

DELIVERED BY DRONE

AMAZON DRONE

Drones are much faster and cheaper than ground delivery robots, but can only carry lighter parcels

SPEED 100mph

TARGET COST PER DELIVERY \$1



Home deliveries by drone are no longer science fiction, with logistics and retail companies such as Amazon and UPS investing, and exploring ways to ramp up and roll out the technology. While the consumer benefit is obvious – faster deliveries at a fraction of the cost – the opportunities for business are also huge. Regulatory hurdles still have to be overcome, but the technology is ready and could be coming to a doorstep near you soon

\$0.05

estimated potential cost per mile for delivery by drone

Deutsche Bank 2016

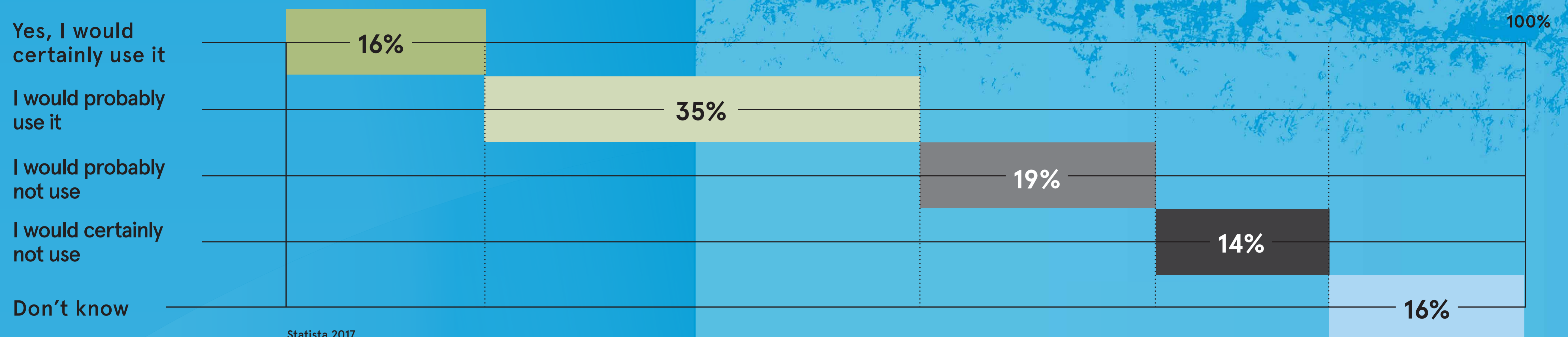
86%

of online shoppers said expensive shipping costs were the primary reason they abandon checkout carts

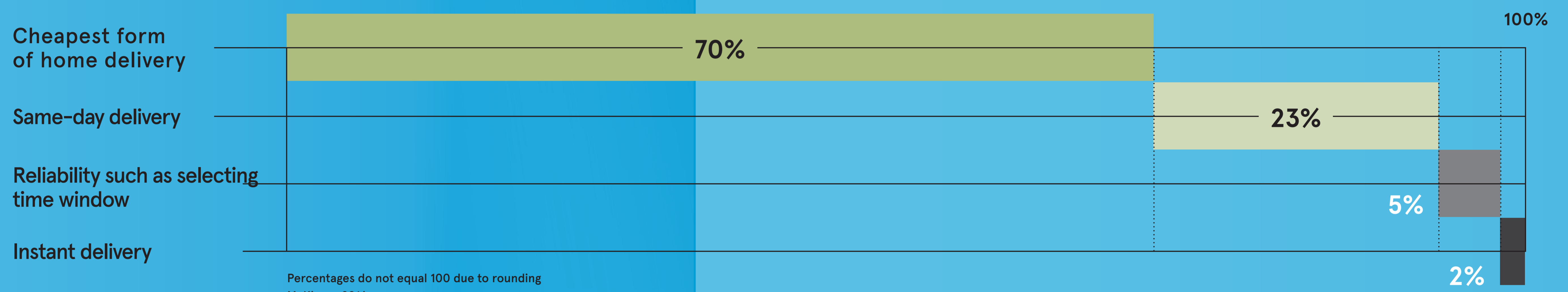
McKinsey 2017

PUBLIC SUPPORT STILL MIXED FOR LOGISTICS DRONES

Would you use the option to have your order delivered by drone?

