B.1. CORRESPONDENCE

TYPE	:	Hasil Penelitian Atau Pemikiran Yang Dipublikasikan Jurnal Ilmiah Internasional terindeks Scopus
TITLE	:	**THE ANALYSIS OF EFFECTIVENESS MEASUREMENT IN ACCOUNTING INFORMATION SYSTEMS THROUGH COMPETENCE FACTOR OF INFORMATION SYSTEM USER (Research on Higher Education in Bandung)**
AUTHORS	:	Lilis Puspitawati
CORRESPOMDENCE	:	Lilis Puspitawati
PUBLISHER	:	International Journal Of Applied Business And Economic Research
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I. CORRESPONDENCE LIST

NO	DATE	DESCRIPTION
1	13 October 2015	Submit Full Paper
2	15 November 2015	The 1st Revision Full Paper
3	20 November 2015	Submit revision Paper
4	15 Desember 2015	The 2nd Revised Full Paper
5	23 Desember	Submit revision paper
5	11 Februari 2016	Article Accepted
5	11 Maret 2016	Article Published

2. CORRESPONDENCE ACTIVITY
2.1. THE 1ST ARTICLE REVISION
Table of correction

Manuscript Name & Code	:	THE ANALYSIS OF EFFECTIVENESS MEASUREMENT IN ACCOUNTING INFORMATION SYSTEMS THROUGH COMPETENCE FACTOR OF INFORMATION SYSTEM USER (Research on Higher Education in Bandung) ICO2-32

NO	REVIEWER COMMENTS	AUTHOR'S COMMENTS/RESPONSE
1	**Abstract and Title** it is necessary to explain the research objectives	has been corrected according to the reviewer's direction
2	**Introduction** a. Need explain the significances of previous researches related with your research, and describe how your research extend or different from the previous researches. b. The last paragraph should include purpose and brief method of your research explicitly	has been corrected according to the reviewer's direction
3	**Research Method** a. describe specifically and explicitly the method implemented in your research and how the method is relevant to your research b. Need an explanation regarding the descriptive data processing carried out	has been corrected according to the reviewer's direction

4	Research Result: a. The results of data processing are presented in the attachment b. Use formula and give a number of equation	has been corrected according to the reviewer's direction
5	The Discussion Describe the results of your research more explicitly and explain your research novelty	has been corrected according to the reviewer's direction

Paper with reviewer comment

THE ANALYSIS OF EFFECTIVENESS MEASUREMENT IN ACCOUNTING INFORMATION SYSTEMS THROUGH COMPETENCE FACTOR OF INFORMATION SYSTEM USER

(Research on Higher Education in Bandung)

Lilis Puspitawati [1]

Abstract

Various facts of findings indicate that there is still the usage of Accounting Information Systems which are less effective in various organizations in Indonesia that are caused by the information system which is not integrated, the reporting and recording of transactions which have not been optimal. Besides that there are users who do not have the knowledge and skill (competency). Based on this phenomenon the purpose of this study implementation is to determine the effect of user competence on the effectiveness of Accounting Information System at financial accounting division on Higher Education in Bandung city-Indonesia.

This study uses *descriptive* and *explanatory research* methods. The population in this study is 60 colleges which are located in Bandung city-Indonesia. The number of samples is determined using Slovin formula based on *probability sampling* method. The number of samples which are used in this study is 37 universities. The data quality is tested by Validity and Reliability test. The statistical test which is used is structural equation modelling (SEM) based on component or variance which is known as Partial Least Square (PLS) and the hypothesis test is by using SPSS 2.0 for Microsoft Windows. The study results show that user competence gives significant positive effect on the effectiveness of Accounting Information Systems at Financial Accounting Division on Higher Education in Bandung city-Indonesia.

Author
it is necessary to explain the research objectives

The other Accounting Information Systems issues is related to Reporting and Recording problem of transactions as proposed by Hadi Purnomo (Chairman of BPK RI, 2013) which states that Accounting Information System of state finance is still weak and has not been effective due to the problem of inconsistent reporting. Furthermore Ani Rahmawati (Budget DG of Ministry of Fund, 2013) states accounting information system of state finances is still weak due to the transaction recording has not been adequate, Ali Masykur Musa (Member of BPK-RI, 2013) reveals Accounting Information System at Ministry of Marine and Fishery is still not good because of the property and supplies recording are inadequate), here in after Rizal Zalil (Chairman of BPK-RI, 2014) states that the weak AIS of State finances causes loss in State Treasury, and Achsanul Qosasih (members of BPK-RI, 2015) states that 14 BUMN have not been accountable in managing State finances.

The effective Accounting Information System must involve the understanding of how people work and the social practices involved inside it (Indeje and Zheng, 2010: 4). User competence is one of the factors that influence the success or failure of an organization/company in implementing information systems (O'Brien and Maracas, 2009). The philosophy of user-oriented accounting information system designing indicates the importance of attitude and approach to systems development that consciously consider the user should be involved in designing applications (Bodnar and Hapwood, 2004: 25).

