



Google Maps Platform

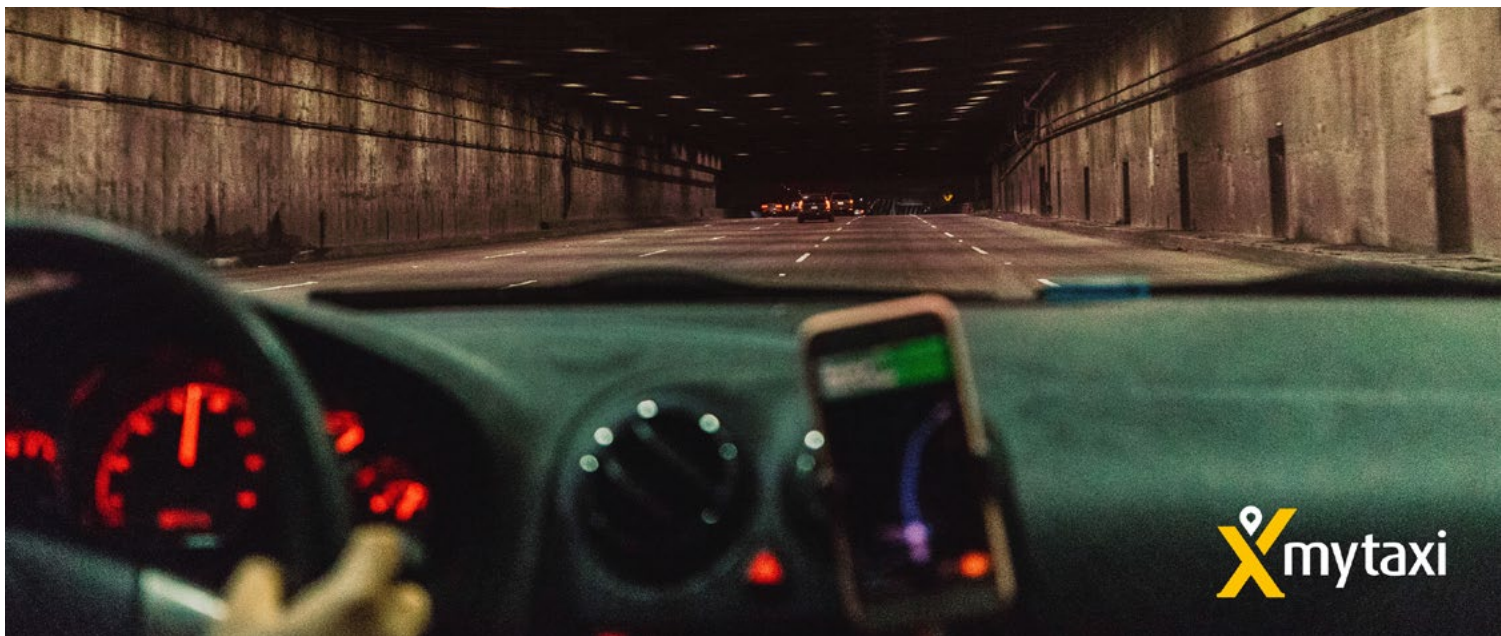
How Google Maps Platform Helps Ride Sharing Services Improve the Customer and Driver Experience while Increasing Overall Efficiency

Google Cloud Whitepaper
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Google Maps Platform helps ride sharing services, delivery companies and businesses that manage vehicle fleets improve driver navigation and the efficiency of their fleets. Developers can embed a Google Maps-powered turn-by-turn navigation experience into their applications and retrieve data about a driver's journey. Drivers no longer have to switch between apps to get directions or information about their next job. And with programmatic control and insight into drivers' behavior, companies can better allocate drivers, and decrease drivers' idle time and wait times for customers. Early users of the ridesharing solution have found it offers significant benefits, including a 4% reduction in drive times, and up to a 48% increase in accuracy of ETAs (estimated time of arrival).

The ridesharing solution provides turn-by-turn navigation with voice guidance, real-time traffic information and rerouting, guidance control, an interactive map with driving perspective and a customizable driver user interface. Unlike consumer navigation

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apps, the ridesharing solution provides an integrated and tailored navigation experience, while also providing data to businesses about drivers' navigation behavior. It enables partners and providers to make real-time decisions about use of their drivers and fleets, and ensures that customers get the best service possible. And unlike other in-app navigation solutions, the Google Maps Platform solution offers a proven and familiar experience from the Google Maps consumer app and leverages high-quality, global mapping capabilities.

