MOBILE ORDER-AHEAD Tracker®

QSRs Face The **Dual Challenges** Of Digital Fraud And Third-Party Competition

FEATURE STORY (p. 7)

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MOBILE ORDER-AHEAD Tracker®

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ACKNOWLEDGMENT

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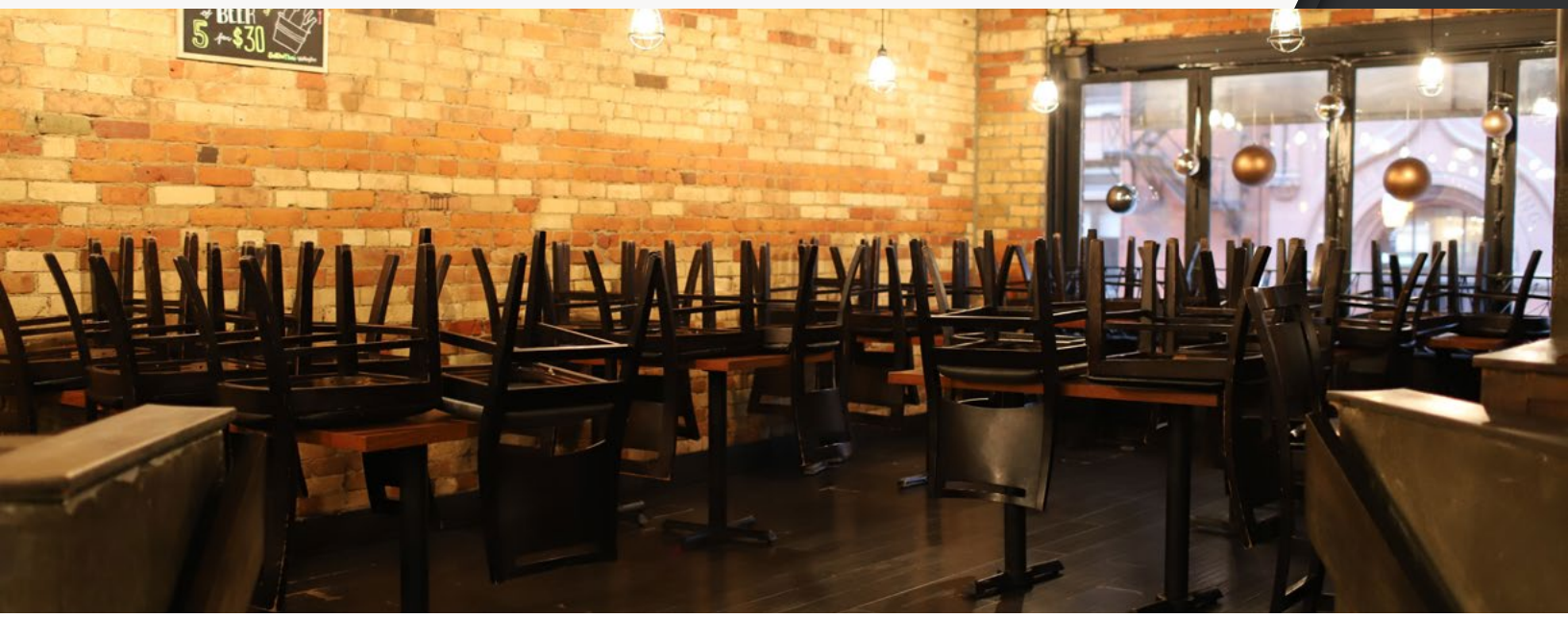
WHAT'S *INSIDE*



Few industries have been hit by the COVID-19 pandemic as hard as restaurants, with stay-at-home guidelines and nonessential business closures forcing many to temporarily shut their doors until the virus recedes. Restaurant traffic plummeted almost 70 percent and restaurant transactions fell 15 percent in the last two weeks of March, and eateries are being forced to lean heavily on delivery services to make up for lost profits. Restaurants that previously generated 100 percent of their business through dine-in traffic are scrambling to take their first steps into the realm of digital ordering.

Many are turning to third-party apps such as DoorDash, Grubhub and Uber Eats to offer these services, and several such companies are waiving commissions and delivery fees to encourage more restaurants to sign on. These apps are also providing new services and promotions to draw in more customers and bolster profits for them and their restaurant partners, with Uber Eats adding grocery delivery services and Grubhub offering $10 off orders of $30 or more. These measures are sometimes akin to fighting a wildfire with a garden hose, however. Uber Eats has seen declines of up to 23 percent in the number of average daily users as well as steep drops in repeat customers.

These apps' problems partly stem from certain business practices. Many restaurants allege that these services' commission fees, which can be as high as 40 percent of each order, are eating into their margins, but they cannot abandon these apps

because they risk losing the customers who use them. The pandemic is exacerbating this issue, as deliveries from these apps are often restaurants' sole revenue sources. Some municipalities are taking steps to reduce such issues, however, with San Francisco imposing a commission cap of 15 percent and New York City exploring a 10 percent cap.

Mobile ordering could see a bright future after the pandemic, with digital ordering set to generate $365 billion in revenue by 2035. Numerous industry players are exploring product launches, partnerships and promotions to get through the current crisis and encourage this growth.

Mobile order-ahead developments around the world

Germany-based delivery app provider Delivery Hero is just one example of an app expanding its services to drive business during the pandemic, having added more than 50,000 new restaurant partners during the last three weeks of March. It has also waived delivery fees for all its restaurant partners and instituted a number of measures to reduce the risk of COVID-19 transmission from staff to customers, including contactless drop-offs and cashless payments. Delivery Hero is also attempting to help its staff and partners through the economic downturn by increasing payment frequency.

The ongoing pandemic is forcing many restaurants to introduce new features to fight declining revenues. Fast casual chain Noodles & Company, which recently reported a 46.3 percent sales decline between March 11 and March 31, introduced contactless curbside pickup and partnered with Uber Eats to increase profits. It is also launching an in-house delivery service to avoid third-party commission fees.

The COVID-19 outbreak is driving new and unexpected players to enter the mobile order-ahead scene. Watertown, Wisconsin, recently authorized three local taxi companies to deliver meals and groceries from businesses that do not typically offer delivery services — such as pharmacies — for a small fee. The fee will be waived for deliveries from food pantries, according to the city, and the taxi drivers will be required to regularly sanitize their vehicles to avoid transmitting the virus.

For more on these stories and other mobile order-ahead developments, read the Tracker's News and Trends section (p. 11).

Chronic Tacos on the dual threats to QSRs' success: digital fraud and third-party apps

Restaurants face intense challenges, even in the best of times, with only 40 percent surviving their first year in operation. The ongoing COVID-19 pandemic has made this industry only more volatile as

QSRs are now facing reduced sales, an upswing in digital fraud attempts and high commission fees from third-party delivery services that are, in many case, businesses' only means of obtaining revenues during the health crisis. For this month's Feature Story (p. 7), PYMNTS spoke with Michael Mohammed, CEO of fast casual Mexican chain Chronic Tacos, about how AI can reduce cybercrimes and why a reliance on third-party services means restaurants are often competing with themselves.

Deep Dive: How AI and ML can improve static rules and manual review for fraud prevention

Fraud is a constant fear for quick-service restaurants (QSRs), with 49 percent of customers worrying about stolen payment information and 41 percent fearing account takeovers (ATOs). Static rules-based fraud prevention systems often do more harm than good, however, with many businesses accidentally blocking legitimate customers after mistaking them for fraudsters. Many QSRs are taking steps to correct this problem, including developing and adopting sophisticated artificial intelligence (AI)- and machine learning (ML)-based fraud detection solutions. This month's Deep Dive (p. 18) examines how these systems can help reduce false positive rates by up to 60 percent.

Executive INSIGHT

Studies show that static, rules-based fraud prevention systems have false positive rates of up to 60 percent. How can AI- and ML-based systems help reduce this figure?

"Turning away a good order is so damaging. Not only does your business lose the revenue, but you can drive a frustrated customer to your competitor — even worse, the customer might share [his or her] negative experience with others, damaging brand reputation.

Effective fraud prevention stops chargebacks and increases good orders by reducing false positives. But rules-based protection isn't enough: A blanket decision to turn away transactions based on one or two factors is a recipe for false positives, and one that can be avoided with advanced artificial intelligence.

Next-generation AI combines both supervised and unsupervised machine learning to analyze billions of fraud and trust-related signals and to deliver accurate, automated decisions in milliseconds.

Kount's supervised machine learning analyzes billions of historical transactions and looks for signals that have predicted fraud in the past. This scales the process of an analyst drawing on [his or her] own experience and the company's history to identify a trusted transaction.

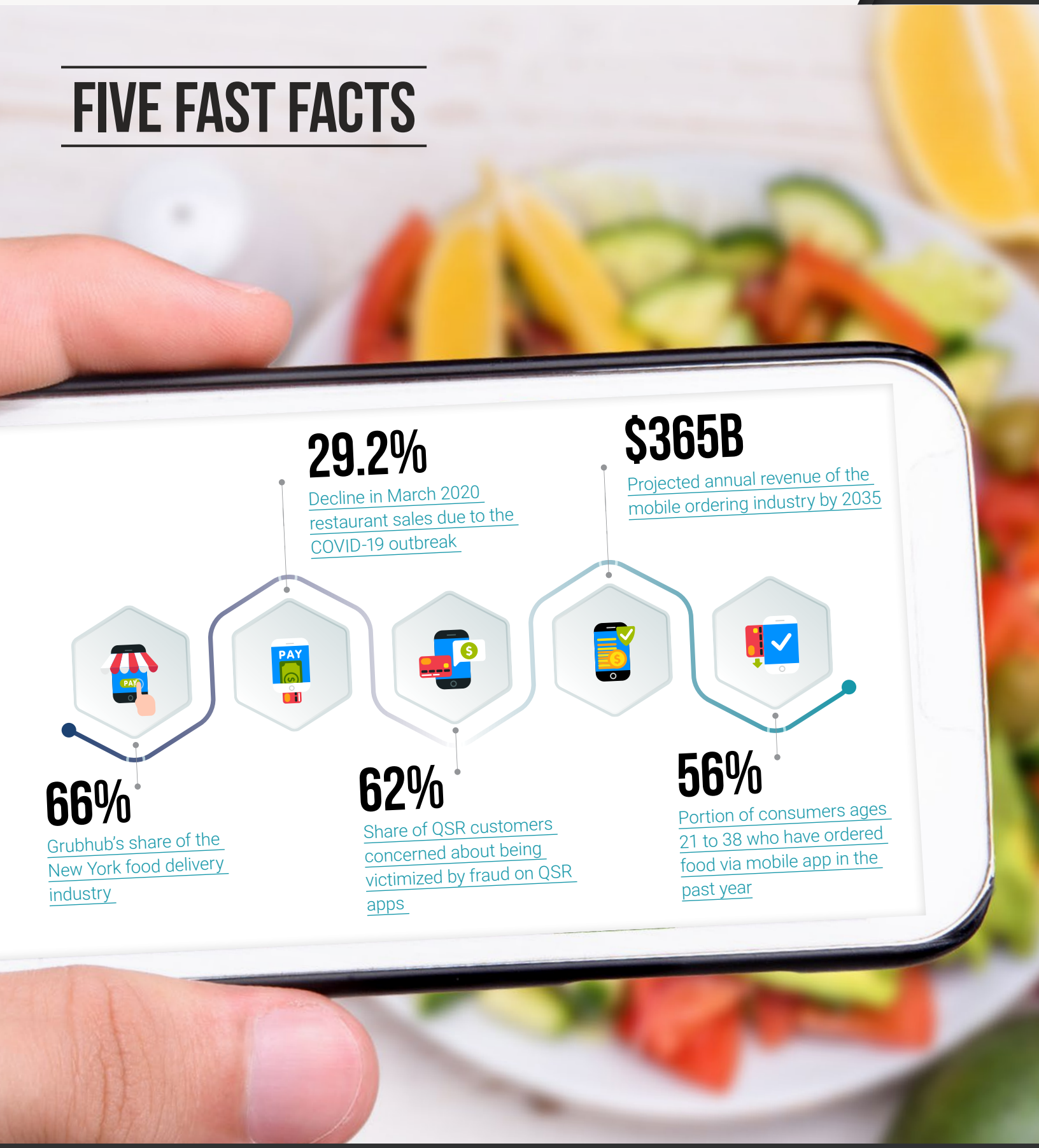
Kount's unsupervised machine learning uses advanced algorithms and models to detect transaction anomalies much faster, more accurately, and at greater scale than a human fraud analyst. It catches new fraud patterns that supervised machine learning models can't stop before they result in chargebacks.

