MOVING BEYOND BASIC METRICS:

LEVERAGING RESTAURANT DATA ANALYTICS TO MAXIMIZE PROFITS

Agilence

Introduction

The key to a great restaurant business is no big secret – it's great food and great service, delivered consistently. But success also depends on being profitable. The key to becoming and remaining profitable isn't quite so simple.

Most restaurant operators, whether independent owners or those who work as part of a large chain, understand that controlling costs like labor and inventory represent a significant variable expense to the business. Keeping control of these costs is just as important as what's coming out of the kitchen.

How can a restaurant make a profit if they're regularly overstaffing or running out of ingredients? How can a business succeed if they're constantly losing money to food waste or employee theft? More importantly, how can restaurant operators determine if these problems are occurring and the best way to fix them? What are their biggest issues? How can operators more efficiently manage costs and improve profits?

Monitoring key performance metrics is one obvious answer. But by going beyond these metrics and digging into the data these systems are already generating, restaurant operators can get a full view of what's going on in their restaurants through data. Basic metrics and Key Performance Indicators (KPIs) are a great way to monitor restaurant and overall business health. However, a tool that can pinpoint problems in near real-time can help restaurant operators proactively address issues and boost profits.

MAXIMIZING PROFITS:

10 Basic Metrics for Measuring Restaurant Profitability

1. Cost of Goods Sold (CoGS) and Percentage of Cost to Sales

Cost of Goods Sold (CoGS) refers to the cost required to create each of the food and beverage items sold to guests. It is a representation of your restaurant or chain's inventory during a set time period. In order to calculate this metric, you'll need to record inventory levels at the beginning and end of a given period, along with any inventory purchases during that period. Inventory standards usually fall between 20% and 40% when expressed as a ratio of a percentage of costs to sales.

It's important to track CoGS because inventory is one of the largest expenses for restaurant operators. This metric can help you determine if menu items are priced correctly, if inventory controls are working, or if food costs are too high.

How to calculate CoGS and Percentage of Cost to Sales:

Beginning Inventory + Purchased Inventory - Final Inventory = Cost of Goods Sold

COGS / Total Sales X 100 = Percentage of Costs to Sales

2. Labor Cost Percentage

Labor Cost Percentage measures the percentage of your revenue that pays for labor (wage, benefits, salary costs, etc.). This is another of the largest operating expenses for restaurants. Knowing this metric allows you to monitor and control these costs. An industry average labor cost percentage should be about 20%-35% of sales.

Labor costs can be further broken down to show front of house, back of house, and managerial ratios to control these elements even more closely.

How to calculate Labor Cost Percentage:

(Labor Cost / Sales) x 100 = Labor Cost Percentage

3. Prime Cost

A restaurant's prime cost is the sum of all of its labor costs, and its CoGS. This is an invaluable metric because it represents the majority of a restaurant's controllable expenses, and the primary area operators can optimize in order to decrease costs and increase profits. Calculating prime cost into a percentage of sales creates a Prime Cost Ratio. Typically, a restaurant's prime cost makes up about 60% (65% for Full Service Restaurants) of its total sales. Anything above 70% could indicate that your costs are too high, but below 55% could indicate that you are overworking your staff or sacrificing quality.

Prime Cost should be taken into consideration in how you price your menu, schedule your staff, create budgets, and establish goals.

How to calculate Prime Cost:

Labor Cost + CoGS = Prime Cost

4. Overhead Rate

Overhead costs are the opposite of Prime Costs. While Prime Costs are in constant flux, Overhead Costs encompass the fixed costs and operational expenses. These include your rent or mortgage, utilities, property taxes, licenses, fees, and permits, etc. Your Overhead Rate is the amount you're paying for fixed costs per hour open for a given period of time. Generally, restaurants aim for an overhead rate of about 30% of revenue.

Covering Overhead Costs should always be considered when pricing menu items and creating sales goals.

How to calculate Overhead Rate:

Total Fixed Costs / Total Hours Open = Overhead Rate

5. Food Cost Percentage

Food Cost Percentage measures the ratio of a menu item's cost to produce versus its selling price. Monitoring your food cost percentage on an ongoing basis allows you to identify rising supplier costs, issues with portions, spoilage, and other forms of shrinkage before changes affect prime costs and profits. Industry standards state that restaurants should aim to keep their food cost percentage around 30% (or between 20%-40%).

This metric should be used to correctly price your menu, with your ideal food cost percentage as your base. This way, each dish accounts for the cost of its ingredients and leaves an acceptable margin for other overhead costs and profit.

