Mixed-Demand:

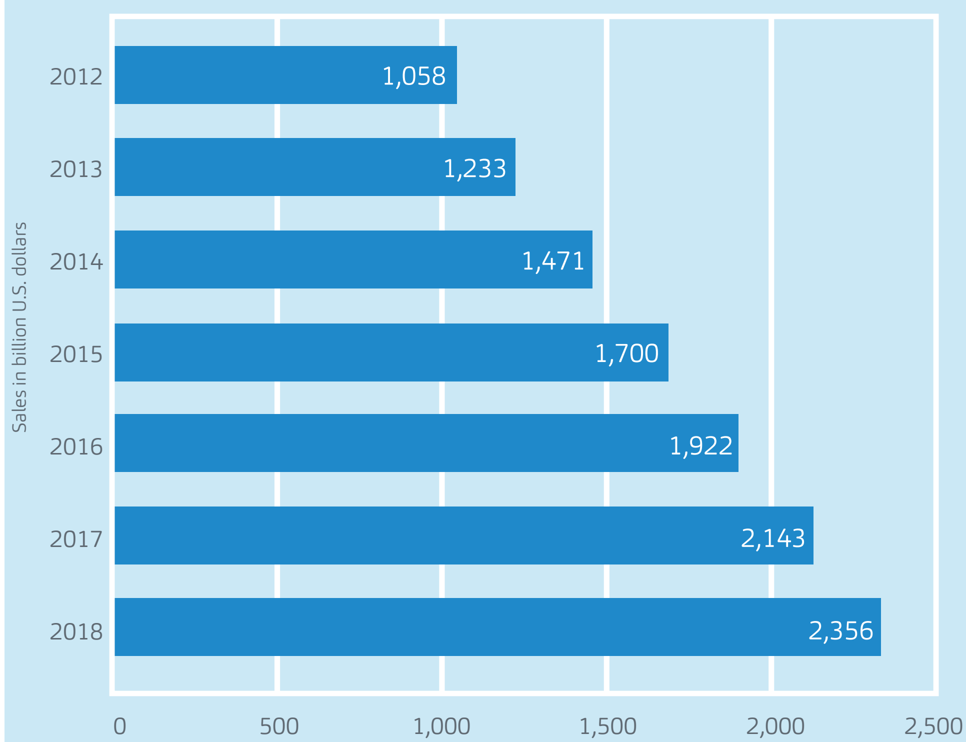
Meeting Same-Day Expectations Profitably in the Last Mile

By Chris Sullens, President and CEO, WorkWave®
Riccardo Bocci, WorkWave Route Manager Industry Strategist

On one hand, the explosive growth of e-commerce is a major boost of business and opportunity for growth for last mile delivery and transportation companies. On the other, over 50% see consumers' growing need for instant gratification through on-demand delivery as a major threat to managing capacity and complexity.[1] So, how can companies survive and thrive in a culture that demands immediacy - when delivering on-demand squeezes already thin profit margins? The answer is by not getting too caught up in the hype of on-demand, and instead focusing on getting the right orders to the right customers at the right time. Your goal is to find a delivery time that is favorable to the customer and fair for business sustainability and growth because sometimes faster isn't the best option: choice and reliability can trump speed.

This white paper outlines how companies can build a profitable and sustainable delivery model based on Mixed-Demand. This approach creates an exact balance of on-demand and pre-planned orders that fulfill consumer needs while allowing delivery companies to maintain profitability.

B2C e-commerce sales worldwide from 2012 - 2018 (in billion U.S. dollars)



[1] The Last Mile Report by Barclays Bank
https://www.home.barclays/content/dam/barclayspublic/docs/BarclaysNews/2014/September/the-last-mile-report.pdf

On-Demand Viability

Every industry is now affected with the “I want it now!” and “I want it my way!”, but few companies can sustain on-demand as a singular focus. Many on-demand businesses have struggled to turn profits given the complexity and cost of demand fulfillment. There’s speculation that the on-demand bubble may be bursting as Venture Capital investments in new on-demand business models have continued to decline in the last two business quarters.[2] What is clear: successful execution relies on very specific business and market conditions. But, it’s not all doom and gloom.

While consumers search, schedule and order online with greater ease and security from their mobile devices 24/7, the on-demand economy is booming. There’s an undeniable need to speed up the supply chain. Customer expectations have been changed forever and consumer appetite for on-demand is strong.