O 'Hagan (2007: 17) defines user competence as the product of *knowledge, skills*/expertise and *values*. Mejia, Balkin & Cardi (2010) define competence as the inherent characteristics of individuals which are associated with the success of a person/individual performance. Sterwart & Brown (2011, 22) user competence shows knowledge, skills and abilities which are needed by individuals to display the desired behaviour.

Based on various findings conditions in the field there are still many users of accounting information systems who are not competent as stated by Supomo Pradjodihardjo (2009, experts BPK) that there are still many local officials with the interest in Accounting field do not have the knowledge and understanding (competence) about accounting information systems. Furthermore Bagus Rumbogo (Bappenas, 2009) states there are still many financial officers or staffs who do not have knowledge and skills/expertise in accounting field. Indratjahja (Ministry of Home Affairs, 2009) that Human Resources at both central and regional level are recognized incompetent in handling the accounting information system of the State Finance.

The results of research which is conducted by Jong Min Choe (1996), Deghanzade et.al (2011), and Taber et.al (2014) produce empirical evidence that there is a significant positive effect between user competence of Information System to the performance of Accounting Information

Author
Need explain the significances of previous researches related with your research, and describe how your research extend or different from the previous researches.

Author
The last paragraph should include purpose and brief method of your research explicitly.

follows: "**Users Competence influence the Effectiveness of Accounting Information Systems**".

3. Research Method

The research method that is used in this research is descriptive method and explanatory research. Descriptive methods are often designed to collect data that describes the characteristics of a person, event or specific situation (Sekaran & Bogie, 2014: 97), while explanatory research method is the method that is used for research which aims to explain the causal relation between variables (cooper and schindler, 2006: 154).

Research Variables

In this study, the research variables can be identified as follows:

a. **Users Competence (X)**

To measure user competence it is used Dimensions and Indicators as follows:

1. **Knowledge Dimension**
2. **Skill/Ability Dimension** use indicators

b. **The Effectiveness of Accounting Information Systems (Y)**

Dimensions and indicators to measure the effectiveness of Accounting Information Systems are:

1. **User Satisfaction Dimension** (Boockholdt.1999; Stair & Reynold. 2012, Heidmann. 2008, Nicolau .2000),
2. **System Use Dimension** (Romney & Steinbart. 2006; Duggan & Reichgelt. 2006, Barrier 2002, Davis.1989, Venkantesh.2003),

Population, Unit of analysis, Unit of observation and Research Sample

Population according to Sekaran and Bogie (2010: 262) is described as "*the entire group of people, events, or things of interest that researcher wishes to Investigate*". Collection or group which is referred to in the study can be objects, people, symptoms, events or other matters that have certain characteristics to clarify the research problem (Kerlinger, 1992). Based on this statement, the population in this study are Public and Private Universities in Bandung City Region which have been using accounting information system in the financial reporting system of 60 universities.

Unit of analysis is a thing/a person/a member of population (Sekaran & Bogie, 2010: 263), which are units (person, group, institution, etc.) that the information will be collected (Babbie.1983: 146). The unit of analysis in this research is Public and Private Universities in Bandung City Region which have been using accounting information system in the financial reporting system.

Unit of observation or units of data collection is an element or group of units of analysis which information will be collected. Thus the unit of

According to Imam Ghozali (2008), partial least square (PLS) is a powerful analytical method therefore it is not based on many assumptions. The data does not have to distribute multivariate normal and the sample size also does not have to be big. Although partial least square is used to confirm the theory, but it can also be used to explain whether there is relation between latent variables. With the following steps:

a. Step One: Designing Structural Model (*inner model*)
b. Step Two: Designing Measurements Model (*outer model*)
c. Step Three: Constructing Path diagram
d. Step Four: Conversion Path diagram into Equation System
e. Step Five: Estimation
f. Step Six: *Goodness of Fit*
g. Step Seven: Testing Hypotheses

The structural model in this study can be described as follows:

Fig. 2.2
Structural model of research

Author
There isn't any the structural model

4. Research Results and Discussion

Higher educations that become the research samples (unit of analysis) are 37 universities with 74 employees as respondents. The number of respondents who returned the questionnaire is 50 respondents, or 67.6% with a number of research place/unit of observation are 34 universities or 91.9%. Based on the 50 questionnaires which are returned, all of them can be processed because as all of the research places are directly visited.

4.1 Research Results

Before analysing the data further, it will be tested for validity and reliability of research data.

Author
The results of data processing are presented in the attachment.

Validity Test

✓ The validity test results show the seventh questionnaire statement items of User Competence (X) has value of $r_{count} > 0.30$ so that it can be concluded that **all variable items of User Competence (X) is valid**. This means that the measuring instrument in the form of a questionnaire statement has had a good level of validity which means it can measure variable of User Competence (X) that is studied.