How to calculate Food Cost Percentage:

Item Cost / Selling Price = Food Cost Percentage

6. Contribution Margin

Contribution Margin measures how much profit you're making on a particular menu item. In other words, this metric shows the dollar amount each dish contributes to your restaurant or chain's revenue after the cost of ingredients.

Restaurant operators can use Contribution Margin to determine which menu items offer the best margins and focus promotional and sales efforts around these items.

How to calculate Contribution Margin:

Selling Price – Cost of Ingredients = Contribution Margin

7. Gross Profit & Gross Profit Margin

Gross Profit represents the money your restaurant or chain makes after deducting the cost of goods sold. It can be shown as a number or a percentage of total revenue (margin). This metric represents the capital available to put towards paying fixed expenses like rent, labor, and other overhead expenses as well as any additional net profits. When used as a key performance indicator, most restaurants aim for a gross profit margin of around 70%.

How to calculate Gross Profit & Gross Profit Margin:

Total Revenue – CoGS = Gross Profit

(Gross Profit / Total Revenue) x 100 = Gross Profit Margin

8. Net Profit Margin

Your Net Profit represents the money your restaurant or chain makes after accounting for all operating costs, including CoGS, Labor Cost, and overhead expenses like rent, equipment, and utilities. While any profit and all profit is cause to celebrate and averages vary by concept, about 6% is the industry-wide average Net Profit Margin.

Proving profitability with this metric can help to set goals, plan growth and expansion, or secure investors.

How to calculate Net Profit Margin:

(Gross Sales – Operating Expense) / Gross Sales = Net Profit Margin

Note: (Gross Revenue – Operating Expenses) is often referred to as Net Income. So, Net Profit Margin can also be calculated as: Net Income / Gross Sales = Net Profit Margin

9. Average Cover (Revenue per Seat)

Average Cover (also known as Restaurant Revenue per Seat) measures the average amount a single customer spends at your restaurant or chain. This metric can inform managers and executives how effective staff is at maximizing sales through upselling, regardless of section size or turnover rate. Average Cover can also be used to predict and forecast sales by combining with average headcount.

How to calculate Average Cover:

Total Sales / Number of Covers = Average Cover

10. Revenue per Square Foot (Sales per Square Foot)

Sales volume is the most reliable indicator of a restaurant's potential for profit. A useful way to look at sales volume is through the ratio of sales to square footage. Average Revenue per Square Foot, also known as Sales per Square Foot, compares sales volume for any period of time to total interior square footage including kitchen, dining room, storage, restrooms, etc. This is usually equal to the net rentable square footage in a leased space. In most cases, full service restaurants should average at least $150 per square foot, while limited service restaurants should average at least $200 per square foot. High profit restaurants can easily double those sales metrics.

Revenue per square foot tells you how efficiently you're generating sales, which can be used to showcase your potential for expanding your restaurant or adding another location.

How to calculate Revenue per Square Foot:

Sales / Square Foot = Sales per Square Foot

The Bottom Line: We Need to Go Beyond the Basics

The above metrics are just a starting point for restaurant operators. While most of these metrics can be calculated manually or reported through a modern POS system, complete data anlaytics can provide true insight and deliver deeper value.

The basics simply won't cut it when it comes to optimizing sales and labor efficiency, analyzing performance in near real-time, and automatically flagging suspicious behavior. Static metrics may indicate a problem, but they will rarely provide the insight necessary to pinpoint it. Organizations that try to make due with basic reporting tend to create massive amounts of reports to try to cover as much ground as possible, but very rarely do these reports actually privide insights. In the rare case that these reports are read, by the time someone has interpreted each report, any insights gathered are outdated. Do you really want the people operating your business spending time reading reports anyway?

Restaurants need to reach conclusions quickly and identify exceptions immediately. Restaurants require data analytics that can provide actionable insights that help operators make better decisions, faster.

5 Ways Data can Increase Restaurant Sales

Restaurants have never had more data at their disposal. Every time a member of your staff enters an order, swipes a credit card, discounts a menu item, or closes a check, valuable data is being created. These data points individually may not tell you much, but altogether, sorted correctly, they have the ability to tell incredible stories about what's going on throughout your business.

Restaurant analytics combine all of your business' raw data and transform it into valuable insights that can help inform better, faster decision-making. Today's technology allows nearly every piece of information about your business – from wait time, to inventory waste and tip distribution – to be accurately gathered, measured, and presented to operators in a way that can easily be understood and acted upon, prompting real-time response and forward-thinking plans for long-term success.

