



# **DATA-POWERED DINING**

**Leveraging Data Analytics to  
Grow Your Restaurant Chain**

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## Introduction

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# Today, the restaurant industry is the place where creativity and science meet.

In past years, restaurant chains were successful because of their menu, food quality, customer service, and price, but now we can add data analytics into the “pot.” While slower than other industries to embrace analytics, restaurant chains are discovering that they cannot maintain their competitive position without using big data. Analytics can now be used to add value to almost every department within an organization and this is great news if you are managing your business in a top-down approach.

But there is some bad news. The reality is you do not want every department to invest in their own data analytics solution. Instead, you should choose an enterprise-ready solution that meets the needs of everyone in your organization. One solution that serves everyone’s needs saves money — you eliminate the costs and training associated with multiple solutions and the time interacting with and managing a multitude of different software providers. Best yet, an enterprise data analytics solution serves the needs of the restaurant chain across the organization’s hierarchy, from the executive level down to the restaurant and employee level.

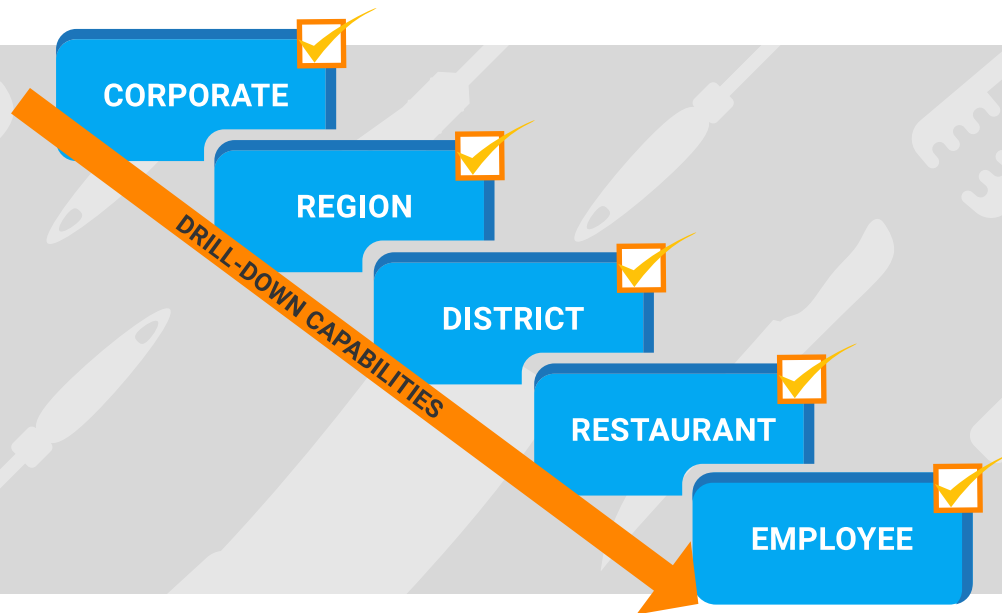
This eBook describes what an enterprise-ready data analytics solution looks like and the various ways that restaurant chains are using analytics today. It is our intention to present these use cases as examples to consider how an enterprise solution can meet your restaurant chain’s needs. You may even discover new use cases that help your organization achieve a more competitive position too. Let’s begin!

“ You should choose an enterprise-ready solution that meets the needs of everyone in your organization. ”

## What Makes a Data Analytics Solution Ready for the Enterprise?

### There are four key features that make a data analytics solution enterprise-ready.

First, enterprise data analytics solutions can analyze both structured data that comes from your Point-of-Service (POS), inventory, supplier, and accounting systems as well as unstructured data that may come from video systems, loyalty programs, social media feeds, etc. This means that your organization need only invest in a single solution that meets various cross-departmental requirements across your organization.



Second, while most restaurant analytics solutions are developed from the store-level up, an enterprise solution is built from the chain-level down. The solution brings everything together so that users do not need to sign into multiple systems to do their jobs and can compare the performance of products, people, and locations in any hierarchy they need. This makes it easier to find the root causes to problems by drilling down from the chain-level to the employee-level, and comparing different areas of the business to seize new opportunities to drive sales up and costs down. With an enterprise-ready solution, the C-Suite can view trends at the corporate level — with Key Performance Indicator (KPI) dashboards that keep corporate goals front and center — and the store manager can also view trends, leaders, and laggards at the store- and employee-level. As Ryan Berkey, Manager, Safety, Security & Strategic Loss Prevention Initiatives at Dominos, comments, “To be effective, data must be actionable and efficiently acquired.” The drill down capabilities featured by enterprise-ready data analytics solutions make data actionable because you can identify trends and issues at the lowest levels.

