ABSTRAK

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PERANCANGAN DAN IMPLEMENTASI SISTEM *POINT OF SALE* PT. MATAHARI DEPARTMENT STORE BERBASIS ANDROID

(xv + 75 halaman: 77 gambar, 25 tabel, 5 lampiran)

Sektor ritel Indonesia berevolusi seiring dengan perkembangan ekonomi yang pesat. PT. Matahari Department Store Tbk. (Matahari) merupakan salah satu perusahaan ritel terkemuka di Indonesia. Proses transaksi ritel di Matahari tergolong kompleks, dimana kompleksitas tersebut dapat disebabkan oleh adanya penjualan barang konsinyasi dari perusahaan lainnya di luar dari produk Matahari sendiri. Selain itu, terdapat kerumitan dalam susunan diskon. Pada saat-saat tertentu, seperti pada saat ada acara ataupun hari raya, gerai Matahari mengalami jam sibuk yang menghambat penyelesaian transaksi ritel atau *point-of-sale* (POS). Gangguan pada POS dapat berdampak negatif terhadap pengalaman pelanggan dan citra perusahaan. Bahkan, pelanggan dapat membatalkan transaksi ritel karena gangguan tersebut sehingga terjadi *loss of sales*.

Tujuan dari penelitian ini adalah mengembangkan suatu sistem POS berbasis *mobile* yang ditujukan untuk meningkatkan pengalaman berbelanja pelanggan di gerai Matahari, khususnya pada jam sibuk. Aplikasi dirancang untuk mengurangi antrian yang ditemukan di *kassa-kassa* gerai Matahari. Untuk mengembangkan aplikasi *mobile* POS, digunakan metode *prototyping* dengan bahasa pemrograman Java di *platform* Android. Pemodelan sistem seperti *use case diagram*, *activity diagram*, dan *class diagram* menggunakan notasi UML versi 2.5.

Aplikasi *mobile* POS yang dikembangkan memfasilitasi pengelolaan transaksi ritel, tanpa mencakup pembayaran. Pada aplikasi ini terdapat fitur pemberian diskon yang kompleks pada transaksi ritel, yaitu penambahan diskon barang dan diskon grup serta pengaplikasian diskon promosi otomatis. Setelah transaksi ritel selesai diproses dengan aplikasi *mobile* POS, pelanggan dapat menuju ke *kassa* untuk menuntaskan transaksi jual-beli dengan melakukan pembayaran.

Kata kunci: ritel, *point-of-sale*, Android, aplikasi *mobile*, pengalaman pelanggan

Referensi: 16 (2007 – 2017)

ABSTRACT

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DESIGN AND IMPLEMENTATION OF ANDROID-BASED POINT OF SALE SYSTEM FOR PT. MATAHARI DEPARTMENT STORE

(xv + 75 pages: 77 figures, 25 tables, 5 appendices)

The retail sector in Indonesia evolved when the country's economic development began to accelerate. PT. Matahari Department Store Tbk. (Matahari) is one of the leading retail companies in Indonesia. The process of a retail transaction in Matahari can be considered as complex, where its complexity is likely caused by the sales of consignment products from other companies along with their own products. Moreover, there is also complexity in the structure of discounts. During certain times such as holidays or when events are being held, Matahari outlets experience rush hours that obstruct the completion of retail transactions or point-of-sale (POS). Obstruction of POS can negatively affect customer experience and Matahari's corporate image. In fact, customers could even cancel their transaction and the company would then experience loss of sales.

The purpose of this research is to develop a mobile-based POS system to improve customer experience when shopping at Matahari outlets, especially during rush hours. The application was designed to reduce queues at cash desks in Matahari outlets. During development of the mobile POS application, prototyping methodology was used along with Java programming language on Android platform. System modeling such as use case diagram, activity diagram, and class diagram was done using notations from UML version 2.5.

The developed mobile POS application can manage retail transactions, excluding payments. It enables the issuing of complex discounts, such as item discounts and group discounts, along with the application of automated promotion discounts. After a retail transaction is processed with the application, customers finalize the transaction by paying at cash desks.

Keywords: *retail, point-of-sale, Android, mobile application, customer experience*

References: 16 (2007 – 2017)