AI and ML in fraud prevention not only reduce false positives by up to 70 percent, but they can also lead to fewer manual reviews. This frees up fraud analysts' time to work on proactive initiatives, and ultimately saves the business resources."

RICH STUPPY

chief customer experience officer at Kount

FIVE FAST FACTS



29.2%
Decline in March 2020 restaurant sales due to the COVID-19 outbreak

$365B
Projected annual revenue of the mobile ordering industry by 2035

66%
Grubhub's share of the New York food delivery industry

62%
Share of QSR customers concerned about being victimized by fraud on QSR apps

56%
Portion of consumers ages 21 to 38 who have ordered food via mobile app in the past year

FEATURE *STORY*

QSRs Face The **Dual Challenges** Of Digital Fraud And Third-Party Competition

Opening a new business is especially challenging in the restaurant industry, where 60 percent of new establishments fail in the first year compared to 20 percent in other industries. This results from numerous factors, like fluctuating food costs and intense competition from other eateries, but one of the most significant is that restaurants' profit margins average a slim 6.2 percent. Any difficulties that disrupt normal operations could therefore easily wipe out their savings and send them into insolvency.

The industry has grown more turbulent in 2020 as the COVID-19 pandemic and its associated social distancing and stay-at-home guidelines have crippled restaurants' revenue streams. Those that have not shut down completely are turning to digital channels like mobile ordering apps to continue operations, and this has proven to be a positive development.

"We've seen a doubling in the amount of [app] users during this time," Michael Mohammed, CEO of fast casual Mexican chain Chronic Tacos, told PYMNTS in a recent interview. "Every restaurant that is surviving through this is seeing this change in customer behavior. We know that [dine-in] customers will come back, but there has been a shift in how people are approaching [QSRs]."

Switching to focus on digital orders also brings risks, however, especially because they provide new avenues for digital fraud as well as the potential for third-party app commission fees to eat into restaurants' profits. The former can be reduced by implementing AI- and ML-enhanced solutions, Mohammed said, but the industry has no clear answer for the latter.

How AI balances security and seamlessness

Sixty-two percent of QSR customers are concerned about fraud when interacting with QSR apps, according to a recent study. This is a well-founded fear, given that 64 percent of American adults have been victimized by data theft. Passwords or quick response (QR) codes may seem like solutions, but 40 percent of customers report being frustrated by these security measures because using them while ordering requires too many steps. Finding a balance between security and speedy transactions is thus a constant challenge.

"There's a certain amount of tries somebody does with an app, and if doesn't get them to where they want, they probably close it," Mohammed said. "I'm guilty of that. If it gets too difficult, I'll find something else to do."

AI-based systems offer seamless security solutions, he explained, as they can conduct fraud prevention completely behind the scenes without interrupting customers' transactions. Chronic Tacos partnered with a third-party payments provider for its mobile app's security system, with its AI-enabled anti-fraud system promoting seamless experiences for QSR customers. Such systems provide another advantage besides ease of use, Mohammed said, as they enable QSRs to block new forms of fraud when they arrive rather than being forced to develop defenses after the fraud has occurred.

"They're analyzing things constantly and they're learning based on their larger database in order to evaluate these transactions," he explained. "When it comes to fraud, the only way to prevent it [is] to really be a step ahead of them. So, it's really about having the most recent technology and the most up-to-date platforms to just stay ahead, because [fraudsters] are always coming up with new ways to circumvent you."

Outsourcing the ordering process to third-party apps like Grubhub and Uber Eats offers an alternative way for QSRs to deal with fraud issues, but

letting such providers handle cybersecurity is not ideal.

The Catch-22 of third-party ordering apps

Third-party delivery apps present a few problems for QSRs, Mohammed explained. The first is the extra cost in commission fees, typically ranging from 10 percent to 40 percent. The second issue is that restaurants are essentially competing with these apps, even though both are selling restaurants' food.

"They're cannibalizing sales that probably could have either walked into your restaurant or utilized your own app," he said. "There is a marketing value in that they are reaching a broader customer base, but there is a cost to that."

The final issue is inconsistent quality control, Mohammed noted. QSRs lack the ability to control orders once third-party delivery drivers pick them up, meaning they cannot prevent drivers from putting them in their cars' cold trunks or making other stops along the way that may result in soggy food. QSRs have no means to counter such issues, but they inevitably get blamed for them when customers do not enjoy their meals.

"At the end of the day, it's still your product — even if somebody else is delivering it," Mohammed said. "It's still going to come back to you if it's not delivered in the way that it should be."

There is no clear answer to this problem, he added, especially as the ban on eat-in services during the pandemic is forcing restaurants to rely on third-party delivery providers to stay in business. Other revenue streams, like dine-in services, will resume once the virus recedes, but the shift in customer preference toward mobile ordering is likely here to stay. Restaurants will need to focus on the parts of their operations they can control — like proprietary apps, in-restaurant service and crafting good food — to maintain loyalty and make up for profits lost to third parties.

CURRENT AND POST-PANDEMIC INDUSTRY TRENDS

Restaurant sales, guest counts plummet due to pandemic

The COVID-19 pandemic has affected a wide range of industries, but the restaurant space has taken an especially hard hit. Recently released data from Black Box Intelligence found that restaurant sales plummeted 28.3 percent month-over-month in March, with this decline accelerating as the month wore on. Restaurant traffic declined by a similar degree, falling 29.2 percent over the course of the month as social distancing and stay-at-home orders forced many restaurants to offer only take-out and delivery services. Fine dining and upscale casual restaurants were the hardest hit because they do not typically offer such services and were either forced to improvise or shut down entirely.

One silver lining is that the industry may have already hit rock bottom, according to Black Box Intelligence's vice president of insights and knowledge, Victor Fernandez. Preliminary data from early April shows that the decline may have already leveled off, with restaurant sales having nowhere to go but up as businesses continue to focus on take-out and delivery. Further relief may also arrive in the form of government assistance, such as the Paycheck Protection Program (PPP), which promises to forgive loans to small businesses that do not lay off any employees.

Food delivery market to generate $365 billion by 2035

Mobile app developers are looking beyond the pandemic to the state of the restaurant industry in years to come. The mobile ordering space is set to continue its upward trend, particularly in food delivery, which is expected to generate $365 billion in annual revenue by 2035. This is largely due to mobile ordering's exploding popularity among younger consumers, with 56 percent of individuals between the ages of 21 and 38 reporting that they had placed delivery or takeout orders via mobile app at least once in the past year. Mobile ordering is especially prevalent among QSRs, as it is projected to be responsible for 10.7 percent of their total sales this year.

Restaurants and developers are exploring new app features to foster use among customers. Location-based services, such as order tracking and geofencing, have been popular for years, but new services, like foreground geofencing, are expected to take these services to the next level. This type of geofencing will enable the app to change and feature revolving menu offerings or promotions based on nearby restaurants.

ADJUSTMENTS IN QSR SERVICE

Starbucks plans to reopen in-store ordering at some US locations

Coffee giant Starbucks is just one of many U.S. chains that have drastically altered their operations since the COVID-19 pandemic's onset. The chain closed all of its U.S. locations on March 21, though drive-thru and delivery services remained active. The chain is now preparing to open up to the public again, according to a letter to Starbucks employees from CEO Kevin Johnson.

Starbucks will decide which stores to open based on local and federal guidelines, and they will operate in a variety of ways depending on location and individual characteristics. Some will offer only contactless pickup for digital orders, while others will allow in-store orders. Locations with drive-thrus will continue to offer those services, and in-store dining is expected to be barred for the foreseeable future. The coffee chain continued offering catastrophe pay to elderly, at-risk and sick employees who could not work through May 3.

Pizza Hut expands contactless curbside pickup nationwide

Pizza Hut is also altering its business practices to prevent employees and guests from inadvertently

exposing each other to the virus. The pizza chain recently introduced contactless curbside pickup, which customers can select by ticking a box on its online and mobile ordering systems, at all of its open store locations. Customers enter details about their vehicles and staff members will place food orders in their cars without any face-to-face interaction.

Pizza Hut introduced this feature due to the demand for contactless delivery, which now represents more than 60 percent of its online orders. A number of safety measures are being implemented to protect staff as well, including regular employee temperature checks, the distribution of 13 million facemasks and transparent shields at store counters to block airborne particles. Pizza Hut's sister QSR brands KFC and Taco Bell are also instituting these safety precautions, with all measures drawn from a best practices checklist from the Food and Drug Administration (FDA).

Noodles & Company rolls out curbside delivery to fight sales decline

Another establishment making major adjustments is 410-location-strong Noodles & Company. The fast casual chain has rolled out a number of new features for its takeout experience, including contactless curbside pickup, which the chain was testing prior to the outbreak and now offers at 75 percent of its locations. Noodles & Company also recently partnered with third-party delivery platform Uber Eats to expand its delivery offerings, after exclusively working with DoorDash, and rolled out an in-house delivery service in March to avoid third-party commission fees.

These steps are intended to shore up the company's flagging revenue as customers are currently ordering out less. Noodles & Company reported a 7.2 percent decline in same-store sales during Q1 2020, with the period between March 11 and March 31

seeing a 46.3 percent sales decline. It was forced to implement a number of cost-saving tactics, including furloughing 10 percent of its customer support staff, reducing hours for 20 percent of its corporate employees, cutting executive salaries and putting a freeze on hiring.

UK QSRs begin to reopen for delivery only

The pandemic is affecting the QSR industry in the United Kingdom as well, with many chains forced to close to prevent the virus's spread. Three chains recently made moves to reopen several of their locations, but they are offering only delivery orders to limit the number of customers inside the restaurants. Burger King is opening four locations in the country with a limited menu, and staff will wear masks and gloves and be trained in kitchen deep cleaning, according to the company. The chain also plans to donate 1,000 meals each week to local medical personnel.

KFC is opening up 11 locations and shifting to delivery only through a partnership with Deliveroo. It is also donating free meals to medical staff located near its open restaurants and promised that furloughed staff at its closed locations will have their jobs waiting for them when circumstances improve. Sandwich shop Pret A Manger is opening 10 locations in the London area and is donating 7,000 meals per week to local charities for the homeless. The chain also offered National Health Service (NHS) workers a 50 percent discount until the end of April.

COVID-19'S EFFECTS ON THIRD-PARTY APPS

UK delivery app Just Eat adds 3,000 new restaurant partners and has merger approved

Third-party ordering apps in the U.K. are also undergoing changes as a result of the outbreak. Online food ordering and delivery platform Just Eat recently announced that it has added 3,000 restaurants to its app since stay-at-home orders began, bringing its total number of partners to 35,000. It also dropped fees for many of its restaurant partners to ease their financial woes, forfeiting more than £2.8 million ($3.46 million USD) in fees in just one week. The closure of its larger restaurant partners, including Burger King, Greggs and McDonald's, has hurt the company's profits as well.

U.K. authorities recently approved Just Eat to be merged with Netherlands-based Takeaway.com in a deal reportedly worth £6.2 billion ($7.6 billion USD). Both businesses are expected to operate in their respective countries under their own brand names for the time being and have reportedly raised €700

million ($756 million) in new shares and bonds. Takeaway.com plans to use these new funds to pay down its debts and purchase other food delivery apps in Europe. The merger marks Takeaway's first foray into the U.K. after it withdrew from the country in 2016.

Delivery Hero adds 50,000 restaurants to its app, takes steps to reduce transmission risks

German food delivery app Delivery Hero is also signing up new restaurant partners, with 50,000 added during the last three weeks of March alone. The app also instituted free deliveries and increased payment frequency to ensure its restaurant partners and delivery personnel stay afloat and are paid more quickly. Delivery Hero has taken a number of steps to prevent COVID-19 from spreading between delivery personnel and customers, including contactless delivery and cashless payments. It also introduced deliveries from grocery stores and pharmacies to aid individuals who are staying at home.

