales *mix*, your service product and your customers' expectations—is the first part of TCM. And getting your layout and service systems *really* in line is the second part.

THROUGHPUT CAPACITY MANAGEMENT RESULTS

Ponderosa Steakhouse

- Kitchen throughput increased by $120/hr. without adding staff
- Increased buffet service speed by 28%
- Decreased table-turn times by 15%
- Redeployed kitchen and service workloads, achieving a major reduction in labor savings
- Right-sized facility and equipment, saving thousands of dollars in up-front costs
- Improved food and service consistency

You Can't Manage What You Can't Measure

The general principals of TCM aren't new, exactly. What's new, though, are the specifics tailored to the restaurant industry, Sill says. As a formalized discipline, with very concrete mathematical tenets and measurement criteria, TCM is the culmination of years of R&D by Sill. A veteran of the foodservice industry for almost 30 years, he long ago came to the conclusion that "every work position, process or facility in a restaurant has a capacity that can be measured, and therefore, managed." Or, more simply put, "If you can't measure it, you can't manage it!"

Sill describes TCM as a discipline (note that word, *discipline*) that incorporates three key elements: new measurement tools, predictive brand standards, and understanding true potential.

Sounds a little intimidating, maybe. But Sill maintains that you don't need to be an engineer to re-engineer your business. TCM brand management tools, simple powers of observation, a stopwatch, and standardized process steps are the basics of this new methodology.

So, how do you determine the full potential of your foodservice operation? Sill advocates a three-step process to achieve a balance of the right people, doing the right things, at the right times to grow the business. Step one is to measure your existing resource capacities in labor, production and back-of-house design and equipment. Are they doing what they're supposed to be doing, or are people doing things in their own way, and every way? (Sill's term for this is "service variation.")

Step two is to measure your guest demand patterns, satisfaction and dissatisfaction, and how guests choose to interact with your particular brand. The third step is to calculate ideal production and service levels by factoring step one with step two, balancing supply with demand.

"The trick for us is to identify those key areas of data collection and measurement that can be easily trained, then automate the capacity calculations with software so that you don't need to be a statistician or industrial engineer to learn the answer," he says. Sounds challenging, but Sill notes the TCM software does most of the work, automating the capacity calculations, taking the guesswork out of the equations.

Better Work, Better Retention

Once you've measured your true potential, the next step is to take a close look at how work is performed via "Work Study Technique," which enables an operation to control its service variation. "The study of work in the TCM discipline serves to clarify the purpose of work, or the lack thereof," Sill says.

One of the many measurable benefits of TCM has been the reduction of employee turnover, which Sill attributes to reducing divisions of labor and redesigning work assignments and stations to encourage employees to connect with what they do. The Work Study Technique's a simple process that doesn't have to require a huge investment of time, but can open your eyes to wasted time and motion.

As for back-of-house specifics, smooth kitchen flow is critical to success. The finest cooks and the best equipment won't offset the potential profit killers of poor design and too much (or too little) labor.

On to cook deployment. Sill says his software calculates cook deployment at back of the house, and enables the operator to, among other things, explore alternatives to relieve congestion at peak times, more convenient equipment placement, and changes to the facility design itself. In fact, innovative equipment changes can include right sizing of chargrills, expo areas, server stations, buffet stations, fryer and microwave cooking batteries, as well as simplifying tabletop designs. In summary, Sill says, "If you put deploy-

ment modeling into the hands of those who control design decisions, TCM is the connection between innovation and implementation."

He points out that this tactic can cost money if it reveals that reconfiguring foodservice equipment could maximize the use of floor space, or even conclude that some equipment may need to be added, deleted or changed. However, in the long run, the investment in making the necessary changes will be recouped rapidly with the resulting new throughput.

Big Customers, Big Names

Cook deployment modeling, a core technique of TCM, can profoundly impact back-of-house operations—as found when Metromedia decided to reinvent Ponderosa from the oversaturated mid-scale budget steakhouse segment to the fast family casual segment. A new prototype in Johnstown, Pa., came under review. A capacity analysis of the new design revealed that ovens shared by the buffet cooks and line cooks caused considerable cross trafficking in production areas. Access to the single walk-in also resulted in extensive walk time as cooks gathered their raw ingredients for production. Bottlenecks occurred frequently at the buffet fryer area, while the cookline fryers were under-utilized.

After studying the cook deployment model of the new prototype, the ovens were consolidated into the highest-use area and undercounter refrigerated and frozen storage was added to reduce steps and save worker time. All fryers were consolidated into a single station with improved worker and equipment utilization.

These three relatively simple changes, indicated by the TCM cook deployment model, resulted in a 33% reduction in cook labor in the prototype kitchen. No need to elaborate on the impact in reducing worker stress, not to mention the obvious plus-profit implications.

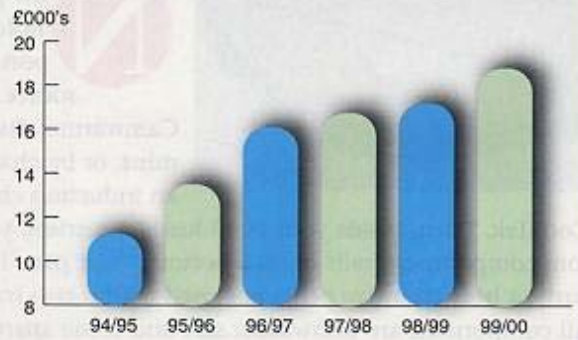
It's not always possible to rearrange ovens and fryers, tear out walls or buy different equipment, of course. TCM advocates taking a holistic approach to any foodservice operation and, rather than "thinking outside the box," Sill suggests looking at what's happening *inside* the box. The TCM discipline teaches you to look at all the possible solutions, from menu to method. There's usually more than one way to fix a bottleneck.

Sauté-Less In Seattle

A perfect example of benefits reaped through TCM is the Seattle Space Needle restaurant, a popular stop for tourists and locals alike. Sill was brought in to solve a problem bottleneck at the sauté position there during peak periods.

BASS RESTAURANT GROUP, LONDON

Weekly Sales Per Average Trading Unit



Applying the TCM discipline, he determined that 37% of all guests ordered items prepared at the sauté station, which greatly exceeded the daily capacity of the station. This impacted everything from recipe integrity to delivery speed and, ultimately, guest satisfaction.

If you're familiar with this famous Seattle landmark, you can guess that adding more space to the kitchen to accommodate another sauté station was definitely *not* an option. So with no room at the inn, so to speak, TCM showed that by reworking the menu, the demand for sauté was reduced, and as an added bonus, the new menu increased the use of the broiler station which was previously underutilized.

THROUGHPUT CAPACITY MANAGEMENT RESULTS

Red Robin's Oregon Market

- Same-store sales up more than 9%
- Productivity up more than 11%
- Labor costs down 2.3%
- Profits up 6% over previous year

More With Less

With the powerful tools that TCM techniques exert on design and equipment placement, what facility designer—operator or consultant—wouldn't adopt them in the design process?

"The real beauty of TCM is the leverage it affords the whole organization," Sill says. "Once you know your workload distribution from a menu and facility design standpoint, this is the same information used in your daily labor scheduling process that assures your payback in design efficiencies are realized."

The challenge for the future is clear, says Sill. "With thousands of oversized and tired kitchens out there, the new launching pad is to measure existing workflows and devise design strategies that improve your throughput and reduce equipment, square footage and personnel requirements—to do more with less."