CBINSIGHTS

# How Uber Makes Money Now

2020

CBINSIGHTS

## WHAT IS CB INSIGHTS?

CB Insights helps the world's leading companies make smarter technology decisions with data, not opinion.

Our Technology Insights Platform provides companies with comprehensive data, expert insights and work management tools to drive growth and improve operations with technology.

**SIGN UP FOR A FREE TRIAL**

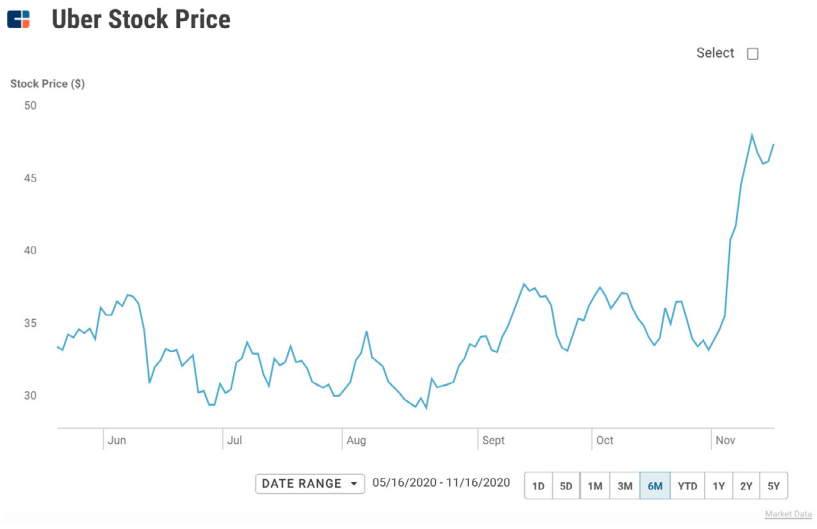
# Table of Contents

# Uber is the quintessential two-sided marketplace, but its losses are the stuff of Silicon Valley legend. We look at where Uber makes money, where it spends it, and where it's looking next to move closer to profitability.

As one of the fastest-growing and most controversial companies to ever come out of Silicon Valley, Uber has long upset expectations with its pioneering of the gig worker model, brash expansion strategy, high-profile controversies, and historic unprofitability.

In May 2019, Uber went public with a valuation of $75.5B, falling way short of the $120B mark floated by bankers for the IPO. It closed its first day of trading down 6.7% — reflecting a $655M cumulative loss for investors who paid the IPO price — making it the worst first-day dollar loss for a US IPO.

A year and a half later, Uber has rebounded to where it was when it first went public. Its stock price now hovers around $49 a share (as of November 2020), boosted by a recent regulatory win.



However, 2020 has put Uber through the wringer.

The pandemic caused its gross bookings and net revenue to plunge. Uber cut 6,700 jobs — around a quarter of its staff — in March alone.

One notable bright spot was its Uber Eats business, which has seen explosive growth in comparison. In Q2'20, its delivery business overtook its mobility segment to become the largest driver of net revenue for the company, though it remains unprofitable.

Amid the pandemic, Uber also successfully battled consequential court rulings in California regarding the classification of its drivers as independent contractors as opposed to employees.

The ride-hailing giant says it had 91M monthly active users and completed 14M trips a day by the end of 2018. However, Uber's path to profitability remains steep. In the first 3 quarters of 2020, the company posted a net loss of $5.8B, though the company predicts it can achieve profitability in 2021.

In this report, we dig into the costs and revenues of running Uber across its segments, the future bets the company is making, and how all of this ties into the story Uber is telling its investors about its long-term viability.

# How Uber works

The two-sided marketplace is one of the fundamental internet business models. Take a group of buyers and a group of sellers, connect them via a technological intermediary like a website or mobile app, and collect a fee from each transaction.

Make using your platform easier, faster, or more powerful than the traditional method of connecting those buyers and sellers, and you have a business.

Auction site eBay was the first major two-sided marketplace success — today, companies like Uber and Airbnb have made it more popular then ever.

Each company in this space has improved upon the experience and economics of the system that it supplanted: eBay, by making it possible to buy and sell anything to pretty much anyone; Airbnb, by making it possible to rent out or book a room to/from people around the world; and Uber, by allowing taxi passengers and its drivers to find each other without relying on the luck of a curbside hail.

Bill Gurley, a general partner at Benchmark and an early investor in Uber, lists 10 criteria to consider when evaluating two-sided marketplace businesses:

- Is it a qualitatively better customer experience?
- Does it provide an economic advantage?
- Can the technology make the marketplace more powerful?
- Is the current market highly fragmented?
- Is supplier signup currently high-friction?
- Is the market large enough?
- Can the market be expanded?
- How often will people transact on the platform?
- How do you get paid?
- Does adding to the network make the network more powerful?

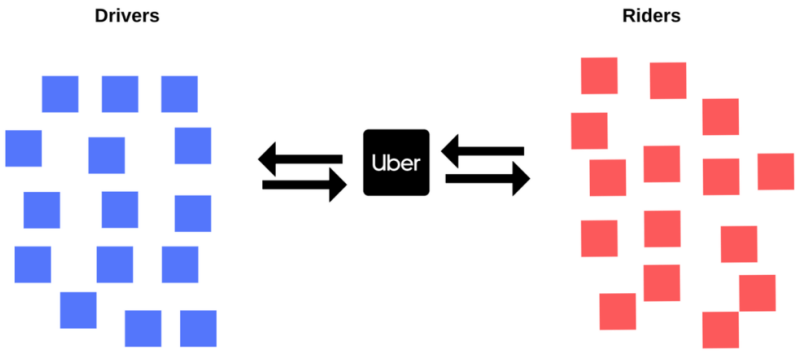
For Gurley, satisfying just 7 or 8 of these categories could make a marketplace business a good investment with a high chance of success. His primary example for most of them, and one of the few companies that could make a claim to satisfying all of these categories, is Uber.

## UBER'S DOUBLE-SIDED MARKETPLACE

The main advantage of Uber's two-sided marketplace has been i ts efficiency.

The medallion cab system operates through forced scarcity — there can only ever be a certain number of cabs on the road in any given city. As a result, fares are high. Cabs never seem to be around when you need them, like late at night or in the pouring rain. And over time, these problems get worse — as the population of a city grows, the cab population often doesn't.

Uber, on the other hand, has become more valuable the larger its network has grown. For Uber, growth means faster pickup times, more drivers on the road, and potentially lower prices for riders. It also means more revenue for Uber. It fits all the criteria of the ideal marketplace business.




*In the Uber model, drivers and riders can find each other more quickly and more reliably.*

The core value of that marketplace is reliability. Old-school taxis find fares either by driving around and picking them off the street (street hail), or having a dispatcher (with phoned-in customer requests) instructing them on where to go.

