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The last-mile delivery challenge

Giving retail and consumer product customers a superior delivery experience without impacting profitability

Introduction

For retailers, ensuring a smooth and satisfactory "last-mile" delivery – the final leg of the journey where a product lands in a consumer's hands – is now more significant than ever. A superior last-mile experience engages and retains consumers, with our research showing that three-quarters are willing to spend more if they are satisfied with the delivery services.

While this is good news for retailers' top line, today's delivery models are not proving to be profitable, with retailers absorbing a part of the cost of last-mile delivery. As more consumers shift to online ordering and expect frequent deliveries, our research shows that meeting demand and service-level expectations will hurt retailers' profitability. For a hypothetical grocery retailer in the US, our analysis shows that net profit could potentially fall by 26% over three years unless it bolsters its last-mile delivery capabilities.

To understand more about this critical component of the value chain, we surveyed key stakeholders from both ends of the spectrum. We surveyed over 2,870 consumers in five countries; we also reached out to 500 supply chain executives from large consumer product and retail firms in nine countries, with a focus on the food and grocery segment.

Drawing on our analysis of this research – as well as in-depth discussions with leading entrepreneurs and industry experts – this report explores four areas:

1. Consumers' increasing desire for faster and more frequent deliveries
2. The benefits for firms that offer great last-mile delivery services
3. The impact of increases in last-mile deliveries on profitability
4. How organizations can get the last-mile value proposition right while mitigating profitability risks.

Delivery innovation in grocery

- **Ocado, a UK-based online retailer is working with Kroger in the US, Morrisons in the UK, Casino in France, Sobeys in Canada, and the ICA Group in Sweden to build automated customer fulfillment centers for processing and packing online grocery orders.[1]**
- **Walmart recently launched a pilot run of its last-mile grocery delivery service – Spark Delivery. It's a crowd-sourced delivery platform, where independent drivers pick up customer orders from Walmart stores and warehouses and deliver them where and when the customer wants.[2]**
- **Major US retailer Target acquired Shipt, an online, same-day delivery startup, for $550 million in cash in 2018, one of the largest acquisitions in Target's history. The aim was to offer same-day delivery in half of its stores in a year's time.[3]**
- **As of October 2018, venture capital firms have invested $3.5 billion in food and grocery delivery services.[4] Instacart – a grocery delivery startup founded in 2012 – recently raised nearly $871 million, valuing the company at $7.87 billion. This makes it one of the most valuable startups globally.**

Consumers want faster and more frequent deliveries

Last-mile delivery has become a key consumer expectation in food and grocery

"We're always looking for the best ways to serve customers, so we're exploring a number of different options for getting groceries from our stores to the customer's front door – some in-house, some third-party." Tom Ward, vice president, Digital Operations, Walmart US[5]

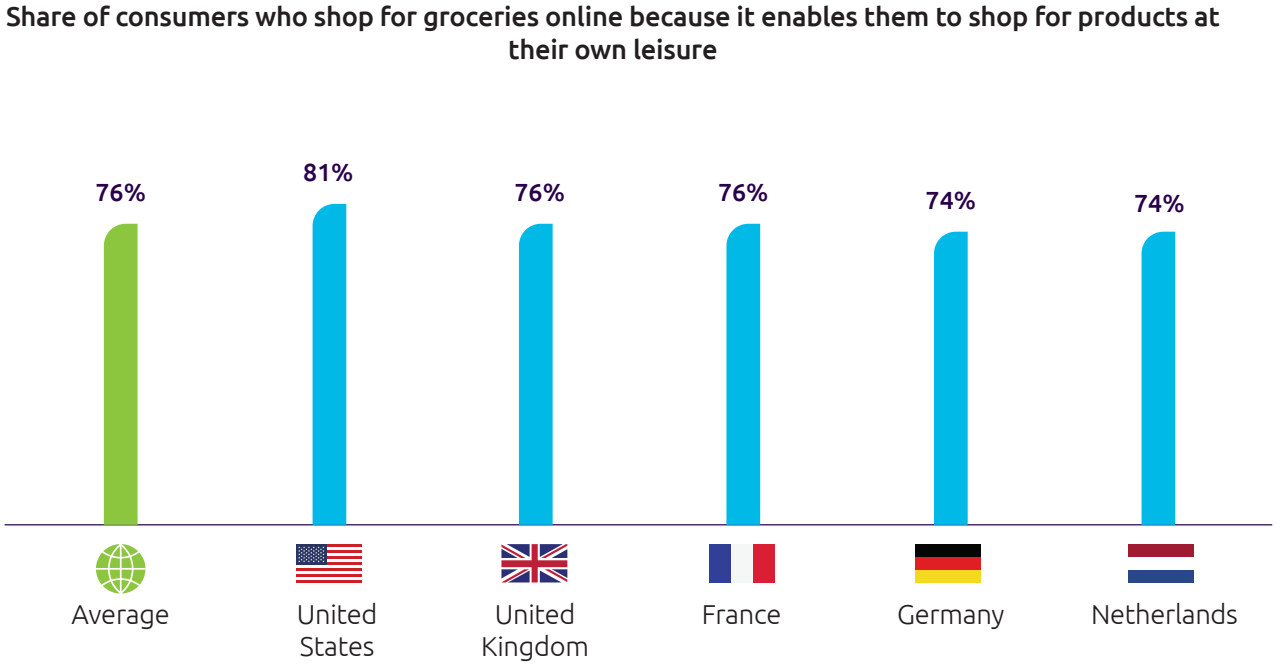
Reflecting fast-changing customer expectations, we found that 40% of consumers now rank delivery services as a "must-have" feature for food and grocery purchases (Figure 1). And one in five consumers (20%) say they are prepared to switch retailers if delivery services are not provided.

Figure 1. Delivery services are increasingly important and influential

Source: Capgemini Research Institute, Last-mile delivery consumer survey, October–November 2018, N=2,874 consumers

Delivery is seen as key to addressing a range of customer pain points. We found that 63% of consumers order online because they find retail stores as crowded as public transport is during rush hour. And, as Figure 2 shows, over three-quarters (76%) order groceries online as it allows them to choose products at their own leisure. It is a consistent phenomenon across key markets and, in the US, it rises to 81% of consumers.

Figure 2. **Delivery services allow consumers the freedom to shop at leisure**



Source: Capgemini Research Institute, Last-mile delivery consumer survey, October–November 2018, N=2,874 consumers.

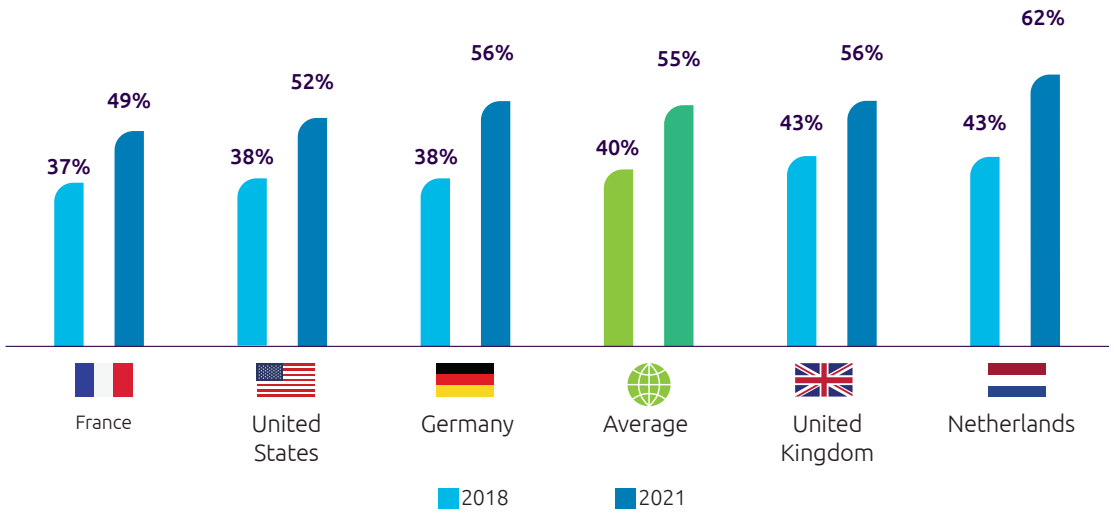
63% of consumers order online because they find retail stores as crowded as public transport is during rush hour

More frequent and faster deliveries

Delivery will become increasingly important as online ordering accelerates. Today, as Figure 3 shows, 40% of consumers use grocery delivery weekly and this number is expected to climb to 55% by 2021. Germany and the Netherlands will see particular acceleration in adoption, with 18 and 19-point growth, respectively.

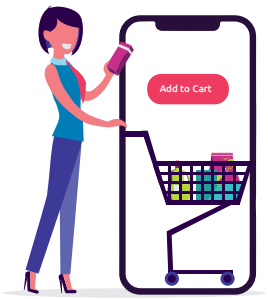
Figure 3. Last-mile becomes even more crucial as consumer adoption of delivery services is set to grow rapidly in the next three years

Share of consumers receiving deliveries once a week or more from grocery retailers



Source: Capgemini Research Institute, Last-mile delivery consumer survey, October–November 2018, N=2,874 consumers.

Characteristics of customers who frequently order groceries online



Consumers who get groceries delivered at least weekly from grocery retailers are more likely to

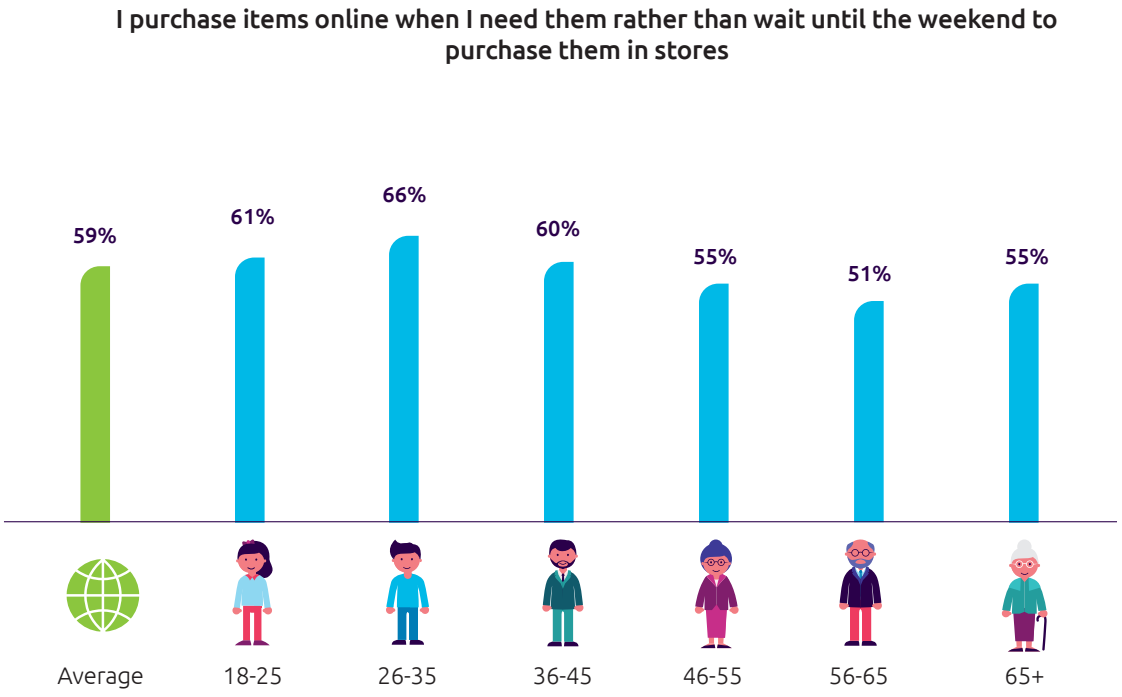
- Be in the 26–45 age group
- Have medium to high income
- Live in a metropolitan or urban area
- Order fresh, chilled or frozen food, baby care products, and alcohol
- Prefer delivery subscription plans, prefer parcel locker to collect deliveries, prefer to buy online and pick up in store

Source: Capgemini Research Institute, Last-mile delivery consumer survey, October–November 2018, N=2,874 consumers.

We also found that 59% of consumers purchase items online when they need them or on demand rather than waiting until the weekend to purchase in store (Figure 4). This potentially indicates a fundamental shift in decades-old purchase behavior.

Expectations are also increasing, with consumers gravitating towards faster delivery options. We found that over half of consumers (55%) said that they will switch to a competitor if that competitor offers a faster service. Organizations that provide a superior last-mile experience will gain a competitive edge over their peers.

Figure 4. **Delivery services allow consumers to order on demand**



Source: Capgemini Research Institute, Last-mile delivery consumer survey, October–November 2018, N=2,874 consumers.