The value of on-demand delivery must be determined by the retailer and the customer, and that means delivery companies must offer transparency and be able to communicate accurate costs for varying levels of delivery types. Retailers may pay more for certain products to be delivered on-demand in order to convert a new customer. Likewise, a customer may feel it’s worth paying more to receive the product with an added convenience fee.

On-demand delivery forces companies to address three major challenges to success:

- Disruption to route planning
- Inefficient use of resources
- $$$ High costs

What delivery companies need to overcome these challenges:

- Transparency of fulfillment capability and risks
- Accurate costs for each delivery

2 https://www.cbinsights.com/blog/on-demand-funding-trends-q1-2016/

What is Mixed-Demand?

Mixed-Demand involves consolidating planned deliveries for optimal routes and building in flexibility to accommodate last-minute changes. Successful execution lies in harmonizing on-demand with pre-existing orders.

It starts with evaluating what you think is going to happen and finding wiggle room to include on-the-fly orders. The key is **only** taking on-demand orders that can be integrated into your existing plan so that the disruption and additional cost is allowable. It's finding the optimal blend of delivery types and time windows that take advantage of your hidden overcapacity and planned routes.

Mixed-Demand in a nutshell:

- Incorporate a blend of planned orders with on-the-fly orders
- Build in flexibility for unexpected events and on-demand services
- Know accurate cost implications of each delivery service option
- Maintain transparency at all times in the supply chain

Think of it like a training plan for a triathlon. Within each discipline you need to train for speed, endurance, and flexibility to prevent injury and stay focused. You need to identify your strengths and the hours you have available for training and develop a plan that optimizes your training time for your best performance. If you know you're strong on the run, the best race-day plan will be to do just enough on the swim and bike portion of the race to keep you competitive and conserve enough energy for your greatest leg of the race.

Likewise, mixed-demand is about creating a plan that is perfectly tailored to your company to maximize your potential and achieve great results. It enables you to provide a delivery service that is reliable and flexible; favorable for consumers and fair for your business's sustainable profitability.

Understanding Customer Needs

Some customers want and need “same-day/ NOW!” service, but not everyone or every product needs fast delivery. Furniture orders and appliance installations are just two examples of non-immediate delivery needs: consumers desire more control over “when” so they can plan a delivery time window that is convenient, that meets their budget, and gives them peace of mind. Reducing the risk of failed deliveries by making sure the customer is available to accept the delivery is more important than getting it there as fast as possible. **Ultimately, it’s about reducing customer anxiety, removing uncertainty, and making sure every delivery meets expectations.**

Today’s consumers are influenced by on-demand giants such as Amazon, Uber, Jet and PostMates, where convenience and customized service is expected unequivocally. The bar has been raised, and retailers and delivery companies are asking: “How can we make this profitable? And still compete!”.

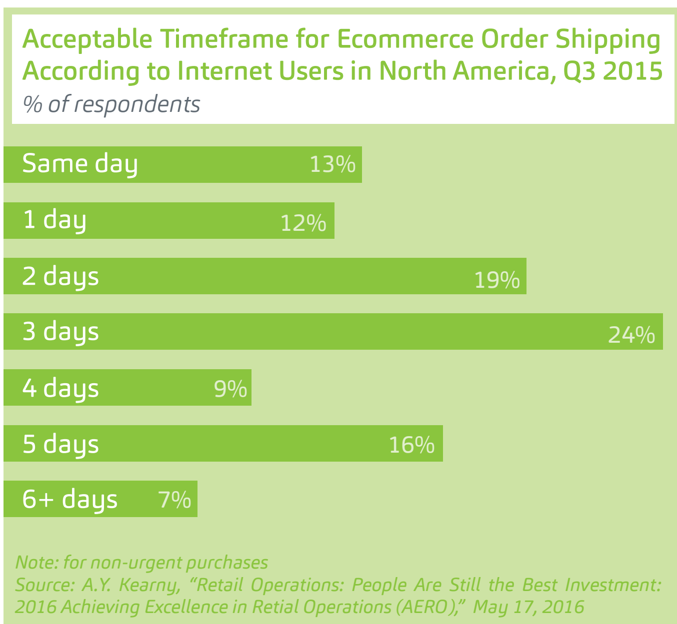
To keep pace with competitors, retailers need to balance the virtues of delivery customization to meet consumer demand along with the costs of complexity to provide that service. The value, and associated risk, of getting the delivery in the time window they need or want needs to be more transparent to consumers.

