

ABSTRACT

Thesis Title : **DESIGN AND CONSTRUCTION OF WORKING POD WITH INTEGRATED SECURITY SYSTEM OF MNANGKABU NATIONAL AIRPORT**
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Degree Granted : **Strata 1 (S1)**
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The development of technology and high mobility has increased the need for flexible workspaces in public areas, including airports. Working pods are an innovative solution that provides comfortable and private workspaces for passengers waiting for flights. This study aims to design and build a working pod with an integrated security system at Minangkabau International Airport. The security system implemented includes card-based or biometric access control, CCTV monitoring, and an Internet of Things (IoT)-based notification system to detect suspicious activity. The design method involves studying user needs, analyzing security technology, and testing system functionality in a simulation environment. The results of the study show that working pods with an integrated security system can improve user comfort and security. The implementation of this system is expected to be an effective solution in providing workspaces at airports with a high level of security.

Keywords: Working pod, security system, Internet of Things (IoT), airport, integrated design.

ABSTRAK

Judul Skripsi : RANCANG BANGUN WORKING POD DENGAN
SISTEM KEAMANAN TERINTEGRASI BANDARA
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Perkembangan teknologi dan mobilitas yang tinggi telah meningkatkan kebutuhan akan ruang kerja fleksibel di area publik, termasuk bandara. Working pod merupakan solusi inovatif yang menyediakan ruang kerja nyaman dan privat bagi penumpang yang menunggu penerbangan. Penelitian ini bertujuan untuk merancang dan membangun working pod dengan sistem keamanan terintegrasi di Bandara Internasional Minangkabau. Sistem keamanan yang diterapkan mencakup akses kontrol berbasis kartu atau biometrik, pemantauan CCTV, serta sistem notifikasi berbasis *Internet of Things (IoT)* untuk mendeteksi aktivitas mencurigakan. Metode perancangan melibatkan studi kebutuhan pengguna, analisis teknologi keamanan, serta pengujian fungsionalitas sistem dalam lingkungan simulasi. Hasil penelitian menunjukkan bahwa working pod dengan sistem keamanan terintegrasi mampu meningkatkan kenyamanan dan keamanan pengguna. Implementasi sistem ini diharapkan dapat menjadi solusi efektif dalam menyediakan ruang kerja di bandara dengan tingkat keamanan yang tinggi.

Kata kunci: Working pod, sistem keamanan, *Internet of Things (IoT)*, bandara, desain terintegrasi.