In other words, “supply” can meet “demand” in one of two ways: through a loosely-organized, semi-random process of discovery, or through a direct routing by a dispatcher middleman.

For taxis, that has meant:

- **Poor supply allocation for drivers.** Traditional cabs only have a passenger in the car 30-50% of the time. To find a fare, they're dependent on taxi stands, centralized dispatchers, or being hailed from the street — they have no other way to know where to go next.
- **Low supply liquidity for riders.** Traditional cabs congregate in urban cores and high-transit areas, leaving outer boroughs, suburbs, and “less profitable” areas underserved. Riders in these areas are often unable to get a cab at all or face long waits.

With Uber, on the other hand, users request rides directly through the app. The nearest driver is dispatched to their location, and they can be hailed again immediately after drop-off, creating:

- **Better supply allocation for drivers.** Uber drivers have passengers in their cars more often, meaning less time and money wasted.
- **Higher supply liquidity for riders.** With surge pricing moving drivers from area to area, finding a ride is more reliable.

This last point — surge or dynamic pricing creating liquidity — is one of the pillars of the Uber business model.

Because of surge pricing, Uber can also continue to hire contractors who work flexible hours, rather than set schedules with set pickup areas — crucial for keeping costs down, but also for constantly repopulating its high-churn employee base.

This is one reason why Uber, Lyft, and other delivery companies spent such huge sums to defeat Prop 22 in California, which would have reclassified drivers as employees. To them, it represented a fundamental threat to their business model.

Surge pricing, while sometimes a deterrent to riders, helps Uber meet fluctuating levels of demand with an optimal level of supply. By ramping up prices (and driver payouts) at times of low supply, the company makes sure that drivers are on the road and passengers are getting picked up.

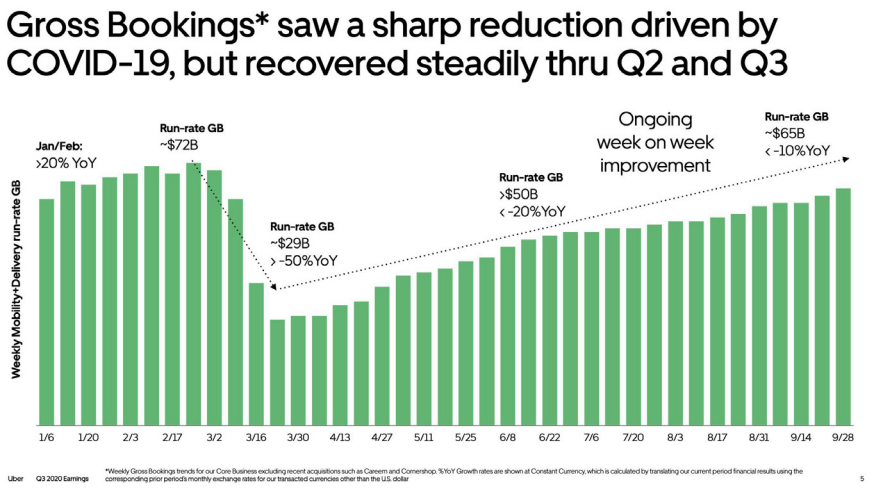
In addition to increasing the supply to high-demand areas, surge pricing also helps control customer demand, as those unwilling to pay a higher price will find other means of transportation, while others will pay for the surge.

While Uber pioneered the gig working economy, this business model has yet to turn a profit for the company — and the pandemic has only furthered its losses.

In Q3'20, gross bookings — which the company defines as the total dollar value, including taxes and fees, represented by its services including rides, deliveries, and freight shipper payments — declined 10% year-over-year (YoY) to $14.7B. Meanwhile, its adjusted net revenue was $2.8B, a 20% YoY decrease. The company remains consistently unprofitable, hemorrhaging $625M in Q3'20.

Uber's take rate — defined as adjusted net revenue as a percentage of gross bookings — also dropped to 19%, down from 22% YoY. Its take rate is essentially how much revenue it pockets from the total fares of trips and deliveries.

However, Q3'20 has heralded better news for Uber, compared to the quarter prior, when it saw gross bookings and adjusted net revenue plunge 35% and 33% YoY, respectively.




*Source: Uber*

Now, Uber is experimenting with layering more value onto the latent, global logistics network that it has built with its fleet of 3.9M+ drivers — from its food delivery business to its experiments with autonomous vehicles — as it seeks new paths to profitability beyond the ride-sharing business.

# Mobility

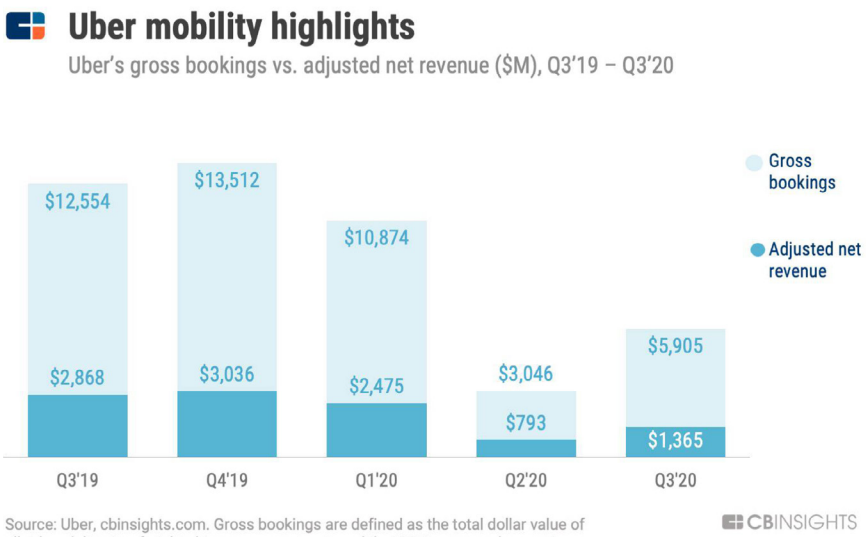
Uber became a darling of Silicon Valley investors by nullifying many of the greatest costs of running a traditional taxi service. But its ride-hailing losses today are the stuff of Silicon Valley legend.

Uber's business model currently hinges on it paying its drivers as independent contractors rather than employees.

In recent years, regulators have ramped up scrutiny, with California passing a law last year aimed at avoiding the misclassification of gig workers. The AB 5 statute, which took effect January 2020, stipulates that workers must be considered employees — thus granting them minimum wage, healthcare, overtime, paid leave, and more — unless businesses can demonstrate the work they do fits specific criteria. Uber recently scored a win with the passage of a ballot measure that would exempt it from the law.

Uber also doesn't own cars; its contractors bring their own, though it offers a vehicle marketplace where drivers can rent cars through local dealerships. Uber's ride-hailing service thus has no physical assets to manage. The company coordinates the meeting of supply and demand and takes a cut. That model — or more specifically, Uber's method of going about it — wound up being quite expensive.

