

# INTERNATIONAL CONFERENCE



The Second International Conference on  
Engineering and Technology Development

# 2<sup>nd</sup> ICETD 2013

27, 28, 29 August 2013, Bandar Lampung, Indonesia



**PROCEEDINGS**



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Hosted by :

Faculty of Engineering and Faculty of Computer Science,  
Bandar Lampung University (UBL), Indonesia

# 2<sup>nd</sup> ICETD 2013

THE SECOND INTERNATIONAL CONFERENCE  
ON ENGINEERING AND TECHNOLOGY DEVELOPMENT

28 -30 January 2013  
Bandar Lampung University (UBL)  
Lampung, Indonesia

## PROCEEDINGS

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## 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 ( 2<sup>nd</sup> ICETD 2013) organizing committee, we are very pleased with the very good response especially from the keynote speaker and from the participans. 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, APTIKOM – 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, Starch Technology Center – Lampung, Universitas Islam Indonesia – Indonesia, Politeknik Negeri Malang – Malang, University of Kitakyushu – Japan, Gadjah Mada University – Indonesia, Universitas Malahayati – Lampung, Lampung University – lampung, Starch Technology Center – Lampung, Universitas Riau – Riau, Hasanuddin University – Indonesia, Diponegoro University – Indonesia, King Abdulaziz University – Saudi Arabia, Parahyangan Catholic University – Indonesia , National Taiwan University– Taiwan, Surakarta Christian University – Indonesia, Sugijapranata Catholic University – Indonesia, Semarang University – Indonesia, University of Brawijaya – Indonesia, PPKIA Tarakanita Rahmawati – Indonesia, Kyushu University, Fukuoka – Japan, Science and Technology Beijing – China, Institut Teknologi Sepuluh Nopember – Surabaya, Researcher of Starch Technology Center, Universitas Muhammadiyah Metro – Metro, National University of Malaysia – Malaysia.

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 gratefull 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, 29 August 2013-08-26

Mustofa Usman, Ph.D  
2<sup>nd</sup> ICETD Chairman

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## COMPARATIVE PERFORMANCE ANALYSIS OF BANKING FOR IMPLEMENTING INTERNET BANKING

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**Abstract-***Internet Banking is the application of information technology in the world of network-based digital perbankan. In i-banking businesses, customers are given the convenience of doing a variety of activities offered by the banking transactions via access of internet. For banks, i-banking is a strategy to compete. Expected to achieve efficiency and effectiveness by cutting marketing and distribution channels and a variety of financing. With the efficiency and effectiveness is achieved it will affect the performance of the bank itself. The purpose of the research object seven banks, namely Bank International Indonesia Tbk. (BII), Bank Central Asia Tbk. (BCA), Bank Lippo Tbk., Bank Niaga Tbk., Bank Permata Tbk., Bank Danamon Tbk., Bank Mandiri Tbk. is to determine the extent of the significance of financial performance on the seven banks before and after application of i-Banking. This study uses a case study approach to the comparative method Hypothesis testing is done with t-test. Data used are secondary data from financial statements of the Securities Exchange Jakarta. Kemudian of one variable with another variable than whether there are differences between the financial performance of banks at the time before and after application of i-Banking. Dalam measuring the financial performance, use two indicators, namely return on assets (ROA) and Return on Equity (ROE).*

*Keyword : Banking Performance*

### I. INTRODUCTION

Information technology that is able to eliminate both geographical boundaries and time also are global or international. For the banks themselves, through internet banking services can reduce the cost of operasioanal because it saves the costs incurred for the transaction if the customer does not use i-Banking. For banks, i-Banking is a strategy to compete. Expected to achieve efficiency and effectiveness by cutting marketing and

distribution channels and a variety of financing so that profits can be increased. With the efficiency and effectiveness is achieved it will affect the performance of the bank itself. If the performance is good then achievement will also be good.

### II. LITERATURE REVIEW

Kohler in "Kohler's Dictionary for Accountants" which is edited by Cooper and Yujii (1984: 32) states that: "To analyze is to determine or examine the

composition of an item, account, or amount, usually by reference by its historical origin; particularly (auditing) to review and set forth in working paper the details of classified summary of items in an account, obtained or substantiated, where necessary, by reference to sources and accompanied by explanation of major items and by cross-references to related account, or to interpret or draw conclusions from a financial statement. "

#### Differences in e-Business with E-Commerce

According Richardus Eko Indrajit in his book Concepts and Applications e-Business e-Business domain concept is much broader than e-commerce. While the domain of e-Tailing be cored trade mechanism between the company and consumers directly. Which seen in this context is a notion that the mechanism of e-commerce focused on electronic transaction activities on two or more entities bisnis. Mean while e-Business has a broader scope . e-Businesssecara common activities in the company, either directly or indirectly associated with the process of exchanging goods and services (business) to take advantage of digital technology. In other words, the whole set of processes that are often encountered in business activities into the e-Business domain, as is often encountered in many applications of the stem such information Supply Chain Management, Customer Relationship Management and Enterprise Resource Systems.