These moves are being made not only to drive revenues for the app and its restaurant and vendor partners, but also to assist vulnerable groups, according to Delivery Hero co-founder and CEO Niklas Östberg. Elderly consumers are particularly susceptible to COVID-19, meaning home deliveries are essential to their quality of life.

Mobile orders decline worldwide due to pandemic

Just Eat's and Delivery Hero's expansions may be small comforts in the face of an overall downward trend in the third-party mobile ordering market. Just Eat and Uber Eats saw declines in daily average users by as much as 23 percent throughout France, Spain and the U.K. in March. Deliveroo fared slightly better, seeing declines in France and Spain but a marginal increase in the U.K. Much of these declines are from customers ordering once and not using the app again, which is normally a huge driver of app revenue and represents approximately 90 percent of all orders. Projections before the pandemic hit saw the mobile ordering industry in these countries growing 10 percent annually until 2030.

The mobile ordering industry in the U.S. is better off than it is in Europe, but the news is still not encouraging. Grubhub reported that demand for its services increased in some parts of the country, including Seattle, but dropped significantly in others, such as New York. Grubhub CEO Matt Maloney attributed this mixed performance to the overall health of the restaurant industry. Mobile orders ceased as the restaurants that offered them closed to meet social distancing recommendations. Many U.S. apps are working to boost revenues by trying out incentives, such as waiving commission and delivery fees

when signing up new restaurant partners or expanding services to include grocery delivery.

DoorDash, Grubhub, Postmates, Uber Eats face class-action lawsuit in New York City

Declining sales numbers may soon be the least of third-party apps' worries, however, as several of these companies were recently named in a class-action lawsuit filed in a federal court in New York City. A group of customers have accused DoorDash, Grubhub, Postmates and Uber Eats of price gouging before and during the COVID-19 pandemic, alleging that these services are in violation of U.S. antitrust laws. The lawsuit claims that by mandating that restaurants charge the same prices for eat-in and delivery, despite the 10 percent to 40 percent cut taken by these apps, restaurants are forced to raise prices across the board to make up for the losses. This has the negative result of hurting restaurants' overall business by discouraging eat-in customers from visiting as they can pay a similar amount to have food delivered.

The lawsuit also argues that restaurants are all but forced to enter into agreements with third-party apps due to their overwhelming market shares. Grubhub holds a 66 percent share of the food delivery industry in New York City, for example, making it difficult for restaurants to partner with competitors. The lawsuit echoes earlier action from New York City legislators, who introduced a bill in February that would cap third-party delivery commission fees at 10 percent to protect restaurants.

NEW MOBILE ORDERING MOVES

Panera Bread adds grocery delivery service, initiates philanthropic efforts

Many proprietary ordering apps are pivoting to add grocery deliveries to their offerings, including bakery QSR Panera Bread. The new service, Panera Groceries, allows customers to order essential items such as bread, milk and produce from Panera's stockrooms. These items will be available via delivery, drive-thru, pickup or "Drive Up," which sees customers park in front of Panera Bread locations and have orders loaded into cars. The grocery service is connected to Panera's loyalty program, with each grocery order counting as a store visit for the purpose of rewards.

This is one of several measures Panera Bread is deploying during the ongoing pandemic. The chain is also experimenting with new revenue streams to make up for the 50 percent revenue decline it has experienced since its dining rooms closed. The chain introduced contactless delivery and its Drive Up program to boost sales, and it has also undertaken several philanthropic efforts. The chain has partnered with World Central Kitchen's #ChefsForAmerica movement by opening its kitchens to chefs looking to supply meals to families facing food shortages. Panera Bread also started a COVID-19 fund to support eligible staffers during this time, with the company donating $500,000 to start.

Wisconsin town enlists taxi drivers to deliver food

The ongoing pandemic has brought some unexpected entrants to the world of food delivery, including several taxi companies in the 23,000-resident city of Watertown, Wisconsin. The city recently allowed three local taxi companies — Brown Cab Co., Passenger Transit and Running Inc. — to deliver meals and groceries from stores and restaurants that do not typically offer these services. Customers can access these offerings for a surcharge of $3.75, but the government will cover deliveries from local food pantries to residents in need.

All orders will be segregated to prevent cross-contamination, and apartment building residents must meet delivery drivers at the main entrance, rather than have their orders delivered to their doors. All taxis will be sanitized on a regular basis, and older or immunocompromised taxi drivers will not be driving for the duration of the outbreak.

How QSRs Can Harness AI And ML To Improve Fraud Detection And Reduce False Positives

Mobile ordering fraud is a constant struggle for QSRs, with bad actors leveraging ATOs and social engineering to steal money or hijack customers' personal data. Consumers are also concerned about security, with a 2019 survey finding that 62 percent of QSR customers feared that using mobile ordering apps would result in them being victimized. Their reservations vary, but 49 percent reported concerns about their payment data being stolen and 41 percent worried their accounts would be taken over.

Preventing fraud and keeping customers safe are key priorities, but many QSRs still rely on static rules and manual reviews to identify bad actors. The sheer volume of fraud attempts woefully outmatch these methods, which often mistakenly block legitimate customers from completing transactions. Restaurants are thus turning to AI and ML technologies to dynamically customize their rules, identify attacks and delegate human analysts to more efficient roles in the fight against mobile ordering fraud.

The following Deep Dive explores manual review and static rules-based prevention processes' shortcomings as well as how restaurants are leveraging AI- and ML-driven cybersecurity systems to outmaneuver and stop bad actors.

The troubles with fixed defenses

Static rules, which set strict thresholds for fraudulent behavior and block transactions that violate them, and manual reviews have three major problems: The processes are time-consuming, do not effectively prevent fraud and regularly ban paying customers.

QSRs need to process transactions instantly so customers are not waiting around for their meals, making manual reviews for every transaction impractical. Many rely on static rules because doing so means they have to conduct manual reviews on only a small percentage of suspicious transactions — but such rules are underequipped for fraud prevention. Bad actors alter their tactics to get around these obstacles, such as the simple username and password requirements used by 48 percent of restaurants.

Another serious flaw with static rules is their penchant for inadvertently blocking legitimate customers. Those who were not blocked outright suffered needless friction if their transactions were subject to a manual review, which hinders restaurants' abilities to provide seamless customer experiences. Transaction friction is especially important to QSRs, as customers typically desire their food quickly and will not hesitate to order from different restaurants after unsatisfactory experiences. QSRs thus cannot rely on legacy methods to vet customer legitimacy.

Fraudsters can change tactics quickly, so any tool used to fight them needs to be just as fast. AI- and ML-based options could be the answer to reducing static rules' frictions and subsequent manual reviews.

How AI outwits fraudsters

AI-driven fraud detection systems can holistically analyze each transaction and compare included data points to every other data point in seconds. These systems can also compare orders against every other transaction the QSR has processed and consider variables a human analyst might never notice to determine their likelihood of being fraudulent. An AI-based system might recognize a credit card being used in another's account, for example, or that the same account has been entering different usernames and passwords over the course of several months.

ML-enhanced systems bring new advantages to the table as they can learn from past transactions and automatically apply these rules to detect fraud. This is particularly useful when finding ongoing patterns that could be signs of fraud. Multiple identical orders coming from IP addresses in a single geographic region in a short period of time could indicate that a

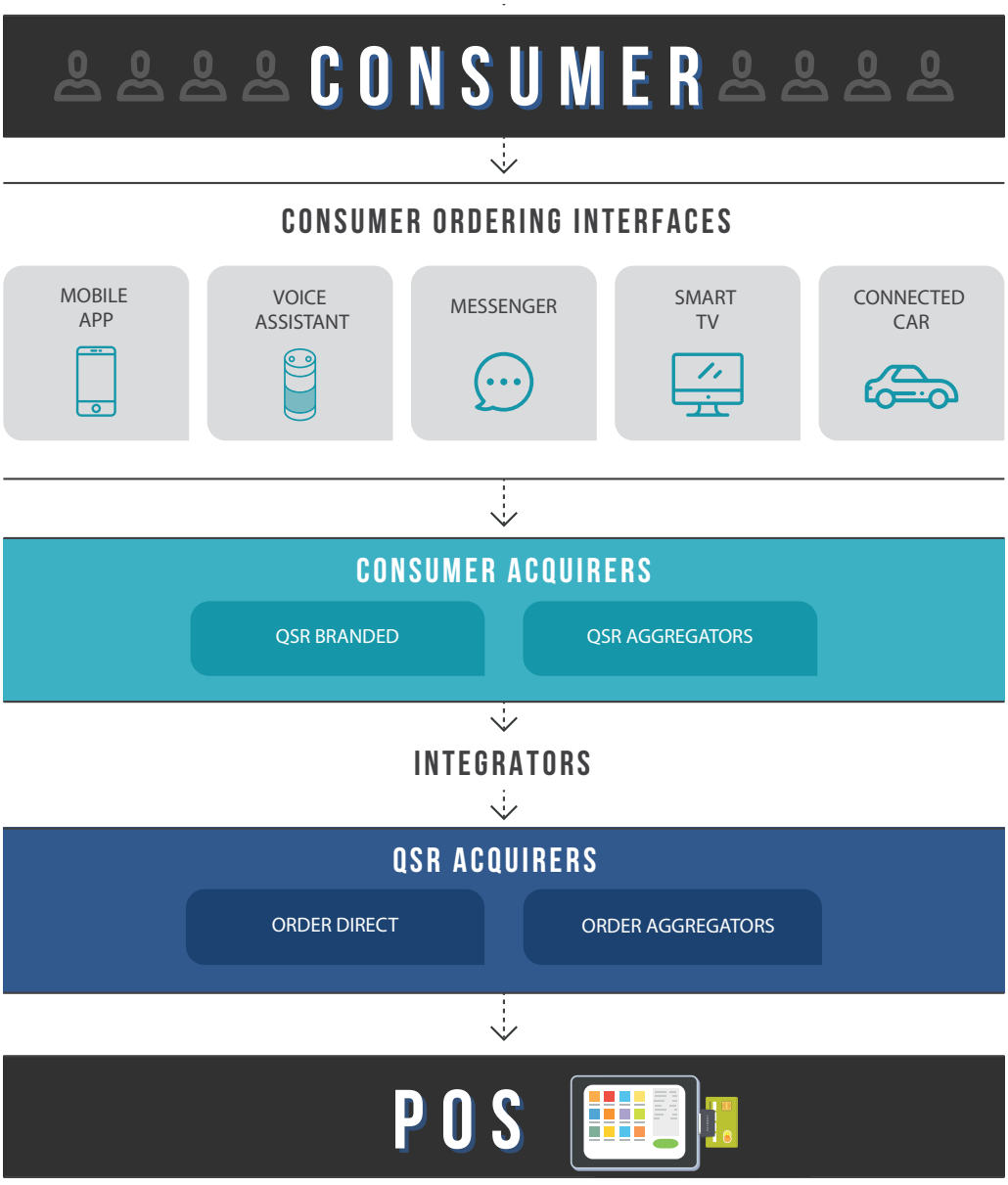
group of coordinated hackers are working together to breach a QSR's defenses, for example.

These bolstered systems stand in stark contrast to their rules-based counterparts, which filter each transaction in a vacuum and block it if the user displays surface-level potentially fraudulent activities, like entering multiple passwords in quick succession. This lack of thorough review results in bad actors being let through and verified customers being locked out. AI systems can mitigate these problems, and they have helped some organizations reduce their false positive rates by 60 percent and increase their fraud detection by 50 percent.

AI system adoption at restaurants is slow, however, with a recent study finding that two-thirds had not invested in these solutions due to a lack of understanding and concerns about spending too much on evolving technologies. These costs could be pocket change in comparison if their old-fashioned manual review and rules-based processes mistakenly block customers from placing orders, however, and fraud risks could drive consumers away from restaurants forever.

MOBILE *ORDER-AHEAD* ECOSYSTEM

The PYMNTS Mobile Order-Ahead Tracker® gives an overview of the trends and activities across the mobile order-ahead space, as well as the companies that offer relevant solutions and services. Each month, the Tracker's News and Trends section provides a comprehensive update of the latest goings-on of the major industry players, technologies and solutions fueling the consumer-driven ecosystem. This visual representation of the mobile order-ahead ecosystem explains how we organize our News and Trends.