The flagship ride-hailing business was all but decimated when Covid-19 swept across the globe, but it has seen slight recovery as cities reopened. In Q3'20, its mobility segment (formerly Rides) reported a $5.9B in gross bookings, a 50% YoY decrease. The quarter prior, it saw gross bookings freefall 73% YoY to just $3B.




*Source: Uber*

Even pre-Covid, Uber struggled with its costs, driven by a number of factors:

- **Constant geographical expansion:** Uber set out to conquer the world, believing that being the first mover could give the company an early advantage — but doing so meant spending hundreds of millions of dollars to start up, lobby, and often fight in unfamiliar markets.
- **The commodification of ride-hailing:** Because Uber has relatively little valuable IP, and local companies and VCs have an incentive to gain a ride-hailing monopoly in their own areas, Uber has spent hundreds of millions fighting well-capitalized local competitors, attempting to drive their revenues down and costs up.
- **Poor overall driver retention:** While part-time work and flexibility are core to the Uber driver experience, its high churn rate on drivers means hefty sales, marketing, and promotional spend designed to keep people signing up and driving for the platform.

## THE BASICS OF CAR RIDE/FEE DISTRIBUTION

Uber calculates fares based on the estimated length of the trip, factoring in variable costs based on time and distance traveled. The total fare also includes a base rate, tolls and surcharges, surge pricing, a booking fee, route-based adjustments, plus other promotions.

The specific formula used is: "((base fare + time rate + distance rate) * surge multiplier) + tolls and other fees," according to Ridester.

On top of the flat-rate booking fee riders pay to cover regulatory and operational costs, Uber also charges drivers a variable service fee. In the case that the total fare is equal to or less than driver earnings, Uber doesn't deduct a service fee. In some markets, the service fee is a flat 25%, instead of a variable rate.

On top of UberX, Uber also offers other options for ride-hailing, including Uber Black, its premium transport service, and Uber Pool, where rides are shared with other passengers.

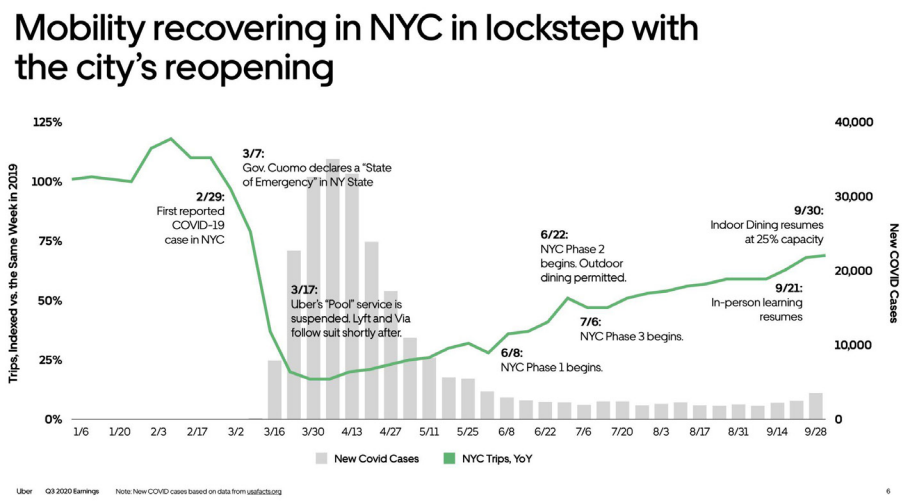
Today, Uber Black is a marginal percentage of Uber's overall volume and revenue. Premium, luxury transportation within Uber's model simply does not drive higher demand, or higher margins, the way that a service like Uber Pool or UberX can.

Part of the problem is cost. In many cities, Uber Black drivers are licensed black car drivers with commercial drivers' licenses, in comparison to the independent contractors of UberX.

The expenses involved in driving for Uber Black are also significantly higher than those of UberX drivers, since a large portion of drivers buy or lease more expensive vehicles, which often have higher costs for insurance and maintenance.

Uber Pool, in contrast, is essentially a carpooled Uber. It offers riders discounted rides by bundling multiple fares into a single car, which could, in an idealized scenario, allow Uber to collect much more revenue on each trip.

However, in practice, many Uber Pool rides taken do not involve multiple passengers hopping onto the route. In these instances, Pool riders effectively halve Uber's take. Due to the pandemic, Uber Pool was temporarily suspended in March in an effort to reduce the risk of spreading Covid-19.




*Source: Uber*

## COSTS

*DRIVER ACQUISITION & RETENTION*

The cost of acquiring drivers has been one of the most expensive parts of running Uber since its inception. In Uber's early years, new drivers got sign-up bonuses as high as $2,000 or $5,000 just for completing a few rides on the app.

Today, referral bonuses have largely been eliminated, but Uber still spends hundreds of millions of dollars per quarter marketing itself to new drivers, paying out on other incentives, and financing driver vehicles.

Though its sales and marketing expenses dipped in Q3'20 to $924M as a result of Covid-19, it remains the second-largest cost for Uber after cost of revenue.

Part of the problem for Uber is driver churn. Only about 4% of drivers remain on Uber's platform after one year, according to a 2017 analysis from The Information.

Uber argues that its drivers churn out by design, because Uber is less a "job" and more an "in-between" and part-time solution. But Uber's already-low retention rate and relatively high take rate make it hard to see how Uber will cut driver acquisition costs in the future or decrease churn.

Despite ads claiming drivers could earn $90,000 a year or on average, or make $25 an hour, the average take-home pay of an Uber driver in the US in 2018 — after expenses — was estimated by the Economic Policy Institute to only be $9.21 an hour, slightly above the federal minimum wage.

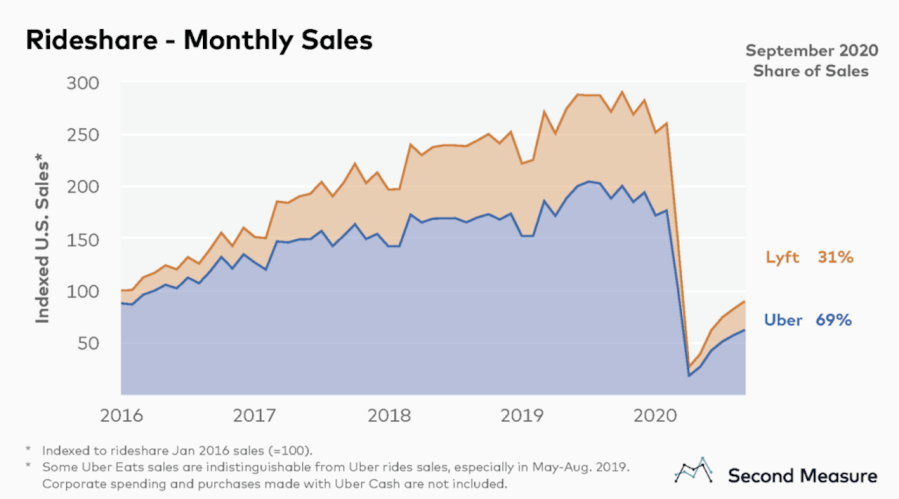
Uber's churn and wage problems represent one of the most significant costs involved in running the company and one of the biggest potential long-term threats.