### III. EMPIRICAL STUDY

#### Security for Internet Banking

Each bank has a security system different. Here is a security system that is commonly used by Budi Rahardjo's journal entitled Technology and Security

#### Aspects of Internet Banking padatahun2001:

1. SSL 128-bit  
SSL or Secure Socket Layer is generally the first layer of security commonly used in the banking world. By using this SSL, all data sent from the server to the client computer and vice versa through the encryption process always (random in the system) by using 128-bit password known only to the client computer and the server.
2. User ID and Password  
The second layer of security is where each user is a i-Banking customers will get a User ID and password that can be molded itself. This password can be changed at any time by the bank nasabah. Biasanya recommends that customers change their password periodically. One Time Password Technology is also used to authenticate customers who want to do transaksi. Bank Central Asia (BCA) has applied this system through Key Bank making this site be the safest at this time.
3. WIN or TIN (Tele Identification Number)  
VPIN or TIN is either secret password consists of 6 digits for transactions made through Electronic Banking including i-Banking. Sebagai password, customers only need to enter two digits of the six-digit random VPIN or her TIN.
4. Firewall  
Firewall serves to restrict access to unauthorized users.
5. Re Auto login and logout  
Another layer of safety is the auto logout and relogin. If the i-Banking

users inactive for 5 minutes then the server will ask for a User ID and Password and when the user is inactive for 20 minutes then automatically i-Banking will logout.

Currently banks that provide i-Banking in Indonesia at an advanced level is BCA, Lippo Bank, BII, Bank Permata, Bank Niaga, Citibank, Bank Mandiri, BNI 46, Bank Ekonomi, Bank Haga and Bank Danamon.

### ANALYSIS OF RESULTS

Here is banking rankings show the best performance on the test approached significance level t-test:

**Tabel 1 Banking Performance Rating**

Rank	Banking	t	Result
1	BankNiagaTbk.	-11,125	-12,706 < -11,125 < 12,706
2	Bank Central Asia Tbk.	-2,120	-12,706 < -2,120 < 12,706
3	Bank Lippo Tbk.	-1,983	-12,706 < -1,983 < 12,706
4	Bank Danamon Tbk.	-1,691	-12,706 < -1,691 < 12,706
5	Bank International	-1,145	-12,706 < -1,145 < 12,706
6	Bank Mandiri Tbk.	0,930	-12,706 < 0,930 < 12,706
7	Bank Permata Tbk.	1,060	-12,706 < 1,060 < 12,706

It can be concluded, although the tally of the average level of financial performance showed an increase in performance of some specific bank in the period after the implementation of i-Banking, but testing t-test showed that there was no difference in the financial performance of banks before and after application of i-Banking .No difference is due to the total assets at the time of application of the i-Banking larger because a large investment in the

system i-Banking. While returns in the form of net income can not be seen in that year, but gradually the long term beside equity can grow large because of the capital requirements for the implementation of i-Banking. The return system also can not be seen in it as well because it takes a long time .The application of electronic banking, including the i-Banking, is one of the strategies that focus on customer satisfaction so that the necessary range.

### IV. CONCLUSION

Comparison of performance of banks before and after the application of internet banking

- a. Although the results of the calculation of the average level of financial performance showed an increase in performance of some banks in the period after application of i-Banking, but testing of t-test showed that there is no difference in the financial performance of banks before and after application of i-Banking.
- b. Financial performance conditions showed good results as there improvement in financial ratios, but not enough because it only a bit of financial ratios in the year prior to the application of i-Banking shows the results minus.
- c. Nevertheless, the banking rankings show the best performance approach to test the level of significance t-test is Bank Niaga Tbk., Bank Central Asia Tbk. (BCA), Bank Lippo Tbk., Bank Danamon Tbk., Bank International Indonesia Tbk. (BII), Bank Mandiri Tbk., and Bank Permata Tbk.

Longer time to see results especially if it's to see banking sector. These performance can be happened because performance is not only seen as net income from profits only, but the company's ability to manage

its investments to generate profits. The absence of this difference is also caused by Indonesian banks are in transition unstable economy affecting financial performance for several past years . i-Banking strategy are expected to improve the performance of banks in terms of both service improvement and facilitate client and future strategies in the face of globalization the digital world.