1. Identify Underperforming Locations, Employees, Dayparts, and Menu Items

Your employees, from dishwasher to front of the house, need to be trained not only in their specific job duties, but also in the nuances that make the experience more enjoyable for the diner, and more profitable for the restaurant. Established training programs help teach servers the differences between menu items, and the psychological benefits of recommending dishes, including high-margin offerings, to the customer. Some employees will thrive in this environment, and others won't. How can you tell which ones are successfully trained and which ones need a refresher course?

Traditionally, managers looked at average ticket sales and similar metrics to identify who was a profitable server and who needed additional training. Today's data analytics go deeper than just "average". Enterprise-wide data solutions can reveal what time of day is best for upselling recommendations, what teams perform well together, what meal combinations are highest profit, and which bottle of wine should be served with your chef's seasonal special. It might even identify innovative server techniques that could be used at other locations.

Understanding data analytics at a granular level not only helps your profits, but optimizes your time and managerial focus by pairing the right teams, providing insights on recommendations by time of day, and other variables that drive up profits while offering focused training opportunities. The first step in an effort to increase sales must be to collect a baseline in order to identify any pain points or underperformers. This means getting a complete view of sales by employee, location, daypart, and menu item.

Employee: Individual employee sales can help to quickly identify training issues or dishonest employees, but also to reward employees who consistently perform well. Checking-in with low-performing employees may also help to decrease turnover.

Location: Viewing sales by location can reveal a number of issues involving management, training, inventory levels, market fit, and more.

Daypart: Sales by daypart can help to optimize inventory levels and labor scheduling and to identify opportunities for promotions through a better understanding of customer behavior.

Menu Item: Measuring sales by menu item, you can gain a better grasp of what is or isn't selling and how to make your menu more profitable.

2. Prioritize Menu Items by Profitability and Popularity

Just because a menu item has a high ticket doesn't mean it has a high profit. Will adding another filet mignon to the ticket drive more profit than a second bottle of wine? Without knowing your profit margin, by item, you won't know if upselling adds to your bottom line - or takes away from it.

Knowing which menu items have the highest profit margins allows you to craft higher impact promotions/discounts and train employees to push those items above all others. The three most important metrics you'll need to measure each menu item's profit margin are menu item food cost, food cost percentage, and gross profit (see previous section for more information on how to calculate these metrics).

Comparing a menu item's profitability and its popularity (or sales per menu item), you can create a hierarchy of menu items that should be pushed to customers. This information can help to train employees, inform promotion creation, identify low margin or unpopular menu items, and optimize menu design to push high performing/high margin items.

3. Increase Order Size: Train for and Measure Upselling

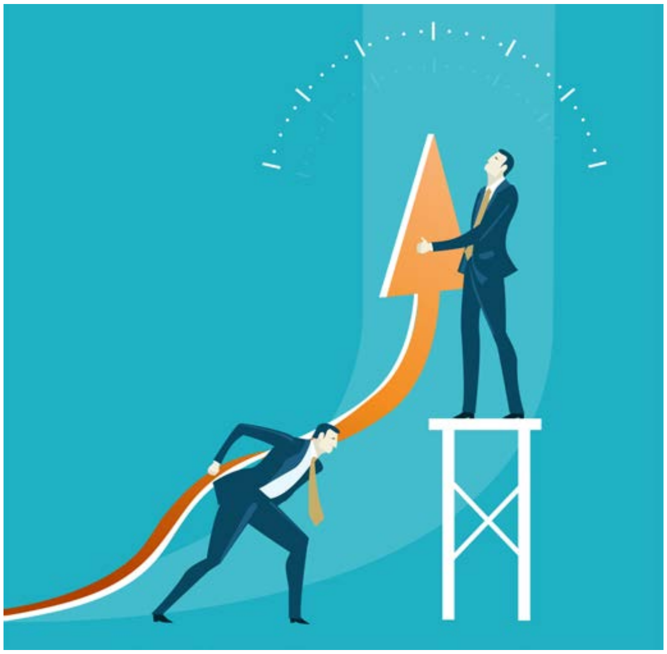
Some argue that the best way to increase check size is by discounting menu items to sell more. But this is a dangerous misconception that can hurt margins and devalue your brand if overused. Alternatively, the best way to increase check size is with a well-trained staff who know how to upsell things like drinks, dessert, and coffee. A robust data analytics solution will allow restaurant operators to identify high-performing employees to praise or advance and low performers to re-train or motivate to improve. Front-of-house staff should be trained in suggestive selling. Server performance should be measured by check averages but also by the number of appetizers, sides, desserts, wine, etc. Identify high performers to praise and low performers for additional coaching to make the biggest impact on sales. Of course, take variables like daypart and shift into consideration to avoid comparing a weekday lunch to a weekend dinner or early morning breakfast. Getting your team excited about upselling should be easy since bigger tips come from bigger bills and happier guests.