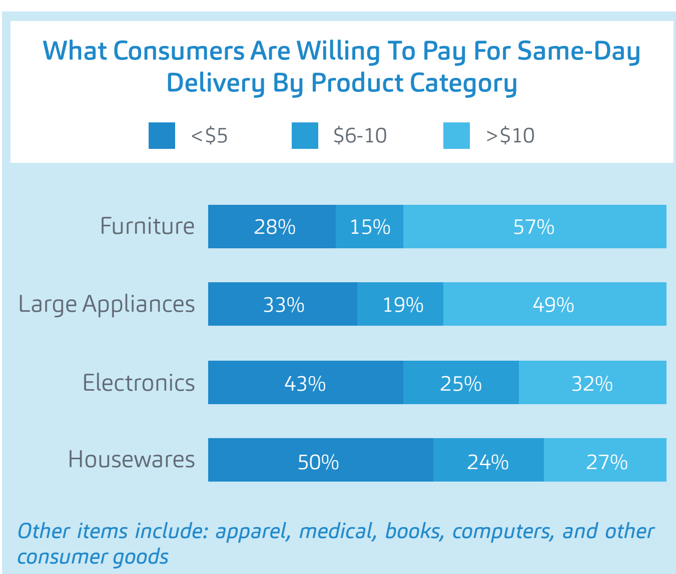
Last mile and delivery companies can add tremendous value to retailers if they can provide accurate cost implications, in real-time, for every delivery option that will satisfy the end consumer:

- **Delivery Type:** white glove, high value, installation, customer signature
- **Special Considerations:** controlled temperature, planning for multiple resources, pick-up and drop off
- **Regional restrictions/expectations:** cannot leave package at insecure location, free shipping, free returns

Same Day/Next Day: You vs. Your Customer

Buying decisions are based more and more on convenience. The buyer decides "I want it!" then looks to see if the shipping cost and arrival time meets their expectations. A recent survey as reported in the **Wall Street Journal** on online shopping behavior of US consumers suggests, "more than half of e-commerce consumers now browse by which shipping choice is available." Shipping convenience and price are a growing part of the determining factors in the consumer's online buying decision. So, to be competitive, more and more retailers are offering delivery options that include same day/next day. To be cost effective, shipping charges need to be more transparent and expose the reality of the cost. Retailers need accurate information from delivery companies to determine the value and risks of different shipping options. Some customers are willing to pay for the premium for an expedited service, some customers will pay for the delivery window of their choice, some customers want free delivery. Bottom line—there's an increasing demand for choice. And, free shipping still remains the most enticing offer.[3]





[3] 2015 MarketingSherpa Consumer Purchase Preference Survey compiled by Dr. Liva LaMontagne, https://www.happyreturns.com/wp-content/uploads/2016/04/151208-Marketing-Sherpa-Study.pdf

The solution is transparency and collaboration between Delivery Company + Retailer + Consumer

The reality is that although "nice" it's not always necessary for everything to be available and shipped now! The mixed-demand approach adjusts the focus from obsessive speed of delivery to an evolved concept that mixes demand in order to stay profitable. It's crucial that companies realize that faster isn't always best and that being reliable and delivering when and what is expected is more important than raw speed.

Retailers NEED
to offer consumers
— a selection of —
delivery options

Consumer & Retailers
NEED TO KNOW
exact cost implications
— & risks involved —
for each delivery option

Customer-Driven Delivery: Now vs. When You Expect It

No one is happy when packages are left undelivered.

The greatest cost to delivery companies and retailers is a package left unsecured, damaged, or requires to be redelivered. When delivery companies can meet a specified time window chosen by the customer then anxiety is relieved for the customer, the delivery company is assured that the package or service will be accepted upon first-time delivery, and the retailer wins great reviews for five-star service. A switch to customer-driven delivery selection becomes an opportunity for deliveries to meet 100% SLA first time.