MOBILE ORDER-AHEAD SCORING METHODOLOGY

Companies included in the Tracker Scorecard are the top restaurants providing mobile order-ahead as an integrated offering within their operations. Providers have been scored and ranked based on three primary mobile order-ahead criteria:

ORDERING CHANNELS

How orders can be placed via the app, including whether they can be made through a branded app, third-party aggregator, messenger app or voice-activated app

LOYALTY INTEGRATIONS

How customers can access their loyalty or rewards program accounts via a business' mobile app

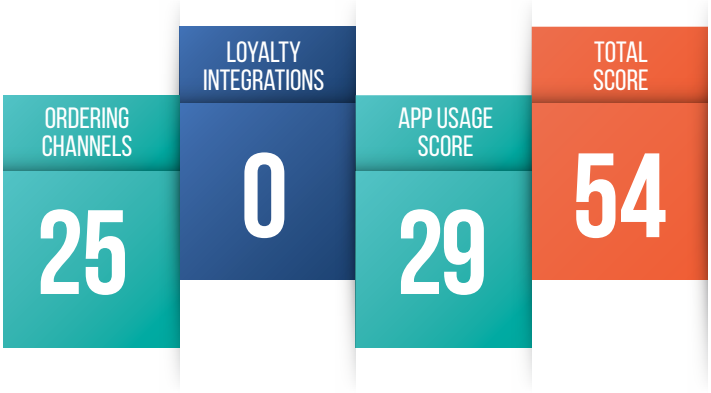
APP USAGE

How many people interact with the app, including usage penetration rates, the number of active monthly users and the average session duration in seconds

TOP TEN *MOBILE ORDER-AHEAD PROVIDERS*

This month's provider directory assesses 77 leading players in the space and scores them based on their mobile ordering apps' features and adoption levels.

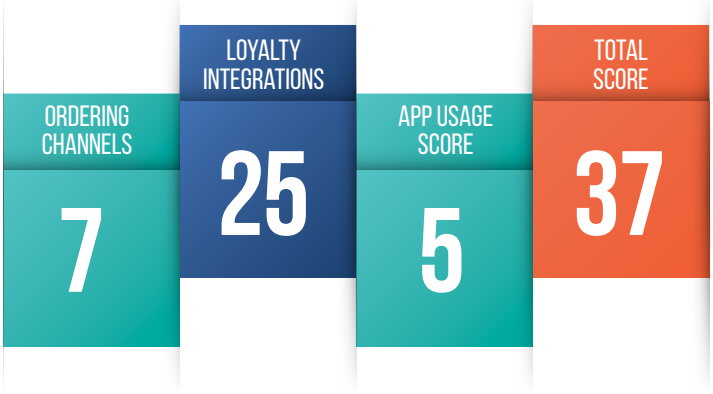
Scoring factors in loyalty and rewards program integrations, the number of active users each month and the average time users spend on the app. Ordering channel options, including whether customers can order by voice and whether orders are placed through a branded app or a third-party aggregator, are also important.



APPLEBEE'S

Launch of mobile order service date: *April 2016*

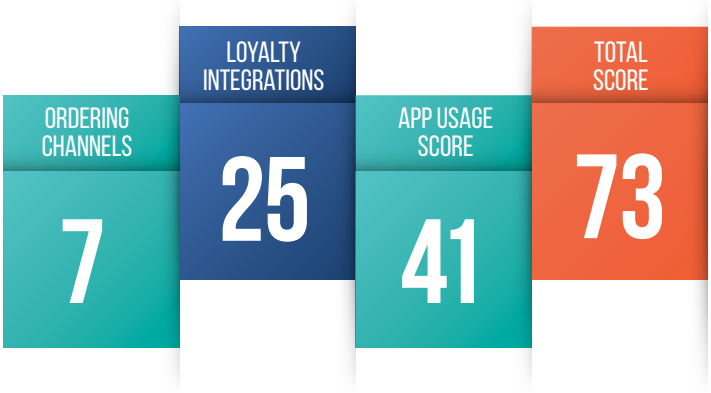
The Applebee's app allows customers to order and pay ahead. They can also create accounts to save favorite orders and earn loyalty points.



ARGO TEA

Launch of mobile order service date: *November 2014*

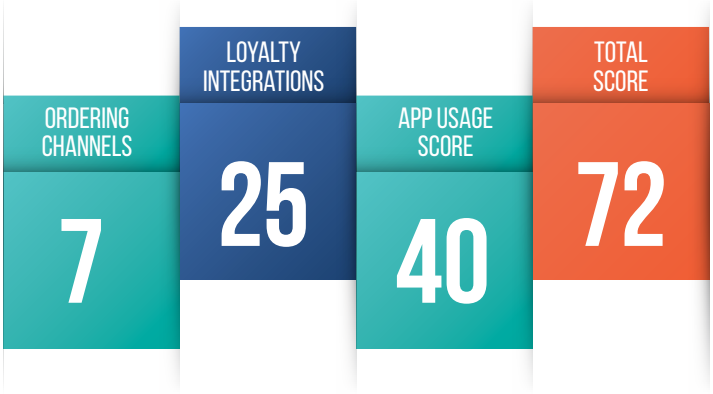
Argo Tea's app enables customers to preorder and prepay for purchases. It allows customers to scan mobile devices to pay at the counter when picking up their orders, and offers rewards and loyalty features including perks for every 10 visits and credit for downloading the app.



BJ'S RESTAURANT & BREWHOUSE

Launch of mobile order service date: *June 2014*

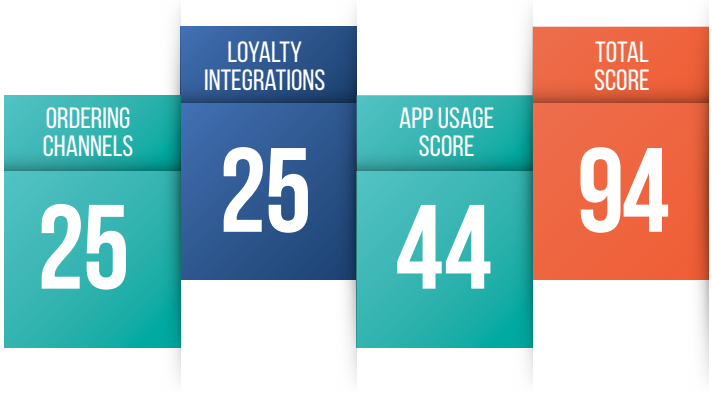
The BJ's mobile app allows customers to order ahead for takeout or dine-in, and offers split-the-bill features for group orders.



BLAZE PIZZA

Launch of mobile order service date: *March 2016*

The Blaze Pizza app enables guests to order and pay from smartphones and earn rewards including free meals. The app also provides online order histories, reordering capabilities and a nutrition calculator.



BURGER KING

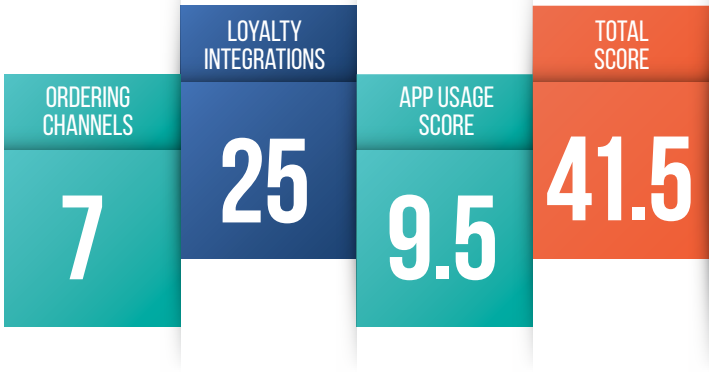
Launch of mobile order service date: *May 2016*

The Burger King app is piloting an order-ahead tool via Facebook's Messenger chatbot. The service would allow customers to place meal orders, select pickup locations and pay for purchases.

CALIFORNIA PIZZA KITCHEN

Launch of mobile order service date: *February 2017*

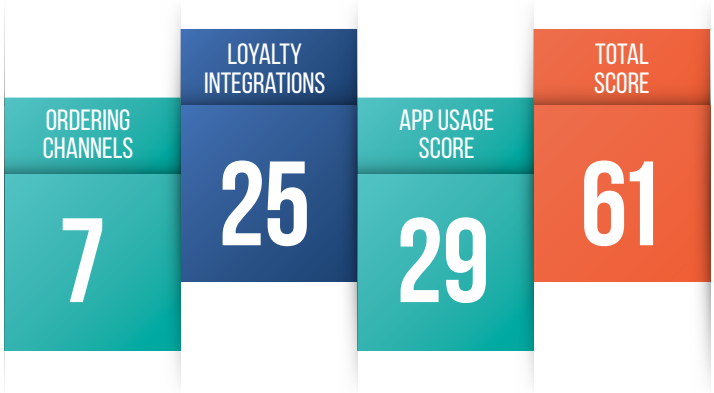
The CPK Rewards app allows guests to order and pay from their phones, and earn rewards they can spend at participating locations.



CAPRIOTTI'S

Launch of mobile order service date: *June 2015*

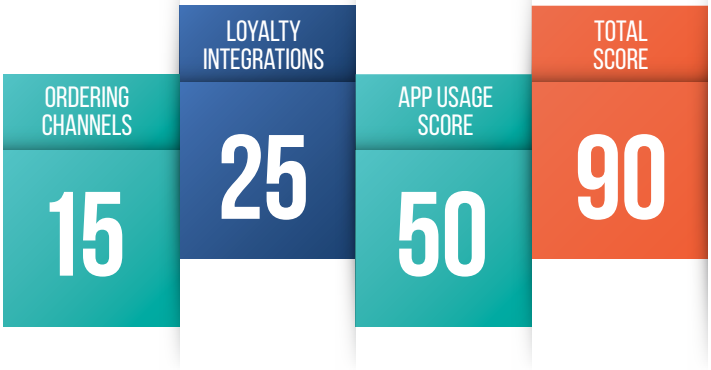
Capriotti's app enables customers to place and pay for orders. It is integrated with the company's CAPAddicts Rewards Program and features a store locator.



CAVA

Launch of mobile order service date: *November 2013*

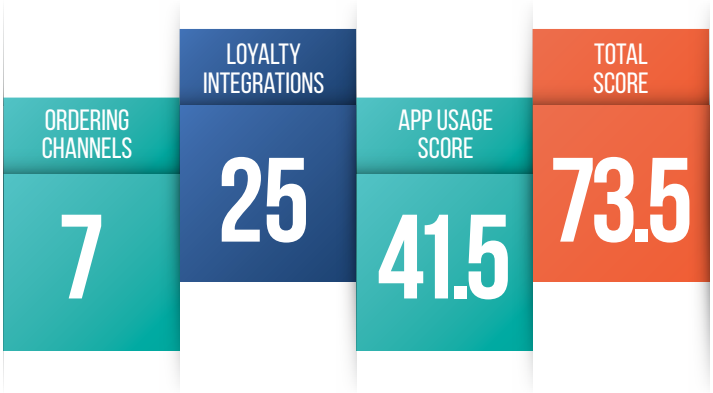
The CAVA app enables customers to view the restaurant's full menu, customize dishes, pay in-app and order in advance.



