

International Conference on Engineering and Technology Development



3rd ICETD 2014

28, 29 October 2014, Bandar Lampung, Indonesia

Hosted By :
Faculty of Engineering and Faculty of Computer Science
Bandar Lampung University, Indonesia



In cooperation
with :



THE UNIVERSITY OF KITAKYUSHU



الجامعة الإسلامية الدولية
INTERNATIONAL ISLAMIC UNIVERSITY MALAYSIA
بوتانجويي الويلو الويلو الويلو الويلو الويلو

3rd ICETD 2014

THE THIRD INTERNATIONAL CONFERENCE
ON ENGINEERING AND TECHNOLOGY DEVELOPMENT

28 -29 October 2014
Bandar Lampung University (UBL)
Lampung, Indonesia

PROCEEDINGS

Organized by:



Faculty of Computer Science and Faculty of Engineering
Bandar Lampung University (UBL)
Jl. Zainal Abidin Pagar Alam No.26 Labuhan Ratu, Bandar Lampung, Indonesia
Phone: +62 721 36 666 25, Fax: +62 721 701 467
website : www.ubl.ac.id

PREFACE

The Activities of the International Conference is in line and very appropriate with the vision and mission of Bandar Lampung University (UBL) to promote training and education as well as research in these areas.

On behalf of the Second International Conference on Engineering and Technology Development (3rd ICETD 2014) organizing committee, we are very pleased with the very good response especially from the keynote speaker and from the participants. It is noteworthy to point out that about 80 technical papers were received for this conference.

The participants of the conference come from many well known universities, among others : University Kebangsaan Malaysia – Malaysia, IEEE – Indonesia, Institut Teknologi sepuluh November – Indonesia, Surya Institute – Indonesia, International Islamic University – Malaysia, STMIK Mitra Lampung – Lampung, Bandung Institut of Technology – Bandung, Lecture of The Malahayati University, B2TP – BPPT Researcher – Lampung, University of Kitakyushu – Japan, Gadjah Mada University – Indonesia, Universitas Malahayati – Lampung, Lampung University – Lampung,

I would like to express my deepest gratitude to the International Advisory Board members, sponsor and also to all keynote speakers and all participants. I am also grateful to all organizing committee and all of the reviewers who contribute to the high standard of the conference. Also I would like to express my deepest gratitude to the Rector of Bandar Lampung University (UBL) who give us endless support to these activities, so that the conference can be administrated on time

Bandar Lampung, 22 October 2014

Mustofa Usman, Ph.D
3rd ICETD Chairman

PROCEEDINGS

3rd ICETD 2014

The Third International Conference
On Engineering And Technology Development

28 -29 October2014

INTERNATIONAL ADVISORY BOARD

Y. M Barusman, Indonesia

Ahmad F. Ismail, Malaysia

Mustofa Usman, Indonesia

Moses L. Singgih, Indonesia

Andreas Dress, Germany

Faiz A.M Elfaki, Malaysia

Warsono, Indonesia

Raihan Othman, Malaysia

Zeng Bing Zen, China

Tjin Swee Chuan, Singapore

Khomsahrial R, Indonesia

Rony Purba, Indonesia

Hon Wei Leong, Singapore

Imad Khamis, USA

Rozlan Alias, Malaysia

Rudi Irawan, Indonesia

Gusri Ibrahim, Indonesia

Jamal I Daoud, Malaysia

Riza Muhida, Indonesia

Heri Riyanto, Indonesia

Agus Wahyudi, Indonesia

PROCEEDINGS

3rd ICETD 2014

The Third International Conference
On Engineering And Technology Development

28 -29 October 2014

STEERING COMMITTEE

Executive Advisors

Dr. M. Yusuf S. Barusman
Andala R. P. Barusman, MA.Ec

Chairman

Mustofa Usman, Ph.D

Co-Chairman

Dr. Ir. Hery Riyanto, MT
Ahmad Cucus, S.Kom., M.Kom

Secretary

Yuthsi Aprilinda S.Kom., M.Kom
Marzuki, S.Kom., M.Kom
Maria Shusanti Febrianti, S.Kom., M.Kom