This white paper describes the benefits of the Google Maps Platform ridesharing solution and details results seen from an early adopter, mytaxi. mytaxi lets passengers book taxi rides using its apps, which have been downloaded more than ten million times. The service is available in more than 70 cities with a network of more than 120,000 affiliated taxis throughout Europe.

A Better Experience for Customers

The key to the success for ride-sharing companies is providing fast, safe rides at reasonable prices. So we'll start off the white paper describing how the the solution does this, and helps provide customers with a better overall experience.

A common frustration for riders is inaccurate driver ETAs. Ridesharing services do not have the most accurate position of the driver or the direction in which they are heading. The service provider can sometimes select a driver that is heading away from the passenger, resulting in a much higher ETA. With the ridesharing solution, the app provides a much more accurate road position and heading, and can be far more precise in its ETA prediction. Improving ETAs can decrease frustrations for riders and increase their likelihood to trust and use the ridesharing service.

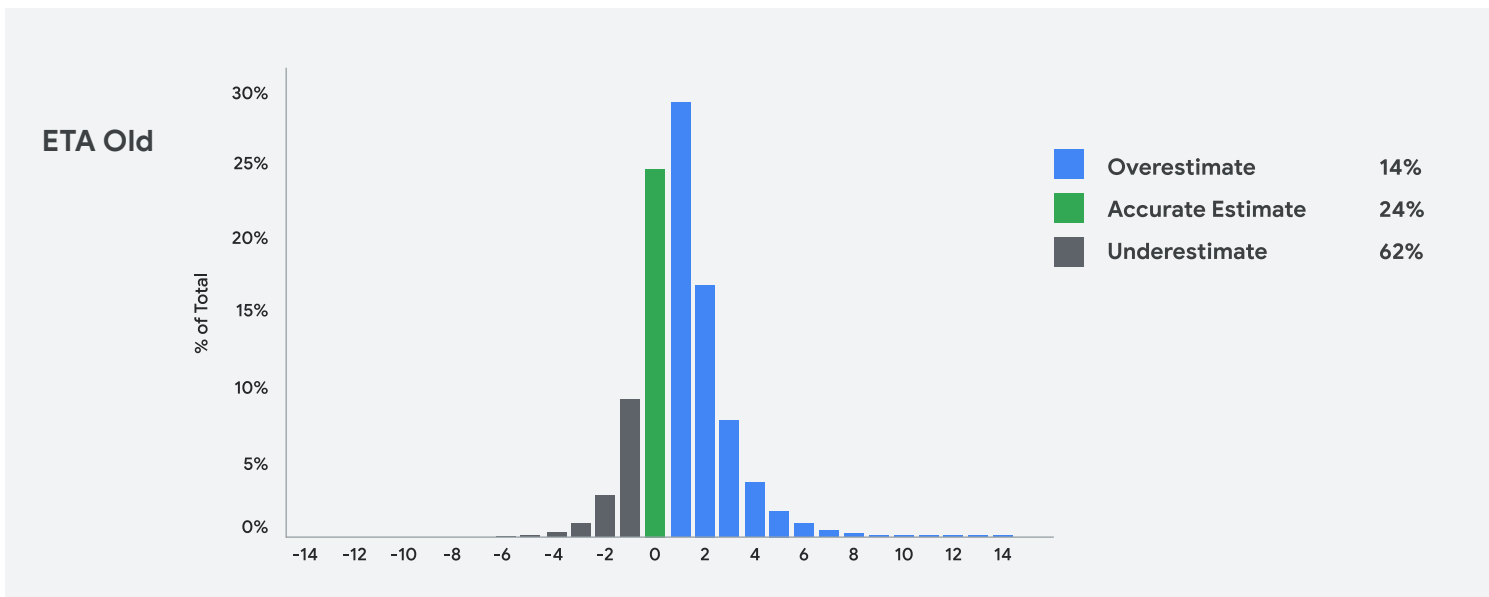
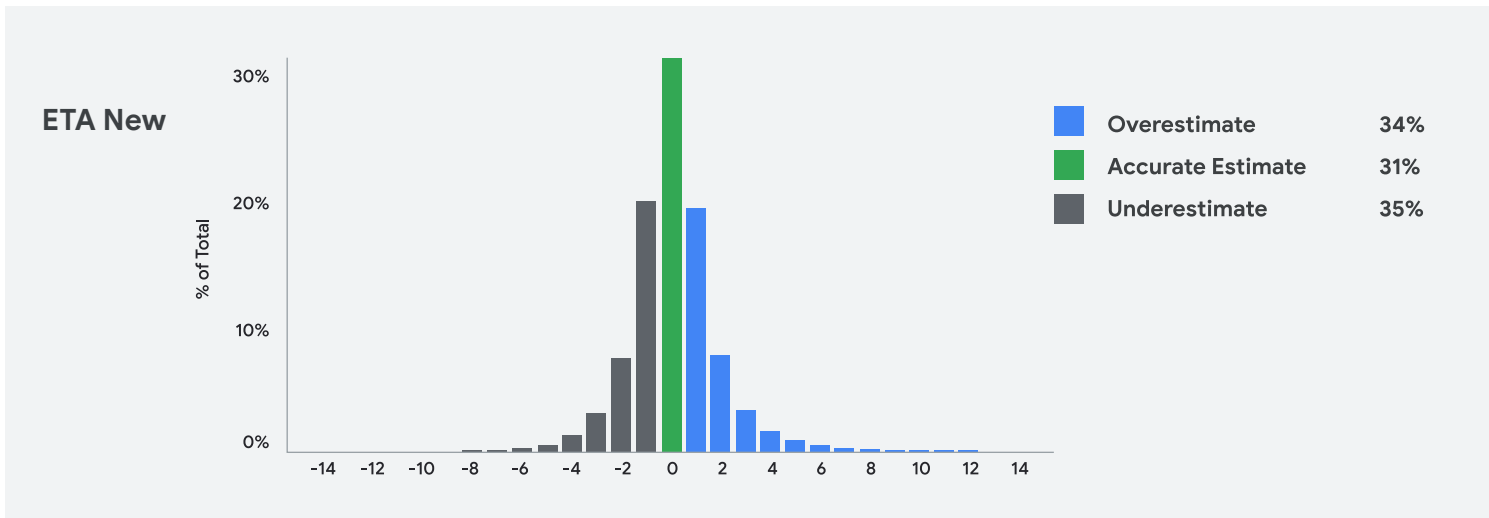
mytaxi uses the Google Maps Platform ridesharing solution in nine countries throughout Europe. Using the solution increased the ETAs accuracy by 23% on average, with as much as a 48% increase in some