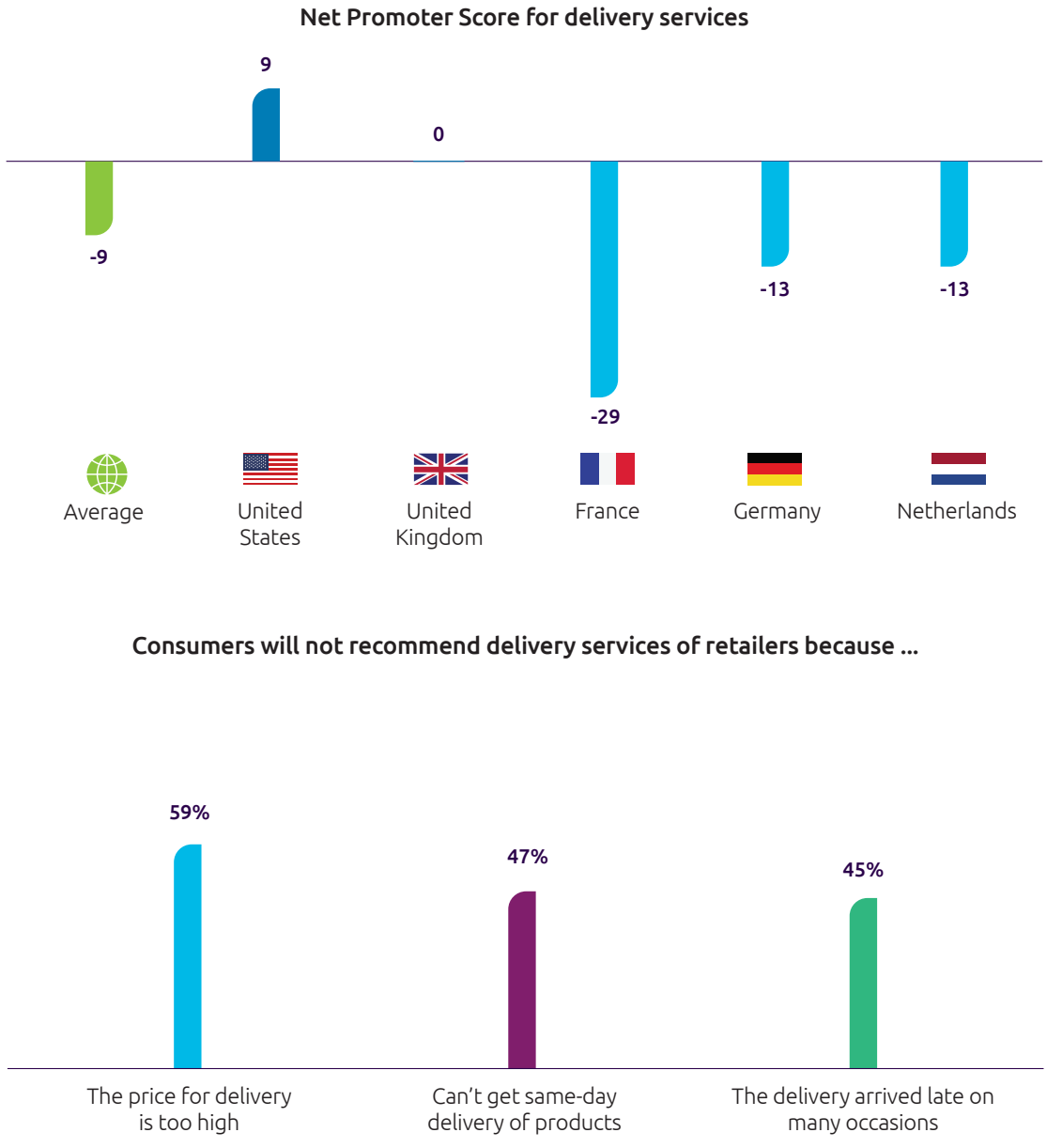
55% of consumers will switch to a competing retailer/brand if it offers a faster delivery service

Consumers are not satisfied with the current state of last-mile delivery

As expectations increase, we find that many consumers are dissatisfied with their current last-mile experience.

On average, across all geographic markets, delivery services receive a Net Promoter Score (NPS)[6] of negative nine (-9). The top causes of dissatisfaction are high delivery prices, unavailability of same-day delivery, and late deliveries (Figure 5).

Figure 5. Consumer dissatisfaction with delivery services stems from price, lack of same-day, and on-time delivery



Source: Capgemini Research Institute, Last-mile delivery consumer survey, October–November 2018, N=2,874 consumers. *Numbers do not add up to 100% as consumers could select multiple reasons.

The direct customer opportunity for consumer product brands

Consumer product firms have a significant opportunity to attract consumers:

- 48% of consumers who buy directly from consumer product firms say they get a better buying experience compared to retailers.
- Brand loyalty programs are a big attraction, with 59% of consumers selecting this as the reason they buy from brands.
- Many consumers want to automate repeat purchases through product subscription, with 46% consumers saying this is why they purchase from brands.

Firms recognize this opportunity, with 96% of consumer product firms seeing subscription models as a means to provide more convenience and value to customers. As more brands start delivering orders to consumers directly, collaboration for shared delivery logistics will become increasingly important. We found that 97% are considering joining forces with other consumer product firms to create shared warehouses and logistics for last-mile delivery. Many are already seeing the fruits of their efforts. For instance, 5% of Unilever's North America sales are online, with a growth rate of 50%.

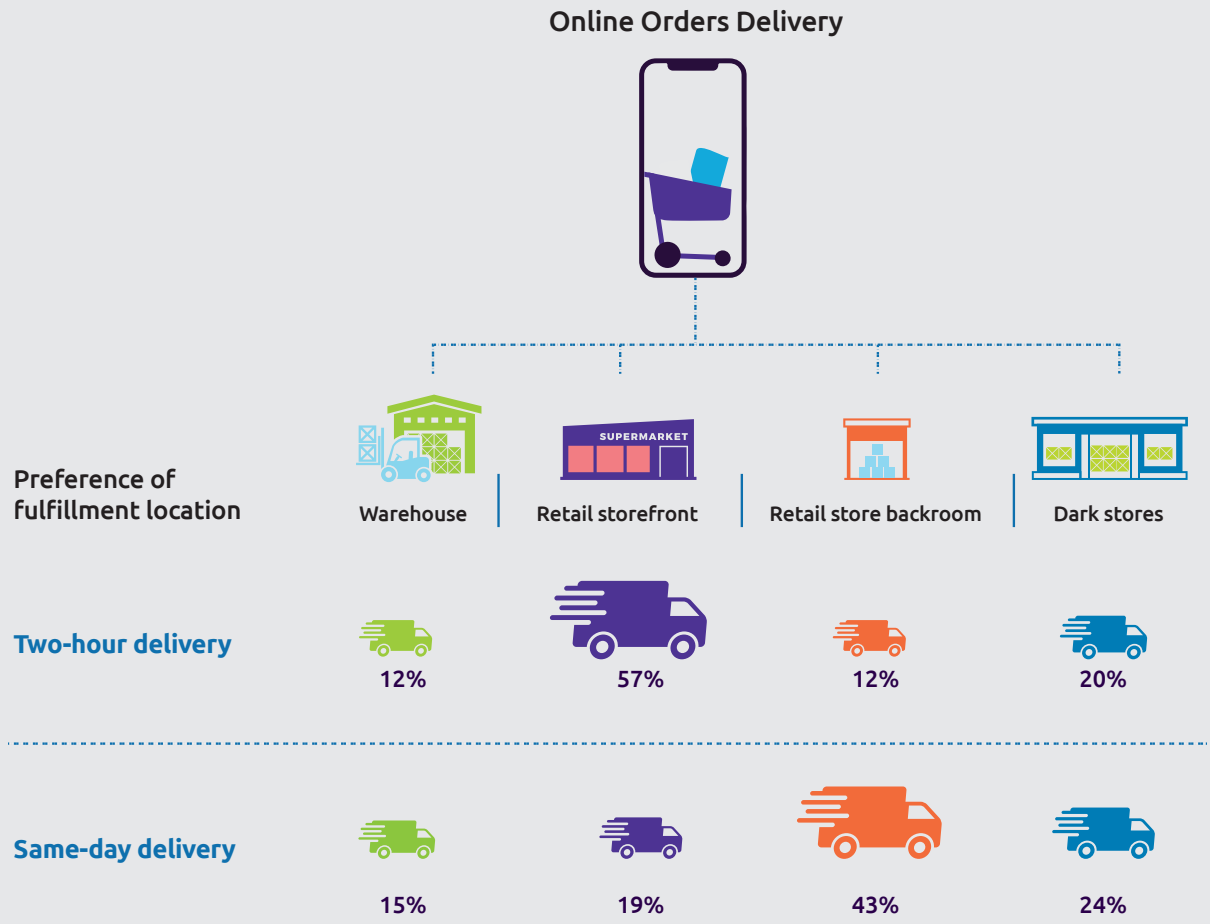
Source: MarketWatch, "Unilever trumps U.S. rivals with solid sales," February 2018.

Leveraging multiple fulfillment locations for last-mile delivery

Last-mile delivery can be achieved in many ways. Stores in metropolitan and urban locations are well-placed to deliver groceries quickly to consumers but crowding the shop floor with employees undertaking fulfillment can inconvenience in-store customers. Nevertheless, the speed of response required often dictates the model. For two-hour deliveries, the most popular route is using the storefront. For same-day deliveries, the most popular route is the backroom of the store (see Figure 6).

Similarly, organizations also use dark stores, retail outposts with a store-like layout intended only to fulfill online orders. Dark stores can process high throughput of online orders since their layout is specifically designed for this goal. They are located close to urban areas with good connectivity to ensure fast delivery.

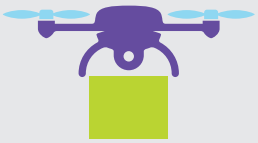
Figure 6. Organizations' preferences for fulfillment locations for fast delivery



Source: Capgemini Research Institute, Last-mile delivery executive survey, October–November 2018, N=500 executives.

Technology driven innovations in last-mile delivery

Last-mile logistics leads the pack in terms of retail technology funding, with $1.3 billion in capital raised in Q2 2018.[a] This is driven by the early adoption of new autonomous-delivery models in developed markets as well as an attractive business case founded on urban demand and the prevailing high labor costs for fulfillment.



Drones

7-Eleven was the first to successfully complete a Federal Aviation Administration-approved drone delivery in July 2015.[b] The retailer partnered with drone operator Flirty to make the delivery. Since then, several retailers – including Amazon – have piloted these.

Autonomous vehicle

Ford, Walmart, and delivery service Postmates are collaborating to design a service for delivering groceries and other goods to Walmart customers using autonomous vehicles. It aims to use autonomous vehicles by 2021 to reduce the costs of last-mile delivery.[c]

Self-service lockers

Self-service lockers allow customers to select any locker location as their parcel delivery address. They can then retrieve their orders by entering a unique pick-up code, removing the need for human involvement. Amazon was among the first to implement this, with Home Depot and Walmart among the major retailers to follow suit.[d]

Delivery to car

A service that gives couriers access to a person's vehicle, allowing them to leave deliveries inside. John Lewis has teamed up with Jaguar Land Rover's mobility and venture arm – InMotion – to trial delivery to shoppers' cars.[e] Amazon has also launched this service in partnership with General Motors and Volvo.[f]

Delivery inside home when customer is away

A delivery service that allows couriers to enter a customer's home and leave packages. Waitrose is the first retail supermarket in Britain to offer this service.[g] The Dutch supermarket chain, Albert Heijn, a subsidiary of Ahold Delhaize, is also experimenting with this service.[h]

a. Venture Scanner, "Last-Mile Logistics Category Leads Retail Technology Funding," September 2018.
b. Forbes, "Future Of Retail: Drones To Play A Big Role In The Next 10 To 20 Years," July 2017.
c. Reuters, "Ford, Walmart to collaborate on designing automated-vehicle delivery," November 2018.
d. USA Today, "Home Depot joins Walmart, others in installing lockers in stores for online orders," June 2018.
e. Forbes, "John Lewis And Jaguar Land Rover Are Trialing Shopping Deliveries Straight To Your Car," February 2017.
f. The Verge, "Amazon will now deliver packages to the trunk of your car," April 2018.
g. Reuters, "No problem if you're out – Waitrose trials in-home delivery service," October 2018.
h. Ahold Delhaize, "Analyst Report – Second Quarter 2018 Results," August 2018.

Retailers who provide a great last-mile delivery service will realize significant benefits

A great last-mile delivery service that delights consumers will go a long way towards attracting and retaining customers. As Figure 7 shows, 82% of satisfied customers have shared positive delivery experiences with friends and family.

Figure 7. Customer satisfaction benefits from a great last-mile delivery service

Source: Capgemini Research Institute, Last-mile delivery consumer survey, October–November 2018, N=2,874 consumers.