✓ The validity test results from the eight questions item to test **the Effectiveness of Accounting Information System** variable **(Y)** shows that the eight items of questionnaire statement has value of

already explained that to test whether a measuring tool is valid or not, it is used statistical approaches, it is through correlation coefficient value of statement item score with its total score. The smallest validity coefficient value which is considered valid is r> 0.3. It is suggested that correlation coefficient between 0.30-0.40 is generally high (*Kaplan-Saccuzzo* 2009: 140). If correlation coefficient of statement item with other items total score is > 0.30, then the statement is declared valid.

Test Of Reliability (Reliability Test)

The instrument which is reliable is an instrument when it is used several times to measure the same object will generate the same data (Sugiyono, 2005: 109). According to Cooper (2010: 43) reliability is: "*Reliability is a characteristic of measurement concerned with accuracy, precision, and consistency*. Reliability can be interpreted as a characteristic which is associated with accuracy, precision and consistency.

In this study, the method which is used to test reliability is *Split Half Method* (*Spearman-Brown Correlation*) split half technique. This method calculates reliability by providing a test on a number of subjects and then the test results are divided into two equal parts (by selecting the even-odd). Suggested reliability coefficient value between 0.70-0.80 is good enough for basic research purpose (*Kaplan-Saccuzzo* 2009: 125). Value r> 0.7 is said that the questionnaire is Reliable.

Data Analysis Methods

The data analysis in this study is conducted with descriptive analysis and verification. Descriptive analysis aims to obtain a description of each study variable characteristics. Make it easier to interpret the variables which are being studied, it is performed categorization of the respondent scores which uses an average value of respondent scores. Categorization scores uses inter-quartile range as it is proposed by Cooper & Schindler (2006; 467) for ordinal data or interval data which has an asymmetric distribution, central tendency measurement can be done through the distribution of inter-quartile range. The first quartile is the 25th percentile, the second quartile (median) is the 50th percentile and the third quartile is 75th percentile.

Further verification analysis which is used to test the hypothesis in this study is *structural equation modelling* (*SEM*) which is component or variance-based that is known as *Partial Least Square* (*PLS*). This analysis tools are chosen on the consideration of limited samples number, of which the samples number in this study is only 55 districts / cities and are not eligible to use *structural equation modelling* (*SEM*) which is *covariance*-based.

Author
need an explanation regarding the descriptive data processing carried out.

incompetent in using information systems. The incompetent users after conducted research have considerable expertise. It means that there are still many system users who do not have the physical/cognitive skills, analytical skill and creativity in operating information systems so that they have many obstacles and difficulties in operating accounting information system.

Descriptive Analysis of the Effectiveness of Accounting Information Systems Variable

✓ Effectiveness of Accounting Information Systems Variable was measured by using two dimensions (user satisfaction and System Use) with eight indicators. Calculation results of *grand mean* score of respondents about the Effectiveness of Accounting Information System (*table ...... in annex*) of 3.92 is at the third quartile (Q_3) or interval 3-4 is included in the category **good enough**. The amount of 3.92 which is obtained is equivalent to 78.4% (3.92/5 x 100). The scores which are obtained do not reach 100% as it is expected, so there is a gap of 21.6% between the ideal levels which is expected with the actual condition. This gap shows the effectiveness of Accounting Information System has not reached the ideal level which means that the conditions of accounting information system have not been effective to allow it can happen and it answers the phenomenon mentioned earlier.

✓ Based on research result data, **user satisfaction dimension** and **system usage dimension** are included in the category good enough (*see table .... in the annex*). This condition shows accounting information system has not been effectively implemented in the company because the user is not satisfied with the information system applications which are available in the company, the dissatisfaction is triggered because of the flexibility and accessible accounting information systems are inadequate and the user has not maximize the use of information systems for security, integration and availability of information systems which have not been assessed adequately.

The results of verification testing (Testing of Statistics)

Designing Structural Model (*inner model*)

Based on the results of statistical data processing, Structural Model can be described as follows:

$$\eta_1 = 0{,}383\xi_1 + 0{,}290$$

Testing of Measurement Model (*outer model*)

Author
Use formula and give a number of equation

Accounting Information System

Based on the results of hypothesis testing it showed that the relation between User Competence and the Effectiveness of Accounting Information Systems variables indicated by path coefficient value of 0,383 with t_{count} of 2.401 *(table ... in the annex)*. The t-statistic value is greater than $t_{critical}$ (1.960), which means User Competence influence the effectiveness of Accounting Information Systems.

The amount of direct influence of Users Competence on the effectiveness of Accounting Information System is equal to (0.383×0.383×100%) = **14.6%**. While the influence of User Competence on the Effectiveness of Accounting Information System is indirectly because of the relation with Quality of Information Technology (0.383×0.632×0.547×100%) = **13.2%**. The amount of total influence of User Competence on the Effectiveness of Accounting Information Systems is **27.9%**.

4.2. Discussion of Research Results
The influence Users Competence on the Effectiveness of Accounting Information Systems.

