

**RANCANG BANGUN ALAT PEMBERITAHUAN OTOMATIS
MENGUNAKAN SENSOR GERAK PIR (*PASSIVE INFRA RED*)
BERBASIS AUDIO UNTUK MEMBERI HIMBAUAN PROTOKOL
KESEHATAN DI KANTOR BADAN PENELITIAN, PENGEMBANGAN
DAN INOVASI DAERAH KABUPATEN BULELENG**

Oleh:

Wildanun Mukholladun, NIM 1415061021

Prodi S1 Pendidikan Teknik Elektro

ABSTRAK

Penelitian ini bertujuan untuk mengetahui pengaplikasian Rancang Bangun Alat Pemberitahuan Otomatis Menggunakan Sensor Gerak PIR (*Passive Infra Red*) Berbasis Audio yang dapat digunakan untuk membantu proses penyampaian himbuan, untuk mengetahui kelayakan sebagai sarana penyampaian himbuan yang inovatif dan efisien di kantor Badan Penelitian, Pengembangan Dan Inovasi Daerah Kabupaten Buleleng. Penelitian ini, termasuk model penelitian R&D (*Research and Development*). Penelitian menggunakan angket atau kuesioner sebagai instrumen pengumpulan data oleh ahli isi (materi), ahli media dan staff. Dari hasil penelitian diperoleh: hasil uji coba ahli isi diperoleh nilai persentase sebesar 100% dengan klasifikasi sangat layak, hasil uji coba ahli media diperoleh persentase sebesar 78,12% dengan klasifikasi sangat layak, dalam uji coba kelompok kecil kelima responden pada klasifikasi “Sangat Baik” dengan persentase 100%. Hasil skor responden terendah ada pada responden 1 (R1) dan 5 (R5) dengan skor 37, skor tersebut sudah termasuk klasifikasi sangat baik pada rentang skor 36 - <45, hasil dalam uji coba kelompok besar, 19 responden berada pada klasifikasi “Sangat Baik” dengan persentase 95% dan 1 responden pada klasifikasi “Baik” dengan persentase 5%. Hasil skor responden terendah ada pada responden (A10) dengan skor 35, skor tersebut sudah termasuk klasifikasi “baik” pada rentang skor 30 - < 36. Berdasarkan hasil penelitian, Rancang Bangun Alat Pemberitahuan Otomatis Menggunakan Sensor Gerak PIR (*Passive Infra Red*) Berbasis Audio untuk memberi himbuan protokol kesehatan di kantor Badan Penelitian, Pengembangan Dan Inovasi Daerah Kabupaten Buleleng layak digunakan sebagai salah satu sarana penunjang dalam penyampaian informasi dan himbuan protokol kesehatan di kantor Badan Penelitian, Pengembangan Dan Inovasi Daerah Kabupaten Buleleng.

Kata Kunci : *Alat Pemberitahuan Otomatis, Passive Infra Red, Berbasis Audio, protokol kesehatan.*

DESIGN AND DEVELOPMENT OF AUTOMATIC NOTIFICATIONS USING
AUDIO-BASED PIR (PASSIVE INFRA RED) MOTION SENSORS TO
PROVIDE HEALTH PROTOCOL NOTIFICATIONS IN THE OFFICE OF
REGIONAL RESEARCH, DEVELOPMENT AND INNOVATION AGENCY
OF BULELENG DISTRICT

By:

Wildanun Mukholladun, NIM 1415061021
Electrical Engineering Education S1 Study Program

ABSTRACT

This study aims to determine the application of Automatic Device Design Using Audio-Based PIR (Passive Infra Red) Motion Sensors that can be used to assist the delivery process of tools, to find out as an efficient and efficient development tool at the office of the Regional Research, Development and Innovation Agency, Buleleng Regency. This research includes the R&D (Research and Development) research model. The study used a questionnaire or questionnaire as a data collection instrument by content experts, media experts and staff. From the results of the study obtained: the results of the expert trial obtained a value of 100% with a very decent classification, the results of the media expert trial were obtained by 78.12% with a very decent classification, in the small group trial the five respondents were classified as "Very Good" with the proportion 100%. The results of the lowest respondent scores are respondents 1 (R1) and 5 (R5) with a score of 37, the score is included in the very good classification in the score range 36 - <45, the results in large group trials, 19 respondents are in the "Very Good" classification. " with a percentage of 95% and 1 respondent in the classification of "Good" with a percentage of 5%. The results of the lowest respondent scores are respondents (A10) with a score of 35, this score is included in the "good" classification in the score range of 30 - < 36. Based on the results of the study, Design and Build Automatic Notification Devices Using Audio-Based PIR (Passive Infra Red) Motion Sensors to give an appeal for health protocols at the office of the Regional Research, Development and Innovation Agency of Buleleng Regency, it is appropriate to use it as one of the supporting facilities in the delivery of health information and protocols at the office of the Regional Research, Development and Innovation Agency of Buleleng Regency.

Keywords: Automatic Notification Tool, Passive Infra Red, Audio Based, health protocol.