74% of satisfied consumers intend to increase purchase levels by 12% with their preferred retailer

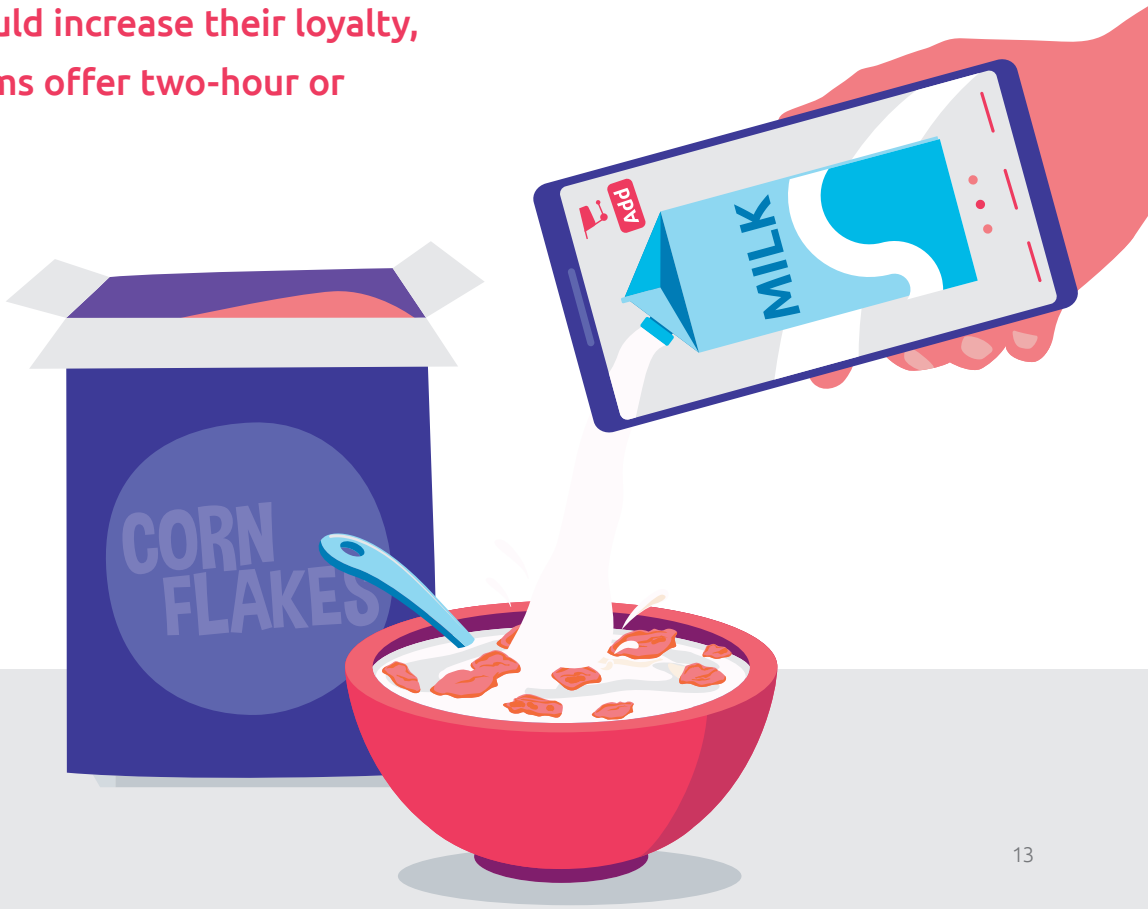
The benefits case for great last-mile delivery is not limited to endorsement. We found that great service delivers significant hard benefits, and that poor service comes at a high cost:

Satisfied customers	Dissatisfied customers
• 74% intend to increase purchase levels by 12% with their preferred retailer • 53% would be willing to purchase a paid membership for delivery services.	• 48% intend to stop purchasing from the poor-performing retailer • Those who will continue to shop at the poor-performing retailer plan to reduce their spend by 45%.

A detailed analysis of consumers satisfied with last-mile delivery services reveals a range of benefits:

1. Increased loyalty when faster delivery options are made available
2. Greater willingness to pay for faster speed of delivery
3. Higher monthly spend
4. More frequent purchases.

55% of consumers say that a two-hour delivery option would increase their loyalty, yet only 19% of firms offer two-hour or faster delivery.



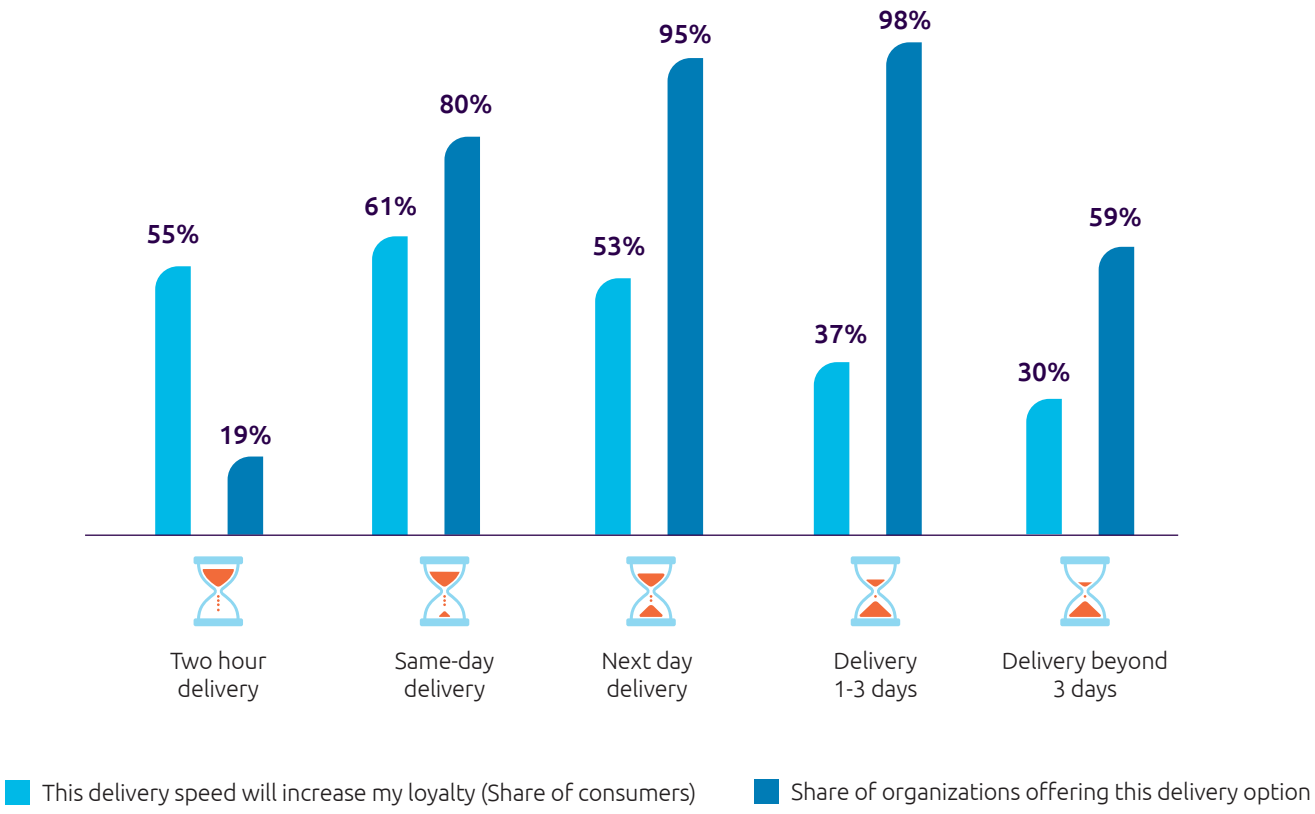
1. Faster delivery: an opportunity to build loyalty

As Figure 8 shows, if given faster delivery options, consumers will be more loyal. For example, 55% say that a two-hour delivery option would increase their loyalty and 61% say the same for same-day delivery. But when delivery moves out to three days or more, only 30% say this will increase their loyalty.

This likely reflects that consumers see this as a commoditized, mainstream option that is offered by most players.

Despite the loyalty opportunity at hand, only 19% of firms offer two-hour or faster delivery. Making faster delivery options available is a significant opportunity for leading firms to differentiate themselves from their competitors and meet consumer expectations.

Figure 8. Faster deliveries build greater loyalty, but fewer retailers and brands offer it as an option



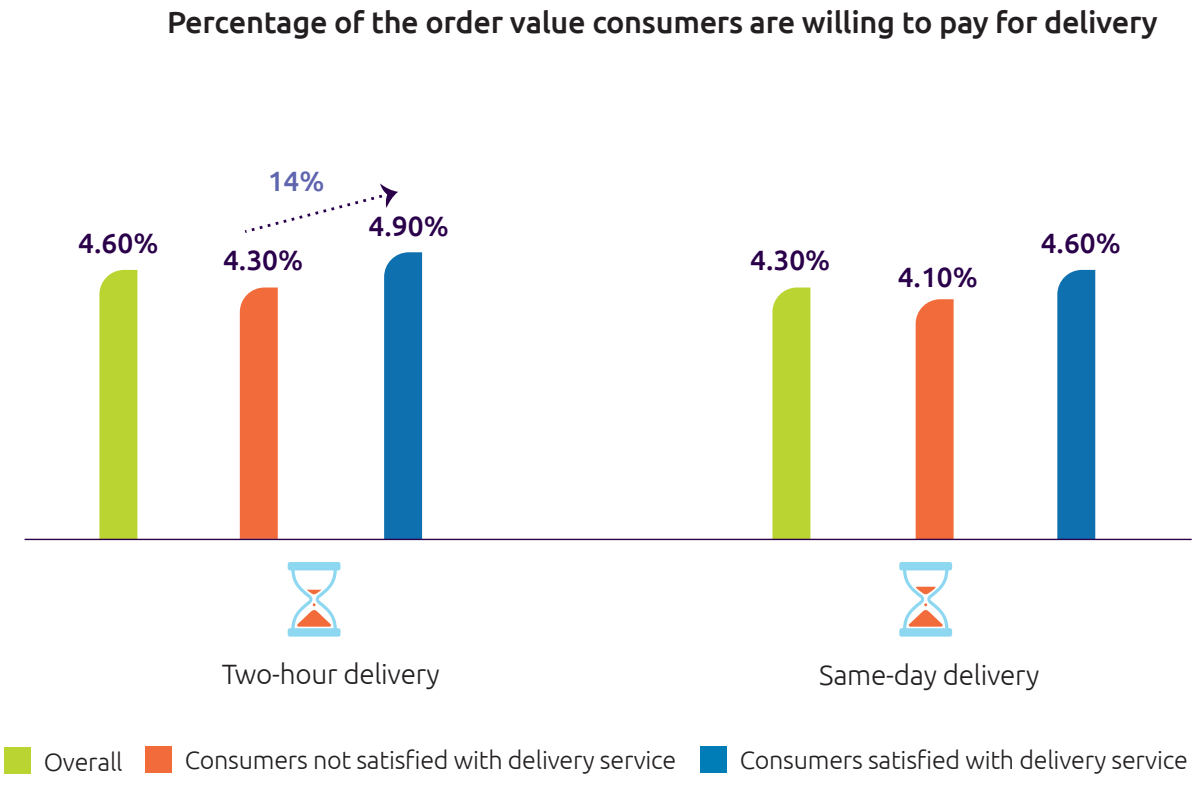
Source: Capgemini Research Institute, Last-mile delivery consumer survey, October–November 2018, N=2,874 consumers; Capgemini Research Institute, Last-mile delivery executive survey, October–November 2018, N=500 executives.

2. Satisfied consumers are willing to pay higher delivery charges for fast delivery

Satisfied consumers are willing to pay more for fast delivery as a value-added service. As Figure 9 shows, satisfied customers are willing to pay the equivalent of 4.9% of total order value for two-hour delivery, but this drops to 4.3% for the dissatisfied. We also found that satisfied consumers, particularly in metropolitan areas, are especially willing to pay a premium.

This offers an opportunity for firms to offset delivery costs. Sebastian Steinhauser, CEO and founder of Parcelly, a technology company that converts redundant space in local businesses via a mobile application into carrier-agnostic parcel storage, believes that views on free delivery are changing. "Customers still expect free shipping when they purchase something, but this is changing, particularly among Millennials and Generation Z," he says. "There will be a point in time when customers would consider free shipping as being very inappropriate from an environmental perspective, operationally, or just because it simply doesn't exist as a market standard anymore." We found younger consumers (30 or younger) are willing to pay the highest across all age groups for faster deliveries.