It is a process that stands in stark contrast to Uber's relatively cheap, efficient, and effective customer acquisition process.

*CUSTOMER ACQUISITION & RETENTION*

Uber's customer acquisition, especially early on, has been driven in large part by local network effects and financial incentives for new users.

Rider churn is not a significant problem — Uber's share of the US ride-hailing market is about 69%, according to Second Measure.




*Source: Second Measure*

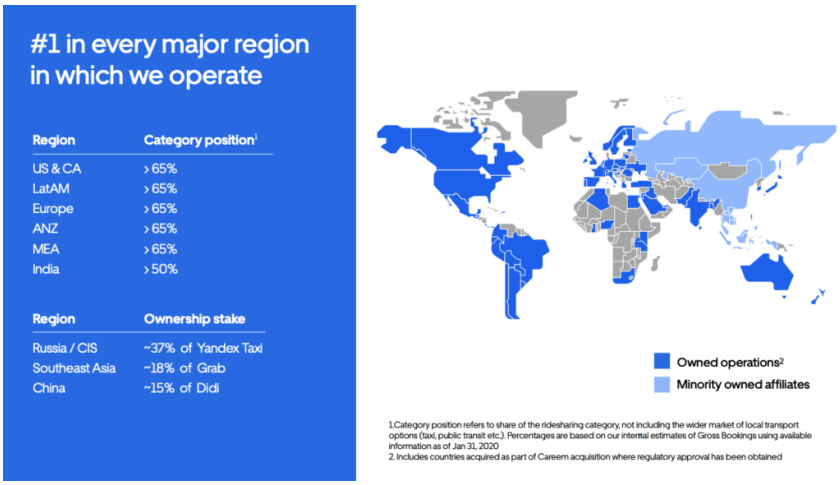
Uber's natural referral mechanics and incentive programs, combined with the average spend of an Uber user, have allowed the company to quickly expand its user base at a relatively low cost. However, the company is still looking for new ways to lock in customers.

In August 2020, Uber rolled out its Uber Pass subscription service across the US except in California, after an extended test period in several US cities. Customers pay $25 a month for discounted rides, meal deliveries, and grocery deliveries (where available), further incentivizing them to stay within the Uber system. Under this system, Uber drivers receive the same compensation, with the company covering the difference in costs.

*EXPANSION COSTS*

Uber was founded on the idea of aggressive expansion. Just months after going live in New York City and Chicago, Uber stunned employees and investors by going online in Paris. London, Mexico City, and Taiwan soon followed.

Today, it operates in 68 countries and 10,000+ cities, and non-US markets account for 80% of all trips (including rides and meal deliveries) as of Q3'20. It recently established a joint venture with South Korea-based SK Telecom to double down on ride-hailing in the Korean market.




*Source: Uber*

But from Russia to Southeast Asia to China, the cost of expansion to global markets has been high.

Uber's business has been commoditized. For that reason, its local competitors — often tied to the local community and supported by the state — have had to do little more than temporarily outspend Uber in order to gain their own foothold. In many of these international markets, those competitors have successfully beaten Uber back.

Uber's expansion into any new market comes with a variety of new, variable costs:

- Higher driver commissions
- Driver incentives
- Driver onboarding (e.g. mobile devices)
- Increased sales & marketing spend
- Insurance/other operating expenses

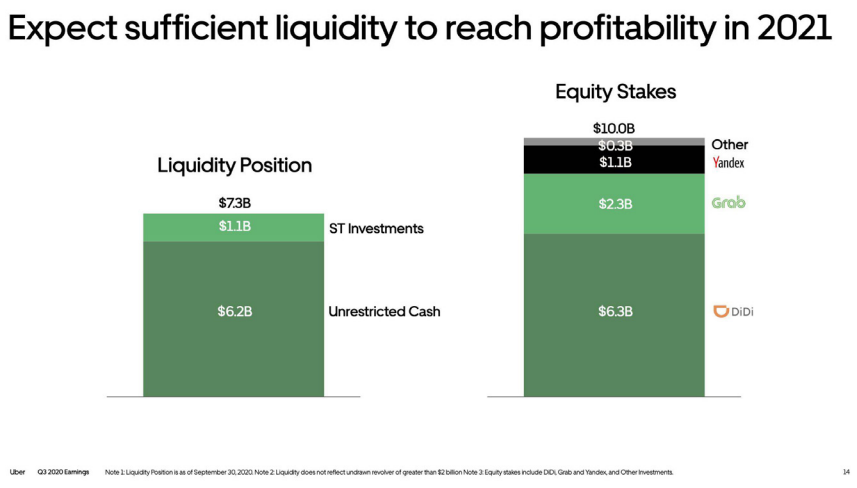
Where Uber's geographic expansion has failed, it has not managed to bring those costs under control.

The problem is that each locale Uber expands into is different — they have different regulations, different technological needs, and different cultures around ride-hailing. These differences make for an intimidating set of everyday challenges for Uber.

Among its numerous battles abroad, Uber's suffered costly defeats in a few major markets, most notably in:

- **China** — In 2016, Uber sold its operations in China, where it was losing $1B+ a year, to local competitor Didi Chuxing for a 19% stake in the company. Uber estimated that the stake had reduced to about 15% as of Q3'18.
- **Russia** — Uber merged with local rival Yandex in February 2018 to form a joint venture, with 38% ownership.
- **Southeast Asia** — In 2018, Uber retreated from Southeast Asia, selling its operations to ride-hailing giant Grab for a 30% stake — worth 23% as of Q4'18.

However, Uber says that these minority stakes have grown to at least $10B on paper, as each of these global rivals has continued expansion.




*Source: Uber*

*REGULATORY COSTS*

Uber escaped regulation early on in the San Francisco and Washington DC markets primarily by appealing to its fast growth and enthusiastic user base. Its primary "defense" (known as "Travis' Law" internally) was that people loved its service so much that any city or local government that banned the company would face a grassroots wrath.

The company has not had such luck everywhere.

In the past, it's been entangled in a stream of lawsuits, including a two-time London ban (which was overturned in September 2020), a nationwide ban in Germany, and a multi-year intellectual property case involving Waymo and Anthony Levandowski, among others.