CHICK-FIL-A

Launch of mobile order service date: *June 2016*

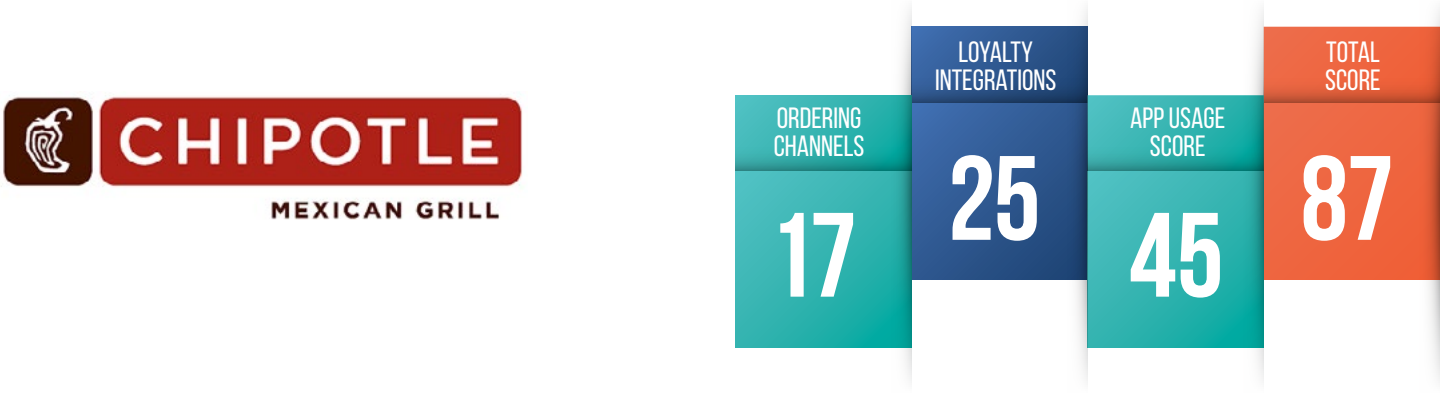
The Chick-fil-A app allows guests to customize their orders, pay in advance and skip lines when picking up their meal. It also offers a new rewards program and allows customers to save and reorder favorite items.



CHILI'S

Launch of mobile order service date: *September 2011*

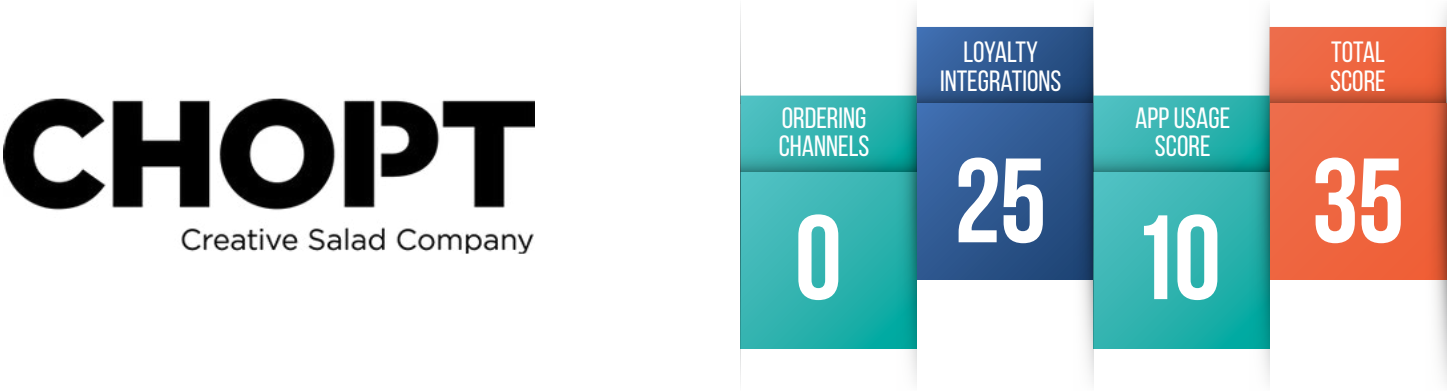
The Chili's app enables customers to find the nearest restaurant, put their names on seating wait lists and order meals to-go. It also saves previous orders and integrates with the My Chili's Rewards program.



CHIPOTLE MEXICAN GRILL

Launch of mobile order service date: *January 2009*

The Chipotle app allows iOS and Android users to place orders and pay for them. It also enables users to find nearby restaurants, see menu and nutrition information and access recent orders.

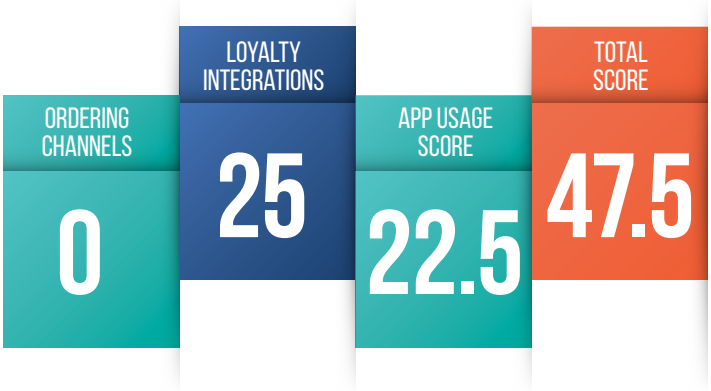


CHOP'T

Launch of mobile order service date: *November 2016*

The Chop't app allows customers to place orders in advance to be picked up in-store, earning rewards. It shows the nearest restaurant and displays nutritional and allergen information about menu items.

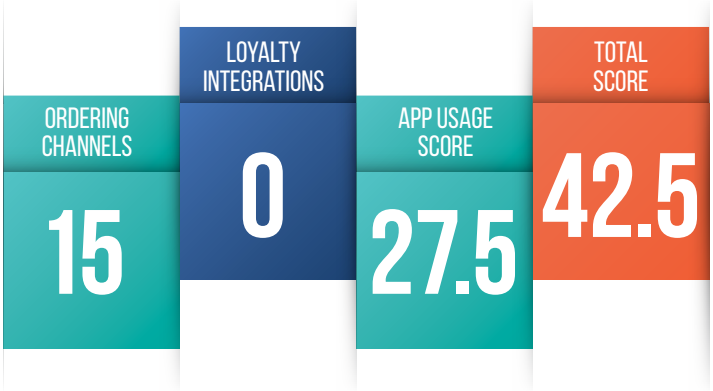
Companies are organized in alphabetical order.



COSTA VIDA

Launch of mobile order service date: *November 2015*

The Costa Vida app features order-ahead and rewards capabilities, displays special offers and encourages users to purchase gift cards for friends.



DENNY'S

Launch of mobile order service date: *May 2017*

The Denny's app allows customers to place orders for takeout or delivery, and they can be tracked and are saved together with payment information. The solution also displays nutritional information.

Top Mobile Order-Ahead Provider

ORDERING CHANNELS	LOYALTY INTEGRATIONS	APP USAGE SCORE	TOTAL SCORE
25	25	45.5	95.5

DOMINO'S PIZZA

Launch of mobile order service date: *February 2012*

The Domino's Pizza app enables customers to order and pay in English and Spanish, and earn rewards for purchasing. It connects with Ford Sync to track orders, and customers can place them on the go with Apple Watch or Pebble smart-watch. iPhone users can also access a voice-ordering assistant.

DONATOS® PIZZA
Every piece is important.™

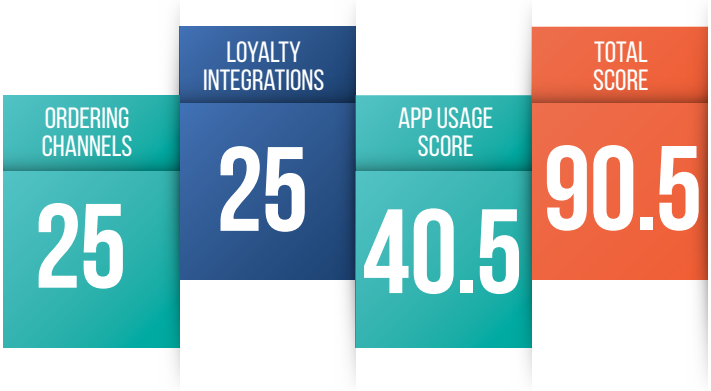
ORDERING CHANNELS	LOYALTY INTEGRATIONS	APP USAGE SCORE	TOTAL SCORE
7	25	24.5	56.5

DONATOS PIZZA

Launch of mobile order service date: *January 2017*

The Donatos Pizza app allows customers to place orders and retrieve past order information.

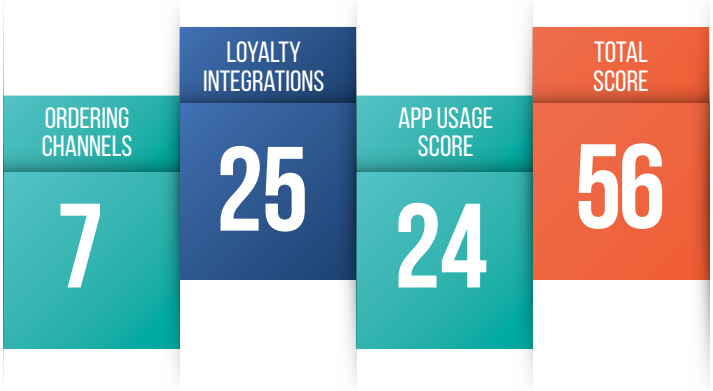
Companies are organized in alphabetical order.



DUNKIN'

Launch of mobile order service date: *August 2012*

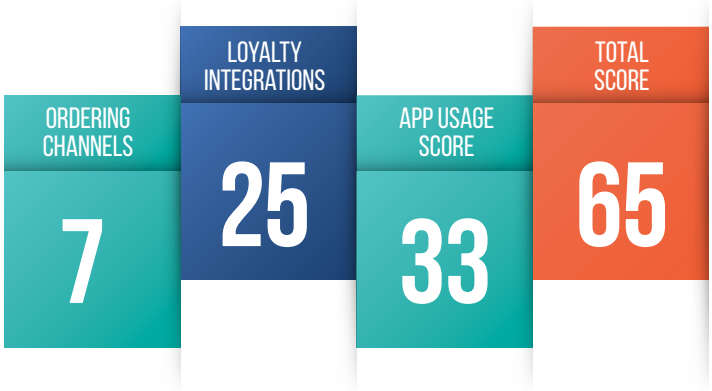
The Dunkin' app enables order-ahead, gives users free beverages on special occasions and integrates with the DD Card, the Dunkin' prepaid card.



EL POLLO LOCO

Launch of mobile order service date: *December 2016*

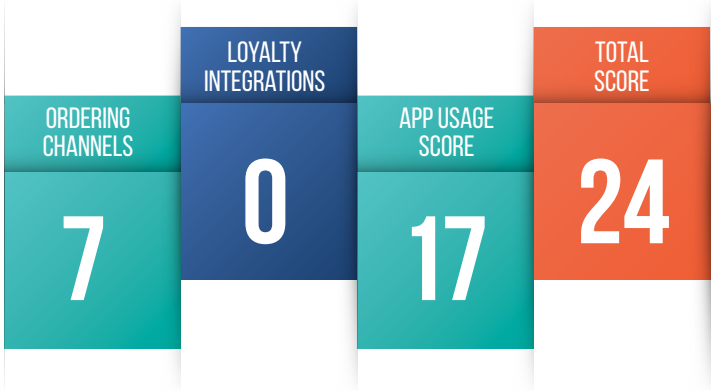
The El Pollo Loco app allows customers to place and customize orders, choose whether to pick up or receive orders via delivery and pay in advance. Customers can also earn reward points and save their order histories.



FIREHOUSE SUBS

Launch of mobile order service date: *August 2015*

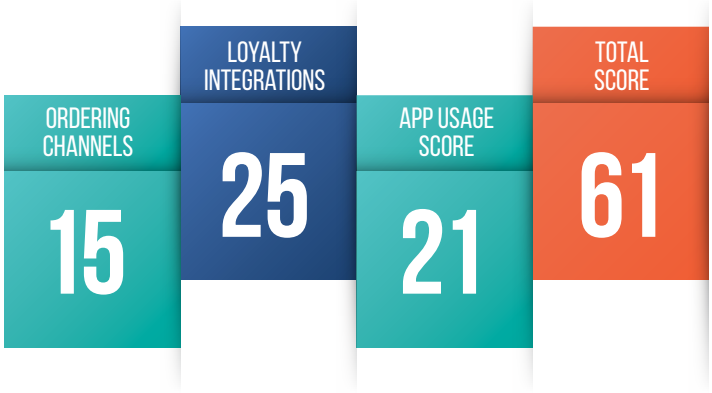
The Firehouse Subs App allows customers to order online, find locations and earn rewards. Firehouse Rewards, the restaurant's digital loyalty program, is available at nearly all U.S. locations.



