ABSTRAK

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PENGEMBANGAN SISTEM *POINT OF SALE* DAN PREDIKSI PENJUALAN PADA APOTEK AA MEDAN MENGGUNAKAN METODE *SINGLE EXPONENTIAL SMOOTHING* DAN *SINGLE MOVING AVERAGE*

(xvi + 106 ; 82; 26; 70)

Apotek merupakan suatu pelayanan kesehatan atau tempat dimana apoteker melakukan praktek kefarmasian. Kehadiran apotek sangat penting dikarenakan setiap orang yang sedang sakit membutuhkan obat dan untuk membeli obat biasanya dilakukan di apotek. Salah satu apotek di kota Medan yang cukup terkenal adalah Apotek AA. Pada kesehariannya, apotek AA selalu melakukan transaksi pembelian dan penjualan berbagai jenis obat. Permasalahan yang ditemukan yaitu dalam proses pembelian obat seringkali jenis obat yang dijual tidak begitu laku (jarang dibeli) oleh masyarakat, sehingga menimbulkan penumpukan stok obat serta mengakibatkan gudang penyimpanan obat menjadi penuh. Oleh sebab itu maka perlu dirancang sebuah *Business Intelligence System* dengan modul fitur di dalamnya berupa *Point of Sale* (POS) dan prediksi penjualan berbasis bagi apotek AA Medan agar dapat dapat mencatat dan melacak jumlah penjualan obat pada periode-periode sebelumnya serta menghitung prediksi penjualan di periode berikutnya menggunakan metode *Single Exponential Smoothing* dan *Single Moving Average*. Dalam proses pengembangan sistem metodologi pengembangan sistem yang digunakan adalah metodologi *Waterfall*. Hasil penelitian menunjukkan bahwa *Business Intelligence System* yang dikembangkan untuk Apotek AA dapat mencatat dan melacak jumlah penjualan obat pada periode-periode sebelumnya secara lengkap dan akurat. Selain itu, penerapan metode *Single Exponential Smoothing* dan *Single Moving Average* mampu melakukan prediksi penjualan produk pada periode-periode berikutnya secara cepat dan akurat.

Kata Kunci: *Point of Sale*, Prediksi Penjualan, Apotek AA, Sistem Berbasis Pengetahuan

Referensi: 20

ABSTRACT

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DEVELOPMENT OF A POINT OF SALE SYSTEM AND SALES PREDICTION AT AA MEDAN PHARMACY USING SINGLE EXPONENTIAL SMOOTHING AND SINGLE MOVING AVERAGE METHODS

(xvi + 106; 82; 26; 70)

Pharmacy is a health service or a place where pharmacists practice pharmacy. The presence of a pharmacy is very important because everyone who is sick needs medicine and buying medicine is usually done at the pharmacy. One of the well-known pharmacies in Medan is the AA Pharmacy. In daily life, AA pharmacy always conducts buying and selling transactions of various types of drugs. The problem that was found was that in the process of purchasing drugs, the types of drugs sold were often not very salable (rarely purchased) by the public, causing a buildup of drug stocks and causing drug storage warehouses to be full. Therefore, it is necessary to design a Business Intelligence System with feature modules in the form of Point of Sale (POS) and sales predictions based on the AA Medan pharmacy so that it can record and track the number of drug sales in previous periods and calculate sales predictions in the previous period. Next, use the Single Exponential Smoothing and Single Moving Average methods. In the system development process the system development methodology used is the Waterfall methodology. The results of the study show that the Business Intelligence System developed for AA Pharmacy can completely and accurately record and track the amount of drug sales in previous periods. In addition, the application of the Single Exponential Smoothing and Single Moving Average methods is able to predict product sales in subsequent periods quickly and accurately.

Keywords: Point of Sale, Sales Prediction, AA Pharmacy, Knowledge-Based System

References: 20