

VI. Kesimpulan dan Saran

6.1 Kesimpulan

Keempat model yang digunakan dalam penelitian yaitu Support Vector Machines (SVM), Gaussian Naïve Bayes (GNB), Artificial Neural Network (ANN), dan Random Forest (RF). Data yang digunakan adalah data dari pertandingan tim Milwaukee Bucks, yang nantinya dibagi menjadi data *training* dan testing (musim 2015/2016 sampai 2020/2021) dengan jumlah data masing-masing 435 data dan 109 data dengan masing-masing 15 parameter. Model yang terbaik pada penelitian ini adalah SVM dengan nilai akurasi 98% dan pada *macro average* nilai *precision* 98%, *recall* 99%, dan *f1-score* 98%, hal ini menunjukkan bahwa SVM cocok untuk data dengan jumlah yang tidak seimbang, tiap kelas memiliki bobot sama pentingnya, dan cocok dengan parameter yang digunakan dengan melihat *learning curve* yang dihasilkan dari sesi pelatihan SVM. Selain itu waktu yang dibutuhkan oleh model SVM dalam berlatih juga sangat singkat dibandingkan ketiga model lainnya dengan waktu 4,104 ms. Hal tersebut menjawab mengenai metode apa yang paling tepat untuk kasus ini. Strategi yang diusulkan agar tim Milwaukee Bucks mencapai kemenangan adalah yaitu secara general meningkatkan kemampuan *offense* dan *defense*, yang disertai dengan meningkatkan efisiensi pada *offense* dan *defense*, dengan memasukan bola lebih banyak, tetapi tidak mencoba untuk menembak lebih banyak dan meningkatkan *assist* dan *rebound*.

6.2 Saran

Penelitian selanjutnya perlu untuk menambahkan jumlah metode model yang nantinya akan digunakan atau melakukan penelitian dengan model-model yang berbeda dari penelitian ini. Selain itu perlu untuk mencoba dengan tim yang berbeda atau semua tim di NBA dan menambah jumlah data, dengan menambah *range season* yang digunakan sebagai data, baik dari season sebelumnya atau season baru di tahun-tahun kedepannya.

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