## What Makes a Data Analytics Solution Ready for the Enterprise?

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Third, enterprise-ready solutions easily integrate with POS, accounting, inventory, human resource systems, video systems — all data sets across the organization. An enterprise solution easily integrates multiple data sources to answer complex business questions without generating unexpected add-on charges during the implementation process too.

While most restaurant chains integrate each of their transaction systems with the enterprise data analytics solution, Skip Kimpel, IT Director at Anthony's Coal Fire Pizza decided to develop a centralized data warehouse to collect all restaurant data in one place. "While awaiting the purchase of our analytics system, we developed a data warehouse so we can only focus on a single integration to reduce implementation efforts and costs," comments Kimpel. "We will then overlay an analytics solution so that multiple departments — marketing, accounting, operations — can self-serve. While our restaurant chain has personnel with good instincts and high-quality food and service, data can assist and support most every decision that we make."

Lastly, with an enterprise-ready solution, your employees and field users can build custom settings and outputs, including hierarchies, queries, metrics, reports, and dashboards based on region, store, risk, and geography, without IT/vendor assistance. This significantly reduces the workload on IT since they do not need to build complex queries for the users across the enterprise.

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## Why Restaurant Chains Need an Enterprise-Ready Analytics Solution

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**Before the era of data analytics, restaurant chains used “gut instinct,” “on-the-ground” observations, and spreadsheet analysis of POS system data to make decisions on how to improve revenues and lower costs.**

But with the advent of “big data” analytics, restaurant chains now have the means to make data-driven decisions to improve their operations, whether it be identifying top revenue-generating menu items, improving employee productivity analyzing store traffic flow, minimizing and managing inventory, and optimizing customer lifetime value.

The fact is there are many departments within your organization that need to analyze data to make informed decisions to improve revenues and decrease costs — including operations, marketing, accounting, loss prevention, even human resources, to mention a few. Furthermore, you have a C-suite and executive management team that are looking to track trends and issues at the chain-level.

For these reasons, restaurant chains need enterprise-ready solutions to eliminate the need for multiple, siloed solutions, and to reduce costs. The good news is that an enterprise data analytics solution can service every user — from C-suite down to restaurant or department manager — everyone who needs to analyze data.

Let’s look in more detail at the different ways a variety of national restaurant chains are leveraging analytics today.

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## Increase Check Size

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### **Some argue that one way to increase check size is by slashing menu prices to sell more, but this a misconception.**

While discounts can bring in more traffic and increase sales, they do not increase check size and tend to devalue your menu. Alternatively, the best way to increase check size is with well-trained staff who upsell drinks, dessert, and coffee. As Amy Nedwell, Director of Marketing at Good Times Restaurants states, “Our restaurant chain is about great food and providing an enjoyable experience for the guest and passionate servers are our number one marketing tool to make that happen.”

With upselling being an area of major focus, this first component restaurants look at when it comes to increasing check size is server performance. Unfortunately, without analytics, while you can assess server performance with your POS data, the analysis is limited to looking at the total value or units per transaction at the store-level.

While this may help an individual store manager, it does not give the restaurant chain the information it needs to identify high-performing and low-performing employees across the enterprise. With an analytics solution, you can quickly assess performance by location and by employee. You can identify the top performers to retain and advance and the low performers that require more training, a transfer to a different position, or, in the worst case, termination. You can pair top performers with low performers to provide coaching. You can incent employees by offering the best shifts to top performers. You can develop sales contests to motivate employees to improve. You can share results across the enterprise as a way of encouraging low performers to improve and encourage friendly competition.