Figure 9. **Satisfied consumers are willing to pay more**

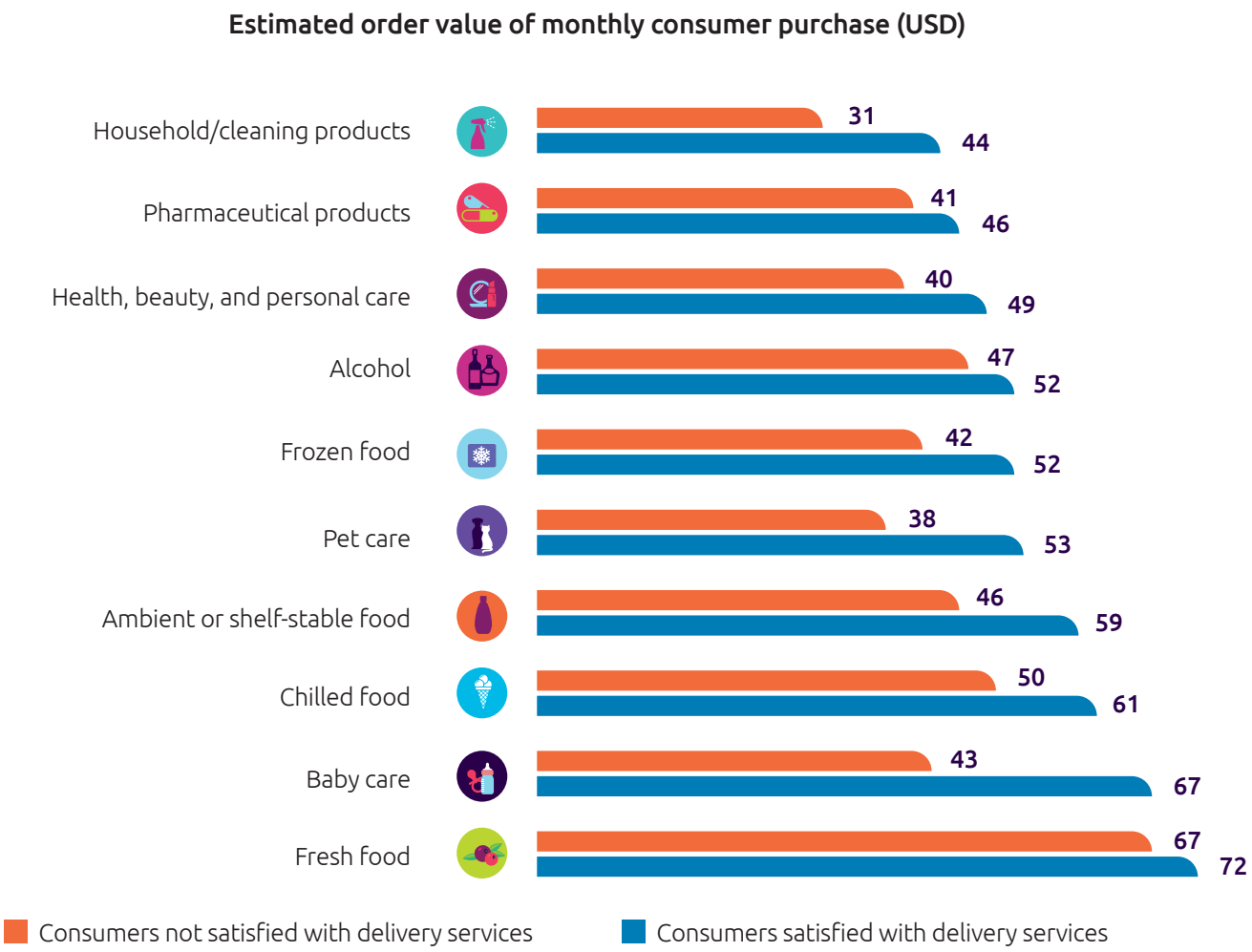


Source: Capgemini Research Institute, Last-mile delivery consumer survey, October–November 2018, N=2,874 consumers; Capgemini Research Institute, Last-mile delivery executive survey, October–November 2018, N=500 executives.

3. Satisfied consumers have a higher monthly grocery spend

We found that consumers who are satisfied with the home delivery services they receive have a higher average monthly grocery spend (see Figure 10). Across all categories, especially fresh food, consumers will spend more when they are offered the option to have their purchases delivered and those deliveries are executed with quality. The additional spend multiplied by the volume of consumers intending to participate in last-mile delivery services could result in a significant uplift to topline revenue. But the difference in spend between highly satisfied consumers and less-satisfied consumers emphasized the importance of ensuring that the solution, processes, and employee training are optimized to consistently and predictably deliver with quality. Firms that offer a winning last-mile delivery service can expect to see an expanded loyal consumer base with higher spend.

Figure 10. Consumers satisfied with home delivery spend more



Source: Capgemini Research Institute, Last-mile delivery consumer survey, October–November 2018, N=2,874 consumers.

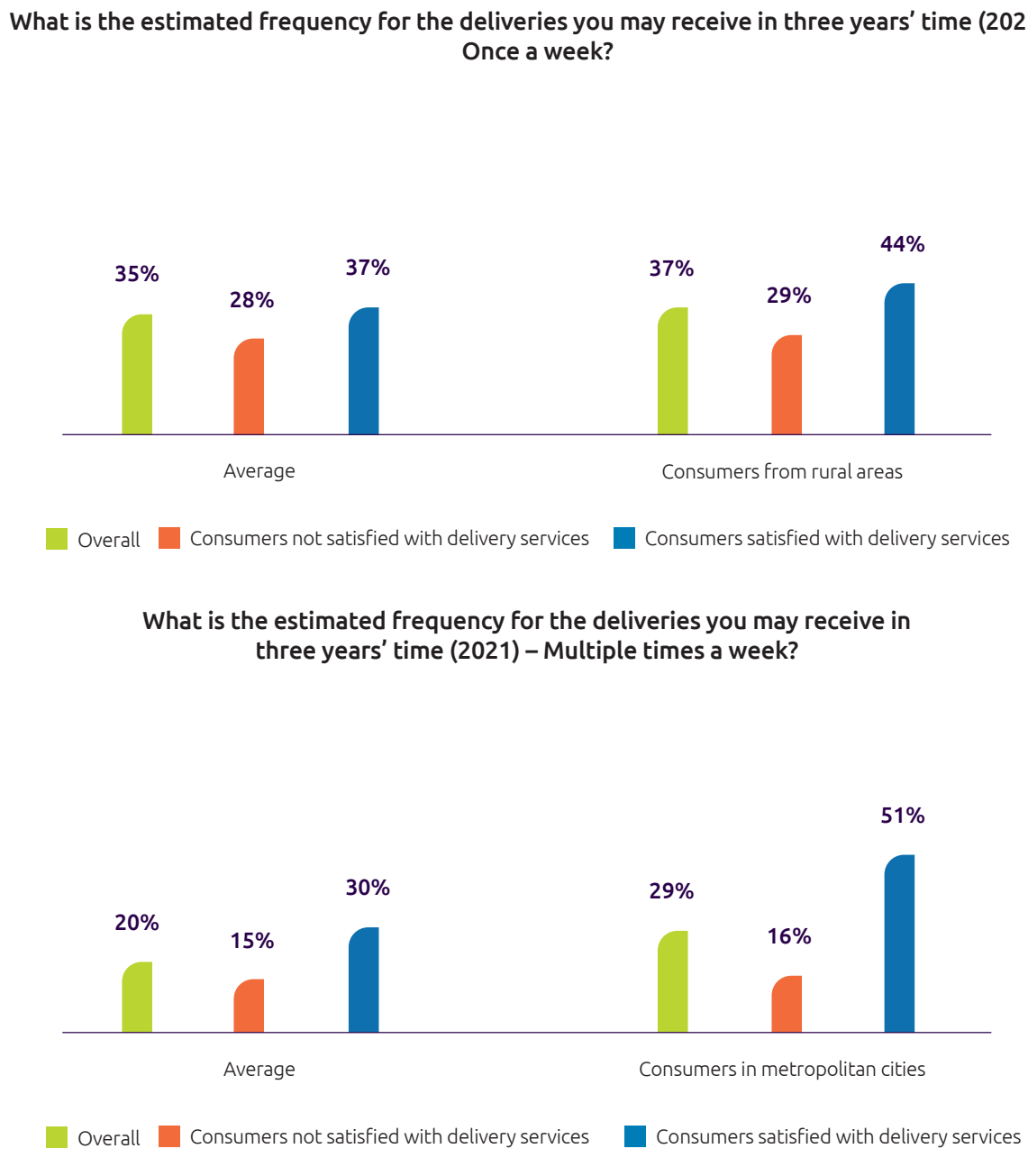
4. Satisfied customers are more likely to purchase at a higher frequency

By 2021, as Figure 11 shows, 35% of consumers overall expect to use home delivery at least weekly. However, this figure is higher for satisfied consumers:

- 37% of satisfied customers expect home delivery on a weekly basis by 2021
- But for the dissatisfied, this drops to 28%.

This difference between satisfied and dissatisfied consumers is pronounced in metropolitan areas. We found that 51% expect to receive deliveries multiple times a week by 2021, but this drops to 16% for dissatisfied metropolitan consumers.

Figure 11. Satisfied consumers are more likely to purchase frequently than unsatisfied consumers



Source: Capgemini Research Institute, Last-mile delivery consumer survey, October–November 2018, N=2,874 consumers.

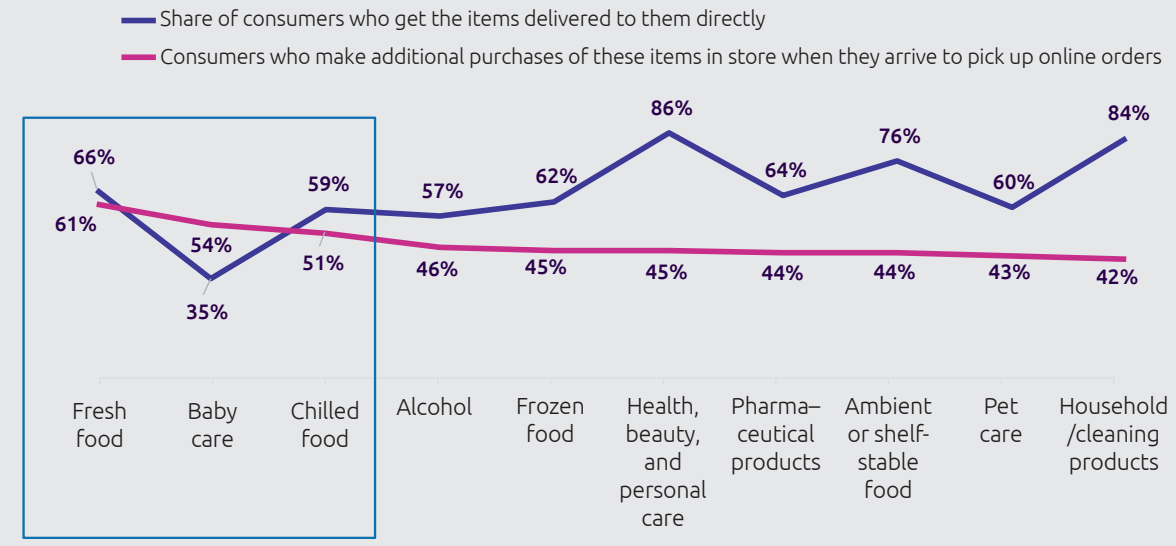
Home delivery is particularly beneficial to retailers and brands as it provides a virtuous circle of benefits. Consumers who are generally satisfied with their retail or brand shopping experiences are more likely to adopt new services, such as home delivery. It raises consumers' satisfaction with their preferred retailer (NPS® score). The service results in consumers spending more per basket and shopping more frequently. Providing a great last-mile experience will be key to building long-term value. However, there is one big barrier that organizations face – profitability risk – which we tackle in the next section.

Fresh food delivery is a big opportunity for retailers

Shopping for groceries online has lagged behind other product categories largely because consumers are concerned about the freshness of their food and the need for a tactile experience (touch, feel, and smell) (see Figure 12). In fact, 61% of consumers who take advantage of the option to buy online and then pick up in store primarily focus on ordering non-fresh categories and then personally select fresh items when they pick up their order.

However, with the increasing prevalence of home delivery options, 66% of consumers are willing to give up personally selecting fresh items in exchange for the convenience of having their groceries delivered. Ensuring consumers are comfortable with having someone else select their fresh items represents a significant opportunity for retailers and brands. Fresh produce is the biggest contributor to basket size with a total average monthly purchase of $65. We also found that 46% of consumers who purchase from consumer product firms are more inclined to sign up for subscription services.* This provides the added benefit of offsetting their delivery costs and learning more about them.

Figure 12. **Fresh food category offers the biggest opportunity to tap fast last-mile delivery**



Source: Capgemini Research Institute, Last-mile delivery consumer survey, October–November 2018, N=2,874 consumers.

*Subscription Service: Consumer places the order with the brands directly and not from retailers for a certain period (3 months, 6 months, or 12 months) and gets products delivered to home every week or month (example Dollar Shave Club).