Technical Committee

Robby Yuli Endra, S.Kom., M.Kom
Sofiah Islamiah, ST. MT
Fenty Ariani, S.Kom., M.Kom
Taqwan Thamrin, ST., MSc
Dina Ika Wahyuningsih, S.Kom
Agus Sukoco, M.Kom
Hj. Susilowati, ST. MT
Haris Murwadi, ST, MT

Treasure

Samsul Bahri, SE
Dian Agustina, SE

PROCEEDINGS

3rd ICETD 2014

The Third International Conference
On Engineering And Technology Development

28 -29 October 2014

ORGANIZING COMMITTEE

Chair Person

Dr. Ir. Hery Riyanto, MT

Vice Chair Person

Ahmad Cucus, S.Kom., M.Kom

Treasure

Dian Agustina, S.E

Secretary

Robby Yuli Endra, S.Kom., M.Kom

Sofia Islamiah Izhar, S.T., M.T.

Taqwan Thamrin, ST., MSc

Erlangga, S.Kom., M.Kom

Iwan Purwanto S.Kom., MTI

Special Events

Agus Sukoco, M.Kom

Dra. Yulfriwini, M.T.

Ir. Juniardi, MT

Ir. Indra Surya, MT

Ir. Najamudin, MT

Kunarto, ST. MT

IB. Ilham Malik, ST. MT

Ir.A Ikhsan Karim, MT

Usman Rizal, ST., M.MSi

Ir. Sugito, MT

Berry Salatar, S.Pd

Ayu Kartika Puspa S.Kom., MTI.

Helta Anggia S.Pd., MA

Yanuaris Yanu Darmawan SS. M.Hum

Receptionist

Indyah Kumoro K.W., S.T., IAI.

Haris Murwadi, S.T., M.T.

Transportation and Acomodation

Irawati, SE
Desi Puspita Sari, S.E
Ifa Ditta, S.E., S.T.P
Riffandi Ritonga, S.H.

Publication and Documentation

Ir. Indriati Agustina Gultom, M.M
Noning Verawati, S.Sos
Hesti, S.H
Masitoh S.Sos

Cosumption

Susilowati, S.T., M.T
Yuthsi Aprilinda S.Kom., M.Kom
Maria Shusanti Febrianti, S.Kom., M.Kom
Fenty Ariani, S.Kom., M.Kom
Reni Nursyanti, S.Kom., M.Kom
Sundari, S.Kom

Facility and Decoration

Siti Rahma Wati, S.E.
Dina Ika Wahyuningsih, S.Kom.
Arnes Yuli Vandika, S.Kom, M.Kom.
Zainal Abidin, S.E.
Ahyar Saleh, S.E.
Eko Suhardiyanto
Wagino
Sugimin