4. Optimize Speed of Service

Finding ways to increase your restaurant's speed of service while also providing quality service may seem like an unreachable goal. However, speed of service plays a large part in the customer's experience, and largely impacts whether or not they will choose to return to your restaurant. By decreasing the average speed of service, restaurants are able to serve more guests in less time without increasing labor spend or sacrificing quality customer experience. Data analytics is one of the best ways to learn what areas need improvement. Looking at your data can help you to identify which store locations have the longest & shortest speed of service times allowing you to compare practices and improve certain locations. This type of analysis will also allow you to forecast which times and days are the busiest, allowing managers to schedule employees accordingly to ensure the right people are scheduled at the right time.

5. Maximize Customer Value

The best way to maximize the lifetime value of customers and overall customer loyalty is to ensure that they have positive experiences every time they visit. This means identifying both front of house and back of house issues immediately and acting accordingly to remedy these issues. Data analytics can help do this as well as forecast customer demand with more predictability and better tailor marketing, loyalty/rewards program, and promotional efforts to drive customer buying actions.



5 Top Tips for Controlling Food Costs

There is no doubt that cost control must be a significant priority for any restaurant, whether independent or a large chain. Labor and inventory (food cost), on average, account for more than 50% of restaurant revenues. The majority of operators counter these high costs by raising menu prices and working with a leaner staff. But both of these options are simply band-aids that have a direct, negative impact on guest experiences. Instead, restaurant operators must make data-driven decisions to control costs throughout the operation.

Food cost is the largest expense for most restaurant businesses. Considering its super-sized impact, keeping inventory costs under control is a lynchpin for financial success – and getting it under control should be a top priority. Implementing the following 5 best-practices will help get these percentages into healthy ranges.

1. Forecast Sales

Sales forecasting involves looking at historical sales data and using that information to predict future sales trends and is a critical planning task in every restaurant business. Not only does this help to control food waste, it also results in more efficient management of employee scheduling, ordering, and food prep. However, getting forecasts right requires more than a quick glance at sales averages.

Consider seasonal changes, regional/locational weather trends, holiday and local event calendars, and even competitor activity when forecasting your sales.

2. Set Goals, Communicate Policies, and Track Progress

The establishment of thresholds, ideal cost variances, formal policies and procedures, and communicating expectations are a key component of any organized effort to improve profitability for your restaurant.

By monitoring the variances in ideal food cost versus actual food cost, you can pinpoint operational weaknesses, identify loss and theft, and combat rising commodity costs. Finally, do not underestimate the cost of food waste; controlling waste is a key component in controlling your cost of goods sold. Make sure the employee handbook is readily available, post signs in the back office or kitchen to boost awareness and follow through with the rules so your staff knows their negative activities do not go unnoticed.

3. Re-Engineer your Menu

As discussed in a previous section, menus can be re-engineered to keep food costs as low as possible by comparing item profitability and popularity.

4. Monitor Comped Items and Employee Meals

Most restaurants have a policy when it comes to free or discounted employee meals. Some provide a basic staff meal for free to all employees while others have staff choose their meals and pay for them at a discounted rate. While it may seem tempting to cut employee meals as a quick way to lower your food cost, you will see an inevitable dip in employee morale. Your staff works long hours in a fast-paced environment, so sitting down for a free or discounted meal every day is a crucial part of team building.

That being said, make sure you set thresholds for free meals and discounts and communicate those expectations to your staff. Make it clear that staff meals are meant to be delicious, filling, and balanced, but not extravagant. Make sure that you set thresholds for employees' meal discounts, communicate those expectations to your staff, and monitor follow through.

5. Ensure Proper Manager Follow-Up

How your restaurant handles and tracks follow-up is just as, if not more important, than actually identifying issues. Without a defined "action plan" to address how to proceed when an incident is discovered, you leave yourself open to restaurant managers pushing problems to the wayside.