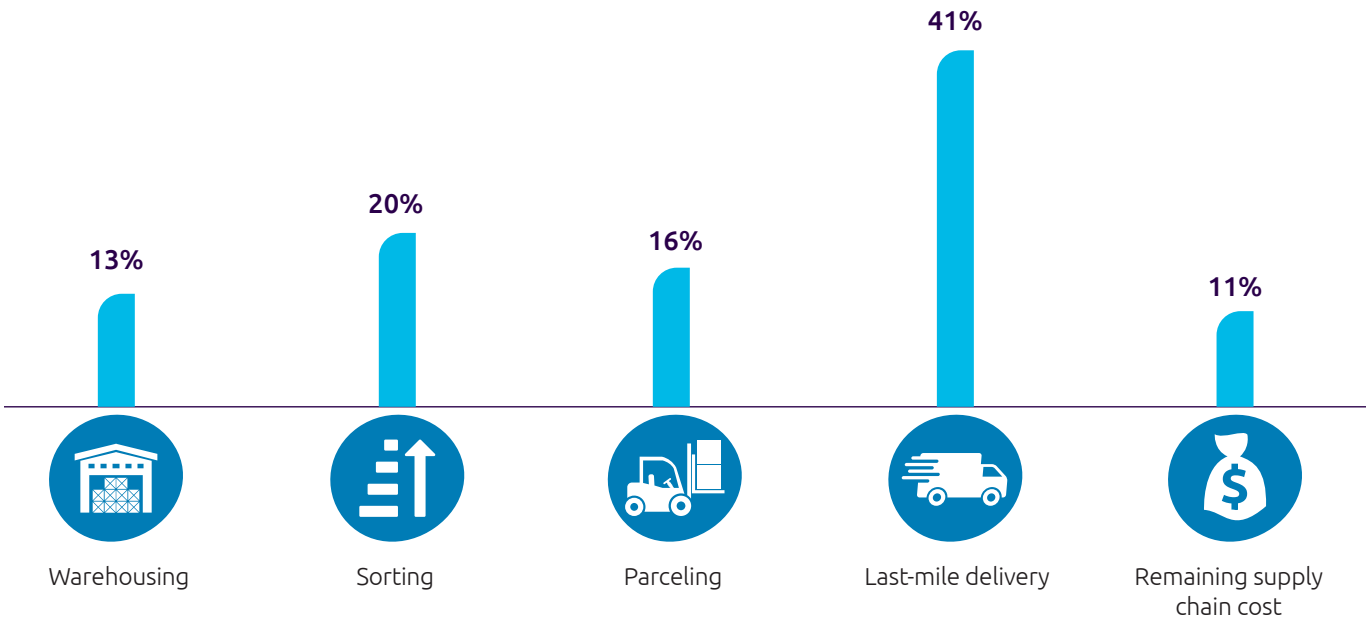
By 2021 in metropolitan cities, **51%** of consumers satisfied with delivery services will place orders for food and groceries multiple times a week, whereas only **16%** of dissatisfied consumers are likely to do so.

Current last-mile delivery models are not sustainable

Last mile is the costliest link in the supply chain

We found that around 40% of consumers take frequent advantage of delivery services (i.e., ordering once a week or more). However, as delivery becomes increasingly popular, we found that the cost of providing last-mile services accounts for 41% of overall supply chain costs (see Figure 13). This is more than double any other category of spend, such as parceling or warehousing. Concerningly, much of the costs incurred for last-mile delivery are variable, meaning that as online grocery delivery volumes increase, so will the costs for last-mile services, thereby increasing the proportion of supply chain costs going toward last-mile delivery. Retailers need to start thinking about the supply chain cost per item and not per bulk unit anymore. For instance, the drop in Target's gross margin in Q3 2018 was attributed to the cost of fulfillment for digital sales. Catherine Smith, Target's CFO, said: "Our third-quarter gross margin rate of 28.7% was lower than our expectations. This was the result of higher-than-expected supply chain costs driven by digital fulfillment and the cost of receiving and processing a larger holiday inventory position compared with a year ago."[7]

Figure 13. Last-mile delivery is the biggest cost driver in the supply chain

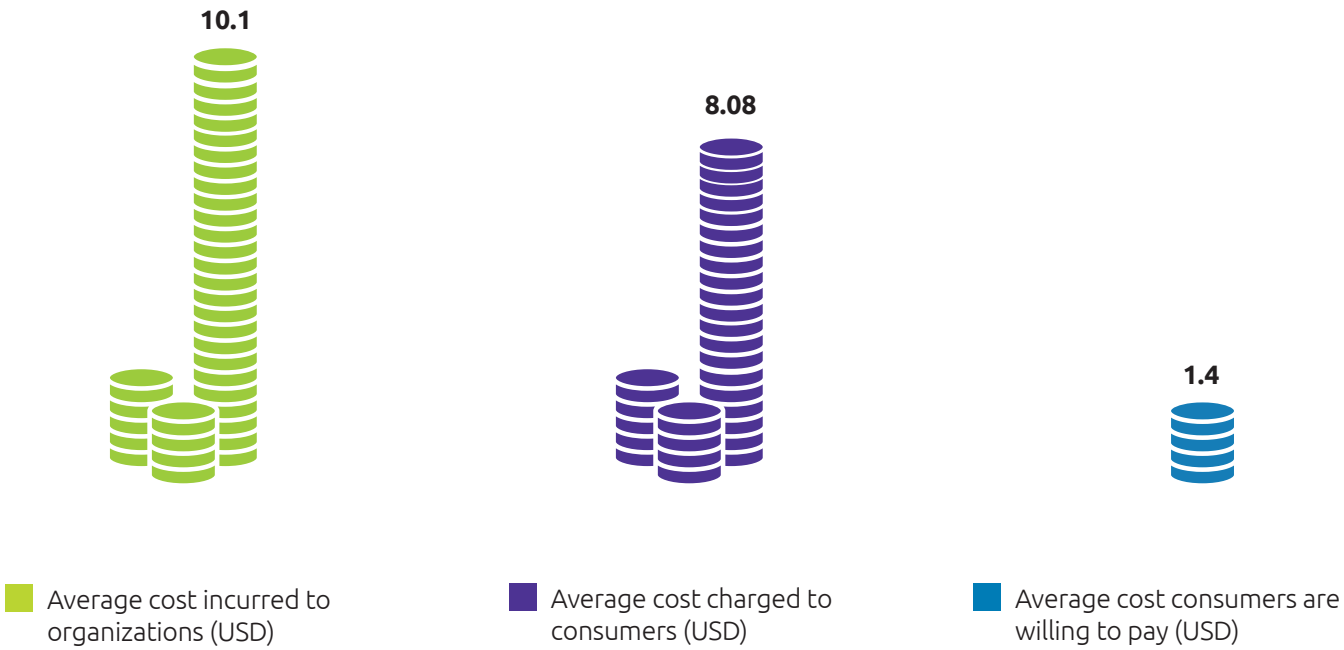


Source: Capgemini Research Institute, Last-mile delivery executive survey, October–November 2018, N=500 executives.

Organizations absorb some part of last-mile delivery cost, enough to erode profits

Today, last-mile deliveries are eroding profits as organizations typically charge less than what it costs them to fulfill the orders. As Figure 14 shows, a last-mile delivery costs the organization an average of $10.1, but the customer only plays an average $8.08. And, consumers are unwilling to absorb the entire cost – we found that only 1% would be willing to pay the total cost incurred. Torsten Scholl, CEO and co-founder of TeleRetail, an AI-based delivery robotics startup, believes that it is not uncommon for retailers and transport providers to subsidize deliveries to gain market share. "Such organizations are subsidizing their deliveries in order to better compete," he says. "In some cases, they are even waiving the minimum order size – taking a cut on overall margins. This suggests that delivery operations are actually subsidized in order to gain market share."

Figure 14. Retailers are absorbing a significant part of the cost of last-mile delivery



Source: Capgemini Research Institute, Last-mile delivery consumer survey, October–November 2018, N=2,874 consumers; Capgemini Research Institute, Last-mile delivery executive survey, October–November 2018, N=500 executives.

Increases in delivery volumes will negatively affect overall profitability

Nearly all of the supply chain executives we surveyed (97%), see last-mile delivery as a critical differentiator to drive revenues. However, we also found that 99% believe online delivery orders are less profitable compared to in-store orders, with respondents saying they are, on average, 19% less profitable than in store. This is a phenomenon that is echoed by the supply chain head of a large multinational cosmetics retailer. "The delivery and supply chain costs are much higher for online deliveries, leading to lower profitability. Unified supply chain operations for online orders and store through a central warehouse will reduce supply chain costs through reduced inventory, more flexible lead time and higher delivery frequency."

Our survey shows that few believe their current approach is suitable for large-scale rollout. We found that 97% of organizations believe that current last-mile delivery models are not sustainable for full-scale implementation across all locations. For a hypothetical grocery retailer in the US, our analysis shows that net profit could potentially fall by 26% over three years unless it bolsters its last-mile delivery capabilities (see "Analysis approach" for our methodology).

Analysis approach

We analyzed the impact of increased online orders on profitability over a three-year period for a hypothetical grocery retailer in the US with the following parameters:

a. Monthly revenue = $1.36 billion

b. Number of customers = 5 million

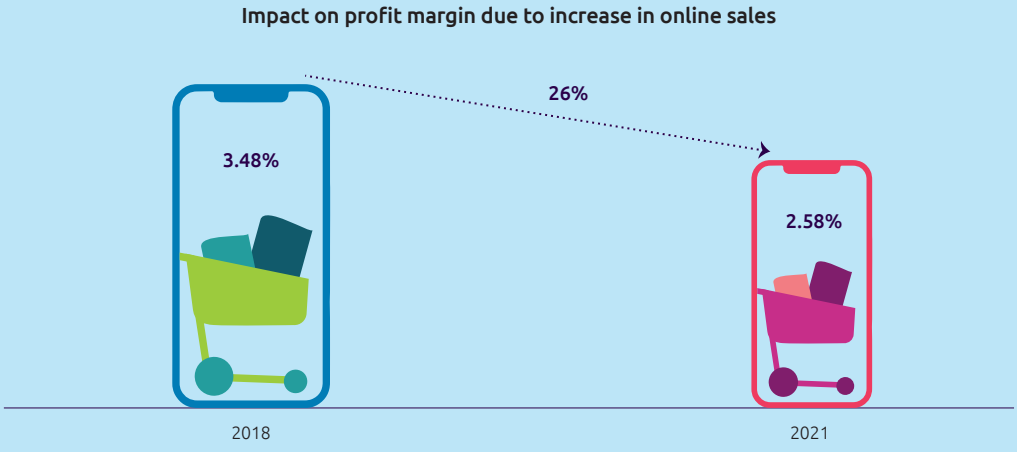
c. Net profit margin = 3.48%

d. Estimated monthly basket size per customer = $272

Using these parameters and the distribution of deliveries in three broad categories – in-store purchase, online purchase, and click-and-collect – we estimate that the retailer faces a loss of nearly $21 million per month in 2018 in last-mile delivery. Accounting for the growth of delivery volumes between 2018 and 2021, this loss is expected to rise to over $33 million per month in 2021, assuming that all other variables, such as cost remain unchanged. This will erode net profit margin of the retailer by 26%, or $148 million.

As Figure 15 and the accompanying table show, we found that profits could potentially decline by 26% or $148 million, illustrating the significance of this issue for retailers.

Figure 15 Absorbing a part of the last-mile delivery cost can potentially hurt retailers' profitability by 26%



	Last-mile delivery – Impact on profitability	
a.	Cost recovered from customer per online order	$8.08
b.	Cost incurred per customer order	$10.10
c.	Delta incurred per order (b – a)	$2.02
d.	Total delta for all online deliveries (2018) (c x total number of online deliveries in 2018)	$9,133,913
e.	Total delta for all online deliveries (2021) (c x total number of online deliveries estimated in 2021)	$16,465,635
f.	Cost recovered from customer per click-and-collect order	$1.76
g.	Cost incurred per click-and-collect order	$4.90
h.	Delta incurred per click-and-collect order (g – f)	$3.14
i.	Total delta for click-and-collect orders (2018) (h x total number of click-and-collect deliveries in 2018)	$11,477,760
j.	Total delta for click-and-collect orders (2021) (h x total number of click-and-collect deliveries estimated in 2021)	$16,451,456
k.	Total delta for all orders (2018) (d + i)	$20,611,673
l.	Total delta for all orders (2021) (e + j)	$32,917,091
m.	Net margin 2018	**3.48%**
n.	Net margin 2021	**2.58%**
o.	Impact on net profit	**26%**

This analysis, in combination with cost of delivery and increased efficiency, also helped us to estimate the potential increase in profitability for various initiatives that retailers can undertake, as explained in the final section.

Source: Capgemini Research Institute, Last-mile delivery consumer survey, October–November 2018, N=2,874 consumers; Capgemini Research Institute, Last-mile delivery executive survey, October–November 2018, N=500 executives.

How to master the last-mile delivery conundrum

Today, retailers must undertake a difficult balancing act between consumers' delivery expectations and maintaining their own profitability. As Figure 16 shows, there are a number of actions that organizations can explore to manage their costs and improve margin, based on whether they have significant number of stores or a smaller store footprint. Those with fewer stores may not have the investment firepower of larger peers to create in-house delivery platforms and invest in the technology needed to improve last-mile delivery. However, they risk alienating their customers by not providing a strong last-mile delivery experience. Below, we look at key actions for both categories of retailers – those with significant store footprints, and those with a smaller base.