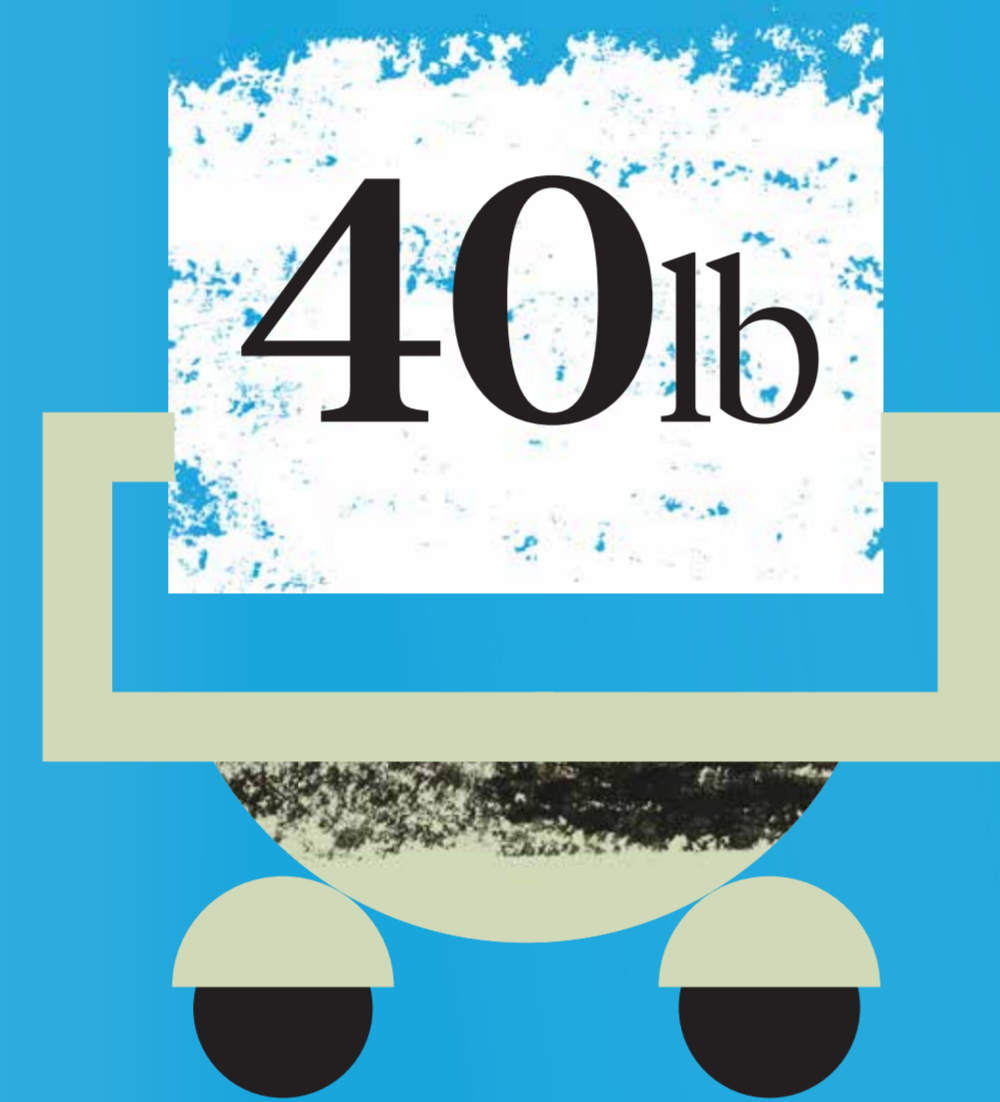


WHAT CONSUMERS WANT FROM DELIVERY OPTIONS



STARSHIP GROUND ROBOT

The Starship Technologies Delivery Robot is a self-driving robotic delivery vehicle that can carry items within a two-mile radius at pedestrian speed



