A MACHINE LEARNING PROJECT

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billboard
THE HOT 100
MOST POPULAR SONGS

IS MY SONG A HIT?

HUMAN prediction?

"Some people have said that I can 'hear' a hit song. Meaning that I can tell the first time a song is played for me if it has potential. I have been able to hear some of the hits that way. But I can also 'feel' one."

- Glen Campbell

Or COMPUTER prediction?

"Normally, each song is facet by human beings, but I suspects that machines can do the job just as well . We teach the computer using machine learning algorithm what the charts are now. We apply the model into the introducing data and we ask which of the songs are most chart-like. Which does the computer think are most likely to go into the charts."

- Alan Cross

Approach

Develop a Machine Learning model which can identify whether a song will appear on the BillboardHot 100 Chart or not.

Motivation

To help YOU and your company determine the likelihood of your song achieving the BillboardHot 100 status.
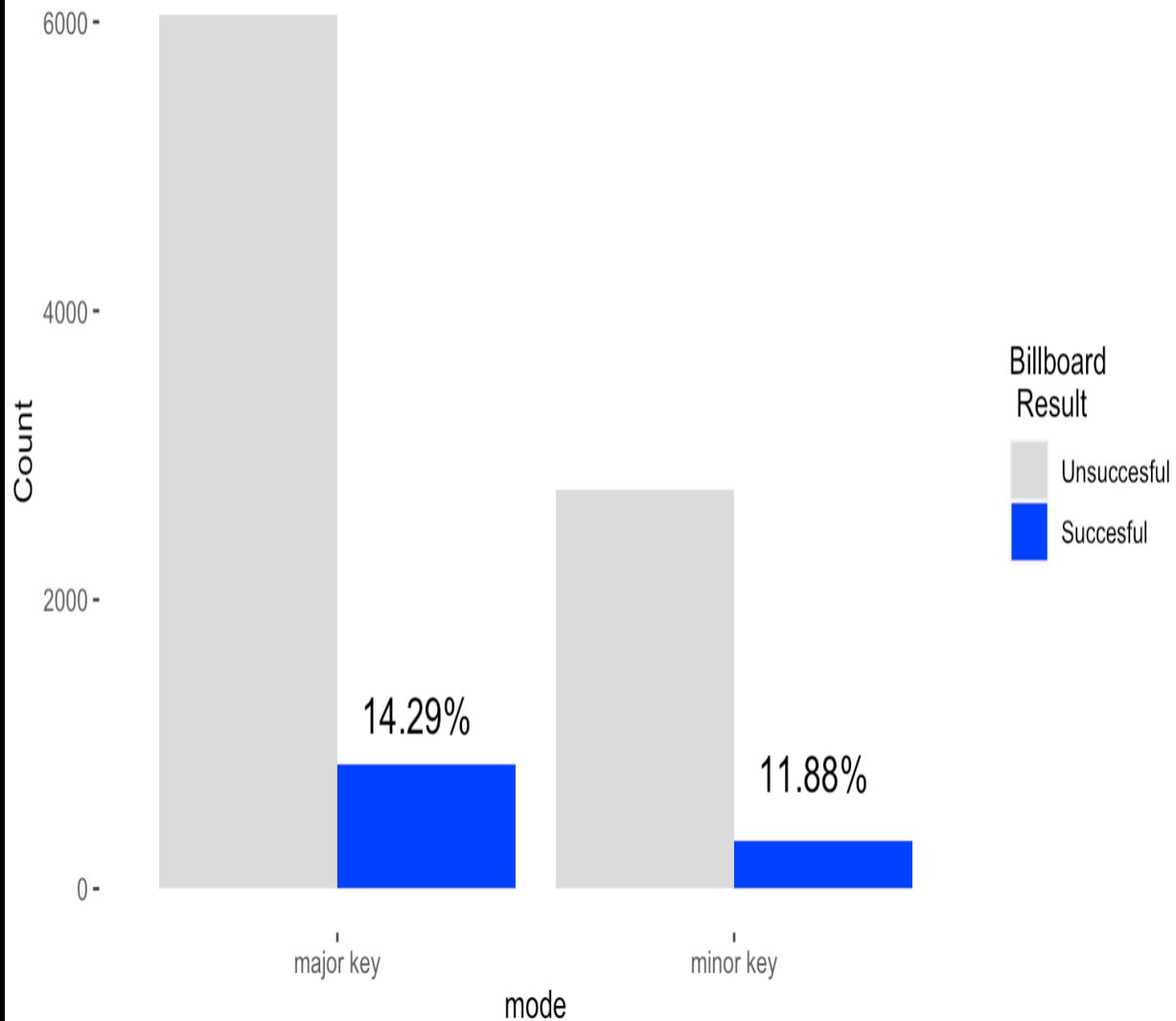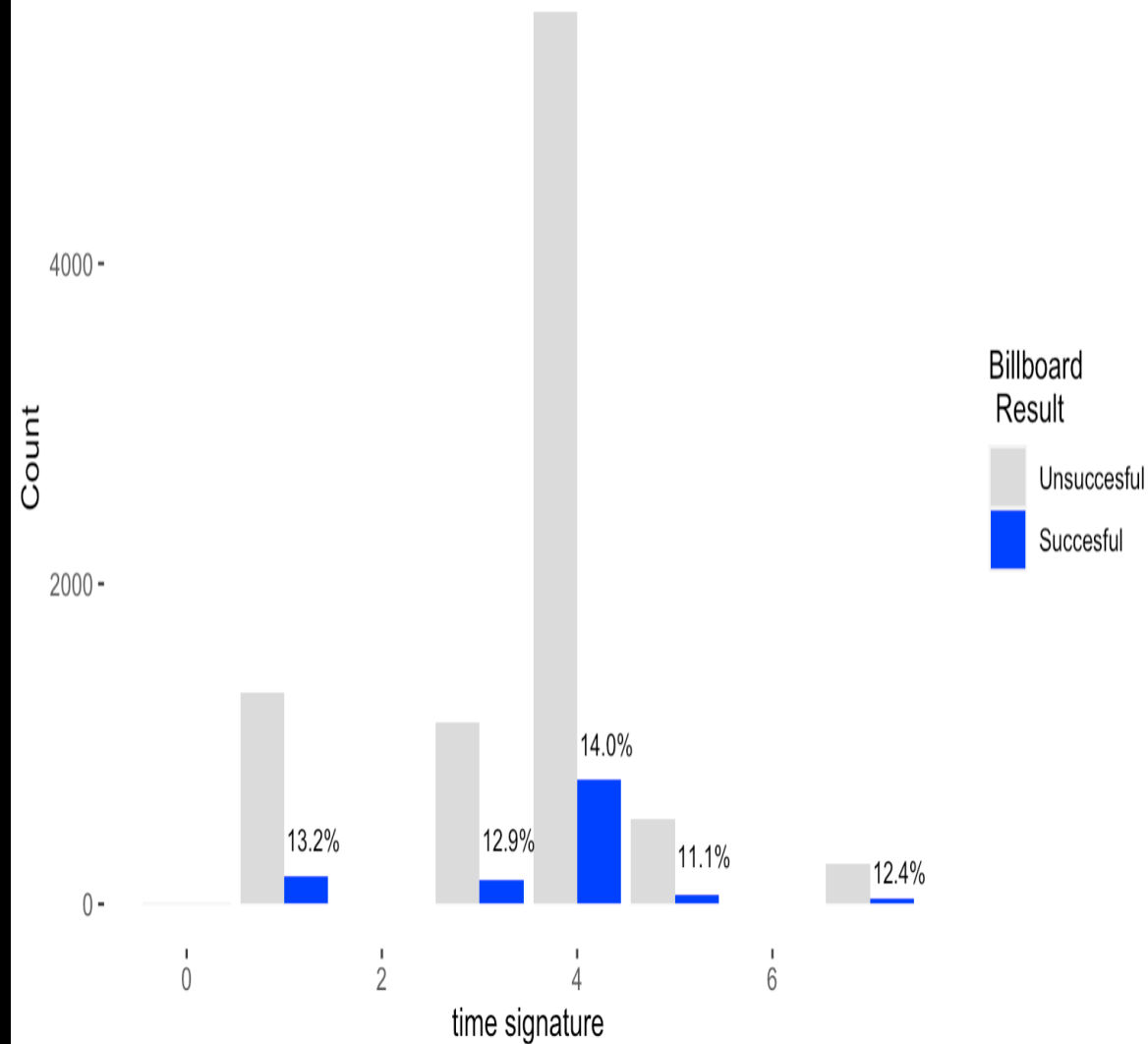
METHOD

