

Case Study Overview



blinkit is about to launch a store in a city of your choice. This store will be open for 18 hours every day, seven days a week, and is expected to handle 2000 orders daily. The store's size will be 2000 square feet, with specific dimensions of 50 feet by 40 feet, resembling the attached image.

Some points to keep in mind:

- The orders will be assigned to a delivery partner (driver) only if they are available at the store.
- Given that this is a new store, the challenge at hand is to organize and manage inventory within the store.

Create an assessment report (can be a spreadsheet, doc, ppt, pdf) including the following:

1. How many delivery partners (drivers) would be necessary to fulfil the orders without compromising **blinkit**'s unique selling proposition (USP) and customer experience?
2. How many workers would be required inside the store to pick and pack the orders, taking into account an average of 5 items per order?

Background

blinkit is India's largest and most convenient hyper-local delivery company, which enables you to order grocery, fruits & vegetables, and other daily essential products, directly via your mobile or web browser.

Goals

- **Optimal staffing minimizes delays**, ensuring efficient operations for order fulfilment.
- Adequate delivery partners and workers **enhance customer satisfaction** by meeting or exceeding delivery time expectations.

- Workforce balance optimizes costs, preventing overstaffing and ensuring capacity meets workload demands.
- Maintaining adequate staffing levels is crucial to preserve the **unique selling proposition** of fast and reliable delivery.

Solution (Using appropriate Guestimation techniques)

1. Count of Delivery Partners:

- Average Delivery Time per Order: Assuming a reasonable average time of i.e., **17 mins**
- Orders per Delivery Partner per Hour: $60 \text{ minutes} / \text{Average Delivery Time} = 60/17 = 3.5 \text{ orders}$
- Total Orders per Delivery Partner per Day: $\text{Orders per Delivery Partner per Hour} \times (\text{Operating Hours} - 3.3 \text{ hours}) = 3.5 * (18-3.3) = 51.45 \text{ orders}$
- Number of Delivery Partners Needed: $\text{Total Daily Orders} / \text{Total Orders per Delivery Partner per Day} = 2000/51.45 = 39 \text{ delivery partners}$ (***38.87 is rounded off***)



Based on guestimation analysis, **blinkit** should hire approximately **39 delivery partners** to ensure smooth operations and meet the expected daily order volume of 2000. This estimation considers factors such as average delivery time and store operating hours.

2. Count of In-Store Workers needed:

- Average Time to Pick and Pack an Order: Assuming a reasonable average time of i.e., **6 mins**
- Orders Picked and Packed per Worker per Hour: $60 \text{ minutes} / \text{Average Time per Order} = 60/6 = 10 \text{ orders}$
- Total Orders Picked and Packed per Worker per Day: $\text{Orders Picked and Packed per Worker per Hour} \times (\text{Operating Hours} - 3.3 \text{ hours}) = (10 * (18-3.3)) = 147 \text{ orders}$

d. Number of Workers Needed: Total Daily Orders / Total Orders Picked and Packed per Worker per Day = $2000/147 = 14$ In-Store Workers (***13.6 is rounded off***)



For seamless operations and meeting the expected daily order volume of 2000, **blinkit** should hire approximately **14 In-Store Workers**, considering factors like the average orders picked and packed and store operating hours, as per the guestimation analysis.