The effective use of information systems requires clear/definite knowledge and expertise (Mc. Leod & Schell, 2007: 9). Ward & Peppard (2002: 115) suggests development of human resources and competence of information systems users will increase the success of information system usage in an organization. Furthermore, the statement is reinforced by Gelinas & Dull (2008: 26), in his statement that the development process of accounting information system can effectively run. The user must have adequate knowledge about the system development.

Based on the research results can be demonstrated that the ineffectiveness of Accounting Information Systems is caused by the user is not satisfied in using the accounting information system and the lack of accounting information systems usage in the company. Results of the questionnaire answers show that dissatisfaction of users on accounting information systems in the company is because of accounting information system that is considered is not able to adapt well (it is not flexible yet) besides users feel the difficulty in accessing accounting information systems in the company. Furthermore, the system usage which is not optimal is due to accounting information system that is available in the company is not easy to use, it has not had an adequate security level, it has not been well integrated and it often has an error/interference so as it is not ready to use.

There are information system users who are not competent in various institutions in Indonesia. It can be re-proven based on the research result which is conducted at universities in Bandung city. Based on the research result, there is still found the level of users competence which has not been

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2.2. THE 2ND ARTICLE REVISION.

TABLE OF CORRECTION

Manuscript Title	THE ANALYSIS OF EFFECTIVENESS MEASUREMENT IN ACCOUNTING INFORMATION SYSTEMS THROUGH COMPETENCE FACTOR OF INFORMATION SYSTEM USER (Research on Higher Education in Bandung) ICO2-32

NO	REVIEWER COMMENTS	AUTHOR'S COMMENTS/RESPONSE
1	**Introduction:** Additional analysis of previous research results is needed to strengthen the novelty of the research	has been corrected according to the reviewer's direction
2	**Framework and Hypothesis :** A more in-depth explanation of the relationship between the variables studied is needed	has been corrected according to the reviewer's direction
3	**Research Method:** Need explanation about indicators in this research	has been corrected according to the reviewer's direction
4	**References:** Use the latest references for at least the last 5 years	has been corrected according to the reviewer's direction

Reviewer comments in the introduction

THE ANALYSIS OF EFFECTIVENESS
MEASUREMENT IN ACCOUNTING
INFORMATION SYSTEMS THROUGH
COMPETENCE FACTOR OF
INFORMATION SYSTEM USER

(Research on Higher Education in Bandung)

Lilis Puspitawati [1]

Abstract

Various facts of findings indicate that there is still the usage of Accounting Information Systems which are less effective in various organizations in Indonesia that are caused by the information system which is not integrated, the reporting and recording of transactions which have not been optimal. Besides that there are users who do not have the knowledge and skill (competency). Based on this phenomenon the purpose of this study implementation is to determine the effect of user competence on the effectiveness of Accounting Information System at financial accounting division on Higher Education in Bandung city-Indonesia.

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Key Word: User Competence, the Effectiveness of Information Systems, User Satisfaction and System Usage.

1. **INTRODUCTION**

Information system is not in a vacuum environment. Information system is an integral part of the company it serves. Therefore information system has a close relationship with the physical operation and organization of the company (Wilkinson, 1993: 33). The information system supports the company's daily operations which are carried out by the personnel of the company so it can determine whether their work has been efficient and effective (Hall, 2011: 14).

Accounting Information System is one of the most important information systems in an organization (Wilkinson; 1992: 18). Accounting

> **Author**
> Additional analysis of previous research results is needed to strengthen the novelty of the research

reviewer comments in the framework and Hypotheses

2.2. Framework and Hypotheses

Effective use of information systems requires clear/definite knowledge and expertise. Information specialists will use their expertise and knowledge all the time. Users will use their skills and knowledge in using computer at the relevant level (*The development of Information systems requires certain knowledge and skill. Information specialists apply this knowledge and skill on a full time-basis. Users apply them when they engage in end user computing to any degree*). (Mc. Leod & Schell, 2007: 9).

Ward & Peppard (2002: 115) reveals human resource development and competence of information systems users will increase the success of information systems usage in an organization. (*Developing the appropriate resources and user competencies to deploy Information System successfully across the Organization*). Furthermore Gelinnas & Dull (2008: 26) argues that the accounting information system development process to be effective, user must have adequate knowledge about system development. (*To be effective in the AIS design process, the users must have knowledge the systems are developed*). In line with Mc.Leod & Schell (2007: 9) and Ward & Peppard (2002: 115), Curtis and Cobham (2005: 592) states that accounting information system which is designed to incorporate elements of user competence will increase job satisfaction and information system will function effectively (*Information systems are designed with the personal competence, job satisfaction will be improved and information system will function effectively*).

