



IMPROVING EFFICIENCIES FOR THE GIG ECONOMY

PRECISE POSITIONING FOR IMPROVED LAST-MILE DELIVERY AND LOGISTICS

As the gig economy grows, precise positioning helps solve the challenges and demands of last-mile delivery, reducing costs and increasing revenues for both workers and businesses.

The gig economy encompasses the swiftly-growing field of businesses focused on connecting freelance service providers with customers demanding more efficient solutions for last-mile delivery¹. From ridesharing and transportation platforms (e.g., Uber, DiDi, Lyft), to food delivery (e.g., Doordash, Deliveroo, Glovo), to quick commerce and on-call grocery shopping (e.g., Instacart, Amazon Fresh, JioMart, Ocado), the service-oriented gig economy has been forecasted to reach around \$455 Billion USD in global transactions in 2023².

With delivery and transportation-based services comprising approximately 58% of this expanding industry³, last-mile delivery is an increasingly critical component—with steep financial impact to gig workers and their employers.

Human (In)Efficiency

Unfortunately, the final mile delivery process is inherently inefficient, as it relies largely on the human element—specifically, the ability of freelance service providers to navigate, follow directions and interpret instructions.

As those who have received packages intended for the neighbor (or watched helplessly as their rideshare continues to circle the block) are aware, there is significant room for human error. In the use case of transportation apps, for example: a driver who misses their stop might be forced to choose between making a U-turn, or circling the block—a decision which costs an average of 2-5 minutes in lost time. Likewise, a driver who waits at the wrong pickup location will add an average of 3 minutes to the ride duration.

Costs stack up quickly when rideshare or delivery vehicles veer from the most efficient route. In a world where free shipping has become the expectation, a package left in the wrong location may cost more to deliver than the revenue earned on sale of the product. A driver who sits at the wrong location triggers losses extending beyond wait fees, in the form of lost time and ride opportunities, as well as passenger satisfaction.

When a driver arrives late with lukewarm food or packages are delivered to the wrong address, customers are unhappy—and their ratings reflect their displeasure. Fast, free and efficient is the new standard—and nearly 55% of customers report that they will stop using a service that fails at on-time delivery two or more times⁴.

Small Mistakes Have Huge Impact

When it comes to delivery of products and goods, the financial impacts (and potential savings) are even greater. Final mile services comprise nearly 53% of total delivery and shipping costs⁵—and those costs increase an additional 20% when service is sub-optimal. Though the rate and cost of failed deliveries varies between countries⁶, totaled estimates for failed services land at around 5%. And even when a delivery is technically successful, subpar performance such as late or unexpected delivery can frustrate customers, damage their trust and discourage ongoing business.

Inefficiencies Add Up, Over Time—At Great Cost To Both Freelancers and Businesses

Workers don't always get it right—despite their best intentions. But the motivation to improve is strong. With global earnings averaging \$21/hr for gig economy workers⁷, faster, more efficient last mile delivery processes can add up quickly to higher proceeds and tips, directly increasing worker take-home pay.

Uber reported approximately 17.4 million rides completed per day in 2021⁸. That means any improvement that saves one minute per ride will add up to literal years of time saved.

Challenges To Last-Mile Delivery

Currently, the digital platforms and apps that connect end-users and customers to service providers are largely operated on crowdsourced technology. Retailers, logistics partners and consumers connect directly with local freelancers, who use their own technology and transportation to make deliveries. This allows businesses to offer fast, on-demand delivery and service, while providing consumers more direct access and control.

Consumers respond well to improved access and business is bustling. But the challenges of crowdsourced

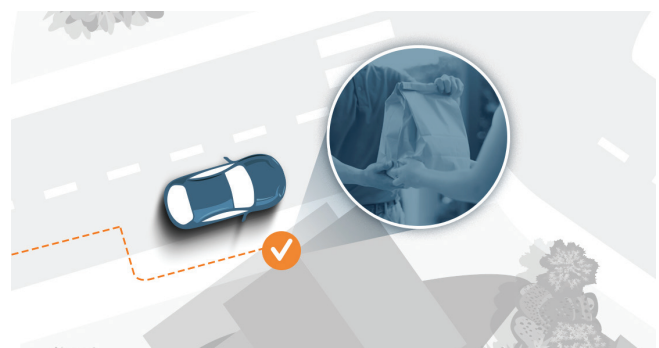
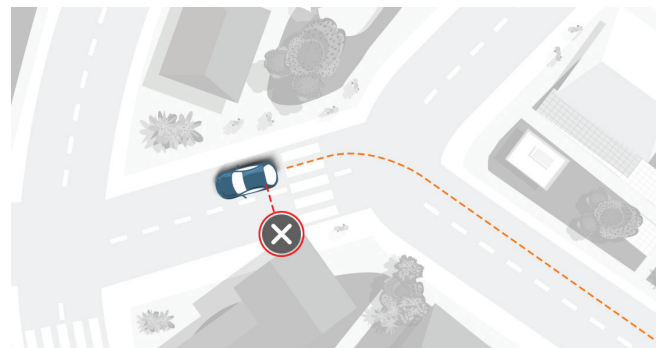
delivery include more complex delivery routes (often on local routes or in suburban locations), the need to update and realign routes in response to customer demand and availability and expeditious optimization of routes in response to changing conditions (e.g., route closures, traffic conditions).