To make it profitable and sustainable, delivery companies need to show how specific delivery time windows that fit into existing routes can be offered at a more favorable rate, and a higher price for a more complex or faster delivery option. Letting the customer determine their preference for cost and convenience helps ensure expectations are met, goods are received, and value of delivery is assured. For example, "Fast-Fashion" requires high speed delivery and both the retailer and customer are more likely to assume higher costs for delivery. If you miss the window of opportunity for delivery then the product is returned. In contrast, "Eco-goods" may be determined by a more economical mode of delivery and more flexible time window.

For customer-driven delivery to work there has to be transparency along the supply chain and improved communication. Utilizing technology, delivery companies that can communicate alerts and updates along the delivery journey to better manage customer expectations are able to ensure deliveries are successful each and every time.

How It’s Done: Can Anyone (who is not Amazon) Make Same-Day / Next-Day Profitable?

It’s a fact: Amazon can bury loss from last mile delivery in other areas of the business. Along with this luxury, Amazon has access to private fleets, airplanes, and warehouses to sustain their on-demand model. So, can anyone else make it work? While many are now arguing that on-demand delivery may never turn a profit[4], consumer expectations make it a necessary option within a Mixed-Demand approach.

Amazon has done a great job of customer segmentation to tailor their high value services for their customers with the greatest growth profitability opportunity, while gearing a more cost-efficient delivery model to customers with lower margins for profitability. Using automation technology, Amazon understands the costs of product, price, and delivery by customer segmentation so it can offer a pricing model that meets operational goals. It’s not the same service for everyone: there’s a premium to be paid. Companies that will make fast delivery profitable need to be selective in which products can be offered same-day or next-day, which customers or geographical locations are eligible, and how much of the cost will be transferred to the customer. Not every product is wanted, needed or offered with same-day order and fulfillment. In essence, the Amazon model is really Mixed-Demand. Amazon tailors the available products and delivery services depending on the customer profile and geographical area.

Like Amazon, companies that want to offer same-day or next-day delivery need an accurate understanding of their cost structure in order to convey the value and range of delivery options. The idea that extremely fast deliveries should require a premium is something that can be backed up when you make delivery costs more transparent. Some customers may choose a delivery that is slightly less convenient for a lower cost. Or, some will choose to pay a premium for a more desirable time-window. Visibility into the cost, value, and risk of different delivery models can help make your service profitable through intelligent disruption of existing resources and planned routes that allow for on-demand deliveries to seamlessly integrate with the minimal possible impact. It requires knowing exactly what the ratio should be between on-demand deliveries and “bread and butter” pre-planned deliveries. It’s also essential to understand, like Amazon, which customers/segments should be offered flexible delivery options.

[4] https://www.thestreet.com/story/13389073/1/why-on-demand-delivery-including-amazon-s-and-google-s-may-never-be-profitable.html

Case Study: Making it work with Mixed-Demand

Marleen kookt delivers fresh, quality meals to busy families and professionals in Amsterdam via electric cargo bicycle. It's a growing business in a city where same-night food delivery is complicated by over 1,000 kilometers of canals and 1,500 bridges. Marleen kookt wanted to offer on-demand 30-minute time windows in response to growing customer demands. They'd tried route planning manually, but their problem was keeping up with customer demands for different 30-minute time windows; ***"Manual route planning was not feasible, it was too much to do. It's the Dutch Standard to provide customers with 30-minute time-windows and it became impossible to juggle requests for 4:15-4:45 and others for 4:30-5pm."*** Joris Keijzer, Co-Founder, Marleen kookt.

Using several features within WorkWave Route Manager, Marleen kookt now automates route plans in minutes, accepts orders up until "last call" and keeps track of delivery team updates with GPS tracking via smartphone. When a new on-demand order comes in, Route Manager will analyze the existing routes and time window constraints to select the delivery person with the greatest capacity and flexibility to accept the new order and ensure each delivery is met on time. The updated routes are then pushed out in an instant. It's enabled them to successfully add the 30-minute on-demand service integrated with their existing planned deliveries. Their focus remains providing quality food and quality service – now they're also a company that has on-demand delivery.

