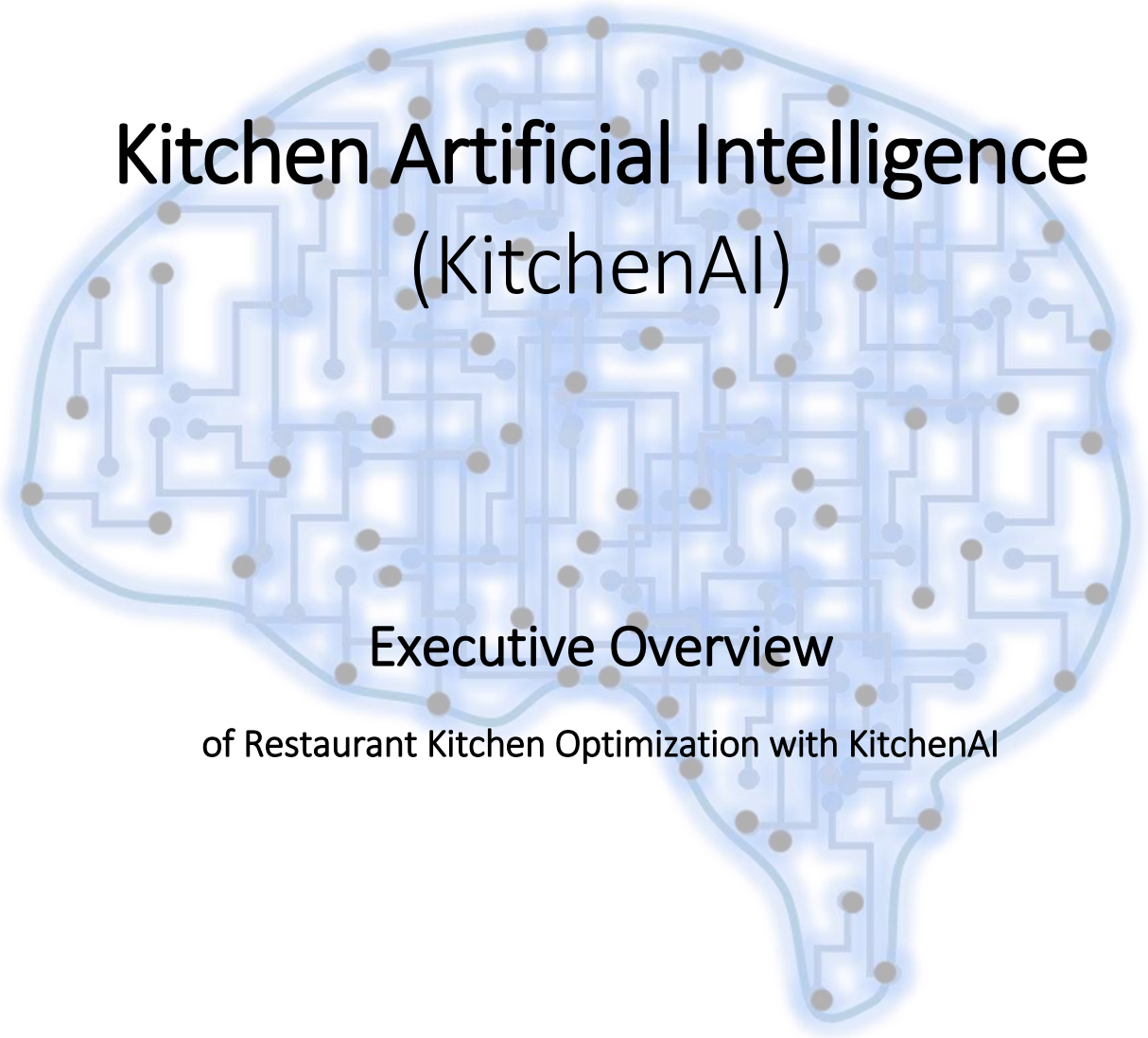


Kitchen Artificial Intelligence (KitchenAI)

Executive Overview

of Restaurant Kitchen Optimization with KitchenAI

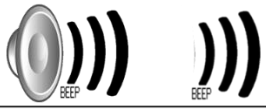
What is KitchenAI?

