Restaurant Tech Market Map

The companies listed here have raised over \$15 million in capital unless otherwise noted below.

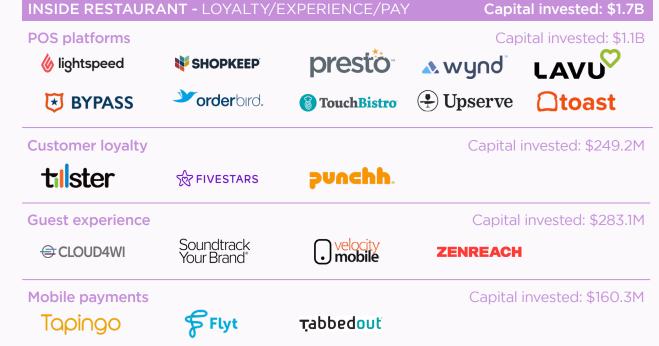


















Overview

Over the past decade, diners have changed how they've learned about and interacted with restaurants. According to the Pew Research Center, 59% of global survey respondents reported owning a smartphone,² and at least 70% occasionally use their phones to coordinate plans.³ As diners have become increasingly reliant on their phones for daily tasks, restaurants and technology firms have identified opportunities to offer diners services that raise awareness, provide convenience, and add value. Shifts in diner preference, increased competition, and rising costs have pushed restaurants to evolve.

No longer do diners learn about restaurants solely by reading reviews in the local newspaper. Nor can customers be expected to seek out restaurant phone numbers in the yellow pages for reservations or delivery. We see the increasing tech-savvy of diners as a major catalyst in driving technological innovation in the restaurant industry. Ordering and delivery firms

have been the most common type of restaurant tech business launched, but we see this shifting as category leaders emerge and consolidation of smaller players increases. We have noticed an upward trend in 2018 toward funding of restaurant management software and delivery robotics companies. We expect this trend to continue as innovators and investors pursue whitespace for business models solving age-old operational issues in the restaurant industry such as business management and last-mile delivery.

Over the past decade, we have seen a rapid increase in the development of restaurant technologies. Customers have moved digital, and restaurants have followed suit. The restaurant industry has historically been a narrow-margin business due to aggressive competition as well as a largely unchanged business model. Until recently, the industry has been slow to incorporate new technologies due to low margins. This has changed over the past decade as margins have improved and as restauranteurs have observed the benefits of implementing technologies. Reasons for rising profit margins include trends toward

organic, local, and high-end goods that allow greater markup, technology-backed operational efficiencies, and improved economic conditions. Restaurants, bolstered by widening profit margins, have adopted technologies at a faster pace. Likewise, investors, sensing a changing tide on a financially neglected industry, have seized the opportunity.

Rising diner expectations, along with a need to differentiate, have driven restaurants to incorporate new technologies to gain an advantage. Similarly, rising costs for labor and ingredients have forced restaurants to implement technologies to preserve and increase profit margins. Companies such as the restaurant management platform Toast have achieved unicorn status by helping restaurants manage staff and front-end guest services and by providing customer relationships management (CRM) tools to better serve customers.

Since 2014, venture capitalists (VCs) have invested \$11.2 billion across 944 deals in the restaurant tech space. The goal of this map is to orient the reader to the

^{2: &}quot;Social Media Use Continues to Rise in Developing Countries but Plateaus Across Developed Ones," Pew Research Center, Jacob Poushter, Caldwell Bishop & Hanyu Chwe, June 19, 2018

^{3: &}quot;Americans' Views on Mobile Etiquette," Pew Research Center, Lee Rainie & Kathryn Zickuhr, August 26, 2015

87 privately held restaurant tech companies that have received the most venture funding, segmented into four categories: outside restaurant, inside restaurant, kitchen operations, and business management. Each segment is then subcategorized to provide greater detail into the use cases for these innovative firms. Although there are many more companies in the restaurant tech vertical, we utilized two parameters to ensure a manageable list of companies. First, we chose to list firms that have received over \$15 million in total invested capital. Second, we filtered out companies that have not received an investment within the past four years to ensure companies were active. For startups that span multiple segments, categorizations are based on our understanding of their primary use case. We hope this map will prove useful to you in your practice and shed some light on this vertical of emerging technology.

