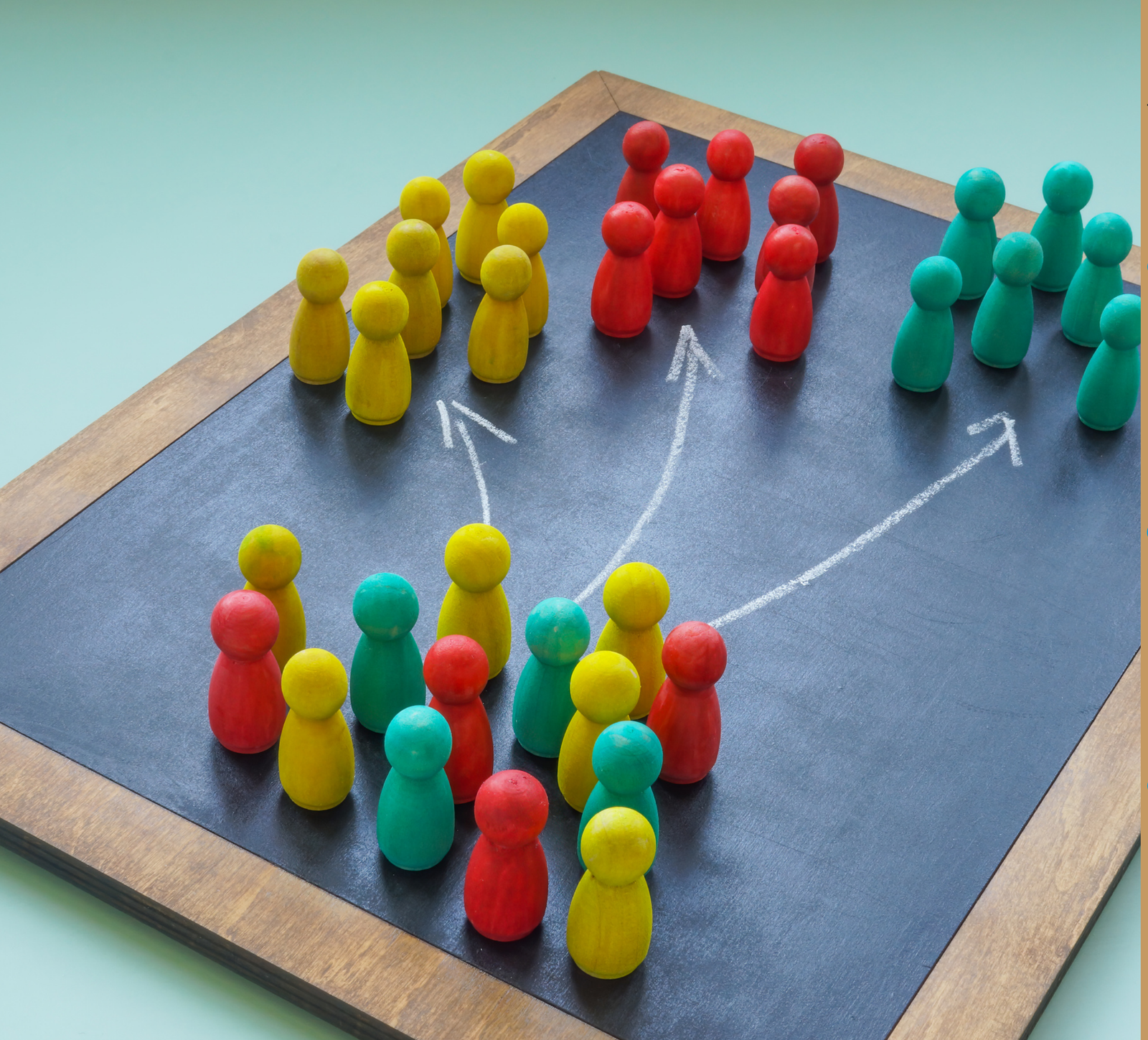
Prediction of lead return for a gaming company with rule based classification.

Business Problem

A gaming company with customers from different parts of the world wants to make:

- Level-based customer definitions using some of the characteristics of its customers,
- To create segments according to these new customer definitions,
- To estimate how much a new customer can bring to the company on average based on these segments.



Solution

The categorical variables a customer has are the source, gender, country, and age. Any combination of these variables will constitute a customer.

Each combination is defined as a personality, and the characteristics of these imaginary personalities are defined by using the data set.

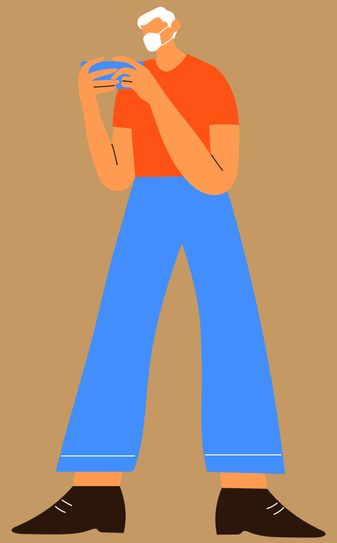
An earnings estimate is made based on which of the defined characters the new customer matches.

The Data Set is ready. In this state, it is ready for inquiry for any new customer.

SOURCE	SEX	COUNTRY	AGE	PRICE
ios	male	bra	17	39
android	male	tur	23	32
android	female	fra	16	43
ios	male	bra	32	34
ios	female	ing	47	45

CUSTOMERS_LEVEL	PRICE	SEGMENT
bra_android_female_0-18	35.6453	B
usa_ios_male_0-18	34.0773	C
bra_android_female_19-23	33.9834	C
usa_ios_male_41+	35.7500	A
fra_ios_female_31-40	32.8181	C

Conclusion



The data of an international gaming company was analyzed by rule-based classification. As a result;

- It became possible to estimate the return for each customer based on the character they matched.
- Customers were divided into segments based on their earnings amounts.
- Thus, the company can more easily choose among customers while directing its resources.
- It can also make future budget planning by approximately estimating how much customers will earn

<u>Example:</u> The earnings of a 17-year-old female IOS user from America are estimated as follows:

```
> df[df[ " CUSTOMERS_LEVEL " ] ==  " usa_ios_female_0_18 " ] ;
> customers_level_based      PRICE     SEGMENT
      USA_IOS_FEMALE_0-18   34.18              B
```

According to the resulting output, this customer is expected to bring approximately 34.18 units of profit.