**Amazon Case Study**

**Question**

1. How are the respondents distributed by age?

Answer: The age distribution of respondents shows a strong concentration in the early 20s, with most individuals falling between ages 20 and 24. The histogram reveals a right-skewed pattern, indicating fewer older participants. The KDE curve confirms this peak, suggesting that the survey primarily engaged younger adults, likely students or early-career professionals.

1. How many male and female respondents are there?

Answer: The gender distribution plot shows that female respondents slightly outnumber male respondents in the dataset. This suggests a higher participation rate from women, which could influence insights related to preferences, satisfaction, or behaviour in the food delivery context.

1. How does occupation influence food ordering behavior?

Answer: This boxplot shows how maximum wait time varies across different occupations. Students and homemakers generally experience shorter wait times, likely due to off-peak ordering. Professionals and self-employed individuals show wider variation, suggesting they may order during busier hours or from more congested areas. This highlights how occupation can influence delivery experience and timing.

1. How is monthly income distributed?

Answer: The pie chart shows that a significant portion of respondents report either **no income** or income **below ₹10,000**, indicating that most participants are likely students or early-career individuals. Higher income brackets are less represented, suggesting limited financial independence among the surveyed group.

1. Do respondents who value “Ease and convenience” also prefer “Easy Payment options”?

Answer: This chart shows a clear trend: respondents who value ease and convenience are more likely to prefer easy payment options. It highlights that a smooth and hassle-free ordering experience—including quick payments—is a key priority for many users.

1. What are the most preferred meals among respondents?

Answer: The bar chart reveals that certain meals are clearly favoured by respondents, with one or two options standing out as the most preferred. This indicates consistent meal choices across the surveyed group, which could guide menu planning or promotional focus for food delivery platforms.

1. How are age and monthly income related?

Answer: The scatter plot shows a clear trend: younger respondents, particularly those in their early 20s, tend to report lower monthly incomes or no income at all. As age increases, there's a slight rise in income levels, suggesting that older participants are more likely to be employed or financially independent. This reflects a typical progression from student life to professional careers.

1. How does Family Size vary by Gender?

Answer: The bar plot compares average age across different family sizes for male and female respondents. It shows that both genders are fairly evenly distributed across family sizes, with slight variations in age. This suggests that gender does not significantly influence family size patterns among the surveyed group.

1. How does the number of orders vary by Order Time?

Answer: The line plot illustrates how the number of food delivery orders fluctuates across different times of the day. Peaks in the graph indicate popular ordering times—likely aligning with lunch and dinner hours—while dips suggest off-peak periods. This pattern reflects typical consumer behaviour, helping delivery platforms optimize staffing and promotions based on demand cycles.

10.What is the distribution of family size across different occupations?

Answer: **Students** tend to come from medium-sized families, typically between 3 to 5 members.

* **Professionals** and **self-employed respondents** display a wider range, with some belonging to smaller or larger households.
* **Homemakers** and other categories may show more variability or outliers, indicating diverse family structures.

This distribution helps highlight how occupation might relate to household size, which can influence food ordering behaviour, meal preferences, and delivery expectations.