Figure 16. **Key actions for retailers to improve last-mile delivery**

Retailers with lower store footprint

Outsource delivery and focus on consumer needs

- Begin by collaborating with grocery delivery services to achieve critical mass
- Focus on genuine customer needs rather than overall market trends

Retailers with higher store footprint

Automate delivery operations to boost profitability

- Automate warehouse operations
- Initiate backroom automation for delivery and click-and-collect orders
- Enable delivery through autonomous vehicles

Optimize fulfillment locations to lower delivery cost

- Equip stores with click-and-collect ordering and delivery capabilities
- Increase use of dark stores for delivery
- Encourage last-mile storage and collection points usage

Encourage multiple avenues for fulfillment resources

- Collaborate with consumers for crowdsourced delivery platforms
- Encourage employees to deliver parcels for additional incentives
- Use the gig economy for delivery during peak seasons

Enable consumer-centric fulfillment offerings

- Encourage customers to visit the store for returns
- Align brand values with consumers' expectations
- Invest in customer-centric initiatives

Source: Capgemini Research Institute Analysis.

Smaller store footprint: Outsource delivery and focus on consumer needs

Begin by collaborating with grocery delivery services to achieve critical mass

Local retailers with a smaller footprint may not be able to provide delivery services across all their operational locations and many small retailers may be unwilling to invest in creating an in-house delivery service. They may also not be able to meet expectations for quick delivery, such as a two-hour service. Collaborating with grocery delivery services potentially offers faster rollout and it is a service that is prized by consumers:

- 65% of consumers who use grocery delivery services[8] such as Google Express, Instacart, or Ocado, say they provide a better delivery service compared to traditional retailers.
- 67% of consumers who use grocery delivery services say they get greater flexibility in scheduling deliveries compared to retailers.

Focus on genuine customer needs rather than overall market trends

Retailers with a smaller footprint must focus more on the genuine needs of customers than on general market trends as they may not have the capabilities to attract and retain customers, such as larger retailers. They need to ensure that their organizational priorities are aligned with consumer needs, which we found lacking:

- Low delivery cost is the top priority for half of all customers. However only 30% of organizations consider low delivery cost as a top priority.
- Consumers do want fast delivery, but 73% of them said that receiving the delivery in a convenient time slot is more important than receiving it quickly. However, only 19% of firms rate the ability to specify time slots as a top priority.

73% of consumers said that receiving the delivery in a convenient time slot is more important than receiving it quickly. However, only 19% of firms consider this a top priority.

Larger store footprint: Automate delivery operations to boost profitability

For organizations with a larger store footprint, there are three key priorities:

- Automate warehouse operations
- Initiate backroom automation for delivery and click-and-collect orders
- Enable delivery through autonomous vehicles.

The overwhelming majority of organizations (97%) say they will not be able to sustain free shipping unless they reduce delivery costs through automation. And 43% of supply chain executives point to the lack of efficiency in online order fulfillment, parceling, and delivery as a major challenge to implementing last-mile delivery solutions. For retailers with significant store footprint and high delivery volumes, automation is critical requirement to bringing down costs.

Automate warehouse operations

"70% of warehouse operations cost is human labor and 70% of labor time is spent walking around to pick objects." Fergal Glynn, VP of Marketing at 6 River Systems, a startup focused on automated fulfillment carts.

With warehouse and sorting representing one-third of supply chain costs, there is a significant opportunity to reduce costs through automation. For example, it can reduce fulfillment errors. When items are left out of an order by mistake, multiple packages have to be sent out to remedy the error, increasing costs and decreasing customer satisfaction. Returns can also be processed using the same automated systems.

The automated warehouse at Ocado, a UK-based online supermarket, can fulfill a 50-item delivery in five minutes when it would take two hours on average without automation. "You can increase order fulfillment productivity by up to 400% through warehouse automation and also reduce order-to-dispatch time to 30 to 45 minutes," says Gopal Krishna, global marketing head at GreyOrange, a global leader in AI-powered robotics systems for warehouse automation.

Depending on the type of automation used, our analysis shows that warehouse automation could potentially increase profit margins by 8% through higher throughput and lower fulfillment cost. Options include:

- Fully automatic, with a rail system in the warehouse where automated carts move and pick items
- Semi-automatic, where robots lift the rack with the products and take it to be selected and parceled
- Human-assisted, where the delivery carts give personnel direction to the rack where the item is stored, accompany them, and help in item identification.

Initiate backroom automation for delivery and click-and-collect orders

Grocery delivery is predominantly requested for same-day delivery and 62% of same-day delivery orders are fulfilled from stores (see Figure 7):

- 43% from the backroom
- 19% from the front room
- Just 15% from warehouses.

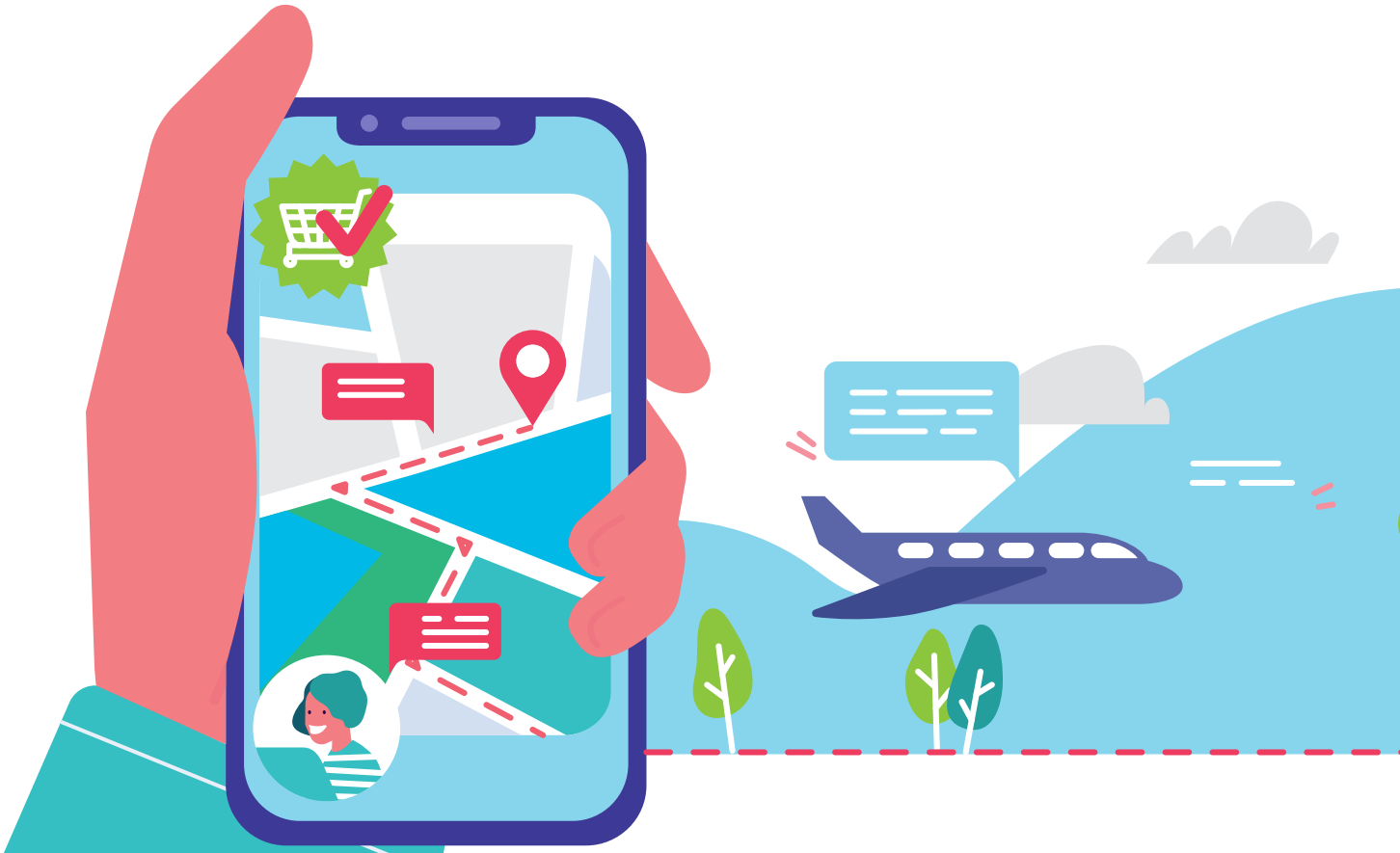
While 61% of customers have used click-and-collect from stores, and more intend to do so in the future, stores are the least automated node in retailers' supply chains. As a result, they drive the greatest cost. With customers increasingly turning to same-day delivery and click-and-collect, 89% of organizations are now investing in mechanization and automation of store backrooms to help expedite fulfillment and deliveries. As a higher proportion of in-store sales is made up of online orders, retailers need to explore how much space to dedicate to the sales floor backrooms that act as mini-warehouses. Walmart is experimenting with automating order fulfillment in a 20,000-square foot extension to a store in Salem, using robotics system "Alphabot."[9] Our analysis shows backroom automation could potentially increase profit margins by 14% by reducing the fulfillment cost for click-and-collect orders and deliveries from the store.

Enable delivery through autonomous vehicles

"When you take the driver out of the car, the delivery cost goes down by about 50% to 60%." Adriel Lubarsky – director, Business Development – udelv, an autonomous delivery startup.

Delivery through autonomous vehicles is still at an early stage but it has generated a lot of attention. This is due to the significant potential it offers to transform the last-mile delivery cost model. Our analysis shows that it could potentially increase profit margins by up to 14%. Despite the significant potential, it still needs more time before it becomes mainstream: 93% of firms are not yet implementing it and the remaining 7% are only at pilot phase.

In addition to regulatory and technical challenges, autonomous vehicle delivery also faces some last-feet challenges. For example, customers may not be as comfortable receiving groceries this way. They would still need to come to the delivery vehicle to collect their goods, which is not as convenient as home delivery or delivery to parcel lockers. Udelv's Adriel Lubarsky says: "Successful autonomous delivery is when the retailers load all of the compartments correctly and customers come to the autonomous vehicle and use their phone to unlock the compartment. The first-time attempt success rate starts low but it goes up very quickly after a few deliveries to the same customer and with proper education and incentivization from the retailer." Long-term, there is also significant innovation potential. In a future where customers have their own autonomous vehicles, they could potentially send their own vehicle to pick-up their orders.



Optimize fulfillment locations to lower delivery cost

Equip stores with click-and-collect ordering and delivery capabilities

For same-day delivery, last-mile delivery costs from a store are 16% cheaper than delivery from a warehouse. However, many organizations have yet to use this to their advantage, as only 8% of stores are equipped to deliver online orders. There is an opportunity for grocery retailers to use their store footprint to create delivery points, particularly where speed is a requirement, or for orders based on fewer items. Food products, especially fresh and chilled foods, need to be delivered quickly to prevent spoilage. The Alibaba store, "Hema," is designed as both a store and delivery center with overhead conveyor belts for employees to send online customer orders to the delivery center. Consumers within three kilometers receive grocery orders in 30 minutes.[10]

Our analysis showed that a 50% increase in store-based deliveries could potentially increase profit margins by 9% due to lower delivery cost and less time taken for delivery.

Increase use of dark stores for delivery

One in four organizations use dark stores for same-day deliveries and found delivery costs are 23% cheaper than conventional stores for same-day deliveries. This is because dark stores have independent operations and are closer to the delivery locations. Also, fulfillment from a dark store eliminates disruption to in-store customers.

Currently, 29% of deliveries are fulfilled from dark stores. This number needs to increase as the volume of delivery services grows in the next few years. Our analysis shows that if deliveries from dark stores increase by 50%, profit margins could grow by 7% as a result of lower delivery costs and higher delivery throughput compared to stores (while also not affecting store operations).

Encourage last-mile storage and collection points usage

Parcel lockers and PUDO points (pick-up and drop-off) are an efficient way to reduce last-mile delivery costs – multiple deliveries can be completed at a single location. Sebastian Steinhauser, CEO and founder of Parcelly, believes that PUDO points can certainly lower delivery costs. "The average success rate for a first delivery attempt is only around 90% in the UK, which means the delivery costs for a second or third attempt add up to the final delivery costs," he explains. "The delivery success rate for PUDO locations is close to 100%, leading to significantly lower costs of delivery."

Amazon is a pioneer in this space. It has:

- Launched "Locker" facilities at Whole Foods Markets and other convenience stores in the US[11]
- Launched locker facilities for apartments, called "The Hub"[12]
- Collaborated with GM and Volvo to experiment with delivery to a customer's car when it is parked at home or office.[13]

Features like these are very convenient for consumers as they do not need to be present to receive the delivery and retailers also get a bigger timeframe to complete the delivery. Refrigerated parcel lockers also address the challenge of storing fresh and chilled products for longer periods without spoilage.[14]

We found that organizations that have implemented lockers and PUDO services have realized a 4% reduction in delivery costs. Our analysis shows that if 30% of deliveries and returns are routed through these services, it could boost profit margin by 8% due to efficiencies in delivery and return logistics. However, only 7% of organizations offer this feature to customers.