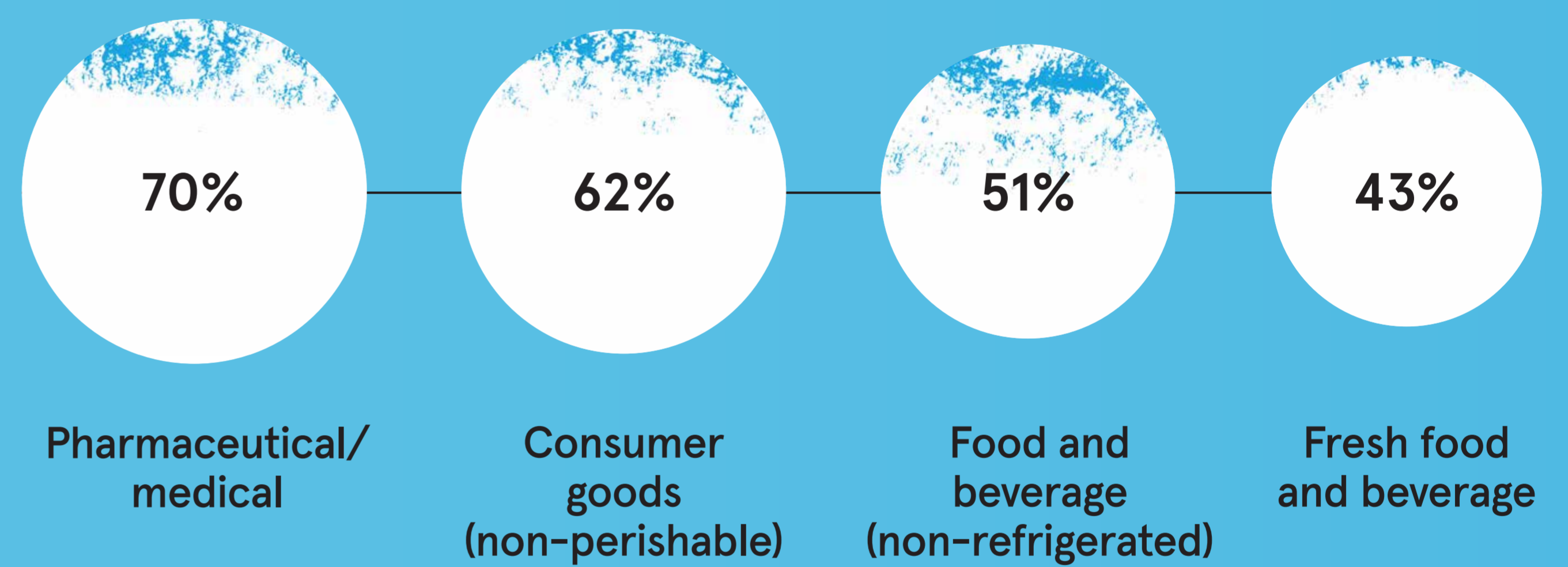
SPEED 4mph

TARGET COST PER DELIVERY \$2.80*

*Starship Technologies have given a target range of between \$1.40 and \$4.20
Ivey Business Review/Bloomberg/Statista 2017

