

## INTISARI

Sistem informasi akuntansi menjadi peranan yang penting bagi suatu badan usaha baik badan usaha profit maupun badan usaha non profit. Penerapan hasil olahan sistem ini mempermudah bagi badan usaha dalam mengumpulkan informasi, mendeteksi permasalahan yang ada serta pengambilan keputusan untuk menunjang kegiatan operasional. *Internet of Things* merupakan suatu perkembangan teknologi yang menghubungkan segala hal disekitarnya dalam rangka membantu proses sistem yang ada.

Kenyataannya, dalam kegiatan operasional Perpustakaan Universitas Surabaya Tenggilis, sistem informasi yang ada masih belum bekerja secara optimal sehingga menimbulkan berbagai permasalahan. Temuan peneliti terkait masalah perbedaan status buku, lamanya pencarian buku di rak, jumlah antrian yang terkadang panjang pada jam tertentu serta vandalism. Untuk itulah diperlukan sebuah analisis dan rancangan sistem yang dapat membantu menyelesaikan permasalahan yang ada. Penelitian ini bertujuan untuk mengetahui bagaimana rancangan sistem terkhusus pada pelayanan berbasis IoT dalam meningkatkan kualitas pelayanan di Perpustakaan Universitas Surabaya Tenggilis. Rekomendasi ini menggunakan *System Development Life Cycle* mulai dari tahapan sistem analisis hingga tahap *physical design* yang terbatas pada pembuatan *relationship database*. Peneliti merekomendasikan NFC-tag, *smart shelf library system*, *smart library*, AppIT, *hand-held reader*, SMS Gateway dan sistem *reward and punishment*.

Kata kunci: Perpustakaan Ubaya, Layanan, Internet of Things, Kualitas

## **ABSTRACT**

Accounting information system becomes an important role for a business entity both profit business entity and non profit business entity. Implementation of the processed products of this system makes it easier for business entities in collecting information, detecting existing problems and decision-making to support operational activities. Internet of Things is a technological development that connects everything around it in order to assist the process of existing systems.

In fact, in the operational activities of the University Surabaya's Library on Tenggilis, the existing information systems are still not working optimally and causing various problems. The findings of researchers are relate to differences in the status of books, length of book search on the shelf, as well as the number of queues that are sometimes long at certain hours also vandalism. For that, we need an analysis and system design that can help solve existing problems. This study aims to determine how the system design, especially on service cycle based on IoT in improving the quality of service at the Ubaya's Library on Tenggilis. This recommendation used System Development Life Cycle from system analysis stage to physical design stage which is limited to relationship database creation. Researchers recommend NFC-tags, smart shelf library systems, smart libraries, AppIT, hand-held readers, SMS Gateway also reward and punishment system.

Keywords: Ubaya's Library, Services, Internet of Things, Quality