An ecommerce retailer wants to run some promotional tests on its products, categories and therefore wants to understand current behavior better to plan and execute the promotions.

A random sample of approx. 100 transactions has been obtained for an initial assessment.

First step is to assess sample representativeness, and the next to understand behavior based on sample.

Q1: The average revenue per transaction in the population is Rs 614. Based on this attribute only, would you be confident that this sample is representative of the population?

Q2: The average order rate (Orders with revenue > 0) is 58% in the population. How likely is it that the observed sample order rate or greater is because of random chance?

Q3: Is there a significant difference in average time spent on the site between visitors that come in on Mondays only vs Sundays only?

Q4: What is the likelihood that based on this sample, a random customer will add at least 3 products to his cart in a visit?

Q5: Is there a difference in time spent on the website between customers from the NCR region, Mumbai, and Bangalore?

Q6: These are the order counts (for successful orders) by category for three cities: Mumbai, Bangalore, Chennai. Is there an association between location and category?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Home | Fashion | Electronics | Jewellery |
| Mumbai | 15 | 18 | 12 | 11 |
| Bangalore | 12 | 22 | 10 | 9 |
| Chennai | 26 | 12 | 9 | 13 |

Q7: One of the new members of your team has suggested that local offers and regional offers are one way of attracting more customers. Should you try to build a localization strategy?