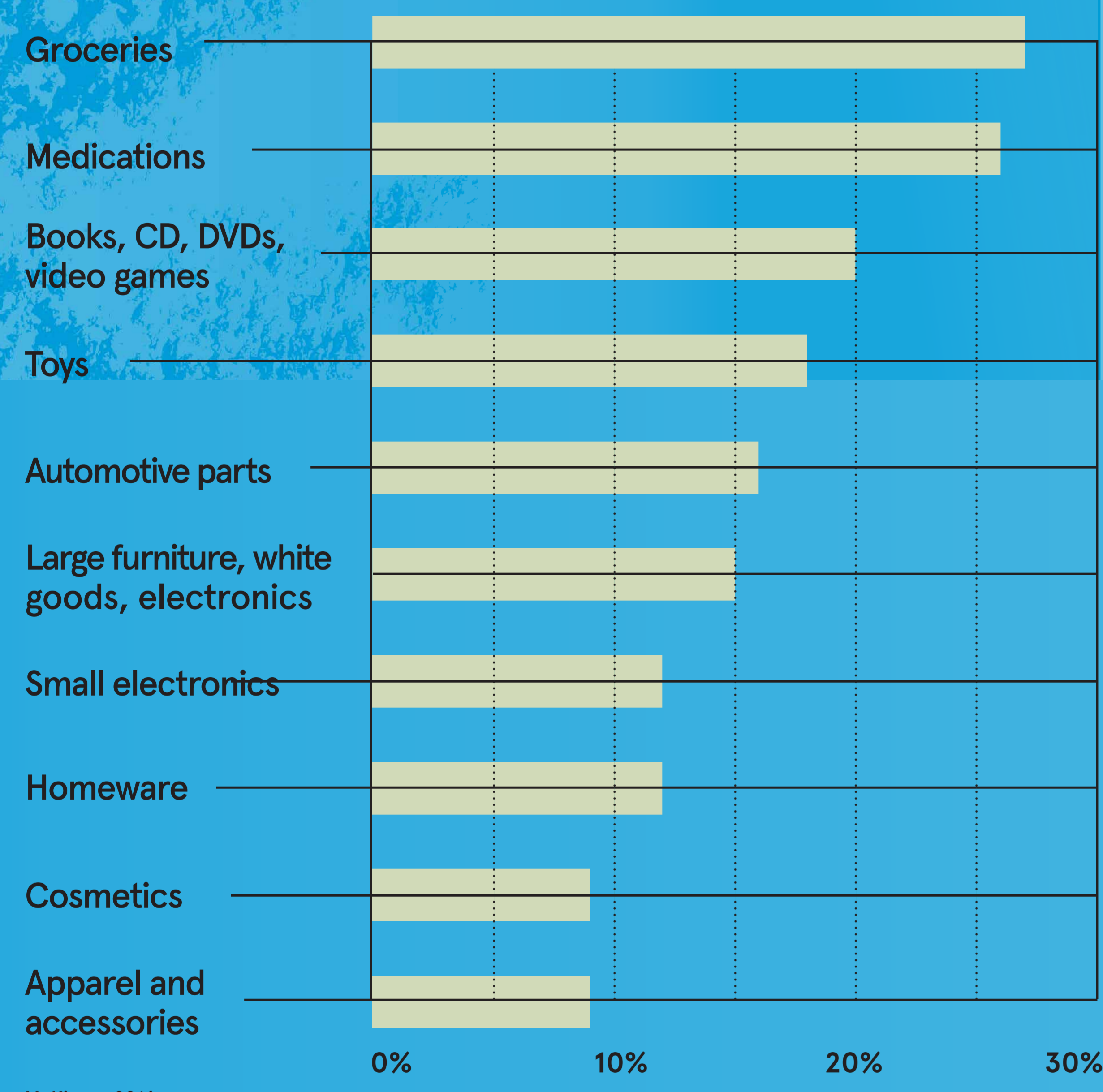
MARKETS TO BENEFIT FROM DRONE DELIVERIES

Percentage of *Packaging Digest* readers who think the following markets would benefit...