KitchenAI is a new artificial intelligence system that transforms your restaurant kitchen. Artificial intelligence is employed to figure out "what" to cook/prepare, "when" to prepare it and "how" to prepare it.

It's like hiring a genius to the position of dispatcher in your kitchen! KitchenAI enables your kitchen staff to work smarter rather than work harder. Rather than replacing kitchen workers with expensive robotics, KitchenAI "augments" your staff's abilities making them more efficient, more effective and more valuable.

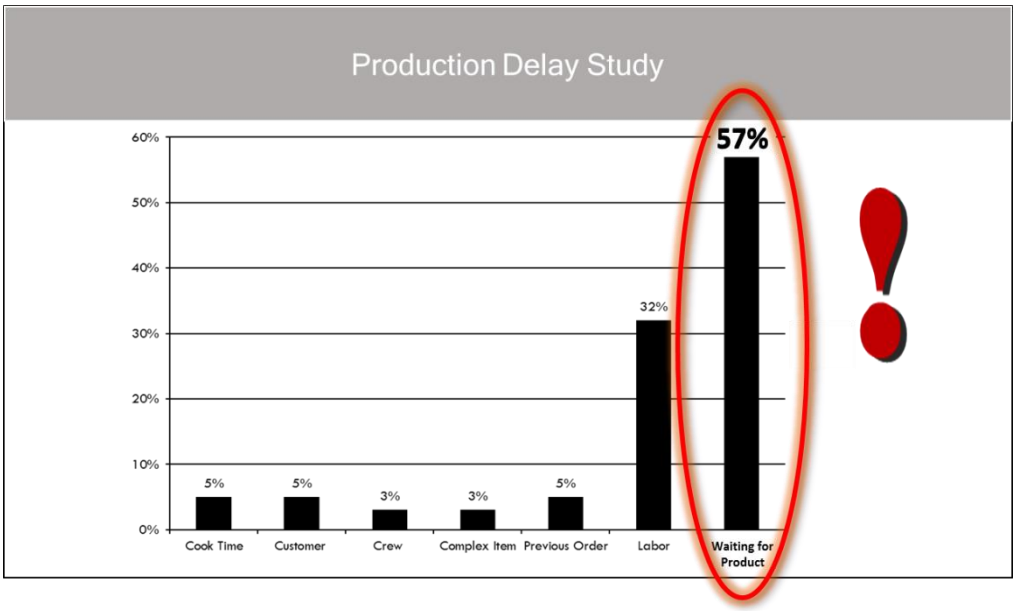
And KitchenAI delivers instructions to your staff verbally through a wireless headset wherever they are. They can be washing dishes, in the manager's office, pulling product from the freezer or in the dining room; they will be instantly aware that they are needed in the kitchen. KitchenAI eliminates the delays caused by kitchen staff not noticing that a Kitchen Display changed or that a new order has printed.

KitchenAI is multilingual. By simply pressing a single button on their belt pack, your staff can switch between a primary and secondary language that are defined for their restaurant. You can elect to use any languages including English, Spanish, French, German and many more.

Wave delivers cooking instructions through natural voice commands. The voice instructions are delivered via a wireless headset system interface.	
The user actively indicates that they have completed the task by pressing an "OK" button on an industrial control or a beltpack button	
The user can press a "Repeat" button to have WAVE re-deliver the last command.	
Wave reminds the user that they haven't completed the task with beeps every 10 seconds that only they hear.	
Wave coaches the user letting them know if they are doing well and letting them know if they are not achieving goals.	 You're doing GREAT!

What is the problem that KitchenAI solves?