READ FULL CASE STUDY

Technology as a Differentiator

With the increasing demand and opportunity provided by mobile commerce and online shopping 24/7, it's almost impossible for delivery companies to compete without automation tools. The hours it takes for traditional routing can be done in just a few minutes or seconds. Computers are really good at repetitive activities and data crunching, and now cloud-based technology makes it affordable for companies of any size to leverage the speed, insight and accuracy that automation affords. In just a few clicks you can receive insight on the variety of cost implications for any given delivery. You can make changes in real-time to respond to environmental changes, like an accident ahead or closed road, or react quickly in response to on-demand orders. There's no substitute for your product and customer knowledge, but where technology enables success is the speed to resolve problems and create a history to help plan for better future execution.

Technology influences tactical decisions such as:

- What is my optimal use of resource?
- What is the most fuel-efficient and time-efficient route?
- Where are my drivers right now?
- Who is running ahead or behind schedule?
- How long is it taking my drivers on each route?
- Are my vehicles following the planned routes?
- Where can I fit in a new order or pick up with least disruption?
- Where do I have most flexibility for a new order?

Technology influences strategic planning decisions:

- Compare planned routes versus what's actually happening in the field
- Identify most and least profitable routes
- Identify the mix of customers that help exploit the most expensive resources
- Review and edit constraints based on what's actually happening to determine most accurate route planning

Not all routing technology is created equally

When you're ready to launch your mixed-demand approach, you'll need to make sure that the technology that powers your routes has an algorithm that can meet the challenge. The engine's core should be developed to balance these complex scenarios as opposed to batch scheduling or compressed scheduling.

Conclusion

There is a lot of noise and a lot of hype around on-demand and pressure to offer same-day or next-day service, and it's important for delivery companies to be able to integrate same-day as a delivery option in order to stay in the ring with competitors. But, to make it viable and profitable delivery companies need to blend the on-demand with existing pre-planned deliveries and build their service on a concept of smart Mixed-Demand.

It boils down to processes, technology and resources. It's essential to choose a technology platform that gives you the capability to build a "normal" route and is designed with the creativity and capacity to support Mixed-Demand. Focus on the value of your services and partner with a technology solution that helps you scale and grow so that you know your costs involved for every delivery outcome, you have built in flexibility into your routes and fleet for reactive demand, and you can tailor your services to provide the highest value at the lowest cost.

About the Authors

Chris Sullens

Chris is the CEO and President of WorkWave. He is responsible for setting the overall direction and product strategy for the company. Since joining WorkWave in 2008, Chris has grown the business over 400%, transforming the company through heavy investment and 9 strategic acquisitions from a single market, single product company into a leading provider of cloud based solutions for the field service and last mile logistics industries. Prior to WorkWave, Chris held several senior executive roles at ServiceMaster, a leading provider of services for homes and businesses, including that of Corporate Vice President of Internet Marketing and Retail Initiatives. Prior to ServiceMaster, Chris held senior executive roles with OurHouse.com, a leading Internet e-commerce company; Applied Value and PRTM, management consulting firms; and Alcatel Lucent, a leader in the telecommunications equipment industry. Chris has a B.S. in Mechanical Engineering from Virginia Tech and an M.B.A. with Honors in finance, strategy and entrepreneurship from the University of Chicago Booth School of Business.

Riccardo Bocci

Riccardo Bocci is the Product Manager at WorkWave Route Manager, a routing and scheduling technology provider. Through his experience in sales and customer support, he discovered how businesses can leverage routing & logistics to improve overall operations. Currently, Riccardo works to process and incorporate customer feedback into new software releases and is heavily focused on delivering ROI to WorkWave Route Manager's users. Since 2010, Riccardo has been working on the details that will help revamp your operations and grow customer relationships.

About WorkWave

WorkWave (formerly Marathon Data Systems) is a fast growing leader in the massive industries of field service management and "last mile" fleet management software – a $45+ billion market worldwide. The company connects all aspects of field services and "last mile" transportation companies' business through its tightly integrated, mobile-first suite of cloud-based software, which includes PestPac, WorkWave Service, ServiceCEO, WorkWave Route Manager, WorkWave GPS, WorkWave Marketing, and ContactUs. This comprehensive offering provides its 9,000+ customers with an unprecedented level of insight and information about their business that empowers them to delight their end-customers at every touch point and supercharge their business. Founded in 1984, WorkWave has been recognized with multiple awards for its outstanding growth and culture, including the Inc. 5000, SmartCEO Future 50, and Best Places to Work in New Jersey. For more information, visit www.workwave.com.