

## Case Application Unit 02: UK Amazon (The Sky is Limit)

Between November 2015 and 2016, the United Kingdom saw online sales increase by 24.9 percent. So why was December 7, 2016, a special delivery day for the country? For the answer, you need to look to the skies. One Amazon customer had to wait for only 13 minutes to receive his Amazon streaming media player and a bag of popcorn, the first products delivered in the United Kingdom by a drone.

Five months earlier, Amazon announced it would be working with the British 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 United Kingdom, it is also looking into the feasibility of drone delivery other countries.

However, there are still many issues to overcome. For example, the United Kingdom 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 metres of congested areas and 50 metres 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 U.K. Airprox Board (an organization tasked with monitoring U.K. air safety) investigated 23 near-miss incidents between April and October 2015, 12 of which were in serious risk of collision.

Drone testing is certainly not exclusive to Amazon nor restricted just to the United Kingdom. In the United States, the first delivery approved by the Federal Aviation Administration (FAA) took place in 2015. An Australian-built drone made three short trips to successfully deliver 4.5 kg of medical equipment. Walmart estimated that 70 percent of the U.S. 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 challenges. Who will be the main users of this new delivery system? This may in part be a generational issue and

organizations are trying to figure out whether the more techsavvy Post-Millennials are the most likely to accept delivery by air. 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 also increase. These, and many other external factors, present managers with some tricky decisions to make in planning, capital spend, marketing, and recruitment.

The U.K. 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 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, United States, 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.

## **DISCUSSION QUESTIONS**

1. What immediate and long-term issues can managers face in organizations that embrace this new drone technology?
2. In the case, many of the organizations operate in different countries. Will the external forces vary between countries?
3. When considering the employment of drone technology, are there any demographic environmental forces to consider? Consider the differences between the baby boomers and the iGeneration.
4. Which stakeholder groups do Amazon need to consider for this new venture? Who do you think has the greatest influence over them?