Furthermore Azhar Susanto (2008: 370) suggests several reasons that cause failure in the application of information systems, the causes of failure are:

1. Unavailable knowledge which users owned so that they are not willing to make decisions or to give their views, because users less understand the impact of their decision.
2. Lack of experience in decision making because of environmental culture that does not support and lack of support from the

Author
A more in-depth explanation of the relationship between the variables studied is needed

reviewer comments in the research methods

data that describes the characteristics of a person, event or specific situation (Sekaran & Bogie, 2014: 97), while explanatory research method is the method that is used for research which aims to explain the causal relation between variables (cooper and schindler, 2006: 154).

Research Variables

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   To measure user competence it is used Dimensions and Indicators as follows:
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Author
Need explanation about indicators in this research

Reviewer comments in the References

<table>
<tr><td>

REFERENCES
</td><td>

Author
Use the latest references for at least the last 5 years
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Abdul Hossein Talebi, et.al. 2013. The Influence if Information Technology on the efficiency of the acccounting information systems in iran hotel industry. *International Research Journal Of Applied and Basic Science.* Vol 4. No. 8.

AL, Nicolau. 2000. A Contigency Model Perceived Effectiveness in Accounting Information Systems. Organizational Condition and Controll Effect. *International Journal of Accounting Information System.* Vol 1. No. 2.

Amoroso, D.L And Chenney, P.H. (1991). Testing A Causal Model of End-User Application Effectiveness. *Journal of Management Information System.* 8 (1). Pp. 63-89.

Azhar Susanto. 2004. Sistem Informasi Akuntansi. Bandung: Lingga Jaya.

Azhar Susanto. 2008. *Sistem Informasi Akuntnsi : Struktur Pengendalian Risiko Pengembangan.* Bandung: Lingga Jaya.

2.3. FULL ARTICLE ACCEPTED (LOA and Publication)

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Feb 11, 2016

PAYMENT INVOICE

LilisPuspitawati
Indonesia Computer University.

Manuscript ID: ICO2-32

Manuscript Title: **The Analysis of Effectiveness Measurement in Accounting Information Systems through Competence Factor of Information System User (Research on Higher Education in Bandung)**

We are pleased to share with you that our scientific & review committee has recommended your article (paper ID: ICO2-32) with paper title: "The Analysis of Effectiveness Measurement in Accounting Information Systems through Competence Factor of Information System User (Research on Higher Education in Bandung)" to be accepted for publication in Scopus indexed Journal of "International Journal of Applied, Business and Economic Research." Abstracting and indexation information about this journal is available on the following webpage.

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Please give your written consent by responding to this email that you are willing to publish your article in this journal and you are willing to pay the publication fee. To make the publication process, speedy we appreciate to receive your consent and the publication fee till 18th Feb, 2016. If you missed this deadline, your paper will be considered for the next round of publication which may take a longer period.

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Articles

THE ANALYSIS OF EFFECTIVENESS MEASUREMENT IN ACCOUNTING INFORMATION SYSTEMS THROUGH COMPETENCE FACTOR OF INFORMATION SYSTEM USER (Research on Higher Education in Bandung)

Author :- Lilis Puspitawati

Volume :- No.14 (2016)   Issue No :- 2 (2016)   Pages :- 815-841

Abstract   Article PDF

THE CHRONOLOGY OF ENTREPRENEURIAL MARKETING DEFINITIONS

Author :- Aldina Shiratina, Umi Narimawati, and Yuyus Suryana

Volume :- No.14 (2016)   Issue No :- 2 (2016)   Pages :- 843-850

Abstract   Article PDF

CASE STUDY ON COMMUNICATION MANAGEMENT IN IMPLEMENTING CORPORATE SOCIAL RESPONSIBILITY THROUGH SMALL-MEDIUM ENTERPRISE (SME) AS A WAY TO IMPROVE SUSTAINABLE PROSPERITY AND RELATIONSHIP WITH THE SOCIETY

Author :- Desayu Eka Surya, S.Sos., M.Si.

Volume :- No.14 (2016)   Issue No :- 2 (2016)   Pages :- 851-870

Abstract   Article PDF

THE ANALYSIS OF EFFECTIVENESS MEASUREMENT IN ACCOUNTING INFORMATION SYSTEMS THROUGH COMPETENCE FACTOR OF INFORMATION SYSTEM USER
(Research on Higher Education in Bandung)

Lilis Puspitawati[1]

Abstract: *Accounting Information Systems exists in all forms of organization (Bockholdt, 1999: 1). Organization will depend on Accounting Information Systems for competitiveness (Bodnar & Hapwood, 2004: 3). The ability of business competition gives a major impact on the increased use of Accounting Information Systems for company (Laudon and Laudon, 2005: 5).*

Various facts of findings indicate that there is still the usage of Accounting Information Systems which are less effective in various organizations in Indonesia that are caused by the information system which is not integrated, the reporting and recording of transactions which have not been optimal. Besides that there are users who do not have the knowledge and skill (competency). Based on this phenomenon the purpose of this study implementation is to determine the effect of user competence on the effectiveness of Accounting Information System at financial accounting division on Higher Education in Bandung city-Indonesia.