XGBoost

Accuracy 53.7%

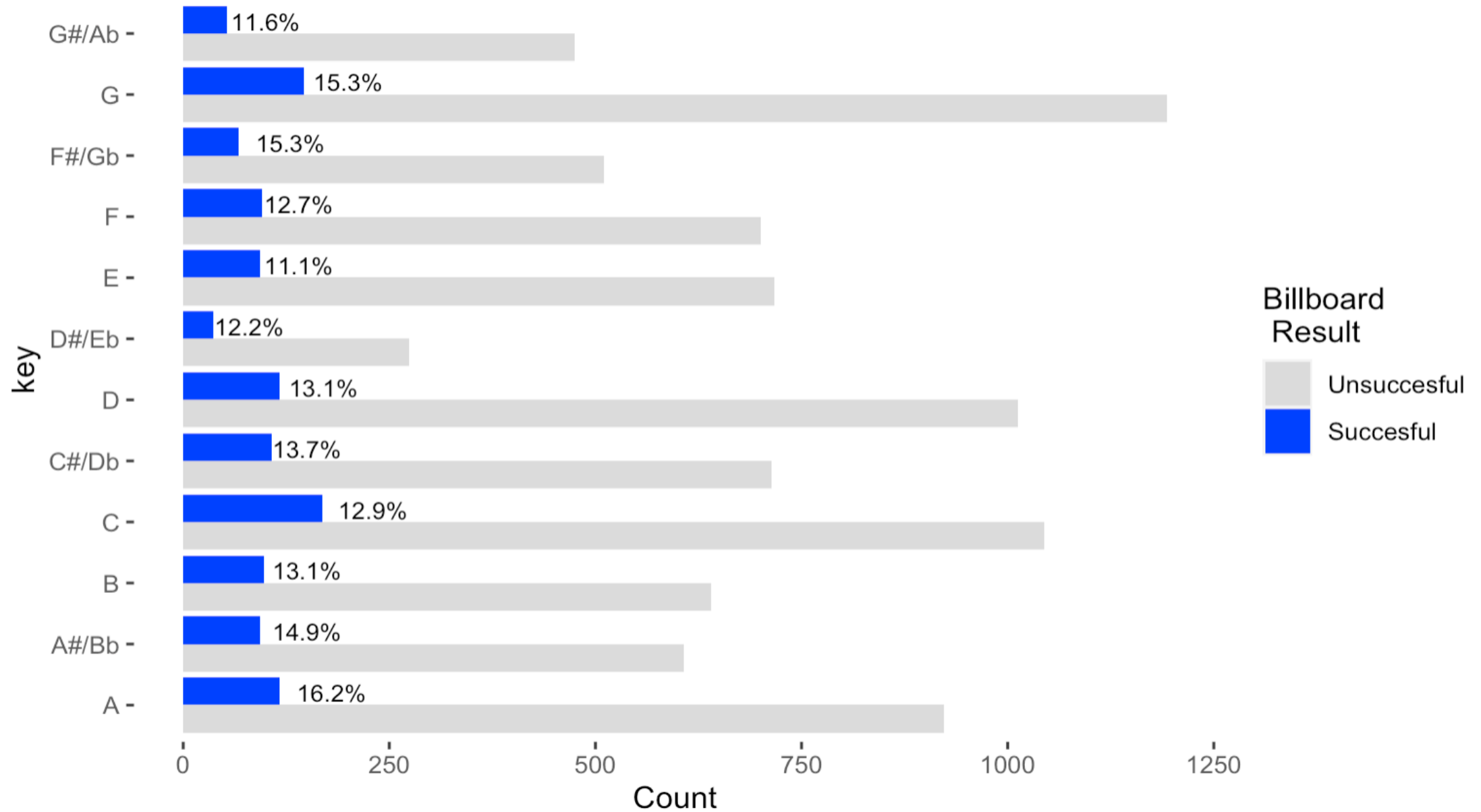What does this mean for you or your company?

Does Mode (a.k.a. major/minor key) Affect Billboard Hot100 Chances?

Does Time Signature Affect Billboard Hot100 Chances?

Does Song Key Affect Billboard Hot100 Chances?

Strengths

- Multi-year usage
- No biases
- Ability to improve accuracy overtime

Weaknesses

- Will not serve certain genres well

Key Takeaways

❑ Machine Learning has a better predictive power than humans

❑ Understanding the importance of song characteristics

❑ Reusable, reliable, and take no biases

❑ Saves you and your company cost in the long run

THANK YOU

QUESTIONS?