Since freelance workers supply—and use—their own mobile devices and smartphones, their efficiency is subject to both the display and location limitations of these devices (standard, GPS-enabled smartphones are only accurate to approximately 5m/15 ft.)⁹

Precise Positioning Improves Last-Mile Services

Precise positioning is just that. It improves location accuracy from meter-level to centimeter-level. The ability to determine a precise location has the potential to deeply impact final mile logistics and capabilities—a key factor in improving gig economy services, profitability and customer satisfaction.

Precise positioning reduces human errors by more accurately pinpointing and presenting location information. Detailed location information supports freelance, gig workers in their search for customer



pickup, drop off and delivery locations—easing the burden of navigation and allowing them to connect quickly and efficiently, saving time and allowing for more deliveries per day.

Elevate Worker and Customer Experiences

Despite the limitations of smartphones they are today's tool of choice. If you've ever stood at an intersection, clutching your smartphone and trying to determine which street corner hosts your destination, you know the challenge posed by inaccurate location services. Imagine the struggle of a freelancer confronting this frustration hundreds of times per day in unfamiliar territory and the need for more accurate positioning tools becomes increasingly apparent.

An added benefit of improved positioning can be found in the link between happy workers and happy customers¹⁰. Studies show that driver satisfaction is directly linked to customer satisfaction¹¹—as well as driving performance, safety ratings and workforce retention¹².

Eliminate Last-Mile Frustration



Precise positioning largely eliminates the frustrations of last-mile logistics. Because of the accuracy precise positioning delivers, it far surpasses the use of address-based positioning services, landing your driver or courier within just a few feet of the customer.

Improvements to visibility work both ways by allowing customers to track their driver or delivery in real-time. This streamlines package and delivery handoff, speeds

rideshare and passenger connections and elevates the consumer experience.

Remain Competitive In An Expanding Market

The gig economy is fast, flexible and expanding quickly. In the United States alone, more than 36% of workers—59 million Americans—are employed by the gig economy¹³, with the majority of those listing gig work as their sole or primary source of income. Last-mile services will be a major part of this economy going forward.

Gig economy operators recognize this and have already begun to focus their efforts on last-mile logistics. Their results prove that efficient final-mile services can turn a marginable business into an immensely profitable operation.

Maximizing the number of hourly trips and deliveries, minimizing the cost per gig and boosting customer and worker satisfaction via implementation of precise positioning takes those efforts even further, helping businesses maintain an edge in the increasingly competitive gig economy.

Platforms and apps designed to connect customers with the resources they demand need to increase the quality, transparency and efficiency of the last-mile experience, to remain competitive. Businesses will reap the benefits of improving final mile services. Implementation of precise positioning is the perfect solution.

Swift Technology Reduces Cost and Complexity

Swift Navigation is your resource for the easy implementation of precise positioning by offering the most comprehensive and cost-effective GPS-based solutions while other location solutions may get workers to the right street or building, Swift's precise positioning platform guides them within arm's reach of the destination.

Swift makes integration, with the apps and tools workers and consumers are already using, effortless, making implementation simple and seamless.

Different from other companies offering GPS location services, Swift is able to assist in the automatic integration of HD-quality maps and data. Swift sources and consolidates information from the industry's best suppliers to continuously improve routing, navigation and location display. Swift is enabling smartphones to present item-specific location, details and metadata.

Made Possible By Skylark

Swift's Skylark™ precise positioning service connected to today's smartphones provides location accuracy within one meter, guiding workers within greeting distance of the customer. Skylark works with existing applications—allowing your business to continue to use the tools your workers and customers are most

comfortable with, without interruption. Developers simply update existing apps to connect to Skylark.

Skylark provides over-the-top DGNS corrections directly to the handset, integrating with the positioning engines of both Android¹⁴ and iOS devices. Skylark scales to serve millions of users with a simple update and is packaged as an affordable subscription service¹⁵ for ease in deployment for vehicles, mobile devices and mass-market applications.

Skylark delivers seamless coverage across continents available across the globe and Swift is actively working with smartphone providers to incorporate Skylark corrections into applications. Users experience the benefits of improved fleet and delivery efficiency¹⁶, significant reductions in cost and liability and improved consumer and worker satisfaction.

Get Started Optimizing Your Operations

Swift's precise positioning makes it possible to gain a competitive edge, improve worker and business revenues, while reducing costs and improving the experience of your workforce and customers. Get started optimizing your operations today.



SKYLARK™
Precise Positioning Service

Contact Swift at sales@swiftnav.com
or visit swiftnav.com/mobile.



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