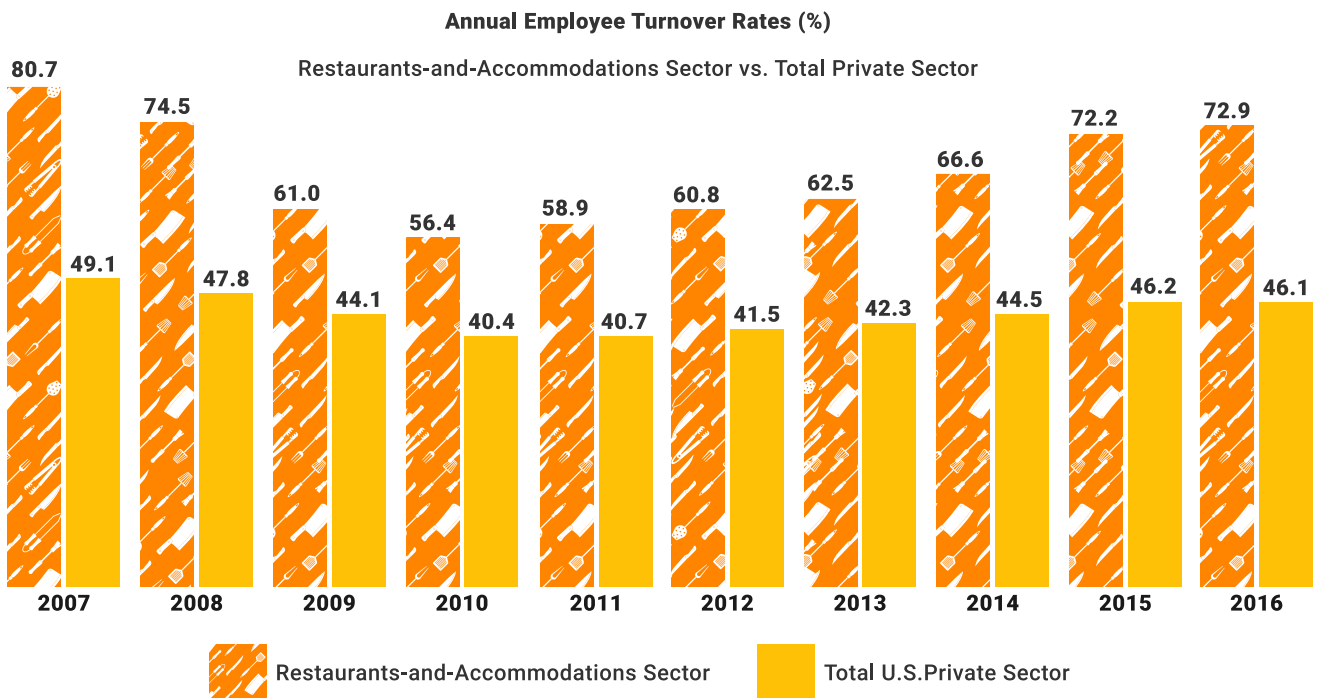
Restaurant chains also perform much more in-depth analysis to increase check size. For example, one restaurant chain analyzes entrée orders that do not include a beverage and entrée orders that do not include a dessert — across their entire chain, by server and by time of day – this is analysis that’s much harder to accomplish without a robust analytics solution. Another restaurant chain analyzes register items to ensure they are set up correctly. In doing so, this chain discovered that the discount key on the registers were set too high, allowing servers to exceed the discount. By fixing this problem, this organization saved \$1.5 million annually.

## Improve Employee Productivity

A by-product of analyzing server performance to increase check size is that this data provides you with the information you need to identify quantifiable employee performance so you can act to weed out and reallocate inefficient employees.

To accomplish this without analytics, you would need to run through hundreds of reports to find the data you are looking for. With one restaurant chain, their Chief People Officer (CPO) uses analytics to create scorecards to compare manager A versus manager B and identify what are they doing differently. Data helps this restaurant chain individually score people during the evaluation process and identify whether the problem is a training issue or whether the employee is in the wrong position. This restaurant chain always wants to promote from within and with an analytics solution, they have right data tools at their fingertips.

Analytics can identify what an employee is good at with regards to sales, average check size, speed of service, whether they are a good cashier, and so on. Do order times lag when this person is on staff? Is the team working well when this individual is on duty? You can also identify the elements associated with high turnover. Is it a sign of poor training or rather that your organization is not hiring the right people? When you understand your employees' career paths and have an organization that promotes from within, analytics can help identify trends that impact employee performance. According to The Association for Talent Development's (ATD) 2014 State of the Industry the average cost to train a new employee is \$1,208 per employee (across all industries) and according to data from the Bureau of Labor Statistics' Job Openings and Labor Turnover (JOLTS) program, the turnover rate in 2016 in the restaurants-and-accommodations section<sup>1</sup> was **72.9 percent**. If your restaurant chain can move the retention rate by even five percent, you can save hundreds of thousands of dollars a year.



<sup>1</sup> The Bureau of Labor Statistics does not report data for restaurants alone.



## Drive Store Traffic and Increase Customer Life-Time Value



**With analytics, it is easy to look at sales trends by analyzing what happened in any given location over time (e.g., this year versus last year) and overlaying big data — such as weather conditions, store temperature, music volume, speed of service, etc. — on top of that. Analytics lets you tie these variables together to help you understand what questions to ask and adjust manageable variables to improve traffic.**

Restaurants also look at sales data to see what is selling in different locations at different times. For example, you can discover where you have slow hours by store location and develop programs such as running a promotion or sponsoring a happy hour and offering special pricing for drinks and/or appetizers. If you run a promotion, you can also analyze what else is ordered with the promotion to create a new promotion or extend the current promotion and get more velocity. You can also evaluate menu effectiveness using data analytics. For example, if you decide to drop an entrée from your menu, you can analyze sales to determine what else customers order when they order that entrée and determine what other sales may be lost.