The latest regulatory entanglement was Uber's fight against California's state labor law, AB 5, which would force gig economy companies to classify its workers as employees and provide them with benefits like overtime pay, paid sick leave, and unemployment insurance. The problems with the law have been widely documented, with some calling it a "one size fits all" bill that was too broad.

The law thrust Uber into a crisis: California remains a significant market for Uber, accounting for 9% of Uber's gross bookings of 2019. In an effort to sidestep AB 5, companies like Uber, Lyft, DoorDash, Instacart, and Postmates poured more than $200M into Prop 22, making it the most expensive ballot measure in California's history. To Uber's relief, voters backed the initiative in November, which exempts these app-based companies from reclassifying their workers while also providing some benefits to contractors, including a wage floor, healthcare subsidies, and accident insurance.

Critics, however, see it differently.

"I am very concerned about what [the Proposition 22 win] portends for the future of work in our country," said Shannon Liss-Riordan, an attorney who has sued gig companies for labor-related issues in California and elsewhere, in an interview with Wired. "They were able to change the law in a way that suited them, and allows them to save labor costs at the expense of working people in this country."

*MICROMOBILITY AND PUBLIC TRANSIT EFFORTS*

Uber's initiatives to expand beyond ride-hailing remain cost centers, as they have yet to yield significant profit. But these micromobility and public transit efforts also represent potential sources of future revenue.

Scooters were a part of Uber's vision of becoming the go-to transportation app; however, its micromobility ambitions have so far been mostly unrealized.

Uber acquired the dockless bike startup Jump in April 2018 for a reported $200M as part of its efforts to expand into the electric scooter space, but divested it to Lime as part a larger investment this year as Covid-19 forced Uber to downsize and cut down its workforce.

As people try to maintain social distancing, micromobility may set for a post-pandemic boost. (For more on the state of micromobility, take a look at our report here.)

Uber has also been pushing into the public transportation realm, under Uber Transit.

It acquired software company Routematch in July 2020 to bolster its public transit services, such as route planning and ticket buying. Before that, it had already partnered with 50+ local governments to offer last-mile trips, boost accessibility, and develop new routes. Last year, it began selling bus and train tickets in Denver, Colorado through its app.

This could be a critical move. Uber is looking to diversify away from the 5 major metropolitan areas that accounted for nearly a quarter of its mobility gross bookings in 2019 — Chicago, Los Angeles, New York City, San Francisco Bay Area, and London — into more suburban and rural areas.

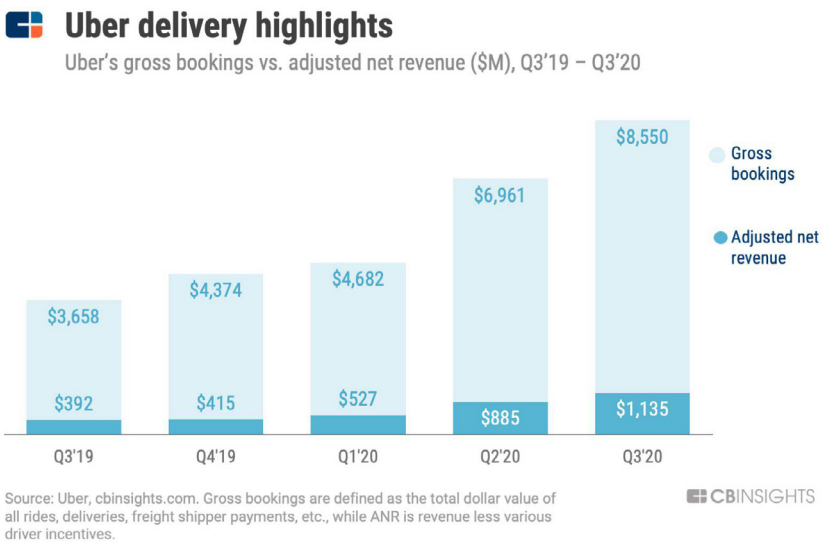
# Delivery

Uber Eats, Uber's food delivery app, is the fastest-growing unit within Uber — it accounted for 40% of its adjusted net revenue in Q3'20.

Its delivery segment has succeeded because it uses the existing global network of drivers within Uber to provide a higher-margin, value-add service to its customers — food delivery.

In parts of the world without well established on-demand food delivery options, Uber has the competitive advantage of already owning a fleet of delivery drivers. Once the company makes a connection with a restaurant, it has to just flip a switch to turn delivery on. Potential customers can use all their existing information stored in their Uber app to start ordering.

In Q3'20, the company's delivery segment garnered nearly $8.6B in gross bookings, a 135% YoY increase. It raked in $1.1B in adjusted net revenue, representing a whopping 191% YoY growth. The segment remains unprofitable, however, with EBITDA for the quarter clocking in at a net loss of $183M.




*Source: Uber*

## REVENUE

Uber Eats generates revenue in 3 ways: a sliding scale delivery fee from each customer, a percentage of each driver's gross fare, and a 30% fee from the restaurant on each order.

*CUSTOMERS*

In lieu of booking fees, Uber updated its pricing structure in March. The breakdown of each order includes:

- A delivery fee, based on the distance of the restaurant and availability of couriers
- Service fees accounting for 15% of the total order
- Small order fees for orders less than $10

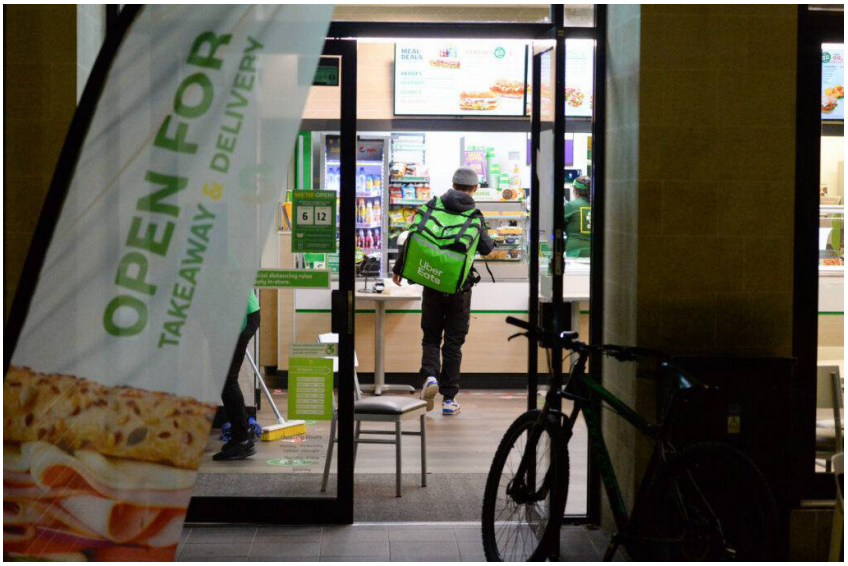
Similar to its Uber Pool service, Uber also bundles orders together, allowing couriers to deliver multiple orders from restaurants in the same vicinity. This can help reduce delivery fees for the consumer through promotions like $0 delivery fees.

