

**PENGELOMPOKKAN PROVINSI DI INDONESIA BERDASARKAN  
KABUPATEN/KOTA YANG MEMILIKI SARANA KESEHATAN  
MENGUNAKAN ALGORITMA *PARTITIONING AROUND MEDOID*  
DENGAN METODE *DAVIES BOULDIN INDEX***

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**ABSTRAK**

Sarana kesehatan merupakan sarana utama dalam pemenuhan kebutuhan masyarakat akan kesehatan di setiap daerah, untuk itu sarana kesehatan harus terletak pada posisi yang strategis dan tersebar merata diseluruh daerah. Jumlah penduduk di Indonesia yang tersebar di 34 provinsi yang mencapai 267,7 juta jiwa berdasarkan badan pusat statistik nasional pada tahun 2018 yang tentunya membutuhkan pelayanan kesehatan yang memadai, pelayanan kesehatan dapat dilihat dari ketersediaan sarana pelayanan yang tersedia di masing - masing wilayah. Permasalahan tersebut membuat pemerataan sarana kesehatan belum maksimal sehingga masih menjadi kendala besar bagi dunia kesehatan di Indonesia. Pada penelitian ini membahas tentang pengelompokan provinsi di Indonesia berdasarkan kabupaten/kota yang memiliki sarana kesehatan menggunakan algoritma *Partitioning Around Medoids* (PAM) dengan metode *Davies Bouldin Index*, diperoleh *cluster* terbaik dengan hasil 2 *cluster* berdasarkan validasi *Davies Bouldin Index* sebesar 0,428 dengan skenario 2 *cluster* sampai 10 *cluster*. Dan jumlah anggota pada masing – masing *cluster* yaitu *cluster* 1 terdapat 31 provinsi dan *cluster* 2 terdapat 3 provinsi.

Kata kunci : Sarana kesehatan, *clustering*, *Partitioning Around Medoids* (PAM), *Davies Bouldin Index*.

**GROUPING PROVINCE IN INDONESIA BY DISTRICT / CITY THAT  
HAVE HEALTH FACILITIES USING AROUND MEDOID  
PARTITIONING ALGORITHM WITH DAVIES BOULDIN INDEX  
METHOD**

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**ABSTRACT**

Health facilities are the main means of meeting the needs of the community for health in each area, therefore health facilities must be located in a strategic position and are evenly distributed throughout the region. The total population in Indonesia which is spread across 34 provinces currently reaches 267.7 million people based on the national statistics center in 2018 which of course requires adequate health services, health services can be seen from the availability of service facilities available in each region. These problems have made the distribution of health facilities not maximized so that it is still a big obstacle for the world of health in Indonesia. This study discusses the grouping of provinces in Indonesia based on districts / cities that have health facilities using the Partitioning Around Medoids (PAM) algorithm with the Davies Bouldin Index method, the best *cluster* is obtained with 2 *clusters* based on the Davies Bouldin Index validation of 0.428 with a scenario of 2 *clusters* to 10 *clusters*. And the number of members in each cluster, namely cluster 1 there are 31 provinces and cluster 2 there are 3 provinces.

Keywords: Health facilities, clustering, Partitioning Around Medoids (PAM), Davies Bouldin Index.