Descriptions

Restaurant tech is defined as innovative technologies that improve the restaurant business for customers and/or restaurant businesses. Review websites (e.g. Yelp), payment software (e.g. Square), and corporate catering businesses (e.g. Fooda) are prime examples of restaurant technology.

Inside restaurant (loyalty/experience/pay)

Startups in the inside restaurant sector involve the customer experience inside the restaurant. The main goal with these companies is making the customer experience more enjoyable and/or more convenient. For example, startups that facilitate mobile payment and modern point-of-sale (POS) platforms can speed up the dining and takeaway processes considerably. Customer loyalty startups provide incentive for repeat visits and help restaurants learn more about the customers they serve. Lastly, guest experience startups provide services that help restaurants differentiate from competitors and provide a more enjoyable occasion for diners.

- POS platforms: POS is the event in the shopping experience when a customer pays a merchant for goods or services rendered. POS platforms are hardware and software POS technologies innovating how restaurants process sales.
- Mobile payments: Similar to POS platforms, the mobile payments category contains companies that facilitate restaurant payments. Mobile payments software allows diners to pay for restaurant meals from a mobile device.

- Customer loyalty: Customer loyalty companies
 are third-party software vendors that perform two
 essential functions. First, they collect and analyze
 customer data that helps restaurants optimize
 operations and better serve customers. Second,
 loyalty programs incentivize customers to increase visit
 frequency and spend per visit.
- Guest experience: The guest experience category
 includes the amenities and services that restaurants
 can provide to customers to improve the customer
 experience such as wifi and music.

Outside restaurant (find/reserve/order)

Customers use technology to interact with restaurants without stepping through the door. The most common example of this is ordering food for takeout or delivery. The standard used to be that a customer would obtain a takeout menu from a previous visit to the restaurant. He or she would call the restaurant to place an order and pay by credit on the phone or cash upon delivery. Today, diners can find menus, place orders, and pay all from a desktop or mobile device. Other restaurant technology companies have replaced yellow pages and other information sources to help diners discover

new restaurants. Lastly, this sector covers companies that develop software to help diners find and secure reservations or to help restaurants manage waitlists.

- Ordering & delivery: Ordering & delivery is the largest segment by far (in terms of total invested capital).
 Firms in this sector typically operate as marketplaces that facilitate the purchase and pickup/delivery of prepared meals between restaurants and customers.
- Catering: The catering category includes businesses
 whose primary business model involves utilizing
 technology to connect restaurants with caterers who
 provide catering services to schools, offices, etc.
- Discovery & reviews: This category describes technologies that help users to find new restaurants and to share their dining experiences with others.
- Reservation & waitlist tools: Companies in this
 category develop software that allows diners to make
 reservations and/or helps restaurants manage their
 reservations and waitlists.

Business management

Companies in the business management sector are focused on managing or optimizing core restaurant

business functions. Some companies in this sector focus on enhancing HR responsibilities such as hiring and scheduling. Others offer do-it-all capabilities to manage nearly every aspect of running a restaurant business. The common factor among these businesses is that the core revenue driver involves managing the business side of restaurant operations.

- Marketing management & CRM: Marketing
 management & CRM companies provide software
 and services that empower restaurants to manage
 digital presence, engage with customers, and manage
 customer data.
- Management software: Restaurant management software provides managers with tools to analyze, automate, and optimize restaurant management and operations.
- Employee management: This category includes
 human resource (HR) management software that
 assists restaurants in employee scheduling and other
 HR activities.

Kitchen operations

This sector includes startups focused on activities in the kitchen. Inventory management, which might normally

be considered more of an operational topic, is included because it concerns managing the ingredients used in the kitchen. Another catch-all subsegment is robotics. This sector primarily concerns hardware that automates kitchen activities, but also includes self-driving robots that perform restaurant deliveries and high-tech vending machines that prepare and/or sell fresh meals.

- Robotics: Companies in the robotics category employ autonomous robot hardware to automate specific restaurant functions such as meal preparation and delivery.
- Food safety & sustainability: Companies in the food
 waste category track and reduce food waste by either
 optimizing inventory and consumption or by creating
 markets for otherwise unsold restaurant food.
- Inventory management: Inventory management
 companies develop products and services that track,
 analyze, and manage restaurant inventory, providing
 operators with actionable insights and tools to reduce
 costs and improve profit margins.
- B2B food marketplace: This category contains companies that develop digital marketplaces that connect restaurant buyers with food suppliers.