Developing and adopting a standardized follow-up workflow can help streamline and operationalize your restaurant loss prevention efforts.

a) Define company-wide potential causes and accepted resolutions for easy tracking of recurring issues

b) Ensure managers know the follow-up steps for each type of issue by publishing corporate action plans

c) Validate that an issue has been viewed with a form of acknowledgement

d) Easily track issue/incident history to identify recurring problems so that you can pinpoint the source within the chain of events

Once a follow-up plan is in place, you will see that there's an immediate sense of restaurant-level buy-in because performance insights are now shining a spotlight onto under-performing staff and managers.

5 Ways to Reduce Restaurant Labor Costs

Labor costs are the second greatest expense for most restaurants, accounting for roughly 20-30% of total revenues. But as essential as labor costs are, controlling them can be extremely challenging as costs are constantly changing, usually upwards due to minimum wage increases. However, by efficiently scheduling, properly training, and retaining top employees, restaurant operators can keep labor costs under control and improve overall profitability.

1. Stay Up to Date on Labor Laws

Are you aware of your state labor laws regarding restaurant workers? If not, it could cost you and your restaurant a lot of time and money. Knowing how many breaks workers are entitled to, if employees are responsible for customer walk-outs, whether managers can take tips, and what the minimum wage is for waitstaff and bartenders are just a few of the laws you need to be familiar with. Violating them could lead to fines, lawsuits, or even business closure.

2. Revise Hiring and Training Procedures

It's not uncommon for restaurant owners to hire seasonal staff during peak periods like summertime. But, you may not actually need such a large seasonal workforce. Review your hiring policy, analyze historical labor reports to spot opportunities to trim seasonal staff, and ask regular employees to take on more shifts. Removing one or two positions can translate into massive savings down the road.

3. Properly Train Employees

Training your staff means that they'll feel empowered to do their job correctly and become more efficient. Greater efficiency ensures you can schedule a leaner workforce without jeopardizing service. Training should include communicating customer service standards and repercussions when these standards aren't met. All employees should have access to an employee handbook which includes everything they need to know about the business, including HR policies, mission statement, as well as crucial systems and processes. Don't forget to conduct refresher training with all staff as bad habits can, and do, creep in. Also, ensure you have regular staff meetings and hold performance reviews to identify areas for improvement.