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1. INTRODUCTION

Information system is not in a vacuum environment. Information system is an integral part of the company it serves. Therefore information system has a close relationship with the physical operation and organization of the company (Wilkinson, 1993: 33). The information system supports the company's daily operations which are carried out by the personnel of the company so it can determine whether their work has been efficient and effective (Hall, 2011: 14).

Accounting Information System is one of the most important information systems in an organization (Wilkinson; 1992: 18). Accounting information system touches almost into most of human lives (Wilkinson, et al: 2000: 3). Accounting Information Systems is an "accounting's principal goal" for individuals and organizations. (Barganoff et al, 2010: 1).

All businesses at the level of any size will not be able to survive without accounting information system (Stair & Reynolds; 2010: 4). Accounting information system is built by an organization with the main purpose to process accounting data from various sources into the accounting information needed by the various users to reduce the risks at the time of decision making (Azhar Susanto, 2008: 8).). Accounting information system is needed to carry out planning, control and business operations activities of an organization (Romney, et. al: 1997: 2).

Accounting Information System is a collection (integration) of sub-systems/ components both physical and nonphysical which are interconnected and cooperate each other in harmony to process transaction data that is related to financial problems into financial information (Azhar Susanto, 2008: 72). Romney et al (2006: 2) states that accounting information system is a data processing and transactions to provide the information which is needed by *User* for their planning, controlling and business operations.

Accounting information system that is built an organization must be able to provide accounting information that refers to the monitoring of accounting activities, adopts rules and accounting standards, as well as refers to the revenue and expenditure transactions of the organization concerned (Lupasc et al., 2009). Accounting Information System that is effective will add value to organization by providing quality accounting information (accurate and timely). System usage and satisfaction of information user is a measure that is used to assess the effectiveness of information system, De.Lone & Mc. Lean (1992).

This condition occurs when the Application of Accounting Information System which is not effective still occurs in many organizations in Indonesia. Various fact finding indicates there is Accounting Information Systems which is inadequate at various government agencies due to integration issues as proposed by: Anwar

Nasution (Chairman of BPK-RI, 2009) who states that Accounting Information System at the central and local governments have not been integrated, then the statement of Taufiqurohman Ruki (Member of BPK 2011) who states that Accounting Information System at DGT is still weak and has not been integrated because it still found differences of tax revenues recording according to DGT with State Treasury.

The other Accounting Information Systems issues is related to Reporting and Recording problem of transactions as proposed by Hadi Purnomo (Chairman of BPK RI, 2013) which states that Accounting Information System of state finance is still weak and has not been effective due to the problem of inconsistent reporting. Furthermore Ani Rahmawati (Budget DG of Ministry of Fund, 2013) states accounting information system of state finances is still weak due to the transaction recording has not been adequate, Ali Masykur Musa (Member of BPK-RI, 2013) reveals Accounting Information System at Ministry of Marine and Fishery is still not good because of the property and supplies recording are inadequate), here in after Rizal Zalil (Chairman of BPK-RI, 2014) states that the weak AIS of State finances causes loss in State Treasury, and Achsanul Qosasih (members of BPK-RI, 2015) states that 14 BUMN have not been accountable in managing State finances.

The effective Accounting Information System must involve the understanding of how people work and the social practices involved inside it (Indeje and Zheng, 2010: 4). User competence is one of the factors that influence the success or failure of an organization/company in implementing information systems (O'Brien and Maracas, 2009). The philosophy of user-oriented accounting information system designing indicates the importance of attitude and approach to systems development that consciously consider the user should be involved in designing applications (Bodnar and Hapwood, 2004: 25).

O 'Hagan (2007: 17) defines user competence as the product of *knowledge*, *skills*/expertise and *values*. Mejia, Balkin & Cardi (2010) define competence as the inherent characteristics of individuals which are associated with the success of a person/individual performance. Sterwart & Brown (2011, 22) user competence shows knowledge, skills and abilities which are needed by individuals to display the desired behaviour.

Based on various findings conditions in the field there are still many users of accounting information systems who are not competent as stated by Supomo Pradjodihardjo (2009, experts BPK) that there are still many local officials with the interest in Accounting field do not have the knowledge and understanding (competence) about accounting information systems. Furthermore Bagus Rumbogo (Bappenas, 2009) states there are still many financial officers or staffs who do not have knowledge and skills/expertise in accounting field. Indratjahja (Ministry of

Home Affairs, 2009) that Human Resources at both central and regional level are recognized incompetent in handling the accounting information system of the State Finance.

The results of research which is conducted by Jong Min Choe (1996), Deghanzade et.al (2011), and Taber et.al (2014) produce empirical evidence that there is a significant positive effect between user competence of Information System to the performance of Accounting Information Systems. Further research that is conducted by Majed Alsharayri (2012), Petter, DeLone and Mc. Lean (2008), and Research of Najab Eternal et.al (2013) provide empirical evidence that information technology has positive influence on the effectiveness the accounting information system.

