

## 1) Travel Selection System

As a first step I would like to find out what model is more accurate. For this I will first calculate the divergent values, which has been classified correctly and divide it through the whole dataset.

$$M1: \frac{(20+20)}{50} = 40/50$$

$$M2: \frac{(15+30)}{50} = 45/50 \quad \text{it seems that model 2 is more accurate.}$$

Secondly I would like to find out (with the cost matrix) how much it costs me to make a wrong prediction for that we need to do the following:

- 1) selling prices
- 2) get prediction
- 3) calculate cost

$$1) M1 = (20 \times -1) + (10 \times 4) + (20 \times 0) = -20 + 40 = 20$$

$$2) M2 = (15 \times -1) + (5 \times 1) + (30 \times 0) = -15 + 5 = -10$$

I will choose model 2 over model 1 because it is much more accurate and cheaper when I make a wrong prediction.