Table Of Content

No	Title	Author	Page
1	The Influence Of Implementing Information Technology On Knowledge Management Toward Performance Evaluation Using Balanced Scorecard	Sarjito Surya	1-3
2	Implementation Of Customer Relationship Management (Crm) To Automate Logging Track Record Students And Alumni	Robby Yuli Endra ^{#1} Fenti Aryani ^{*2} Septiany Dian Puspita ^{#3} Ade Kurniawan ^{*4}	4-10
3	Prototype Model Classification System Level Internal Audit Findings Based On Case-Based Reasoning In Education Quality Management	Marzuki ^{#1} Maria Shusanti Febrianti ^{*2}	11-13
4	Implementation Case Based Reasoning In Determining The Rational Prescription Of Tb Drugs	Ahmad Cucus	14-19
5	Implementation Of Workflow Management System On E-Learning Platform For The Effectiveness Of Distance Learning	Yuthsi Aprilinda ^{#1} Agus Sukoco ^{*2} Ahmad Cucus ^{#3}	20-25
6	Thermal Bioclimate For Tourism: Case Study Of Kuta, Bali Province, Indonesia	Nyoman Sugiarta ^{#1} Andreas Matzarakis ^{#2}	26-32
7	Minimum System Design Of Android Based Pstn Phone	Deo Kiatama ^{#1} Fransiscus Ati Halim ^{*2} Arnold Aribowo ^{#3}	33-38
8	The Design Of Pressing Equipment For Banana Fruit	M.C. Tri Atmodjo	39-44
9	Modelling Supply Chain Management In B2b E-Commerce Systems	Idris Asmuni	45-51
10	Extreme Programming Study Method Case Study On Designing Of Accounting Term Dictionary	Usman Ependi ^{#1} Qoriani Widayati ^{*2}	52-55
11	Review On Economic Valuation Of Solid Waste Management In Bandar Lampung, Lampung	ling Lukman ^{#1} , Diah Ayu Wulandari Sulistyaningrum ^{*2} , Taqwan Thamrin ^{#3}	56-57

No	Title	Author	Page
12	Prototype Topology Sdn For Simple Network Campus	Arnesyulivandika	58-61
13	Tsunami Force On A Building With Sea Wall	Any Nurhasanah ^{#1} Nizam ^{*2} Radianta Triatmadja ^{#3}	62-64
14	Analysis The Quality Of Website Service Information System Academic Integrated (Siater) Bandar Lampung University Using Pieces Methods	Yusinta Ria Disanda	65-71
15	Organize Bad Manual Financial Database Of Educational Organization By Bank To Decrease Financial Criminalize	Ruri Koesliandana ^{#1} Eka Imama Novita Sari ^{*2} Arnes Yuli Vandika ^{#3}	72-74
16	Design Of Lampung Bay Waterfront Using Poetic Architecture Approach	Shofia Islamia Ishar, S.T.,M.T. Muhammad Syahroni, S.T.	75-83
17	Analysis Limiting Internet Sites With The Method Using Squid Proxy Server At Smkn 1 South Rawajitu	Reni Tri Astuti	83-88
18	Effect Of Grading On Differences Using Mixed Concrete Aggregate Rough And Fine Aggregate Concrete Compressive Strength Of Natural	Yulfriwini	89-97
19	Analysis Quality Dino Tour Travel Management Website Using Webqual 4.0	Rola Hengki	98-105
20	Holonic Manufacturing System: Current Development And Future Applications	Moses Laksono Singgih	106-113
21	An Analysis Perspective Implemented Text Mining Analytics Information Extraction For Impact Of Indonesian Social Media	Agus Suryana.Mti ^{#1} Sri Ipnuwati.M.Kom ^{*2}	114-123
22	Study Of Gold Mine Tailings Utilization As Fine Aggregate Material For Producing Shotcrete Based On Concept Of Green Technology	Lilies Widojoko ¹⁾ Harianto Hardjasaputra ²⁾ Susilowati ³⁾	124-133