FIVE GUYS

Launch of mobile order service date: *August 2011*

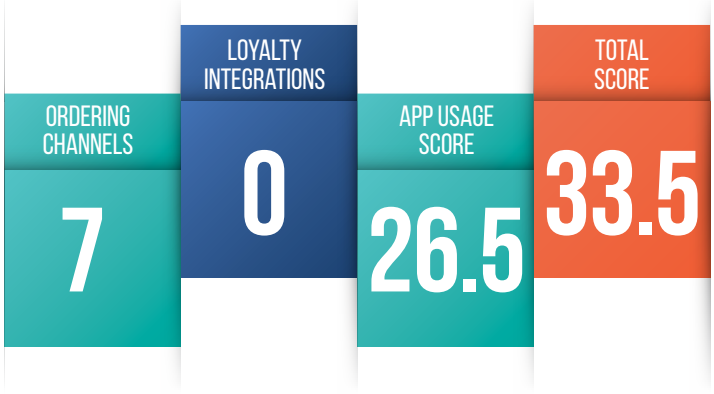
The Five Guys Burgers & Fries app was developed by food ordering platform Olo, and it allows mobile ordering and order history capabilities, among other features.



FREEBIRDS

Launch of mobile order service date: *June 2016*

The Freebirds Restaurant app enables customers to place orders and pay via digital gift cards. They can also scan receipts to earn rewards.



HUNGRY HOWIE'S PIZZA

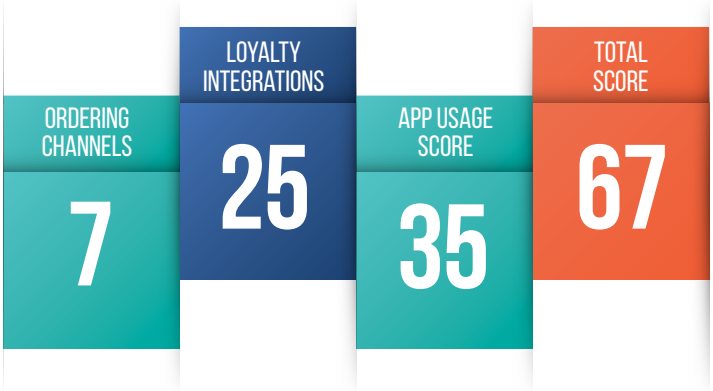
Launch of mobile order service date: *January 2015*

The Hungry Howie's Pizza app allows customers to place and pay for orders and save payment methods for future use. Users can also create profiles, save orders and reorder past purchases.

JAMBA JUICE

Launch of mobile order service date: *August 2015*

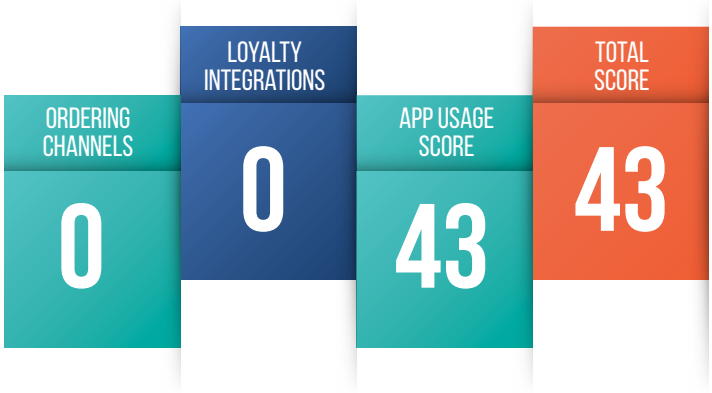
The Jamba Juice app helps guests skip lines by enabling them to order and pay in advance. Users can save their preferred stores, earn reward points on their purchases and reorder from stored recent orders.



JERSEY MIKE'S

Launch of mobile order service date: *April 2014*

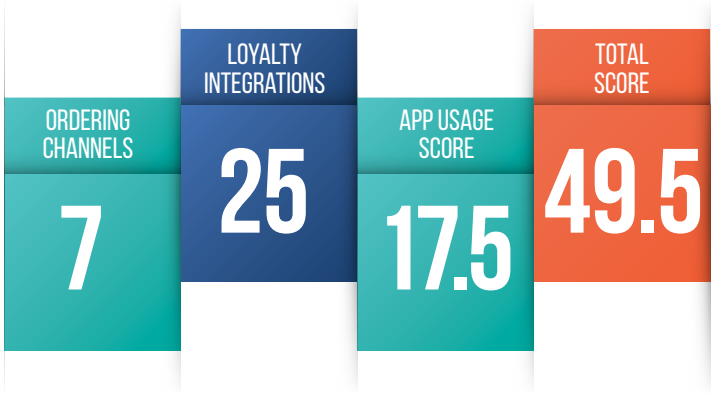
The Jersey Mike's app, created in partnership with Splick.it and available via both Android and iOS, allows customers to locate Jersey Mike's restaurants, choose orders from the full menu, pay ahead and store favorite items for easy return ordering.



JIMMY JOHN'S

Launch of mobile order service date: *December 2014*

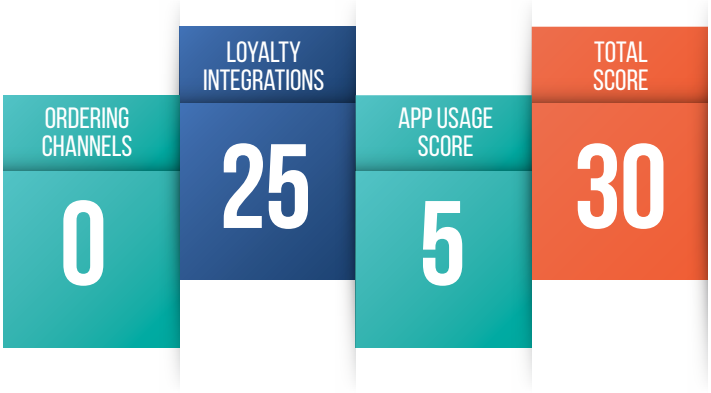
The Jimmy John's Sandwiches app allows patrons to order food and pick it up from the closest Jimmy John's location. Customers who sign in with the app can save their order information for future purchases.



LA MADELEINE

Launch of mobile order service date: *February 2016*

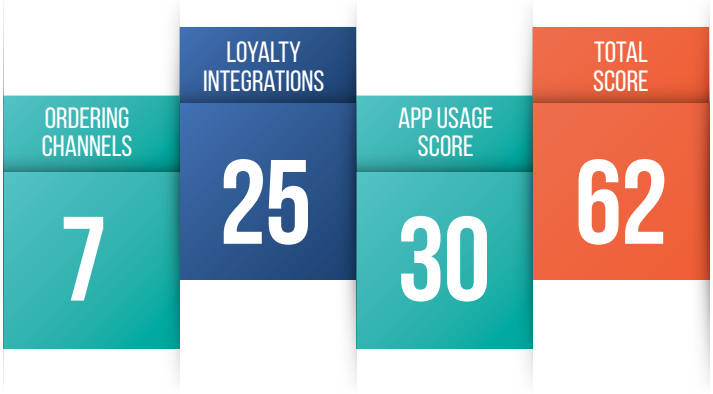
The la Madeleine app allows customers to make orders, pay for them and earn rewards. It also enables customers to find the closest restaurant location and view the restaurant's menu.



LE PAIN QUOTIDIEN

Launch of mobile order service date: *June 2015*

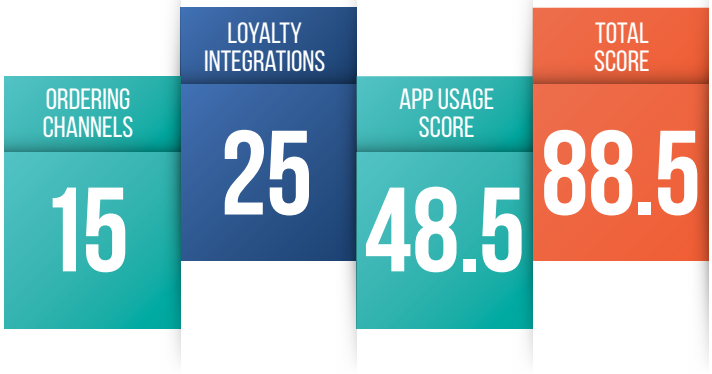
The LPQ app allows diners to order and pay for food from their phones. It also enables them to pay their bills by scanning bar codes, as well as earn rewards points for purchases and discounts for referring friends.



MCALISTER'S DELI

Launch of mobile order service date: *May 2017*

The McAlister's Deli app allows customers to place customized orders, shows nearby locations and displays special offers.



MCDONALD'S

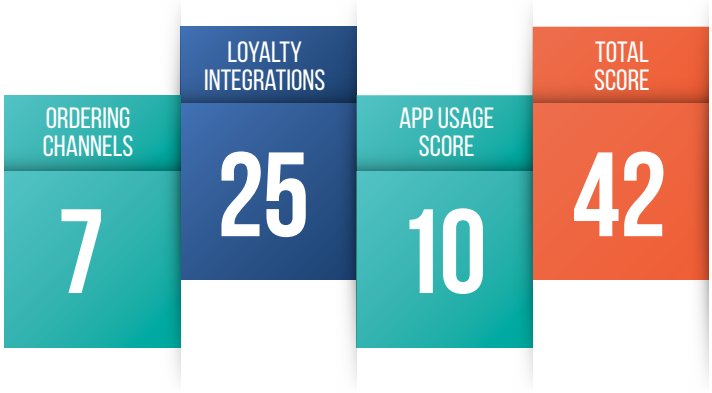
Launch of mobile order service date: *August 2015*

The McDonald's app allows customers to place and pay for mobile food orders. Users can save purchases for reordering, access exclusive discounts and find locations.

MOE'S SOUTHWEST GRILL

Launch of mobile order service date: *April 2012*

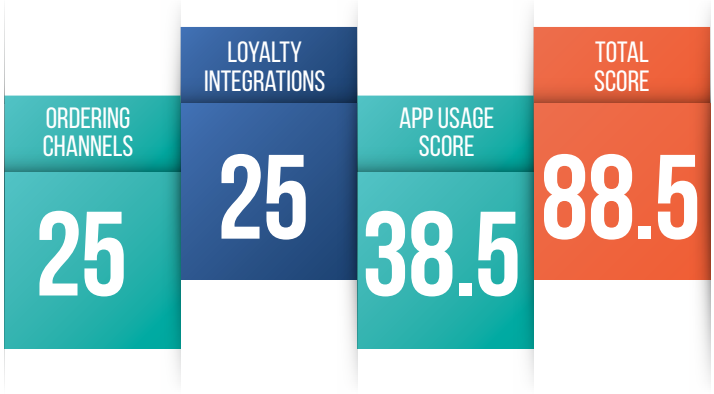
The Moe's Rockin' Rewards app allows customers to place and pay for orders as well as earn rewards points. It also enables customers to find the nearest restaurant location.



MOOYAH

Launch of mobile order service date: *May 2014*

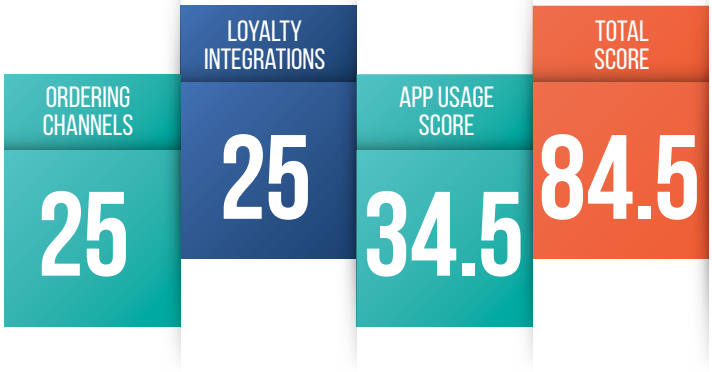
The MOOYAH Rewards app allows customers to place and pay for orders in advance. It also integrates with the MOOYAH Rewards program, a loyalty offering based on points obtained by scanning receipts.