2. LITERATURE REVIEW

Accounting Information System

Accounting information system is a set of resources such as people and equipment that are designed to alter financial data (Bodnar & Hapwood, 2010) to produce accounting information (Hall, 2004: 21; Sacer et al, 2006: 61) which is used in decision making process (Laudon and Laudon, 2007: 13) by user either to user internal and external management system (Mitchell et al., 2000). Furthermore, O'Brien & Marakas (2008:30) argue that accounting information system is a set of human resources, *Hardware* and *Software*, data and network.

Accounting Information System Components according to Romney and Steinbart (2006; 3) consists of people, procedures, data, software and information technology infrastructure. According to O'Brien (2005: 10) Accounting Information System components consist of people (*brainware*), information technology (*hardware*, *software* and communication networks) and database then Mc Leod & Schell (2007: 85) and Azhar Susanto (2008: 72) add procedures components in Accounting Information Systems.

The integration of accounting information system components is the company resources in order to achieve substantial advantage (McLeod and Schell, 2007: 29). Integration is the key to successful implementation of information system. Integrated information system will generate information that is accurate, timely, and consistent for management (Rodin-Brown, 2008).

Researchers in Information Systems field examine the definition of Accounting Information Systems Effectiveness as a condition of information user satisfaction in getting the desired information (Dehghanzade et al, 2011). According to Nicolaou (2000) The Effectiveness of Information Systems is a condition of the

information availability which is used as a basis for decision-making that is needed by organisation to conduct coordination and control.

According to De.Lone & Mc. Lean (1992), the system usage and information user satisfaction are the measure in assessing the effectiveness of information systems. Furthermore De.Lone & Mc. Lean (1992) adds that the size of information systems usage and Information User Satisfaction can be seen from the point of view system quality, information quality and service quality.

Based on the various descriptions, it can be said the effectiveness of accounting information system is a condition of information user satisfaction on the information it receives which is produced by information system (Dehghanzade. et.al. 2011) as well as the condition of how the system is used in an organization that is seen from the point of view system quality, information quality and service quality (De. Lone & Mc. Lean, 1992 and Pitt, et al, 1995).

User Competence

User competence shows knowledge, skills, and abilities which are required to display the desired behaviour (Sterwart & Brown, 2011: 22). According to Spencer and Spencer (1993: 9) competence is a special characteristic of individual which is reflected in how the individuals think rationally during a long period of time.

According to Ward and Peppard (2002: 393) user competence is a combination of knowledge, skills, expertise and behaviours that exist and spread in individual and organizational processes and can determine how individuals can develop and exploit the expertise (*competency can be considered as a combination of knowledge, skills, expertise and behaviours that reside in the people it deploys and organizational processes that determine how to develop and exploit that expertise*). The similar opinion was expressed by Funk (2005: 33) user competence is a level of performance that shows knowledge, skills and management which have been implemented effectively by individual (*a level of performance demonstrating the effective application of knowledge, skills and Management*).

Spencer & Spencer (1993: 9) further argues that the special characteristics of a person who has competence from the perspective: knowledge, skills/expertise, *Self Concept* (individual perception/concept), and nature/ character/personal traits of a person (*traits*). Dimensions of competence according to Meija et al (2010: 242) are: *Knowledge*, *skills*/expertise, ability (*capability*), Work *Management*, *Character*, and *Commitment*. Dimensions of competence according to Konopaske et al (2009) are the ability, *Knowledge*, *skills*/expertise, behaviour (*attitude*), motivation, and *Stress*.

Knowledge should be owned in building user competence in designing accounting information system, accounting as system users must have knowledge

in the principles of Accounting, Auditing, Information Systems Technology and system development method (Gelinas and Dull, 2008: 26). Information systems users particularly accountant will work effectively it depends on how they have knowledge in accounting information systems and technologies which is used in implementing it. Furthermore Mc. Leod & Schell (2007: 80) suggests the knowledge that must be possessed by system users are: *computer literacy, information literacy, the Business fundamentals, System Theory, System Development and System modelling,* then the skills/expertise that must be possessed is the expertise in terms of: communication, the ability to analyse, creativity, and leadership. Similar opinion is expressed by Kondalkar (2007: 48) that there are two criteria for *skills*/expertise which should be owned by user are: physical skills/expertise and *intellectual* skills/ expertise.

3. RESEARCH MODEL

3.1. Framework and Hipotheses

Effective use of information systems requires clear/definite knowledge and expertise. Information specialists will use their expertise and knowledge all the time. Users will use their skills and knowledge in using computer at the relevant level (*The development of Information systems requires certain knowledge and skill. Information specialists apply this knowledge and skill on a full time-basis. Users apply them when they engage in end user computing to any degree*). (Mc. Leod & Schell, 2007: 9).