No	Title	Author	Page
23	Decision Support System For Determined Recommendations Lecturer Teaching Handbook Using Fuzzy	Usman Rizal ^{#1} Fenti Aryani ^{*2}	134-140
24	The Expert System Software Application On Lecture Scheduling Based On Rule Based Reasoning	Taqwan Thamrin ^{#1} Ahmad Cucus ^{*2} Adi Wijaya ^{#3}	141-144
25	Portal Website Analysis Using Iso / Iec 9126-4 Metric Effectiveness (Case Study Indonesia Wi-Fi Portal Website)	Refky Jumrotuhuda	145-149
26	Student Satisfaction Analysis Of Siater Using End User Computing Satisfaction (Eucs)	Erlangga, Jefri Krisna Putra	150-155
27	Urban Tourism Development Through Low Impact Development (Lid) Towards Green-Tourism	*Iir. Wiwik Setyaningsih, Mt *Ztri Yuni Iswati, St., Mt, *Zsri Yuliani, St., M.App.Sc.	156-161
28	Hawkers Empowerment Strategy To Promote Sustainable Economy In Surakarta	Murtantjanirahayu Rufiaandisetyanaputri	162-172
29	New Urbanism: A Comparative Analysis Between Traditional Village And Housing Estate	Bhakti Alamsyah	173-179
30	Traditional Market Revitalization As An Urban Catalyst In The City Of Surakarta	Istijabatul Aliyah #1, Bambang Setioko #2, Wisnu Pradoto #3	180-188
31	The Robinson Mall Impact On Fv And Ds In Zapa Street, Bandar Lampung City	Ida Bagus Ilham Malik Ilyas Sadad	189-195
32	Decision Support System For Mall Nutrition Using Simple Additive Weighting (Saw) Method	Reni Nursyanti Mujasih	196-200
33	Effect Of Cement Composition In Lampung On Concrete Strength	Heri Riyanto	201 – 204

No	Title	Author	Page
34	E-Archive digital storage media	Arnes yuli vandika, ade kurniawan, ari kurniawan	205 -207
35	Virtualization Technology for Optimizing Server Resource Usage	Edwar Ali, Didik Sudyana	208 - 212
36	Decision Support System (DSS) For The Determination Of Percentage Of Scholarship Quantity Based Fuzzy Tahani	Robby Yuli Endra #1, Agus Sukoco #2	213 -223
37	Evaluation of Pedestrian Way's Comfort Case Study: Jl. Z. A. Pagar Alam, Bandar Lampung	Haris Murwadi 1*, Fritz Akhmad Nuzir 2	224 - 228
38	Modification Effect Of Volume Cylinder Four Stroke Engine To Effective Power	Ir. Najamudin, MT	229-239
39	Impact Of Motor Vehicle Emissions On Air Quality In Urban And Sub Urban Area (Case Study: Bandarlampung City)	Ir. A. Ikhsan Karim, MT., Ir. Sugito, MT	240-249

E-Archive : Digital storage Media

Arnes Yuli Vandika¹, Ade Kurniawan², Ari Kurniawan Saputra³

Computer Science Faculty, Bandar Lampung University
Bandar Lampung Indonesia

¹arnes@ubl.ac.id, ²ade.13421026@student.ubl.ac.id, ³ari.12421013@student.ubl.ac.id

Abstract - In the digital age that is increasingly sophisticated, that have an impact on all aspects of our daily lives, one of them is on the filing system on the experience the more effective and efficient, which previously used the closet as storage media, we can now utilize electronics as the storage media archives. Application of the method of filing electronically in an institution is required to support the activities of archiving that achieved effectiveness and efficiency in the management, as well as being able to secure the archives that have important information or value for its users. In the implementation of an electronic archive, type of media used all kinds such as E-mail, DVD 's, microfilm and other electronic media. To support the activities of the application required a good infrastructure and facilities for monitoring and maintenance so that the planned goals are achieved. It also needed a system that is appropriate for the application that is executed is supported by personnel competent in the field of archiving, as well as having the skills and capabilities that support the implementation of electronic filing.

Keywords electronic archive , Archive.

I. INTRODUCTION

At first the development of modern technology in the world, it's been known since several centuries ago when the first generation of computers found by a mathematician from the United Kingdom, Charles Babbage, then very large-sized computer and function only for counting. As time went on the developed the computer so that the next generations are created by having different shapes and specifications at the start of the second generation with a smaller size, less electrical power and has more functionality than the first generation, so too is the third generation and beyond is constantly evolving from previous generations. These developments feel has a major influence on other aspects like a filing system, if we are talking about the development of archiving system from the current level of their effectiveness was quite good, especially in terms of the use of the media to store archives, used to be a closet used as a medium for storage of archives, of course this will complicate us

to search the archives at a time when we need it other than that it is also influential in the archive it self, archives will be easily damaged due to the age of the old storage media is not appropriate, as time goes by can take advantage of the technology as a medium for storage of archives that we know with electronic Archive.