Encourage multiple avenues for fulfillment resources

Collaborate with consumers for crowdsourced delivery platforms

Consumers are open to experimenting with crowdsourced delivery:

- We found that 64% of consumers are indifferent to whether delivery is made by a retail store's employees, private individuals, or third-party couriers.
- For an incentive, 55% are willing to deliver products to neighbors in their vicinity (the most popular incentive is monetary). And 79% are willing to deliver groceries at a price that is less than the cost incurred by retailers to deliver it themselves.

If close to 44% of customers deliver for other customers, we estimate that it will lift profit margins by 29%, as consumers are willing to deliver at a price lower than retailers' delivery costs.

Retailers – both large and small – recognize this potential: 89% are considering joining forces with other retailers to create a shared delivery platform for last-mile delivery through crowdsourcing. Marshall Hughes, CEO and founder, Passel, a crowdsourcing startup in Australia, believes that consumers are willing to make this part of their daily lives, rather than being seen as delivery agents. "Shoppers should not be delivery agents," he says. "Rather than getting shoppers to do a delivery job, we offer to pay them to go home anyway and drop a package in their street. We think that's the key difference."

55% of consumers are willing to deliver products to neighbors in their vicinity

Retailers can begin experimenting with easy-to-carry items that require no special packaging or temperature control. Examples would be pet care, personal care, and household and cleaning products.

Encourage employees to deliver parcels for additional incentives

Using existing employees to deliver groceries is an opportunity for them to earn additional incentives and for firms to increase delivery volumes with existing resources. Employees could undertake deliveries when they return home or during dedicated time slots when in-store traffic is low. However, retailers must ensure employees are compensated adequately to encourage employee take-up.

Use the gig economy for delivery during peak seasons

We found that 43% of executives said that a contracting labor market – coupled with inflationary wage pressures – is a major challenge for implementing last-mile delivery solutions. Gig economy, that allows organizations to hire freelancers instead of full time employees for short time periods, is helpful to overcome labor shortage, especially during peak holiday seasons. In Q2 2018, over a third of the US workforce (33.8%) is participating in the gig economy.[15]

Enable consumer-centric fulfillment offerings

Encourage customers to visit the store for returns

The associated cost for returns represent almost 26% of delivery cost. To combat this, retailers need to find ways to attract customers to the store. In earlier research we conducted, 57% of consumers said that they prefer to go to stores if there are additional activities such as cookery or bakery classes.[16] Creating additional opportunities to interact with consumers could encourage more frequent visits, which in turn could represent an opportunity to also return products. For instance, Alibaba Hema stores attract consumers due to its unique blending of online and offline experiences. For instance, consumers can use an app to scan the barcodes of food items and get information on sourcing, nutritional value, and pricing.[17] Our analysis shows that if 40% of returns were channeled through stores, this could increase profit margins by up to 7% due to lower reverse logistics cost.

Align brand values with consumers' expectations

Socially-responsible brand values are very important to frequent online grocery purchasers. These include:

- Sensitivity to climate change (carbon-neutral delivery)
- Sustainable packaging (plastic-free)
- Ethical work environments for delivery employees.

We found that almost 50% of frequent purchasers only order from retailers that embody these brand values. This is a significantly higher share of consumers compared to non-frequent purchasers. We found organizations are actively pursuing sustainable packaging of their products. As Sebastien Auger, Supply Chain Director at Nestle confirms, "Sustainable packaging is a key area we are focusing on. In April 2018, we committed that by 2025 100% of our packaging, including plastics, will be reusable or recyclable. It is our ambition and we are working hard to achieve this". Frequent customers want to know that retailers and brands share their values. For instance, Picnic, a Dutch online supermarket, delivers orders in electric vans and has a waiting list of thousands of consumers.[18] Velove, a Swedish company, offers an electric cargo bike that can be used for faster deliveries.[19] It claims to be up to twice as productive and has a significantly lower cost of ownership than vans, in addition to carbon-neutral deliveries.

Invest in customer-centric initiatives

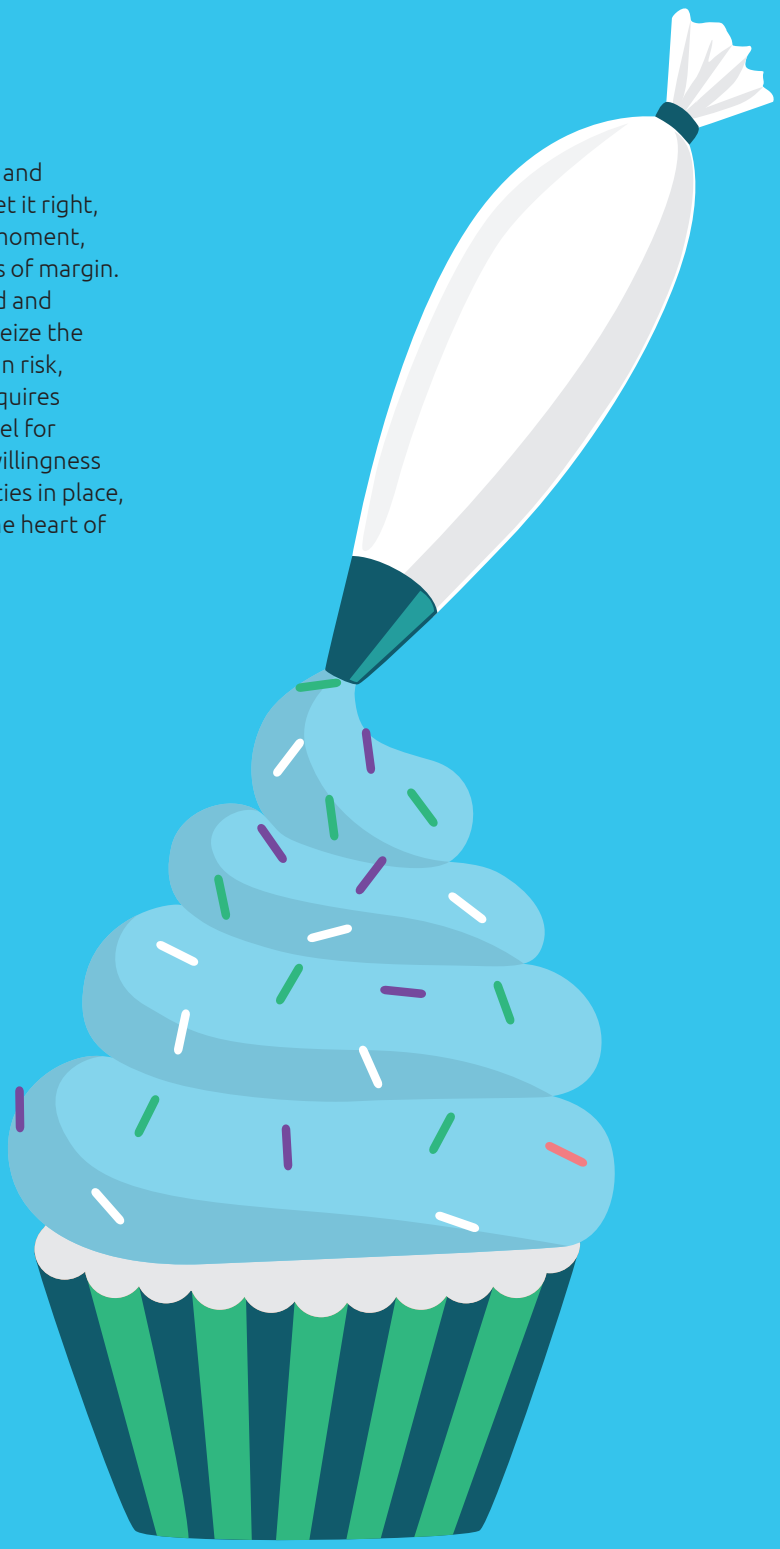
Two-thirds of consumers are concerned about the security of delivery packages left on their doorstep/mailbox when they are not at home. We found that half of consumers are willing to use innovative services. These include smart locks, where deliveries can be made to the kitchen when no one is at home, as well as delivery to a car. These solutions can address concerns about security and the theft or damage of deliveries. A senior executive in value chain development for a leading food retailer based in Europe, confirms, "We deliver groceries into the customer's kitchen, when the customer isn't at home. This superior service compared to other delivery models is highly appreciated by customers"

While many technologies in the last-mile delivery space are nascent, retailers and consumer brands can focus their research and development efforts by understanding exactly what consumers value and where they want pain points resolved. This means distinguishing between technologies that are exciting on paper and those that offer a practical solution to consumer needs. For example, this means investing in initiatives such as delivery to kitchens versus technologies that are more speculative, such as drones. We found that 95% of executives believe that delivery through drones is an impractical fad.

57% of consumers said that they prefer to go to stores if there are additional activities such as cookery or bakery classes.

Conclusion

Today, consumers increasingly want and expect faster and more frequent deliveries. For those companies that get it right, this offers a significant opportunity. However, at the moment, meeting that rising demand does not play out in terms of margin. It simply costs too much for retailers to meet this need and consumers show little appetite to pick up the tab. To seize the significant top-line opportunity while managing margin risk, companies need a holistic strategy. Such a strategy requires the right smart technologies, the right operating model for delivery, innovative approaches to manpower, and a willingness to collaborate with consumers. With those four priorities in place, companies can solve the profitability conundrum at the heart of last-mile delivery.

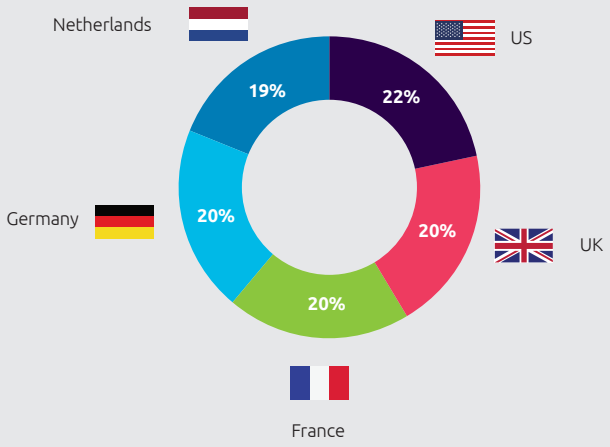


Research Methodology

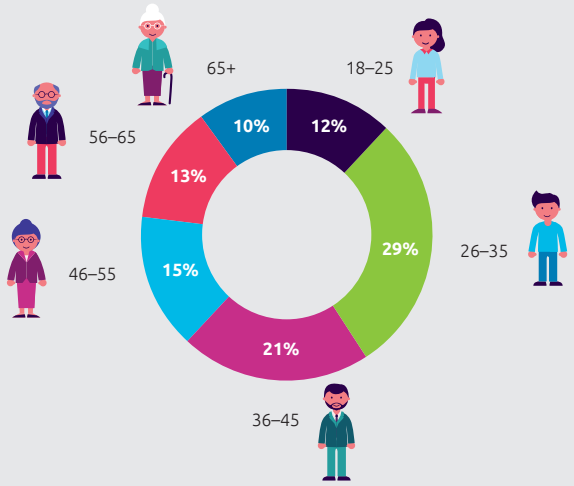
Primary surveys

We conducted a primary consumer survey of 2,874 consumers across five countries in Europe and North America in October-November 2018

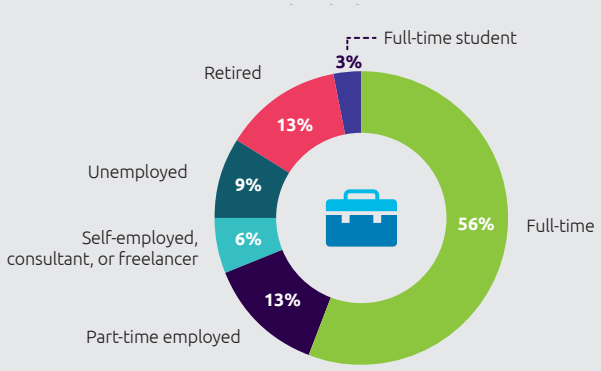
By country



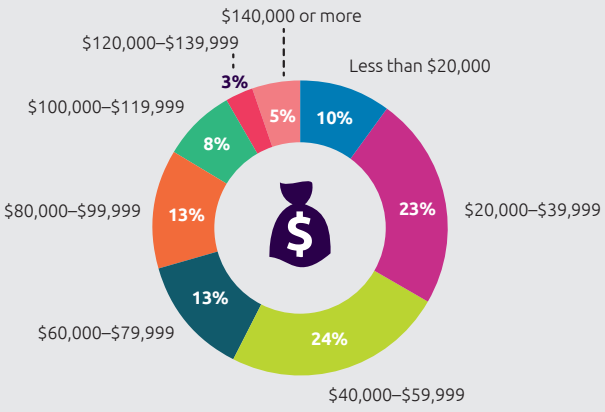
By age



By employment status



By income

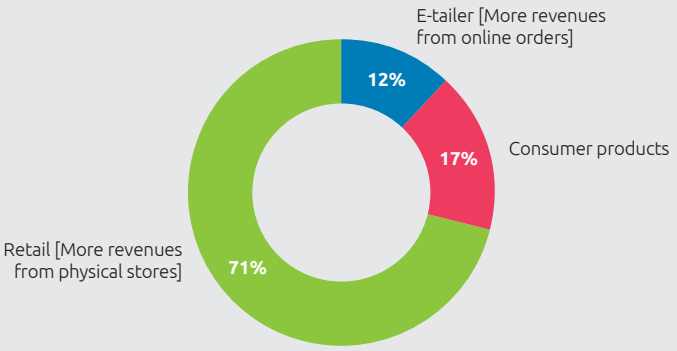


Executive survey

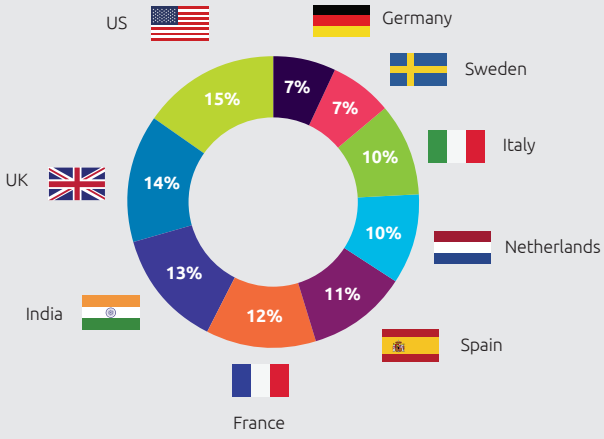
We surveyed executives from 500 grocery retailers and consumer product firms in October-November 2018.