#### ACKNOWLEDGEMENT

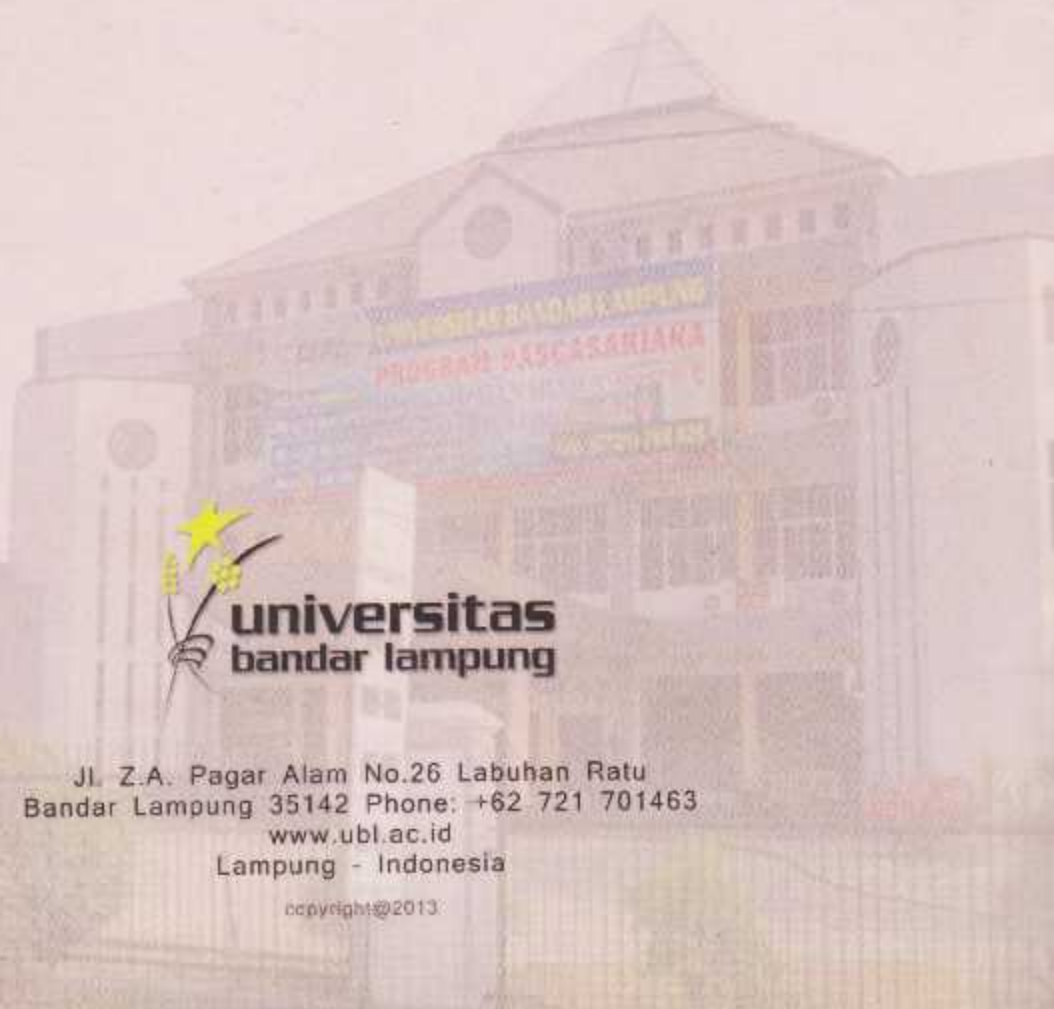
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#### REFERENCES.

- [1] Arikunto, Suharsimi, 2002 **Prosedur Penelitian: Suatu Pendekatan Praktek**. Edisi Revisi V. Jakarta: Rineka Cipta.
- [2] Gibson, A. Charles, 1992. **Financial Statement Analysis**.5th ed. New York: South Western Publishing.
- [3] Ikatan Akuntansi Indonesia, 2004, **Standar Akuntansi Keuangan**. Buku Satu, Jakarta: Salemba Empat.
- [4] Indrajit, E.Richardus, 2002.**Konsep dan Aplikasi e-Business**.Edisi 1.Yogyakarta: Andi.
- [5] Kasmir, 2001.**Manajemen Perbankan**. Cetakan ke-2. Jakarta: PT Raja Grasindo Persada.
- [6] Kasmir, 2003. **Dasar-Dasar Perbankan**. Cetakan ke-2. Jakarta: PT RajaGrasindo Persada.
- [7] Mulyadi, 2001.**Akuntansi Manajemen, Konsep, Manfaat, dan Rekayasa**. Yogyakarta: STIE Yayasan Keluarga Pahlawan Negara.
- [8] Munawir, S, 2004. **Analisis Laporan Keuangan**. Edisi 4. Yogyakarta: Liberty.
- [9] Sartono, R. Agus, 2001. **Manajemen Keuangan Teori dan Aplikasi**.Edisi 4.Yogyakarta: BPFE.
- [10] Sugiyono. 2004. **Statistik Untuk Penelitian**. Cetakan ke-6. Bandung: Alfabeta.
- [11] Susilo, Y. Sri., Triandaru, Sigit. , Santoso, Totok Budi, 2000. **Bank dan Lembaga Keuangan Lain**.Cetakan Pertama. Jakarta: Salemba Empat.
- [12] Van Home, James C. and Wachowicz, John M, Jr, 2005.**Fundamentals of Financial Managenent**. Edisi 12. Jakarta: Salemba Empat..
- [13] Weston, J. Fred and Copeland E. Thomas, Alih Bahasa Oleh Joko Wasana &Kribandoko, 1992.**Financial Management**.Edisi ke-8. Jakarta: Erlagg







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