II. THEORY

i. Introduction to Archive

- A. According to UU No. 7 in 1971 about the provisions – provisions subject matter section Chapter I article 1, archives are:
 1. The script is created and accepted by the State institutions and bodies –government agencies in any good figures in a single State or a group in order to conduct Government activity.
 2. The script is created and accepted by the Agency and private agencies or individuals, in the form of any good in Mannerism, single or in groups in the framework of the implementation of the national life.
- B. T. R. Schellenberg (The Liang Gie, 1979, 217) "The term archives" may now be defined as follow : "Those records of any public or private institution which adjudged worthy of permanent preservation for reference and research purpose and which have been deposited or have been selected for deposit in on archival institution".
- C. Massive Indonesian Language Dictionary (KBBI) archive is a document written (letter, certificate, etc.), oral (speeches, lectures, etc.), or pictorial (pictures, movies, etc.) Dr. time's past, stowed dl media write (paper), electronics (tape, computer disk, videotape, etc.), usually issued by official agencies, stored and maintained in a special place for reference.

ii. Electronic Definition

Prof. Dr. Jumadi, M.Pd(2013) Defines several definitions from experts who can give you insight into electronics, as follows:

1. Fitzgerald, Higginbotham and Grabel

“Electronics is the branch of Electrical Engineering which deals extensively with the transfer of information by means of electromagnetic energy”.

2. J. Millman
“Electronics is the science and the technology of the passage of charged particles in a gas, in a vacuum, or in a semiconductor”.
3. E. Carol Young
“The study, design, and use of devices that depend on the conduction of electricity through a vacuum, gas, or semiconductor”.
4. H.C. Yohannes
Electronics is the science that studies the properties and usage of devices ("devices" =tool) that is the basis of his work is the electron flow in a vacuum or gas (as in radio tubes) and a flow of electrons in the semi conductor (such as in transistors). From these definitions in fact studied Electronics control the movement of particles and the application of charge carriers (electrons) in a vacuum, gas or semi conductors.

iii. Electronic Archive Definition

Based on the source of the above we can conclude about Electronic Archive definition, that the electronic archive is a document written (letter, certificate, etc.), oral (speeches, lectures, etc.), or pictorial(pictures, movies, etc.) from the time a past, which is stored via electronic media (tape, videotape, computer, email etc.).

iv. Benefits And Weakness Of Electronic Archives

A. Benefits

Daryono(2013) explain that the archival storage of electronically obtain some profits and efficiency, when compared to conventionally archive storage system. As for the advantages of electronic archival storage were:

1. Investment in the form of space-saving archives

As we learn together, growing an archive, it will require more storage space as well. This can be overcome by means of archive storage system with transfer of conventional archive media into electronic media archive.

2. Investment Savings in the form of paper, printing ink (printer & copy)

The main advantages of electronic-based systems is its spread are electronic, no longer need paper and ink, and it is enough to copy on a disk or other media, although at any given moment paper still is needed.

3. The Efficiency of access time

Archiving accounting method would be very difficult to find a file contained in the archival space, it is effected by the placement, the system archives are often borrowed, and usually are not returned in its place, as well as unstructured storage, unlike the electronic archive, a structured storage system facilitates the appointment back archive is as easy as filling the code archive, as well as when we are searching a document on your computer.

4. Human Resources-Saving

In the conventional course of many archive system involving archival officer to manage and serve the needs the archives, and it does not guarantee the speed and accuracy in the system archive search. In contrast to electronic archives, of course can be done HR needs emphasis, in addition to the appointment system information back does not have to involve a lot of resources, but access to information can be done quickly.

5. minimize the possibility of data destruction

With our electronic archive will be easy to do Back-up data, so we'll have a backup of the archives critical owned. This is to prevent the destruction of archives that are caused by disasters such as floods and fires.