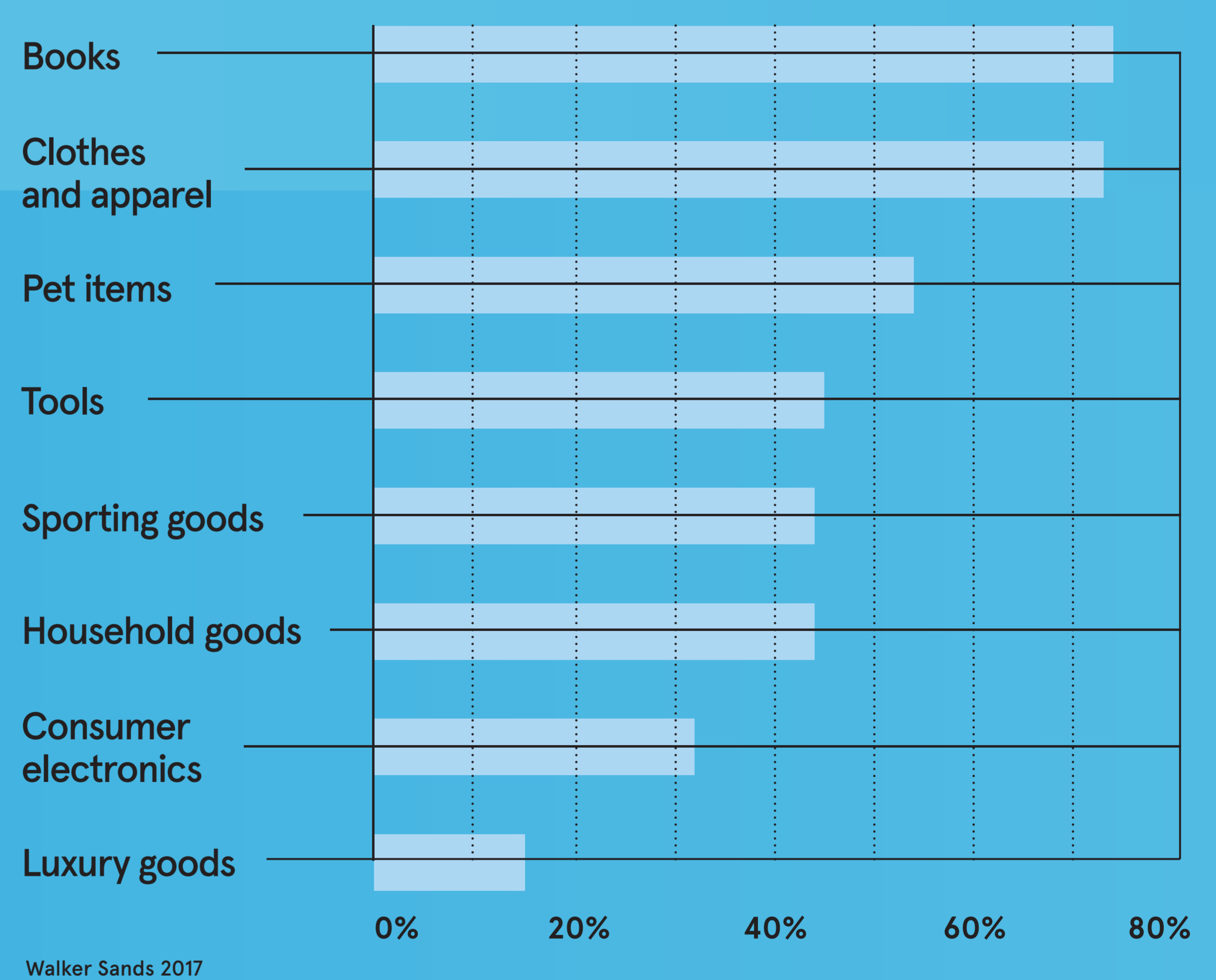
IMPACT OF LONG DELIVERY TIMES

Percentage of consumers who did not purchase an item online due to long delivery times



INTEREST IN DRONE DELIVERIES, BY PRODUCT

Percentage of consumers who would be open to trusting drone delivery for the following...



< 30 mins delivery



\$50m saving



TIME IS MONEY

Amazon Prime Air is a conceptual future delivery system that the retail giant promises will get packages to customers in 30 minutes or less, as long as the destination is within ten miles of an Amazon fulfilment centre. The company is experimenting with drone deliveries of packages that weigh up to five pounds, which make up nearly 90 per cent of the items it sells. Prime Air is being tested in multiple international locations, with development centres in the UK, United States and Israel. Its first order, for a Amazon Fire Stick and bag of popcorn delivered in the Cambridgeshire countryside, arrived in just 13 minutes.

LAST-MILE DELIVERIES

Rural deliveries are often the most expensive routes for logistics and transport firms due to the time required and vehicle expense, and that "last mile", between a delivery van and a recipient's door, is often the least efficient part of the shipping process. UPS has even estimated it could save up to \$50 million each year by cutting just one mile from the daily routes of its 66,000 delivery drivers. The logistics company has successfully tested launching delivery drones from the top of a UPS van, which it hopes will be incorporated into day-to-day operations as the device is able to return to the vehicle autonomously while the driver makes a separate delivery.