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cities. Prior to implementing the ridesharing solution, mytaxi was overestimating or underestimating ETAs far more frequently than after its use. The following chart provides a detailed breakdown of ETAs versus ATAs.

Accuracy of ETAs





Improving ETAs should increase customer loyalty, decrease cancellations and increase the number of rides they take per month. mytaxi Driver App Product Manager Robert Quitsch explains, “By providing more accurate ETAs, the Google Maps Platform ridesharing solution has helped make sure we’re better satisfying our customers.”

The ridesharing solution makes for satisfied customers in another way as well: It shortens the length of rides. mytaxi found that ride duration has dropped by 4%. Quitsch says, “People taking taxis want to get somewhere fast -- for example, to an airport, train station or restaurant. The ridesharing solution helps us make sure that happens. And customers often pay less when the trip is shorter, so they can save money as well.”

There’s one final benefit for customers, not easily measurable: They’re likely to feel safer during the ride, because their drivers aren’t distracted by switching between apps.

A Better Driver Experience

Constantly switching between a driver app and a consumer navigation app can be inefficient and unsafe. The Google Maps Platform ridesharing solution improves driver experience, because drivers can focus on getting to their next destination without having to switch between their company’s app and a navigation app.

Drivers spend on average 4% less time on each ride when using the ride sharing solution. Services like mytaxi can assign simpler and safer routes because they know which direction they are heading and can more easily identify which side of the road the passenger is located.

Traffic information provided by the ridesharing solution has been helpful for drivers. “We’ve found that the traffic information is really gold for them,” Quitsch says. “They don’t get stuck in traffic and can get to their pickups and destinations more quickly and easily. Integrated navigation makes it far easier for them to find pickup spots

and their ultimate destinations. And even drivers that know the best routes cannot know the real-time traffic situation on every street, but can find that out directly in the app. All this is a big contributor to the average ride duration dropping 4%.”