B. Weakness

1. the existence of opportunities for manipulating files (create, save, modify, or delete)in all ways;
2. the difficulties for various file because the file format or the availability of the network or access to share files with others;
3. possibility of destruction of files at any time without any prior indication of a server, for example, stricken with encephalitis or the vanishing of data permanently because it unintentionally.

v. Media of E-Archive

One of the media that we can make use of electronic-based archives to save as:

1. Google Drive

Naufal Assagaf (2012) explains the Google cloud storage Drive is a service from Google which was launched in late April 2012, namely services to store files on the internet on the storage provided by the Google. By saving the file in Google Drive then the owner of the file can access that file at any time anywhere by using a desktop computer, a laptop, a tablet computer or smartphone. And the file can be shared with others for sharing and collaboration also editing. The capacity provided by google is a free service to drive 5 GB capacity, to use more of it then it will incur additional charges.



Google Account Login (Source <http://google.com/>)



Google Driver (source <http://cyberinfo.web.id/>)

No	Tanggal_Arsip	nama_file	type_file	ukuran_file	file	Kategori	Keterangan	aktif	Download
1	2014-10-10	Air Kurniaman Saputra	jpg	1.88 KB	File\Air Kurniaman Saputra.jpg	-	-	-	Download
2	2014-10-09	AAA	jpg	1.45 KB	File\aaa.jpg	aaa	aaa	Ya	Download
3	2014-10-09	AAA	jpg	1.45 KB	File\AAA.jpg	aaa	aaa	Ya	Download
4	2014-10-01	ARSIP WAWASAN2014	png	15.75 KB	File\ARSIP WAWASAN2014.png	--Pilih Kategori--	AAA	AAA	Download
5	2014-09-27	ARSIP PAK YUSUF SULFARANO BARRISMAN	png	63.56 KB	File\ARSIP PAK YUSUF SULFARANO BARRISMAN.png	--Pilih Kategori--	AAA	Y	Download
6	2014-09-27	ARSIP REKTOR	xls	1423 B	File\ARSIP REKTOR.xls	--Pilih Kategori--	ARSIP REKTOR	ARSIP REKTOR	Download
7	2014-09-27	ARSIP BAA UBL	pdf	15.38 KB	File\ARSIP BAA UBL.pdf	--Pilih Kategori--	AAA	Y	Download

2. Application

We can also make an application as a storage medium, such as a Digital Information System for higher education (Simpasti). SIMPASTI is a system for archiving the digital's Collage of Bandar Lampung University, in working process on this application could use the storage server that can store millions of records of data.

Source : Simpasti UBL

III. CONCLUSION

Such a glimpse of an electronic archive of the explanation, with an increasingly technological advances allow us to be active in the expected positive impacts towards capable of carrying larger especially in the field of archiving. To support the activities of the application required a good infrastructure and facilities for monitoring and maintenance so that the planned goals are achieved. It also needed a system that is appropriate for the application that is executed is supported by personnel competent in the field of archiving, as well as having the skills and capabilities that support the implementation of electronic filing.

Reference

- [1] Daryono (2011) Pengelolaan Arsip Berbasis Elektronik. <http://daryono.staff.uns.ac.id/2011/12/22/pengelolaan-arsip-berbasis-elektronik/>
- [2] Prof. dr. Jumadi, M.Pd (2013) Pengertian & Ruang Lingkup Elektronika. [Hhttp://staff.uny.ac.id/dosen/prof-dr-jumadi-mpd](http://staff.uny.ac.id/dosen/prof-dr-jumadi-mpd).
- [3] Naufal Assagaf(2012) Mengenal & Menggunakan Google Drive.<http://www.cloudindonesia.or.id/mengenal-menggunakan-google-drive.html>.

PROCEEDINGS

3rd ICETD 2014



Hosted By :
Faculty of Engineering and Faculty of Computer Science
Bandar Lampung University, Indonesia