

The Sky Is the Limit

Internet sales comprise about 20 percent of all retail sales in the UK, with a record of £1.9 billion in online sales in December 2018. And for advancements in online sales, December 7, 2016, is a special delivery day for the country. On this day, one Amazon customer waited for only 13 minutes to receive his Amazon streaming media player and a bag of popcorn—the first products delivered by a drone in the UK. Five months prior to this achievement, Amazon announced it would be working with the UK government to test drone delivery.

Though in its latent stage, Amazon Prime Air has big plans for the future. Apart from developing the system in the UK, it is also looking into the feasibility of drone delivery other countries. However, there are still many issues to overcome. For example, the UK has specific rules regarding the use of drones—drones must fly at a height of 400 feet (122 m) or less, and must avoid flying within 150 meters of congested areas and 50 meters of a person or structure. Even with these rules in place, there have been a number of worrying incidents. In April 2016, a British Airways flight reported hitting a drone while approach the Heathrow Airport, and the UK Airprox Board (an organization tasked with monitoring UK air safety) recorded 125 near-miss incidents in 2018, up from 93 and 71 in 2017 and 2016, respectively. Drone testing is certainly not exclusive to Amazon nor restricted just to the UK. In the US, the first delivery approved by the Federal Aviation Administration (FAA) took place in 2015. An Australian-built drone made three short trips to deliver 4.5 kg of medical equipment successfully. Walmart estimated that 70 percent of the US population is within 5 miles of one of their stores and, in October 2015, it applied to the authorities for permission to test drone home deliveries. From September 2016, hungry diners at Virginia Tech have been able to have their Chipotle burrito delivered by a Google drone. While Google appears to be grounding its drone venture with partner Starbucks, it is still looking at possibilities in Ireland, where the rules governing drone use are less stringent.

Though government legislations are a concern, they are not the only external environmental forces affecting the business. Managers across business have to identify the buyers or the target customer—who will be the main end users of this new delivery system? This may in part be an issue pertaining to the generation to which the consumer belongs, and organizations are testing whether the more tech-savvy

Post-Millennials are the most likely to accept drone delivery. With some countries predicting significant increases in life expectancy and an aging, less mobile population, the demand for home delivery from this age group may increase in the future. Identifying and assessing the needs of the target customer, along with other environmental factors, present managers with some tricky decisions to make in planning, financing, and marketing.

The UK Amazon tests are limited to the delivery of items of 2.7 kg or less. While this limit may appear quite restrictive, it is believed to account for around 90 percent of Amazon sales. But what if you wanted to send something bigger? Or perhaps even someone? In January 2016, Chinese firm Ehang unveiled the *Ehang 184*, a single-passenger drone. The company claims that this eight-propeller electric drone can carry a passenger for up to 23 minutes. The machine, given clearance for testing in Nevada, US, is capable of a vertical lift-off of up to 3.5 km (11,500 feet) and speed of up to 100 kmph (63 mph). However, it is unclear whether there will be a market for a personal drone-delivery system. Even the economics are questionable: a drone delivers one parcel at a time while a delivery truck can deliver several hundred parcels across 120 destinations. However, the development of drone technology offers an innovative alternative to delivery problems. With consumers increasingly looking for convenience and speed, it is likely that more businesses will be considering drone delivery in the future.²⁶

DISCUSSION QUESTIONS

- 3-15. What immediate and long-term issues might managers face in organizations that embrace this new drone technology?
- 3-16. In the case, many of the organizations operate in different countries. How do the external forces vary between different countries?
- 3-17. Are there any demographic forces to consider in the use of drone technology? Consider the differences between the baby boomers and the millennials.
- 3-18. Which stakeholder groups does Amazon need to consider for this new venture? Who do you think has the greatest influence over them?

Source: Robbins, S.P., Coulter, M.K. and Randel, A. (2021) Management. 15th global ed. Harlow, England: Pearson Education.