PANERA BREAD

Launch of mobile order service date: *April 2014*

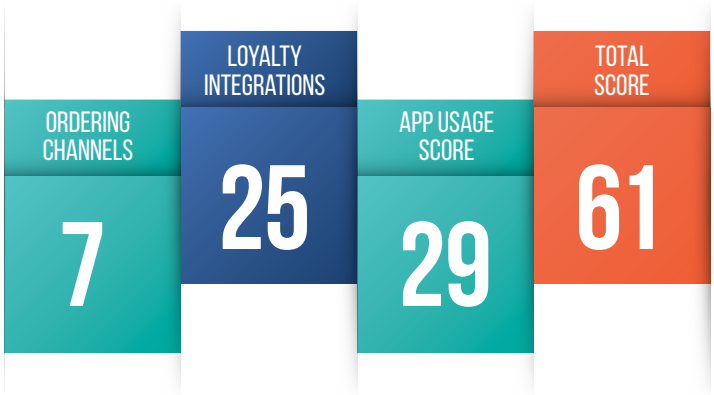
The Panera Bread app is designed to reduce wait times and speed service. It encompasses digital ordering, payments, operations and a revamped guest experience, whether customers are eating in or ordering to go. It also allows for customized menus and use of the MyPanera loyalty program.



PAPA JOHN'S PIZZA

Launch of mobile order service date: *December 2010*

The Papa John's Pizza app allows customers to choose between delivery and carryout and features special offers. Users can also create accounts to save orders and earn reward points, and the app also provides information on nearby locations.



PEI WEI

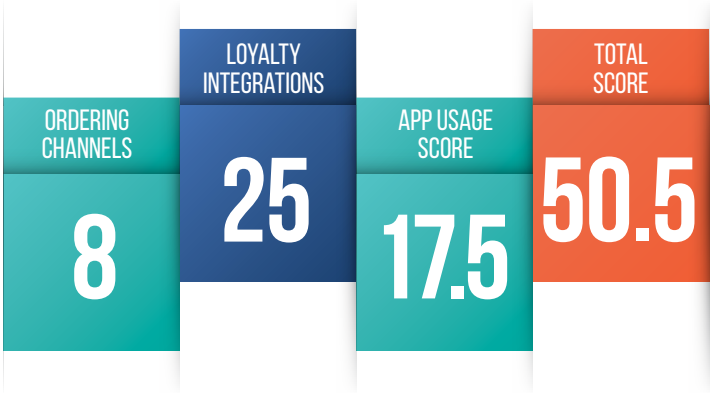
Launch of mobile order service date: *September 2016*

The Pei Wei Rewards app lets customers order and pay for meals in advance, saves order history, allows access to Pei Wei's rewards program and displays special offers.

PIZZA HUT

Launch of mobile order service date: *August 2009*

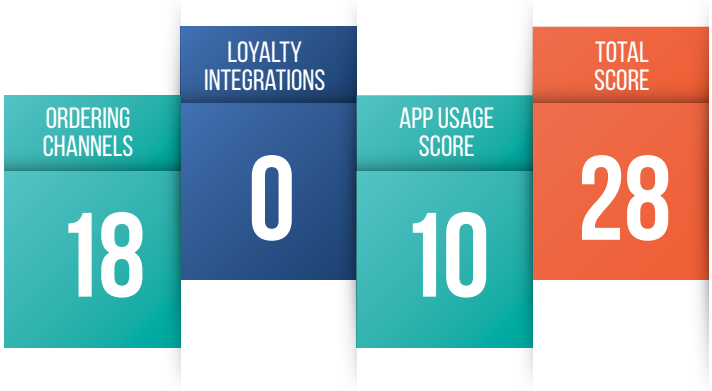
The Pizza Hut app allows orders from a full and customizable menu, helping customers find local deals and the closest stores. It also allows them to pay directly from the app and accepts voice orders.



PIZZAREV

Launch of mobile order service date: *November 2016*

The PizzaRev app enables customers to place orders online while earning points for both spending and referring friends. Patrons can also use it to find the closest PizzaRev location and redeem rewards.



PORTILLO'S

Launch of mobile order service date: *August 2016*

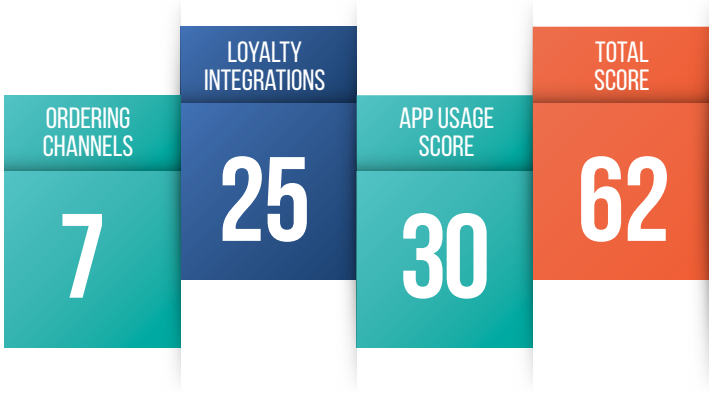
The Portillo's app enables patrons to place their drive-through or in-store pickup orders.

POTBELLY SANDWICH SHOP

Launch of mobile order service date: *March 2017*

The Potbelly Sandwich Shop app lets patrons place orders for pickup or delivery. It also includes Potbelly Perks loyalty program, through which customers earn “smiles” that are later exchanged for meals.

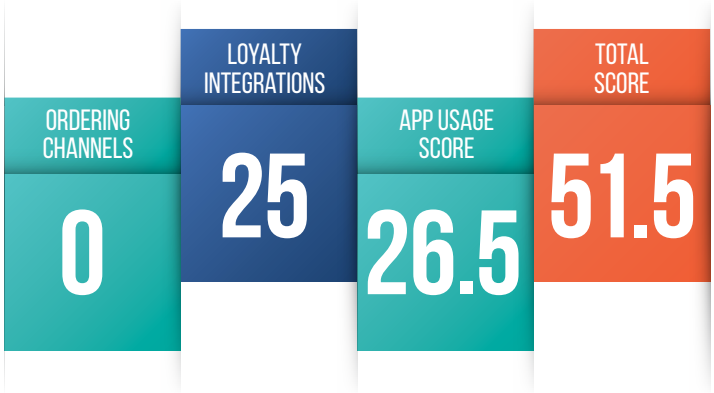
Companies are organized in alphabetical order.



QDOBA MEXICAN EATS

Launch of mobile order service date: *December 2016*

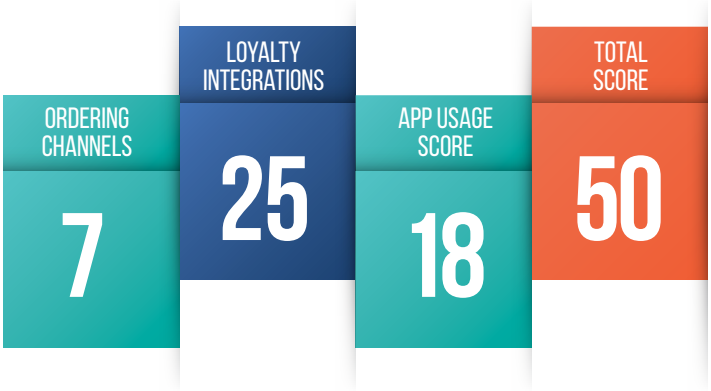
The QDOBA Rewards app allows users to order and pay in advance, accumulate points in their reward accounts and find the nearest restaurant locations.



QUIKTRIP

Launch of mobile order service date: *October 2015*

The QT app allows ordering for immediate or scheduled pickups.. It also provides exclusive deals and offers and in-app payments and customers can log in to save orders and preferences. The app also locates nearby branches for customers.



QUIZNOS

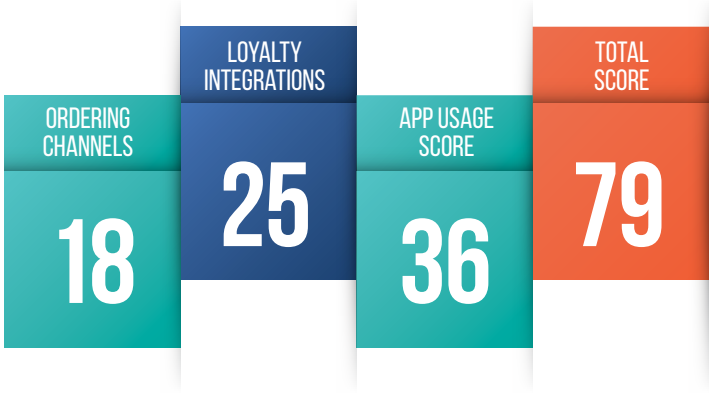
Launch of mobile order service date: *June 2017*

The Quiznos app enables customers to place and pay for orders, as well as earn loyalty points for each purchase. It also includes a customer feedback feature and promotional offers.

SHAKE SHACK

Launch of mobile order service date: *October 2016*

The Shake Shack app enables customers to place orders in advance, create custom profiles and find restaurants based on their GPS locations.



SHEETZ

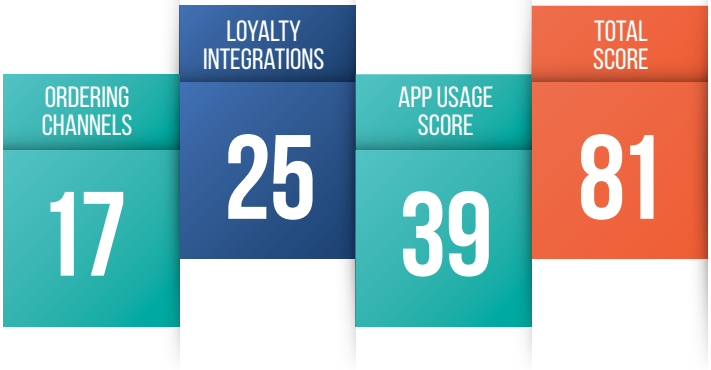
Launch of mobile order service date: *August 2017*

The Sheetz app allows customers to order, earn loyalty points, pay with saved gift cards and view nutritional information.

SNAP KITCHEN

Launch of mobile order service date: *December 2016*

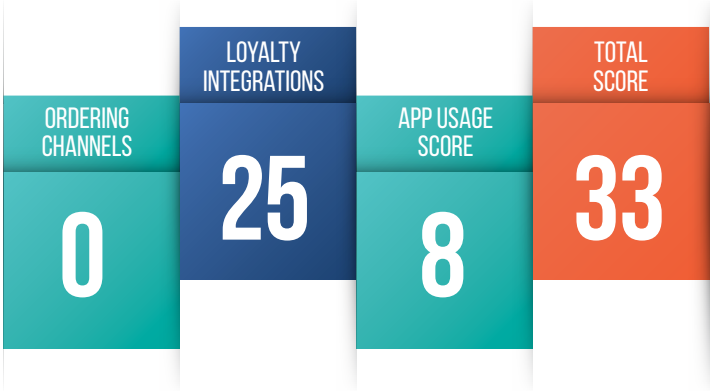
Snap Kitchen's app enables users to earn order-ahead prepared meals for pickup. Customers also can schedule meal deliveries for up to a week in advance.



SONIC

Launch of mobile order service date: *May 2014*

The Sonic Drive-In app allows users to place and pay for orders in advance, earn rewards and send and receive digital gift cards.

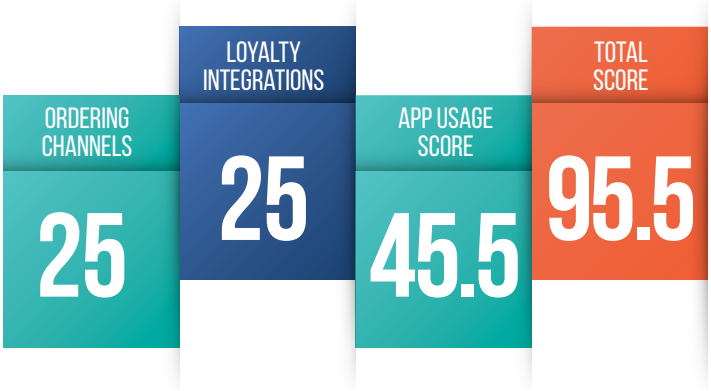


SPECIALTY'S CAFÉ & BAKERY

Launch of mobile order service date: *January 2016*

The Specialty's Café & Bakery mobile app enables patrons to make orders and save payment methods and preferences. It also helps customers find the closest locations and look up nutritional information for menu items.