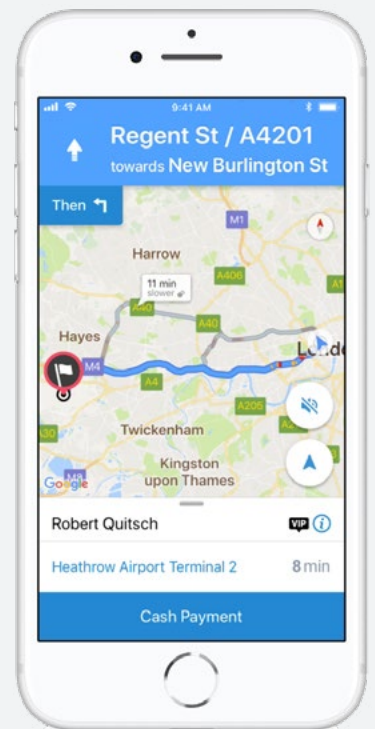
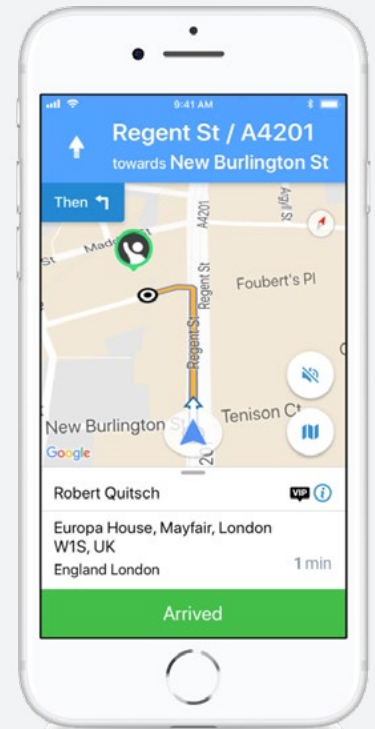
Quitich adds, “We saw an increase in driver ratings and passenger sentiment when we began using the Google Maps Platform ridesharing solution. We believe this is due to more accurate ETAs and faster routes.”

The solution may yield financial benefits for drivers as well. The data helps mytaxi assign rides closer to them, so drivers spend less time driving to pick up passengers. That, combined with the reduction in average ride time, may add up to more trips per day. In addition, arriving close to ETA and getting passengers to their destinations more quickly may lead to a better relationship with customers, possibly resulting in higher tips. Because of all this, drivers are likely to view the in-app navigation as a tool to help them with traffic information and driving directions, not to tell them how to do their jobs.

A survey of drivers across Europe who use the mytaxi app with built-in navigation found that drivers are now more satisfied with their experiences than previously. More than 74% say they found the new navigation feature a useful addition to the driver app. Drivers surveyed called it a “massive improvement” over the previous app, as well as “brilliant,” “excellent,” and “well done.”

Improved Company Operations

When a company integrates the ridesharing solution into its app, it can gather location and other information about drivers, offering insight into drivers’ navigation behavior. This can improve the business’s overall efficiency. Highly accurate driver location and ETA data helps companies make better allocation decisions and provide more precise wait times, leading to increased driver utilization, decreased transportation costs and an improved customer experience.



Because a company has more accurate driver location data, it can more effectively assign drivers to passengers near them. For example, it can tell when a driver is close to dropping off a passenger at a specific location, and assign that driver to a new ride, even before the previous one is complete.

“We noticed a significant decrease in cancellations after we began using the ridesharing solution” Quitch says. “We believe we are better matching drivers and riders near each other in part due to increased location accuracy.”

mytaxi has been using location data to help it match customers who want to share rides rather than riding alone. “We now have much more accurate routing and location information, which helps our algorithm better match ride-sharing passengers with each other and with drivers,” Quitsch says.

Integrating navigation into the mytaxi app also helps attract and retain drivers, Quitsch says, because the driving experience is much improved. In addition, drivers who don’t know an area well can easily find the most efficient routes right within the app, which grows the pool for potential drivers. “That has especially helped us in Ireland, where there haven’t been enough drivers on the road,” he says.

The Google Maps Platform ridesharing solution can also be customized for the specific needs of individual companies. It can provide notifications, workflow details, and destination information within the navigation screen. (The nearby screenshot shows an example.) mytaxi customized its navigation screen in a number of ways, including a custom sound toggle to turn of the voice over and a button to show the selected route and route alternatives. In addition, mytaxi added the ETA next to the address, providing full visibility for both the passenger and the driver.

Summing up the benefits mytaxi has experienced, Quitsch says, “Reliability is the basis of our company, and with the Google Maps Platform ridesharing solution we’ve improved reliability for both customers and our drivers. We get more passengers to where they

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want to go quickly and safely, and our drivers have a better experience because they pick up passengers on time and get them to their destinations faster. Having an app that includes full navigation puts us on the right path to gain the trust of our drivers and customers.”

mytaxi Chief Product Officer Johannes Mewes adds, “Our aim in integrating Google Maps is to improve the user experience and to make using mytaxi even more service-oriented and more intuitive for our drivers. The passengers benefit from the update as well. Traffic jams and hold-ups can specifically be avoided at the beginning of the trip, without the driver first having to waste time searching for alternative routes in separate systems. With the integration of Google Maps mytaxi underlines again its role as a market leader, driver of innovation and first mover.”