*DRIVERS*

Uber Eats already saves a significant amount on costs because it utilizes existing Uber drivers to do pickups and delivery. It also takes a variable service fee from its drivers, the same fee it charges for ride-hailing.

Uber Eats couriers get paid a base fare and tips, as well as trip supplements (e.g. if a trip takes longer than expected) and promotions (e.g. surge pricing) when available.

In September 2019, Uber also began lowering base fares for drivers in favor of the trip supplement, which accounts for time and distance in each trip.




*Source: Getty Images*

*RESTAURANTS*

Uber Eats charges restaurants a $350 activation fee to new restaurants as well as a 30% fee to use the platform. The cut is decreased to 15% if the restaurant has its own delivery staff or offers customer pickup.

Margins for the restaurant business are notoriously low — full-service restaurants and fast-casual places have an average profit margin of 3-5% and 6-9% respectively, according to restaurant accounting firm Restaurant365. As a result, restaurants need a high volume of orders to break even with a service like Uber Eats, which has caused some to opt-out entirely.

But amid the Covid-19 pandemic, delivery has become a lifeline for restaurants.

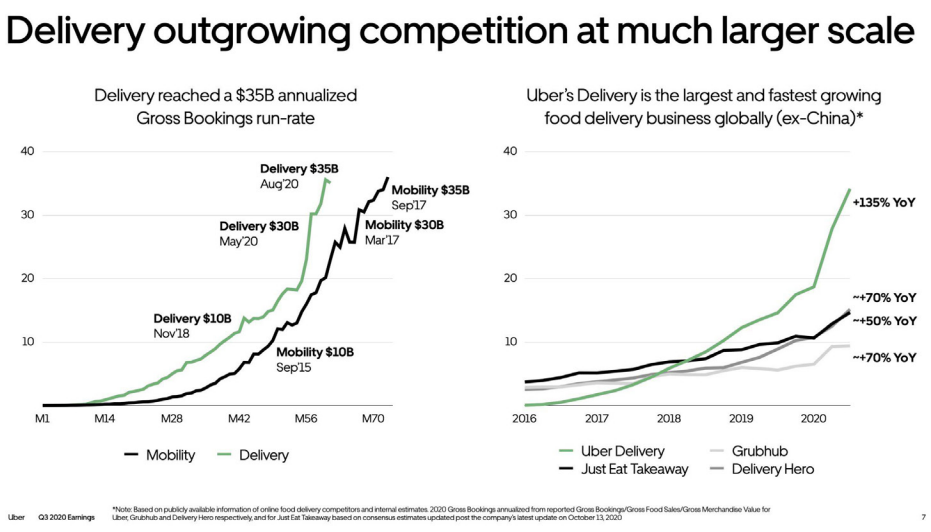
**“These delivery companies were never something I wanted to work with, but we have to,” said chef and restaurant owner Eli Sussman in an interview with Food and Wine. “We are a fast-casual restaurant. We are dependent upon volume to make any money. And most people eat dinner on their couch these days.”**

Given the extraordinary circumstances, US cities like San Francisco, Seattle, Washington DC, and New York have passed limits to third-party delivery commissions to help restaurants stay afloat, though these remain temporary emergency measures.

## EXPANSION

In the wake of Covid-19, food delivery has become a booming business. After its failed attempt to acquire Grubhub — later acquired by Netherlands-based food delivery giant Just Eat — in June 2020, Uber gobbled up Postmates a month later in a $2.65B deal.

As of September 2020, Uber Eats accounted for 22% of the meal delivery market in the US, beating out Grubhub for second place, according to Second Measure. DoorDash retained the lion's share of the market, encapsulating 49% of sales.



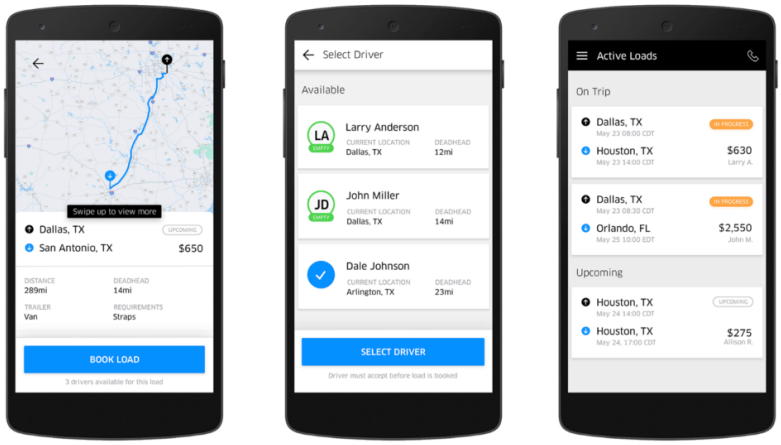

*Source: Uber*

Uber's expansion plans for its delivery business aren't new. Last October, it bought a majority stake in grocery delivery startup Cornershop, which serves the Latin American market as well as the US and Canada. Uber went on to launch an on-demand grocery delivery service in Latin America and Canada.

The profitability prospects of the on-demand delivery industry have been hotly debated as Uber continues to pour millions into subsidizing the business. Whether its aggressive behavior to stave off competitors and gain market share will result in success remains to be seen. Meanwhile, criticism has continued to escalate, as costs rise for drivers, customers, and restaurants alike, raising questions around the viability of this business model.

# Uber Freight

Trucks move some 70% of freight in the US. But the freight business has long been fraught with inefficiencies, even pre-pandemic.



