World Cup 2018 prediction: Croatia vs England

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**Croatia vs England (semi-final)** 

Our hypothesis is that the unexpected gaming will occur when the subjective prediction deviates

the objective prediction in a certain value. That means if the indicator surpasses some threshold,

the unexpected result will come out. We use machine learning approach (1) of each game as

the objective prediction, and use the probability calculated based on the odds of 20 minutes

before the game offered by the gambling company Bet356 as the objective prediction. We set

the threshold to 5 percent.

1. By machine learning (objective prediction):

Probability of Croatia winning: 0.181

Probability of Draw: 0.312

Probability of England winning: 0.508

2. By odds of bookmaker (subjective prediction):

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Probability of Croatia winning: 0.243

Probability of Draw: 0.324

Probability of England winning: 0.432

3. The confidence indicator is: 0.076

Therefore, both subjective and objective predictions show England will win, but the confidence indicator is 0.076 that is greater than 0.05. So, the result of the game could be unexpected: draw or Croatia wins, let's see.

## References

1. G. Muriuki, Predicting fifa world cup 2018 using machine learning (2018).

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