**BUSINESS PROBLEM:**

GEZİNOMİ, a tourism company, wants to make an average earnings estimate for its new customers. To do this, it must categorize the customers using the information of its previous customers and examine their averages. The data set includes concept, city, and season information.

**Solution:**

**Step-1:** The data set is made ready for analysis. For analysis, information containing all sales-related options is required. For example, season information and city. Each customer will come across any possibility of this information. Therefore, new sales definitions are created for all possibilities and their averages are calculated.

metin, ekran görüntüsü, yazı tipi içeren bir resim

Açıklama otomatik olarak oluşturuldu

*Average revenue information for each combination.*

**Step-2:** Each combination is defined as a persona. These personas are divided into segments based on earnings information. Thus, all variables are expressed with a single variable.

metin, menü, ekran görüntüsü, yazı tipi içeren bir resim

Açıklama otomatik olarak oluşturuldu

*Average earnings information and segment information for each persona*

**Step-3:** The data set is simplified so that only average earnings, segment, and character information remain. In this case, a new customer can be recorded in the data set in a queryable format and the average profit it will bring can be estimated.

metin, menü, ekran görüntüsü, yazı tipi içeren bir resim

Açıklama otomatik olarak oluşturuldu

*Character, segment, and average earnings information*

**Example:** Ali will go on holiday in concept C, city A, season 2, and Buğra will go on holiday in concept B, city C, season 1. What is the approximate return on customers?

**Ali:**

new\_customer="concept\_C\_city\_A\_S\_2"

df[df["sales\_level\_based"]==new\_customer]

metin, yazı tipi, ekran görüntüsü, tipografi içeren bir resim

Açıklama otomatik olarak oluşturuldu

Considering the choices Ali made, it is expected that he will earn an average of 240.5 units.

**Buğra:**

new\_customer="concept\_B\_city\_C\_S\_1"

df[df["sales\_level\_based"]==new\_customer]



Considering the choices made by Mr. Buğra, it is expected that he will gain 199.5 units.

**Results:**

The sales data of GEZİNOMİ, a tourism company, were used to estimate the expected earnings of new customers by making a rule-based classification. Thus, the company can know its customers better, organize its advertisements accordingly, and use this information to shape its future investments. For example, a company with limited resources can focus only on segments A and B.