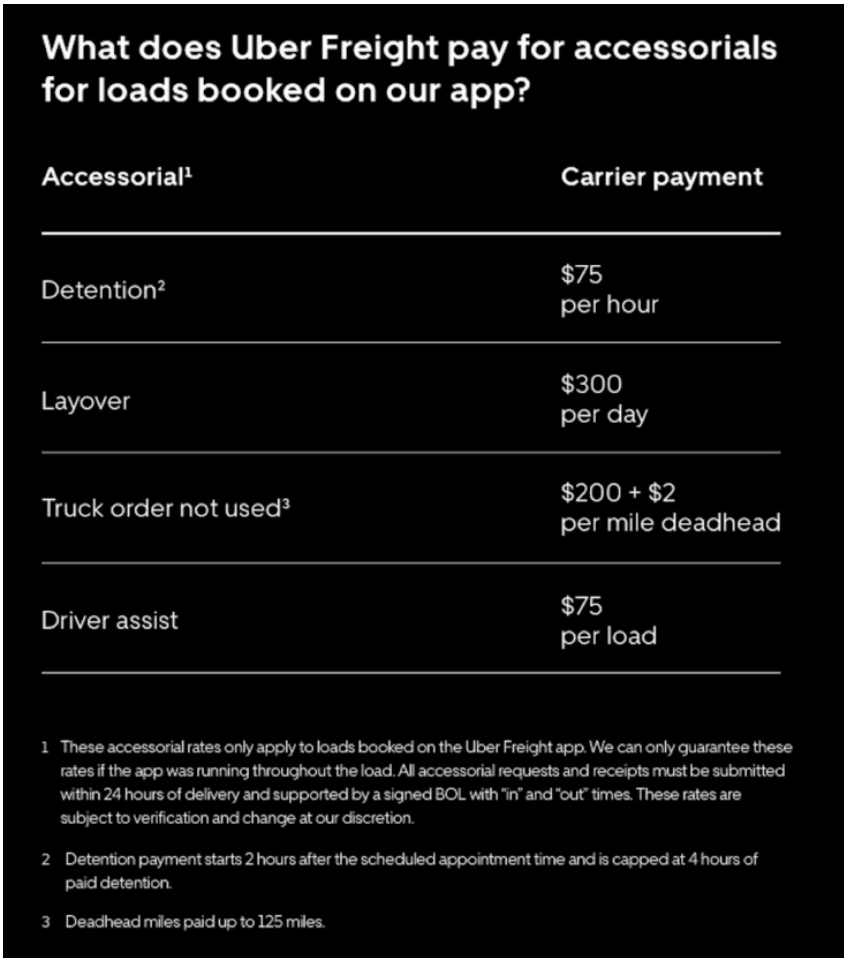

*Source: Uber, FreightWave*

Digital freight brokerages, which aim to more effectively match supply and demand, are looking to disrupt the industry.

Launched in 2017, Uber Freight offers a marketplace that connects carriers and truck drivers with shippers, allowing for upfront pricing. Today, it boasts nearly 65,000 carriers and thousands of shippers, including AB Inbev, Nestle, and Heineken, as customers. In Q3'20, its freight segment brought in $290M in gross bookings and $288M in revenue, a 30% and 32% YoY surge, respectively.

Uber leverages algorithms to price loads in real-time, factoring in date, seasonality, weather, demand, and more — similar to setting airfare prices, according to the company. These prices expire after 15 minutes, but Uber guarantees its quotes once they are locked in.

In April, Uber Freight rolled out in-app bidding, which allows carriers and drivers to submit bids for specific loads. The trucking company also pays for detention time, layovers, unused truck orders, and driver assistance.



**What does Uber Freight pay for accessorials for loads booked on our app?**

| Accessorial[1] | Carrier payment |
|---|---|
| Detention[2] | $75 per hour |
| Layover | $300 per day |
| Truck order not used[3] | $200 + $2 per mile deadhead |
| Driver assist | $75 per load |

1 These accessorial rates only apply to loads booked on the Uber Freight app. We can only guarantee these rates if the app was running throughout the load. All accessorial requests and receipts must be submitted within 24 hours of delivery and supported by a signed BOL with "in" and "out" times. These rates are subject to verification and change at our discretion.

2 Detention payment starts 2 hours after the scheduled appointment time and is capped at 4 hours of paid detention.

3 Deadhead miles paid up to 125 miles.

*Source: Uber*

Uber is leveraging the familiar strategy of undercutting profits to gain market share in its trucking business: almost 99% of the gross revenue goes to the carriers, per a Morgan Stanley analysis.

In October, the growing but unprofitable segment closed a $500M Series A led by Greenbriar Equity Group, valuing the unit at a reported $3.3B. This follows its ongoing expansion into enterprise shipping and several partnerships with cloud transportation management system providers in the past, including SAP and Oracle.

Uber sold its European freight arm to Sennder in September, indicating a shift in focus to the US market.

The company also signaled an interest in autonomous trucking when it acquired Otto in 2016, but it shuttered that program after a contentious lawsuit with Waymo and pivoted its efforts to self-driving cars.

# ATG and other technology programs

Today, Uber's bets for the future are in alternative forms of transportation, like autonomous vehicles or helicopters.

The last-mile accounts for more than half the delivery cost of all goods in general — and Uber, with its massive fleet, could play a role in lowering that. Uber has already experimented with package delivery with its Uber Rush service. With Uber Eats, Uber has started doing this for the meal delivery space.

Uber's fleet, in other words, could serve as a latent, global delivery network. And, with the eventual emergence of autonomous vehicles, Uber stands to cut out the top cost of running its business — human drivers.


*Source: Uber*

A UBS research note claimed autonomous vehicles could lower passenger fares by as much as 80%, but the advantages go beyond lower fares for riders and a higher take of the profits for Uber. With autonomous cars, Uber would be able to use its cars are producing value even when they're empty of passengers. Uber wouldn't have to rely on financial incentives to make sure drivers get out on the roads during busy times — it could simply spin up the right number of cars, optimized for demand.

Autonomous cars also mean Uber's business model will have to change in other ways. Owning a fleet of autonomous vehicles rather than renting the time of vehicle-owners means Uber has to pay the attendant costs on those vehicles — maintenance, insurance, and depreciation — on top of buying or manufacturing them.

Autonomous driving is still very much in development. Furthermore, Uber's self-driving tests were halted after the death of a pedestrian but began ramping up again in July 2018. While the autonomous play sounds promising, the goal of eliminating drivers and dramatically lowering costs is likely still far off.

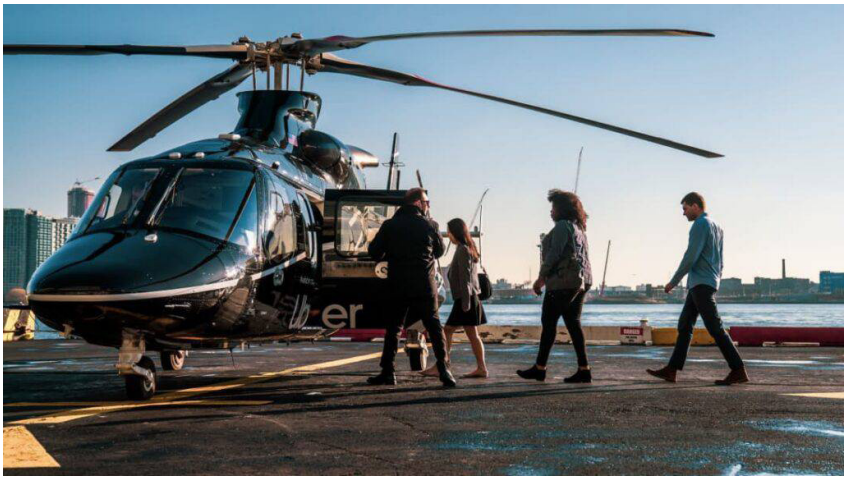
Uber has ostensibly been working on developing its own autonomous driving technology since 2015 when the company started up its Advanced Technologies Group (ATG).