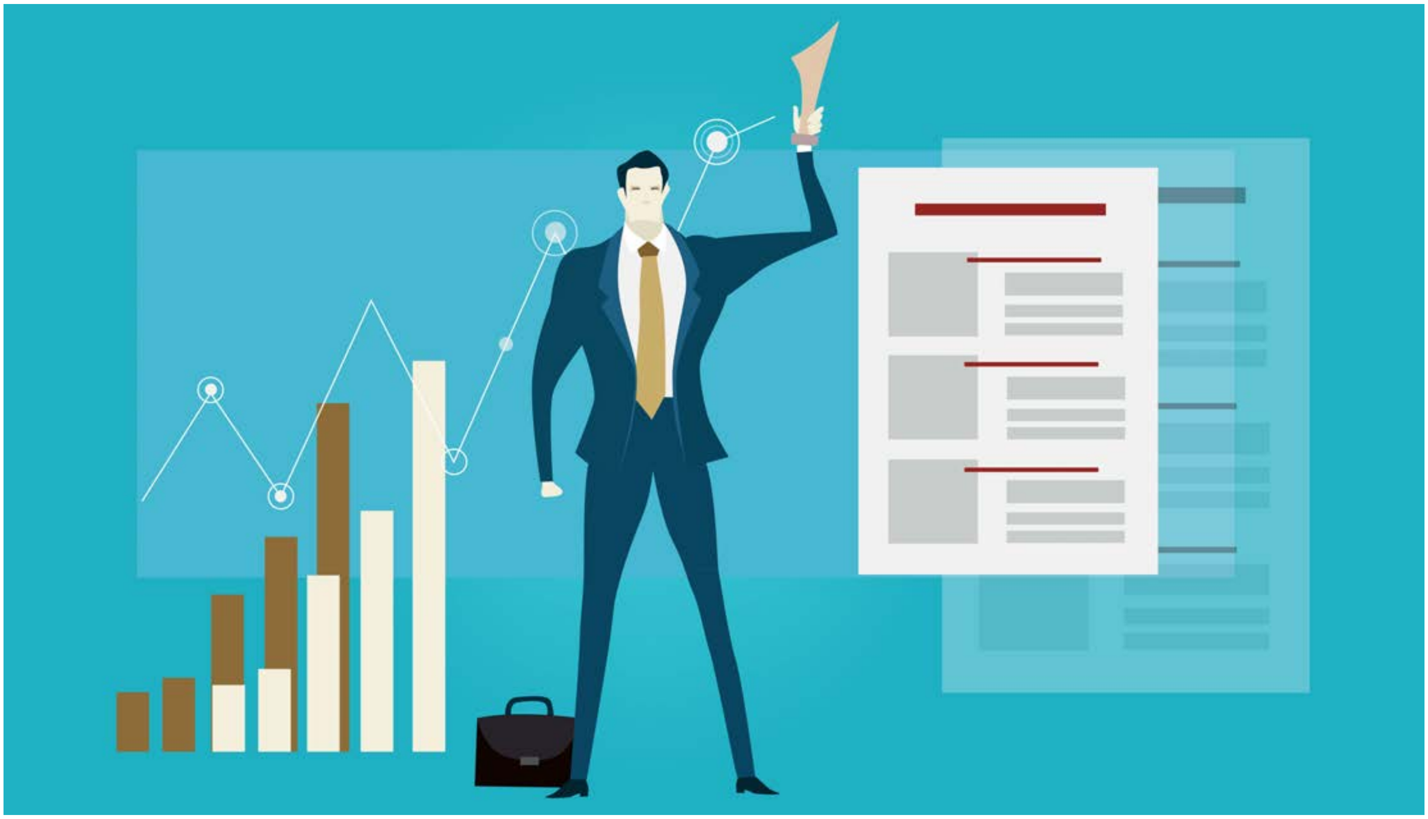
4. Reduce Employee Turnover

Turnover rates are notoriously high in the restaurant industry. These high turnover rates cost you money in the form of higher labor costs. Every time an employee leaves, you have to invest time, money and resources into finding and training a new employee. It's a cost you could avoid by focusing on retention. But how exactly do you retain existing employees? Here are three ways:

- **Rewards:** Provide monthly rewards like "employee of the month" or daily rewards for those who make the most sales.
- **Recognition:** It's not always about a financial reward. Sometimes employees just want to feel valued. A simple "thank you," and even public recognition can boost their confidence and morale.
- **Promotion opportunities:** Reward top-performing employees with a promotion to create a culture of growth that encourages other employees to work harder because they see a future with your restaurant. To help identify these top performers, review sale reports from your POS and monitor those who regularly do more than their job description.

5. Analyze and Improve Processes

Audit your current processes including time clocking, inventory management, and employee scheduling to identify optimization opportunities that will improve efficiency. For example, instead of using manual clocking out methods, use a solution that automates and digitizes the entire process while collecting valuable business intelligence.



Reducing Other Forms of Profit Loss

Whether an established chain or an up-and-coming restaurant, ignoring preventable sources of profit loss can derail the outlook of any business. The reason why is simple – loss eats into the bottom line. Identifying the source of that loss is key to stopping revenue leakage but has historically been difficult to pin down.

Identifying Deliberate Loss (Theft) with Automated Alerts

Automating data analysis is a core foundational piece when building your loss prevention strategy. By finding things to take off your "manual analysis plate," you not only save yourself a data-mining headache, but you can also allocate resources more effectively.

Targeting common employee profit draining activities like SITs or the wagon wheel scam is a good place to test your automation process – this is because there is usually a pattern to their fraudulent activity, which your data can easily expose.

Rather than manually reviewing restaurant check data and video (more on that later) to identify fraud at your restaurant, you can use your own historical data combined with industry trends to define an "unacceptable" level of activity for each fraud scam (i.e 3 transfers in a shift per employee); and set an alert for it. This "set it and forget it" methodology gives you the peace of mind that if suspicious employee behavior appears, you will be made aware without the need to waste time searching for it.

Additionally, advanced restaurant alerting tools have the flexibility to continually add and adjust thresholds to be stricter (or more lenient) as employee behaviors change. So, as your loss prevention scope widens you can institute more automation as things improve.

Common Types of Restaurant Theft

Auto Gratuity Scam

Focus in on employees with above average check counts containing auto-gratuities, or above average total top to sale percentage.

Employee/Manager Meal Abuse

Focus on employees manager meal to shift percentage, as well as comparing managers against other manager averages.

Shell Game Scam (Voids/Discounts/Cancels)

Focus on variance metrics and set alerts on cashier voids, discounts, cancels, etc. for the day and flag those above a certain threshold outside of the norm.