- Executives belong to companies headquartered in: France, Germany, Italy, Netherlands, Spain, Sweden, India, the UK, and the US.

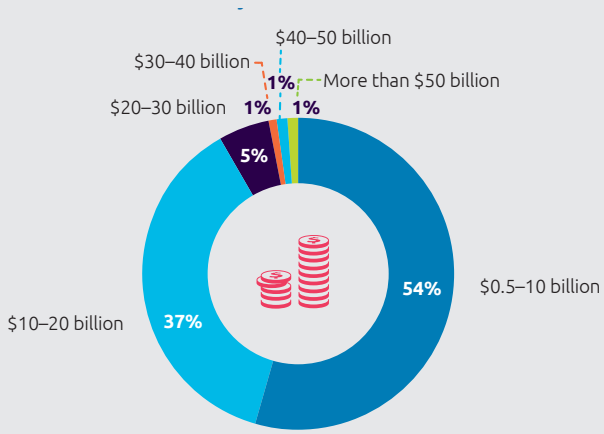
By industry



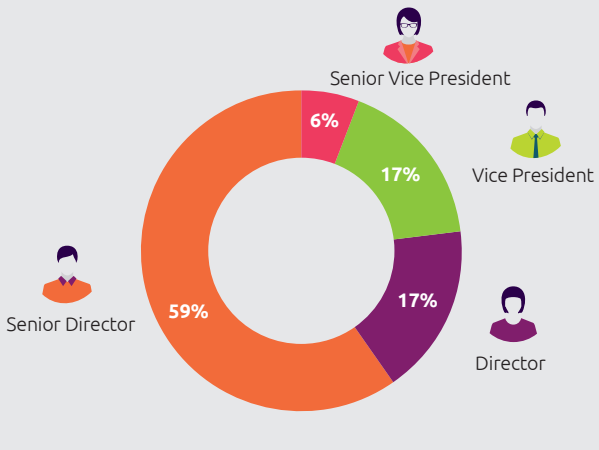
By country



By revenue



By role



Focus interviews:

We also conducted interviews with industry leaders and leading entrepreneurs, examining the impact of last-mile delivery on cost, loyalty, and profitability.

References

1. CNBC, “Kroger names Cincinnati the first US city to open an Ocado automated warehouse,” November 2018.
2. Walmart, “Walmart Tests New Last-Mile Grocery Delivery Service,” September 2018
3. Target, “Here’s How Acquiring Shipt Will Bring Same-Day Delivery to About Half of Target Stores in Early 2018,” December 2017
4. Wall Street Journal, “Investors Are Craving Food Delivery Companies,” October 2018.
5. Walmart, “Walmart Tests New Last-Mile Grocery Delivery Service,” September 2018
6. Net Promoter, NPS®, and the NPS®-related emoticons are registered service marks, and Net Promoter Score and Net Promoter System are service marks, of Bain & Company, Inc., Satmetrix Systems, Inc. and Fred Reichheld
7. Target, Q3 2018 Target Corp Earnings Call, November 2018
8. Grocery delivery service: Customers purchase groceries from multiple retailers online using the grocery delivery service website/app and get it delivered. Example Google Express, Instacart, Ocado
9. RetailDive, “Walmart to pilot Alphabot robotics for grocery pickup,” August 2017
10. CNBC, “Inside Alibaba’s new kind of superstore: Robots, apps and overhead conveyor belts,” September 2018.
11. Reuters, “Short visits rise at Whole Foods stores with Amazon lockers,” March 2018.
12. Cnet, “Amazon Hub lockers now available to 500,000 US residents,” June 2018
13. The Verge, “Amazon will now deliver packages to the trunk of your car,” April 2018
14. Globenewswire, “Parcel Pending Announces an Industry First: Refrigerated & Outdoor Smart Lockers for Multifamily Properties,” June 2017
15. PYMNTS, “Digital Marketplaces Draw Gig Economy Workers Across Verticals,” September 2018
16. Capgemini Future of Retail Store, Consumer Survey, N=6,000 consumers, November 2016
17. AdAge, “Alibaba Group’s Hema Supermarkets: The Real Deal With China’s ‘New Retail,’” February 2018
18. Reuters, “Startup Picnic runs grocery delivery bus in Dutch online shopping boom,” September 2018.
19. Company website

The AI Enabled Integrated Planning and Execution Supply Chain from Capgemini

From supply chain to supply networks, all retail and consumer product (CP) operations are different.

A fashion retailer's network looks different than a basics retailer's roadmap. A solution tailored for a grocery retailer addresses a different list of priorities than a home center's solution. A CP company who sells direct-to-consumer or business-to-business includes an even broader network.

Despite all these differences however, these companies share goals that are universal: deliver a curated, personalized set of products to individual consumers at the right time, in the right location, for the right price.

For over a decade Capgemini has been helping clients realign their operating models and design supply networks to support customers from demand to consumption using our Integrated Planning and Execution (IP&E) framework. IP&E is a vendor agnostic collection of business processes and systems that enables CPGs and retailers to plan and control their inventory through their supply chain across limitless commerce.

IP&E is also fully customizable to fit any organization's business model and needs including: Product Lifecycle Management, Merchandise Financial Planning, Store Clustering, Assortment Planning, Assortment Optimization, Plan-o-grams, Demand Forecasting, Replenishment, Allocation, Size / Pack optimization, Price Optimization, Warehouse Management, Transportation Management, Distributed Order Management and Commerce Solutions.

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1. **Capgemini's approach to Artificial Intelligence and Machine Learning** has fueled some of the world's biggest CP and retail brands with more insightful results using:
    - Predictive Analytics: Forecasting future sales incorporating causes such as: weather, demographics, and social trends
    - Prescriptive Analytics: Weighing multiple options and making recommendations based on your business priorities
    - Cognitive Learning: Where systems learn from your evolving business needs
    - Dynamic Pricing: Determining the optimal price that will move you towards your desired margin and sales goals.
2. **BOTS and CHATBOTS** that automate processes and ease human-effort allowing existing teams to elevate to more strategic decision-making roles.
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The Capgemini Research Institute is Capgemini's in-house think tank on all things digital. The Institute publishes research on the impact of digital technologies on large traditional businesses. The team draws on the worldwide network of Capgemini experts and works closely with academic and technology partners. The Institute has dedicated research centers in India, the United Kingdom, and the United States. It was recently ranked Top 1 in the world for the quality of its research by independent analysts.

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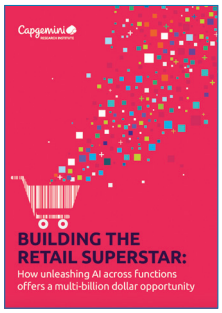

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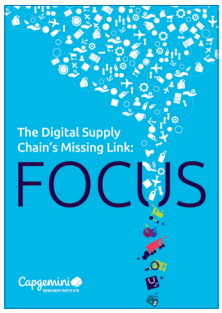

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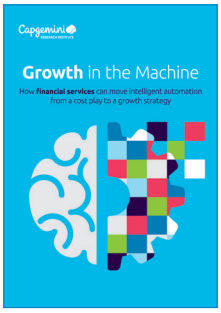

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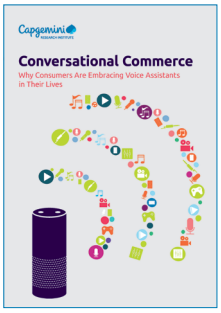

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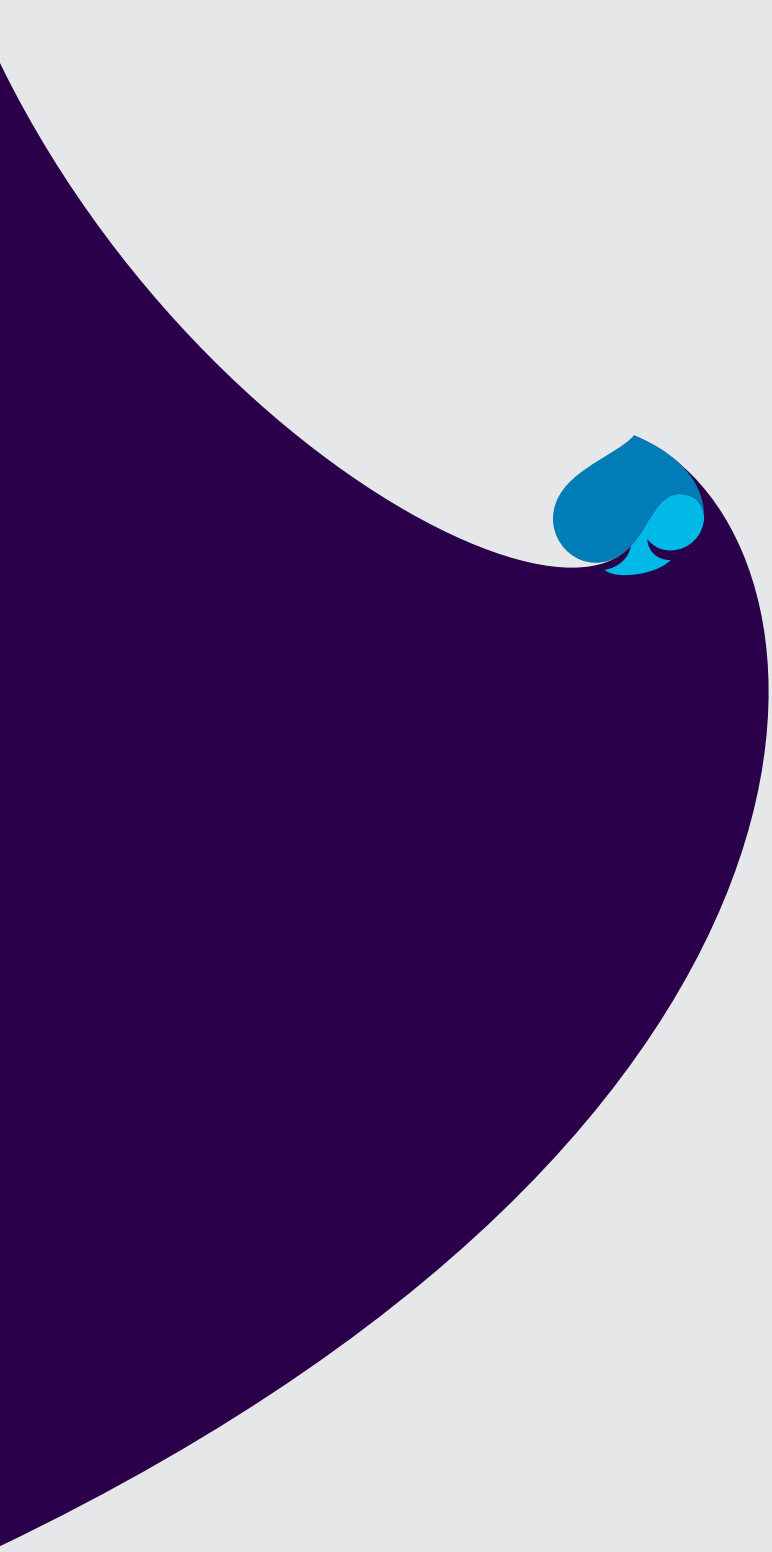

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