ABSTRAK

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PENERAPAN RFM *ANALYSIS* PADA *CUSTOMER PROFILING* MENGGUNAKAN *K-MEANS CLUSTERING*

(xvi + 61 halaman; 30 gambar; 12 tabel; 2 lampiran)

Perkembangan teknologi informasi menyebabkan ledakan jumlah data, namun data tersebut harus diolah agar mendapatkan wawasan yang dapat digunakan. Pemanfaaatan data diperlukan untuk mempelajari kebutuhan*,* perilaku, dan nilai dari *customer* untuk membangun relasi yang lebih baik dengan mereka atau yang sering disebut sebagai *customer relationship management* (CRM). Seiring berkembangnya perusahaan, data semakin banyak dan semakin sulit untuk melakukan interaksi langsung dengan *customer* dan adapun persoalan seperti kampanye pemasaran yang kurang efektif sehingga dapat berakibat kerugian apabila tidak segera diatasi. Oleh karena itu, dilakukan segmentasi *customer* menggunakan variabel *recency*, *frequency*, dan *monetary* (RFM) dan mengimplementasikan *K-Means clustering* dengan penentuan jumlah *cluster* menggunakan metode *elbow* dan *silhouette score*. Berdasarkan hasil analisa, terdapat tiga jenis *cluster* yang dikategorikan sebagai *best customer, may not lost customer,* dan *average customer.*

Kata kunci: CRM, RFM, K-Means, *elbow method, silhouette score*

Referensi: 22 (2011-2020)

ABSTRACT

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IMPLEMENTATION OF RFM ANALYSIS TO CUSTOMER PROFILING USING K-MEANS CLUSTERING

(xvi + 61 pages; 30 figures; 12 tables; 2 appendixes)

The development of information technology causes an explosion in the amount of data, yet the data must be processed in order to obtain useful insights. The use of data is needed to study the needs, behaviour, and customer's value which are meant to build better relationships or what is often referred to Customer Relationship Management (CRM). As the company grows, data is getting abundant and more difficult to interact directly with customers and problems such as marketing campaigns that are less effective can result in losses if not immediately addressed. Therefore, customer segmentation was carried out using recency, frequency, and monetary (RFM) as variables and K-Means clustering by determining the number of clusters using the elbow method and silhouette score. Based on the analysis results, there are three types of clusters, categorized as best customers, may not lost customers, and average customers.

Keywords: *CRM, RFM, K-Means, elbow method, silhouette score*

References: 22 (2011-2020)