Tip Boosting Scam

Focus on tip % by server and look for those outside of the norm. You can also compare tips for orders containing voids and those without voids to try to zero in on the transactions that are the issues.

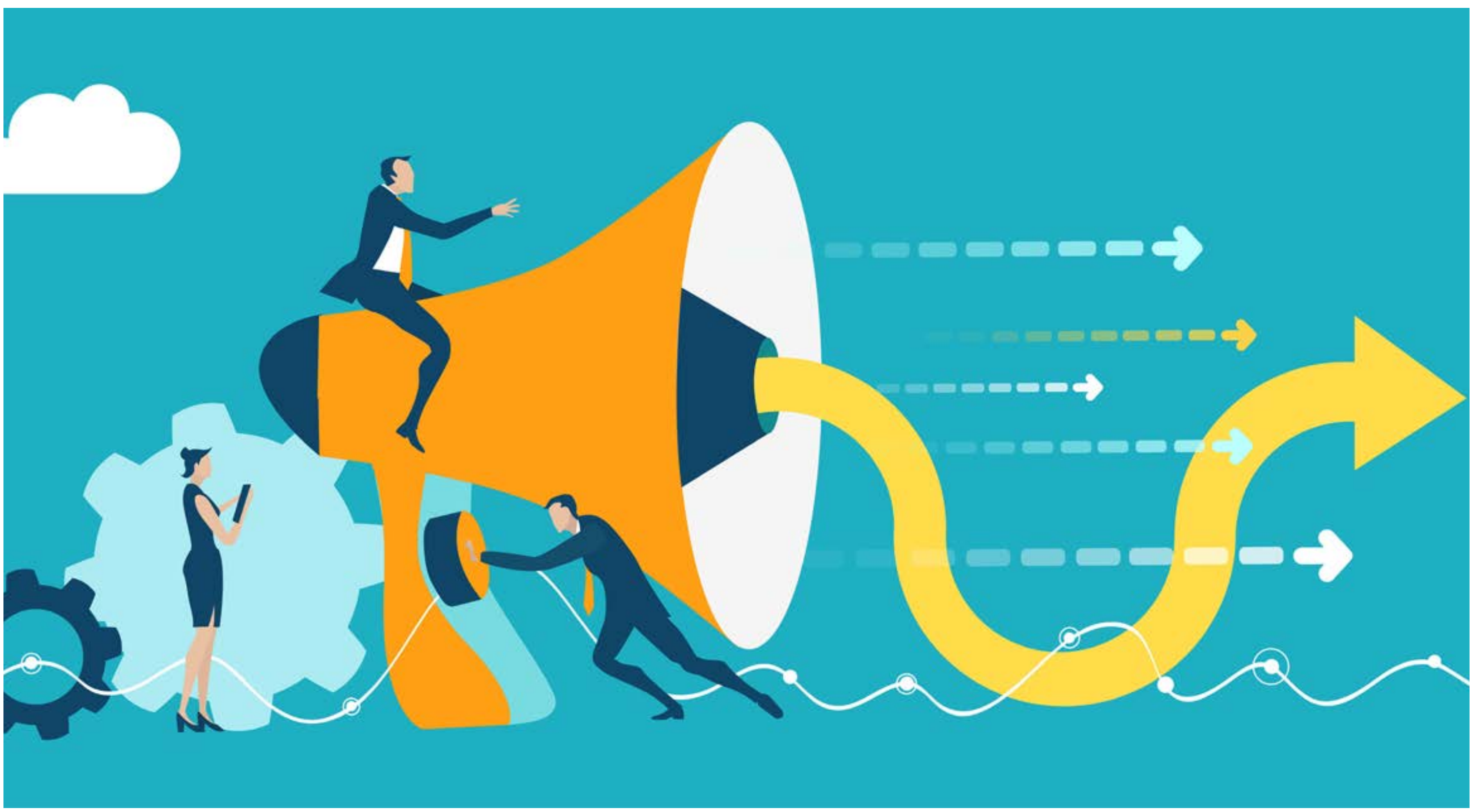
Wagon Wheel Scam

Analyze same item transfers in cash transactions by employee or monitor overall transfer activity by employee to see if anyone is outside of the average.

Clearly Communicate Restaurant Policies and Repercussions

Communication is key to successfully implementing any sort of policy or proceedural changes. Whether it is in employee training, during regular meetings, or when a new policy is introduced, make sure that your staff is aware of the rules & repercussions involved. Drawing their attention to the software or processes that are in place to monitor their activity can sometimes be a deterrent to future “bad” behavior.

