

BAB V1

KESIMPULAN DAN SARAN

6.1 Kesimpulan

Berdasarkan hasil penelitian yang telah diperoleh pada penelitian ini maka dapat disimpulkan bahwa :

1. Sistem Pengelompokan negara terdampak dan penanganan terhadap pandemi COVID-19 di benua asia dilakukan dengan menggunakan metode *K-Means* dan *DBSCAN* dengan memanfaatkan 4 variabel yaitu *case fatality rate*, *mortality rate*, *recovery rate*, dan *density*. Dataset diolah dengan Rapidminer 9.1 dengan parameter untuk *K-Means* yaitu jumlah K sebanyak 3 dan *Max Run* 10. Sedangkan untuk *DBSCAN* ditentukan nilai epsilon sebesar 0.01 dan *Minimal Points* sebanyak 2.
2. *Clustering* dilakukan secara multi dimensi dimana semua variabel dijadikan parameter. Sehingga mempermudah melakukan Analisis dalam menentukan dampak dan penanganan dengan perhitungan nilai Min-Max dan nilai Mean dari masing-masing cluster atau variabel . didapatkan hasil bahwa cluster 2 merupakan cluster yang paling baik dibandingkan dengan cluster yang lain dengan nilai Mean untuk Case Fatality Rate sebesar 1.27% kemudian, Mortality Rate sebesar 0.009 % meskipun cluster 1 sedikit lebih baik dengan nilai Mortality Rate 0.005%, namun untuk nilai Mean Recovery Rate cluster 2 tetap menjadi cluster dengan nilai yang paling baik yaitu 93.56%, walaupun nilai Mean Desity atau kepadatan penduduknya cukup tinggi yaitu 1295

populasi/km². Evaluasi metode *K-Means* dan *DBSCAN* dilakukan dengan metode *Davies-Bouldin Index*, dan ditemukan bahwa untuk karakter data seperti pada penelitian ini akurasi dari *K-Means* lebih baik dibandingkan dengan *DBSCAN* dimana akurasi terbaik dari metode *K-Means* mencapai 97% sedangkan *DBSCAN* hanya 80%.

6.2 Saran

Adapun saran untuk penelitian berikutnya :

1. Penelitian ini dapat dilakukan dengan metode-metode yang lain.
2. Penggunaan variabel *Epidemiologi* yang lain dapat digunakan untuk penelitian berikutnya sehingga menghasilkan hasil yang lebih variatif.
3. Perbandingan *K-Means* dan *DBSCAN* dapat dievaluasi dengan metode lain sehingga dapat dijadikan perbandingan.

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