Some restaurant chains dig deeper into their data by analyzing abandoned orders, credit card purchases, and the results of their loyalty program. Abandoned orders can happen when a customer calls for a price; the product information is keyed into the POS and the order is started but never saved. One restaurant chain that did not record these transactions prior to 2000 created a new metric to analyze abandoned orders and discovered a disturbing upwards trend. As a result, this chain started to aggressively train and coach the sales team, improved their staffing choices, and created incentives so their employees could reduce these abandoned orders.

Most large restaurant chains have loyalty programs, but it is difficult to determine specific issues with the program without an analytics tool; the task is cumbersome and it is difficult to get good answers. However, using analytics, these chains can get answers quick, determine what is working and what is not working, and rapidly adjust the program. These organizations analyze the success of the program by looking at key elements, including frequency of purchase, items purchased, time of purchase, order value, etc. One restaurant chain, which does not sponsor a loyalty program, performs a similar analysis by analyzing “tokenized” credit card numbers. Where lapsed customers are discovered, the chain executes a marketing program (either by direct mail or online) to incent these individuals to visit the restaurant more frequently.

## Drive Store Traffic and Increase Customer Life-Time Value

One restaurant chain uses analytics to improve their social media efforts — including Facebook, Google, Yelp, TripAdvisor — identify trends, and drive operational changes in their restaurants.

The restaurant also uses its own social media to promote brand identity and differentiation. Comments their Director of Marketing,



We want to create a brand people want to be a part of. We use social media to put our personality out there—so we post our in-store artwork and pictures of unique dishes on Instagram and Facebook. We seek to display an urban, hip feel on our media postings that reflect what you’d actually experience in one of our restaurants. The idea is to give consumers the impression that they can find something other than Applebee’s or Red Robin — something cool without driving into the city. We look at the number of likes and try to track what gets someone on social media to actually visit one of our restaurants and become a long-term customer.



The chain then evaluates their social media output; how it impacts the sales at across the chain and whether there are outlier stores who “should” have seen a boost in sales but may be facing operational headwinds that the social campaign cannot address.

## Talking Omni-Channel

Every restaurant chain is creating different channels to improve their business. In addition to dining in and take out, many chains are working to let their customers order anywhere using different methods — call-in, on-line, mobile, TV, smart watches, tabletop tablets, kiosks, etc. — and experience one seamless and consistent brand. Many restaurant chains are discovering that this omni-channel approach not only increase sales but can also bring in new types of customers.

“Going omni-channel” without an analytics solution is like playing basketball with a blindfold on. Analytics helps provide you with the data you need to improve the channel experience by identifying sales trends by channel, meals by channel, customer frequency, the impact on your loyalty program, etc. Restaurants need to prepare with the right POS and analytics solutions to support this growing, and increasingly complex trend.

## Doubling Down on Loss Prevention



There are also many other areas where restaurant chains use analytics. For larger chains with loss prevention teams, analytics is used to identify employee theft and inventory shrinkage. According to the National Restaurant Association, employee theft can cost a restaurant up to seven percent of gross sales every year.

Using analytics, the loss prevention team at one large restaurant chain can identify internal and external theft and fraud, operational deficiencies, and customer interface issues. For example, one chain identified that employees had issues with the cash register, which caused cashiers to void orders. Based on that information, they developed a new ordering dialogue to simplify the cashier's job and encourage "conversational ordering." Comments Michael Keller, Manager, Loss Prevention Analytics at Panera, LLC, "We discovered that there were a lot of voided orders at our drive-thrus, which can be an indication of several events including drive-offs or employee theft. By integrating the store video system with the analytics solution, we can see how an employee handles an order to identify the cause and take appropriate action."

Another restaurant chain uses analytics to identify external theft by looking at gift cards to determine whether they were purchased with stolen credit cards. A business analyst wrote a query looking for gift card purchases equal to or greater than a certain amount, and then reviews each transaction to determine if the credit card used is stolen and, if so, the gift cards are deactivated. Without analytics, the restaurant would wait for the person whose credit card was stolen to reject the bill, which can take some time. In the meantime, the gift cards could be used and result in the chain losing money.

Other ways restaurant chains use analytics systems are almost endless. Here are just a few examples. An HR team uses analytics to evaluate employee discounts and incentives. Finance uses analytics to investigate credit card disputes. A food cost team uses analytics to identify inventory levels.



## Conclusion

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### Restaurant chains have a universal need for data analytics.

In this eBook, we have talked about select use cases where operations, marketing, loss prevention, finance, and human resources have implemented analytics. Just like with other technologies that have enterprise-wide appeal, data analytics is ubiquitous — or should we say — will be ubiquitous across all successful restaurant chains in the near future.

Without analytics, you simply cannot compete. If you are an advocate of data analytics and are considering a solution, keep the different use cases in mind and choose a solution that meets the needs of every department, eliminates “analytics chaos” and ensures that everyone is speaking from a single source of truth.