Companies are organized in alphabetical order.

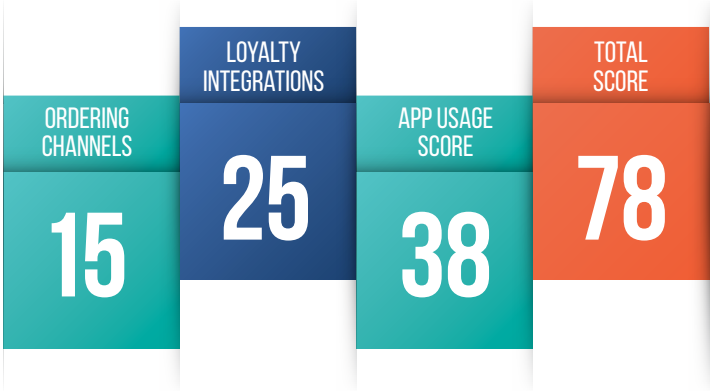


Top Mobile Order-Ahead Provider

STARBUCKS

Launch of mobile order service date: *September 2015*

The Starbucks app allows users to order drinks and food in advance and pay for them via the app. Customers can also find nearby locations, customize orders and view an estimated time frame for order pickup.

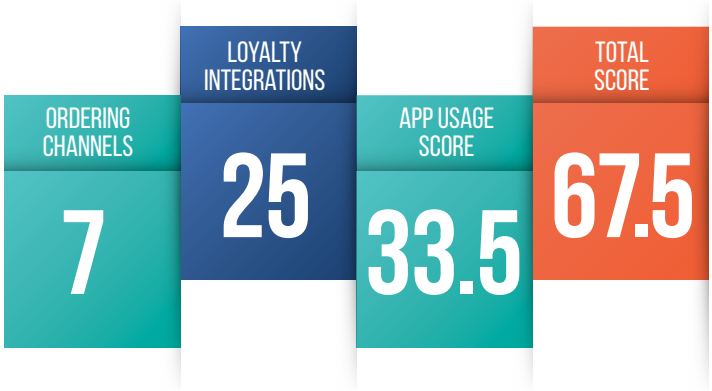


SUBWAY

Launch of mobile order service date: *July 2015*

The Subway app enables customers to place orders 15 minutes in advance. Users can save their purchase histories and earn rewards at participating locations.

sweetgreen

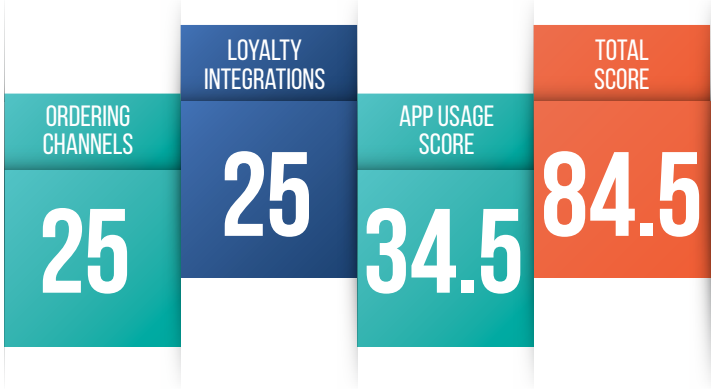


SWEETGREEN

Launch of mobile order service date: *February 2013*

The sweetgreen app allows users to order from a full menu and access a rewards program.

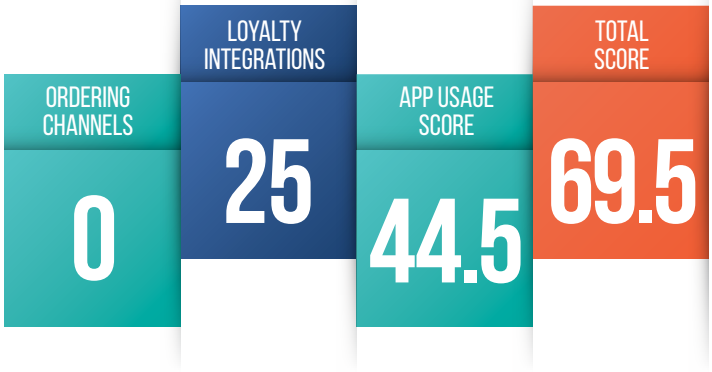
TACO BELL



TACO BELL

Launch of mobile order service date: *October 2014*

The Taco Bell app allows users to order and pay via the app, set pickup times and use gift cards. They can also opt to receive real-time order status updates.



TEXAS ROADHOUSE

Launch of mobile order service date: *November 2016*

The Texas Roadhouse app enables customers to reserve spots in the table queue before arriving. Users can also pay from the table and earn rewards.

TGI FRIDAYS

Launch of mobile order service date: *July 2016*

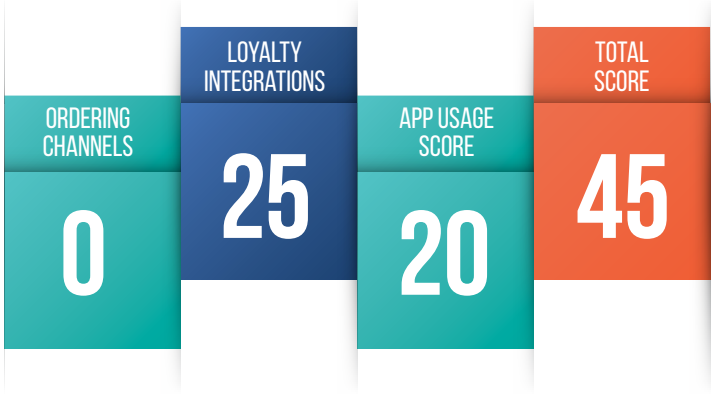
The Fridays app allows patrons to order food and beverages for pickup, pay directly from the table, find nearby locations, view the menu and add, check and claim points through the chain's rewards program.

Companies are organized in alphabetical order.

TROPICAL SMOOTHIE CAFE

Launch of mobile order service date: *March 2016*

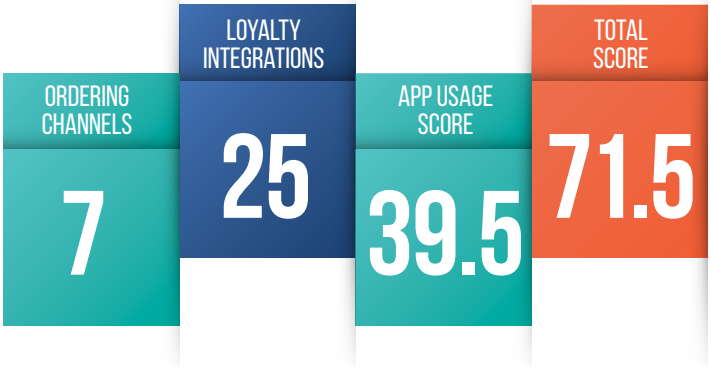
The Tropical Smoothie Cafe app enables customers to order food and link credit or debit cardsto make on-the-go payments when ordering ahead. It also offers an automatic reward credit earning feature.



VEGGIE GRILL

Launch of mobile order service date: *December 2013*

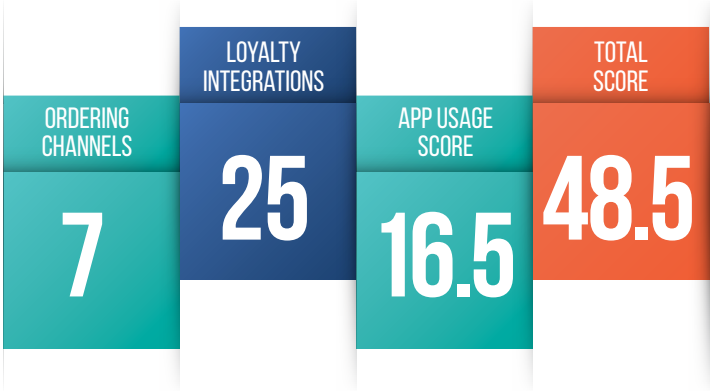
The Veggie Grill Rewards app allows users to order and pay for meals, and saves payment methods for easy future purchasing. It helps patrons locate the nearest restaurants and tracks both purchases and rewards, including a $9 reward for every $99 spent.



WAWA

Launch of mobile order service date: *February 2017*

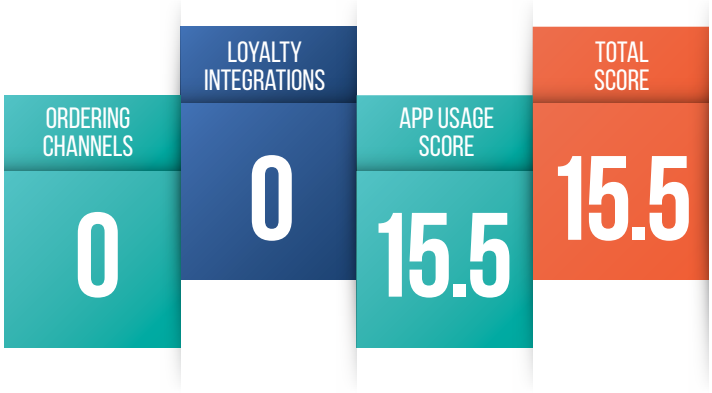
The Wawa app allows Wawa Rewards members to place and pay for orders via their smartphones. It also enables customers to pay in-store with git cards, check their balances, earn rewards and find nutritional information.



WHICH WICH

Launch of mobile order service date: *June 2015*

The Which Wich app enables customers to order and pay through the platform, and is also connected to Vibe Club Rewards, the restaurant's loyalty program.



WHITE CASTLE

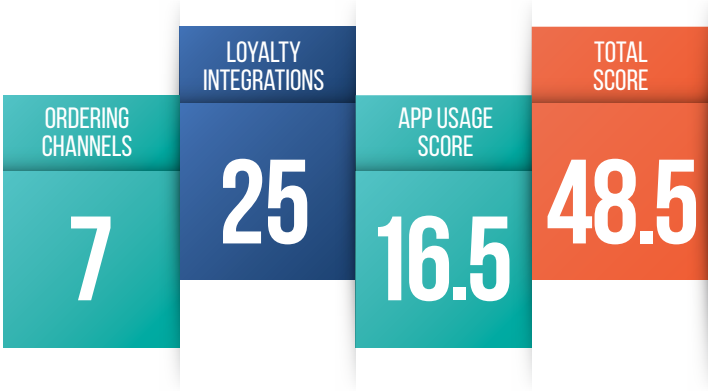
Launch of mobile order service date: *May 2012*

The White Castle app allows customers to order and pay for meals on the go, and to save their favorites for repeat purchasing.

WINGSTOP

Launch of mobile order service date: *August 2011*

The Wingstop app allows customers to order up to a week in advance, customize their orders and find their nearest stores. They also can place them with the Wingbot virtual ordering assistant through text messages, Facebook Messenger, Twitter direct messages or Alexa voice orders.



ZOËS KITCHEN

Launch of mobile order service date: *September 2017*

The Zoës Kitchen app enables customers to place orders via their mobile devices. Other features include user profiles, order histories, rewards and a store locator.

About The Tracker

The PYMNTS.com Mobile Order-Ahead Tracker® is designed to give an overview of the trends and activities across the mobile order-ahead space and the companies that offer solutions and services.

Questions? Comments? Brilliant ideas?

We hope you like the Tracker and we welcome your feedback. Drop us a line at mobileorderahead@pymnts.com.

PYMNTS.com

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Kount

Kount provides an all-in-one SaaS platform to help online businesses, merchants, acquiring banks and payment service providers detect fraud and avoid turning away legitimate customers. As part of this effort, the company leverages machine learning and artificial intelligence techniques to analyze risk in transactions. Kount serves a variety of client industries. It helps its food and beverage merchant clients secure payments, avoid fraudulent orders and facilitate the checkout process in mobile channels and traditional eCommerce models.

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