Speed-of-Service constrained business exists in many restaurants. This is most evident, and measurable, in the drive-through operation. A recent restaurant study revealed that drive-through service delays are most often the result of kitchen product delays. In fact, inefficient (aka suboptimal) kitchen production is responsible for 57% of the delays that occur!



Some chains have circumvented this by holding more cooked product to guard against production delays. Instead of fixing the problem, they have traded service delays for increased product waste (cooking too much product) or poor product quality (holding product for too long) or both.

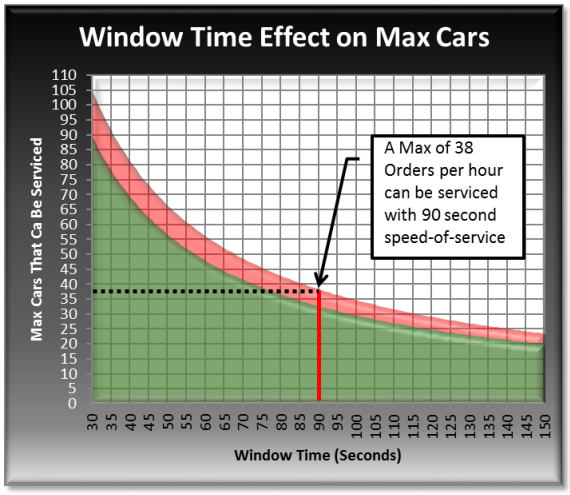
What is the magnitude of the opportunity?

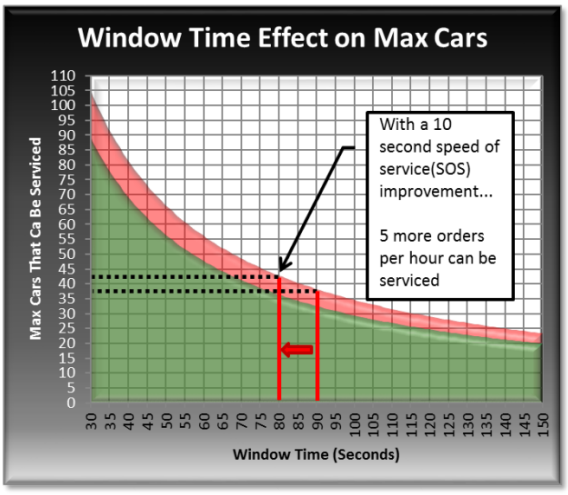
The "cost" of speed-of-service constraints is typically difficult to measure. However, speed-of-service constraints and costs can be measured for drive-through business, and this measure is typically a good indicator of the overall restaurant performance improvement opportunity.

In the drive-through, throughput of customers (orders) is sequential. Only one car (customer/order) can be serviced at a time; the current customer must be delivered their order and must depart the Window before the next customer can drive to the Window for service. And nearly every drive-through restaurant employs a "Drive-through Timer" that reports timings of the drive-through business. If the "average" Window time during a given business hour is "1 minute", the maximum number of cars that could possibly be serviced during that given hour would be 60.

Most restaurants have two rush periods during the business day (breakfast/lunch or lunch/dinner). During the rush periods, customers are time-constrained rendering your rush periods to be on a fairly well-defined schedule that is finite in time. With many customers available, but, for only a limited window of time, your restaurant speed-of-service determines what share of the available customers it captures.

If your average Window time is 90 seconds during a 1-hour rush period, then the maximum number of cars your restaurant can service is 38 cars. But, what if you were able to improve your speed-of-service by 10 seconds? Then your average service time would be 80 seconds per car and you could service 43 cars per hour. That is 5 more orders captured per hour!





What is the economic value of the 10-second improved speed-of-service in your restaurant?