This may seem like an obvious one, but the majority of restaurant employee fraud is opportunistic or due to the belief that they either won’t be caught or there will be no repercussions. There is a fine line between running a tight ship and appearing overbearing. So, promote open dialog with your staff so that they feel like they are an important part of the team. This approach will make them feel like a vital asset to the restaurant and help preemptively prevent restaurant theft while improving overall morale.

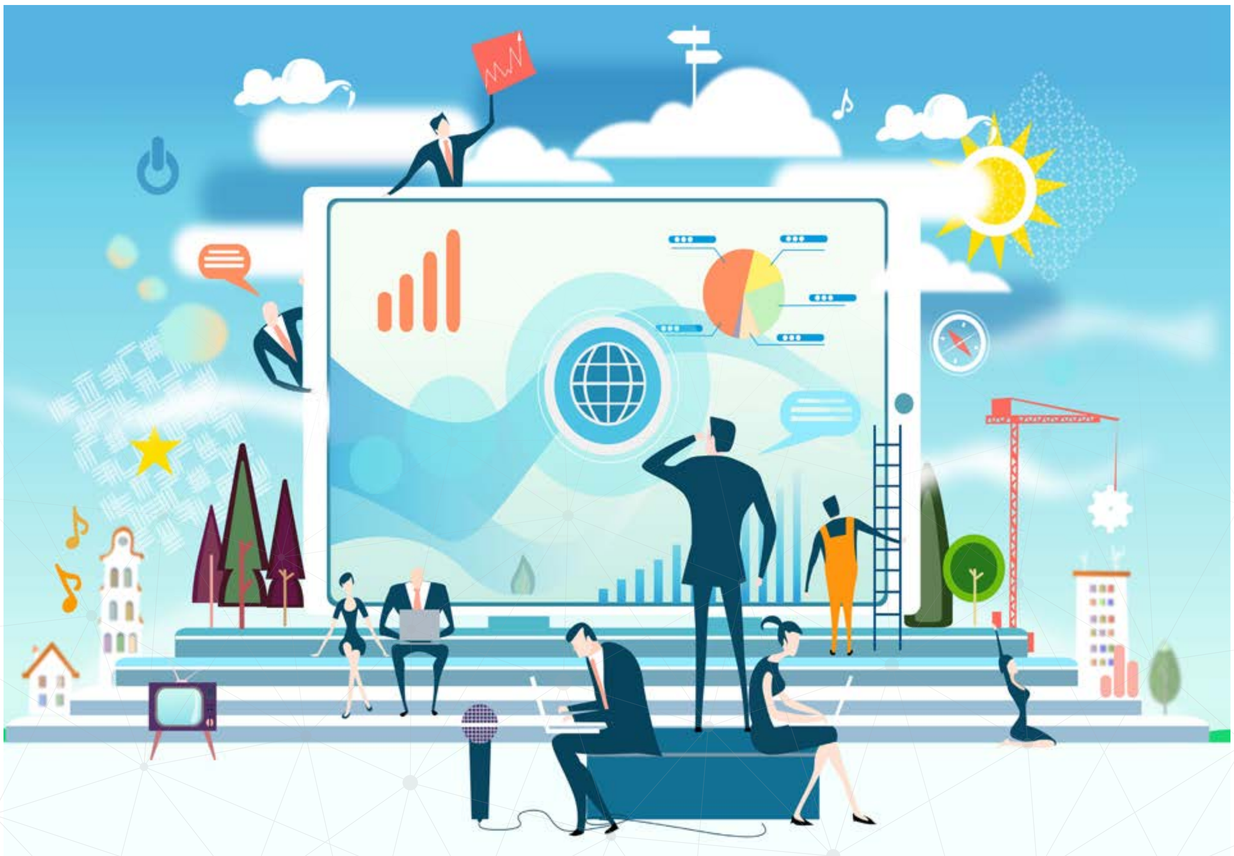


Continue to Grow, Tweak, and Refine

The final and possibly most important tip we can provide is that no decision, priority, or threshold should ever be final. A big part of optimizing profitability is commiting to constantly revisit and refine these decisions based on new data, new processes, evolving industry standards, emerging opportunities, etc.

Continuing to analyze your restaurant data, reports, alerts, and resolved issues to ensure they remain effective will give you the best chance of optimizing your restaurant performance and earning the most profit.

Ready to learn what Agilence can do for you? Contact us today to learn more!



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