The project is, however, a drain on profits — Uber has reportedly spent $2.5B on the segment since its launch to little demonstrated success. After raising $1B from Toyota, Denso, and SoftBank at a more than $7B valuation last year, the unit planned on continuing to fundraise from outside sources as profitability remained a far off prospect, according to ATG head Eric Meyhofer. However, it was reported in November that Uber was in talks to sell the ATG unit to autonomous driving company Aurora Innovation.

The self-driving car unit “has simply failed to evolve and produce meaningful progress in so long that something has to be said before a disaster befalls us," an ATG manager reportedly sent to the CEO in an internal email, reflecting ongoing doubt about the viability of this segment.

Competitors like Tesla and Waymo have found greater success of late, with Waymo's recent announcement that it would open its driverless ride-hailing service to the public and Tesla's private beta release of its full self-driving software. Even if Uber abandons its own pursuit of autonomous vehicles, it could become a major customer for other players working on the tech.

Beyond its focus on autonomous driving, Uber has also previously pursued “aerial ride-sharing" as an alternate method of mobility through its Uber Elevate business. The company says that it will launch shared air transportation between suburbs and cities by 2023. The company has already experimented with aerial transportation via Uber Copter, a helicopter service launched last year to fly passengers between lower Manhattan and JFK Airport.



*Source: Uber*

# Uber's competition

Uber has significant, big-name competitors across all of its business segments — mobility, delivery, freight, and autonomous vehicles.

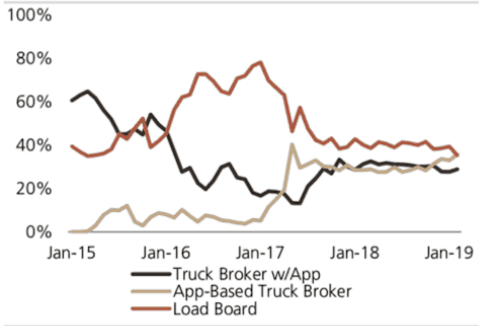
In ride-hailing, Lyft remains Uber's main competitor in the US. Reflecting the high commoditization of ride-hailing and Lyft's well-capitalized team, Uber is ramping up investments in adjacent businesses like food delivery.

While drivers often drive for both companies, most customers are loyal to one app: 64% use only Uber, while 26% use only Lyft, according to Second Measure. Uber also claims a broader international market, while Lyft operates solely in North America.

The historically money-losing food delivery industry also ballooned amid the pandemic, with notable acquisitions including Just Eat's purchase of Grubhub and Uber's own acquisition of Postmates. However, in the US, DoorDash remains the largest competitor in the space, accounting for 49% of the market share, per Second Measure. Uber Eats follows with a 22% share, trailed closely by Grubhub's 20%.

In the freight business, its most direct competition is Seattle-based startup Convoy, which has raised $675M to date from tech heavy-hitters Bezos Expeditions, Alphabet, and even Uber CEO Dara Khosrowshahi (before he joined Uber), among others. Other players in the space include Transfix and Loadsmart, which are also digital brokers that connect carriers and loads via algorithms.

**Figure 1: Shr. of Downloads – Type**




Note: Aggregate of iOS and Google Play
Source: UBS Evidence Lab, Sensor Tower

**Figure 2: Shr. of Downloads – Brokers & Load Boards**

| Total Shr., Rank | Service | 2018 | YTD19 |
|---|---|---|---|
| 1 | Uber Freight | 21% | 23% |
| 2 | Truckloads | 13% | 12% |
| 3 | DAT Load Board | 12% | 10% |
| 4 | Convoy; J.B Hunt | 8%; 11% | 9% |
| 5 | Truckstop; 123 Loadboard; TQL Carrier | 7%; 7%; 6% | 7% |
| 6 | Navisphere Carrier | 7% | 6% |

Note: Aggregate of iOS and Google Play
Source: UBS Evidence Lab, Sensor Tower

**www.ubs.com/investmentresearch**

*Source: UBS*

As of February last year, Convoy boasted a 95% automated load to truck match rate and was reportedly working with 100,000 truckers, 35,000 carriers, and 500+ shippers. (For more, clients can see 60+ trucking tech companies here and where Smart Money VCs are investing in trucking here.)

In an effort to catch up, some traditional incumbents like C.H. Robinson and J.B. Hunt, have invested in digital operations as well — though Uber Freight is aggressively investing in its algorithms to maintain a competitive edge.

In its autonomous vehicle effort, Uber faces several competitors, though the industry is facing market uncertainty. In its latest filing, it cited Waymo, Cruise Automation, Tesla, Apple, and Zoox (which Amazon recently announced it will acquire) in its list of competitors. Today, Alphabet-owned Waymo, in particular, has pulled ahead, having launched its driverless taxi service to the public in October. (We dive deeper into Waymo in this brief and the partnerships shaping the space here.)

## The future of Uber

In a recent Financial Times interview, CEO Dara Khosrowshahi gave a glimpse into his thinking on the subject of the future. For him, Uber's expansion into food and grocery delivery positions the company to grow into a "super app" revolving around delivery:

> **"Eventually, you know, I can see a world where if you want to take cash out from the bank, someone will come and deliver cash to you, right? It'll be anything that you want delivered to your home."**
>
> **— DARA KHOSROWSHAHI, UBER CEO**

Uber has matured from being the rule-breaking startup that garnered fame — and several lawsuits — and is now taking a more conservative approach in growing its ride-hailing business. Instead of blustering, loss-making expansion into international markets, it is opting to take stakes in local giants. This approach leaves it well-positioned, as Uber holds valuable equity stakes as well as future growth potential in those markets. In its delivery segment, however, Uber is defaulting back to its aggressive loss-making playbook to gain market share, leaving critics with doubts regarding its path to profitability.

Furthermore, with the passage of Prop 22, Uber and other gig economy companies have eked out a victory in worker classification. However, the company's fight is far from over. Other US states, including New Jersey, Massachusetts, New York, and Illinois, may also craft laws that target Uber and other gig economy companies — and are likely to learn from California's stumbles.

# Additional reading

*This report was created with data from CB Insights' emerging technology insights platform, which offers clarity into emerging tech and new business strategies through tools like:*

- *Earnings Transcripts Search Engine & Analytics to get an information edge on competitors' and incumbents' strategies*
- *Patent Analytics to see where innovation is happening next*
- *Company Mosaic Scores to evaluate startup health, based on our National Science Foundation-backed algorithm*
- *Business Relationships to quickly see a company's competitors, partners, and more*
- *Market Sizing Tools to visualize market growth and spot the next big opportunity*

*If you aren't already a client, sign up for a free trial to learn more about our platform.*