If we assume the following:

- The restaurant has 3 days with busy rush hours each week (Thursday, Friday, Saturday)
- The restaurant has a 2-hour lunch rush and a 2-hour dinner rush each busy day
- The average order ticket for the store is $8
- Food cost is 30% of sales

Then, the minimal and very conservative annual economic opportunity is…

3 days x 4 hours x 8 orders x $8 x 52 weeks = **$40,000 additional sales / year**

And because you can make the improvement without increasing labor (you are making your existing labor force more efficient/effective), then…

$31,200 * 70% = **$28,000 additional store profit / year**

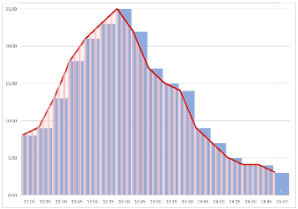
And that's not all; economic improvement will occur in areas other than the drive-through. These same efficiency improvements will translate to your front counter business too!

That's still not all! In addition to increased sales and profits, your restaurants will likely experience improvements in the following areas:

- Improved Customer Satisfaction through improved speed-of-service and product quality
- Reduced food cost resulting from less product waste

How does KitchenAI improve the situation?

KitchenAI uses sophisticated mathematical models and artificial intelligence methods in a 4-stage process to optimize your kitchen operation.

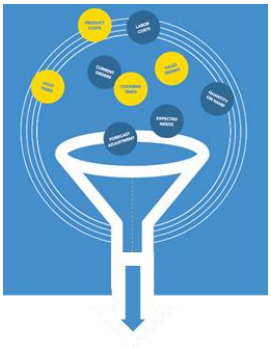


1 The system captures all order transactional data from your Point of Sale system. KitchenAI then uses a dynamic forecast algorithm that computes statistics on several weeks of "same day" history and uses the results to set base expected product needs moment by moment for the current day.

2 History is a good starting point, but each day is different in weather, local events, promotions and other impacting variables. KitchenAI automatically adjusts its expectations based on current day activity using a mathematical "damping" algorithm. The adjustments are made continuously throughout the day to render a most accurate forecast of expected needs.

3 KitchenAI can direct the restaurant staff in restaurant "food prep" tasks. With the forecast, KitchenAI can tell your kitchen staff how many tomatoes to slice in the morning, how much bacon to fry, how many biscuits to proof, etc. And you can define multiple prep times so that most prep occurs in the morning while mid-afternoon prep tasks that use the auto-adjusted forecast then deliver afternoon prep instructions to most accurately prep for the remaining day needs.

4 Knowing the cook/prepare times associated with each defined product, along with how long each product/item can be held before it must be used or discarded, KitchenAI determines how much of each product should be prepared. KitchenAI implements an algorithm that identifies when each individual item is needed to avoid production delays. It determines which specific items are most urgently needed and then reconsolidates the list of items.



5 It then uses an artificial intelligence method that takes numerous factors into consideration (e.g., quantity needed, labor cost, product cost, time of day, current on-hand quantity, etc.) to determine "how" each needed product batch should be cooked. For example, your kitchen staff could cook a basket, or a half-basket of French Fries or it could cook Fries by order amount (small, medium, large). KitchenAI chooses the most optimal preparation method to minimize cost while maximizing speed.

Finally, KitchenAI delivers production instructions to your staff verbally via wireless headsets. They are immediately notified of urgent needs wherever they are. Staff with outstanding tasks hear a gentle beep every 10 seconds until they complete the instructed tasks. When they complete the tasks, they press their remote "OK" button which notifies KitchenAI that they are ready for any next tasks.

Summary

KitchenAI is a completely turnkey system that interfaces with your Point-of-Sale system or Kitchen Display system. There are no additional components such as PCs, display monitors or operating systems that must be additionally purchased.

KitchenAI introduces breakthrough artificial intelligence technologies into your restaurant kitchen to…

Increase Restaurant Sales
Increase Restaurant Profits
Increase Customer Satisfaction

To learn more, visit DaringSolutionsLLC.com or contact Jeff Chasney at:

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