Ward & Peppard (2002: 115) reveals human resource development and competence of information systems users will increase the success of information systems usage in an organization. (*Developing the appropriate resources and user competencies to deploy Information System successfully across the Organization*). Furthermore Gelinnas & Dull (2008: 26) argues that the accounting information system development process to be effective, user must have adequate knowledge about system development. (*To be effective in the AIS design process, the users must have knowledge the systems are developed*). In line with Mc.Leod & Schell (2007: 9) and Ward & Peppard (2002: 115), Curtis and Cobham (2005: 592) states that accounting information system which is designed to incorporate elements of user competence will increase job satisfaction and information system will function effectively (*Information systems are designed with the personal competence, job satisfaction will be improved and information system will function effectively*).

Furthermore Azhar Susanto (2008: 370) suggests several reasons that cause failure in the application of information systems, the causes of failure are:
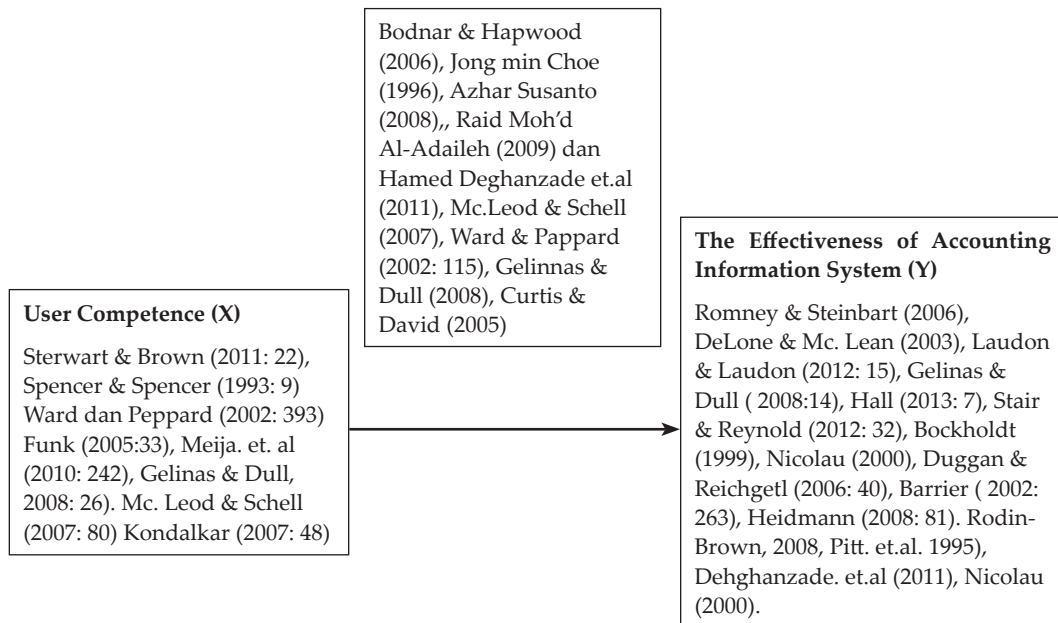
1. Unavailable knowledge which users owned so that they are not willing to make decisions or to give their views, because users less understand the impact of their decision.

2. Lack of experience in decision making because of environmental culture that does not support and lack of support from the organizations in participating to take decision.

3. Decision making is limited to stages that allow users or employees are involved in decision making.

4. Lack of opportunities for testing and lack of opportunity to learn, this arises because of fears of high costs that need to be incurred for these activities.

Based on the concepts which are stated by Azhar Susanto (2008: 370) it can be said that the level of knowledge, experience, and skill affect the effectiveness of information systems.

In line with Azhar Susanto (2008: 370), Bodnar and Hapwood (2006) emphasize the importance of knowledge and expertise of users on Accounting information systems, users should be able to understand the purpose and characteristics of each output so that the output can be maximum utilized. Personnel training are needed in design phase not after the system is run. Finally system must be prepared to accept the changes to be changed after the operation is begun. Users will usually ask for a change. Anticipation of this possibility and the other factors which are mentioned above are important in system design philosophy which is user-oriented.

Many researchers have studied the effect of user competence on the effectiveness of accounting information system. The results of research which are conducted by Jong Min Choe (1996) provide empirical evidence that there is a significant positive effect between of the performance of Information System User competence to Accounting Information System performance. Further the research which is conducted by Deghanzade et.al (2011) provides empirical evidence that education level, education field and skills/expertise in computer field influence the effectiveness of accounting information system. The research which is conducted by Taber et.al (2014) examines the effect of user competence on the effectiveness of Accounting Information System. The results of research which is conducted by Taber et.al (2014) prove that Competence has significant positive effect on the Effectiveness of Accounting Information System.

For more details, framework can be presented in the form of research model in figure 2.1 below:

Figure 1: Research Model

User Competence (X) Sterwart & Brown (2011: 22), Spencer & Spencer (1993: 9) Ward dan Peppard (2002: 393) Funk (2005:33), Meija. et. al (2010: 242), Gelinas & Dull, 2008: 26). Mc. Leod & Schell (2007: 80) Kondalkar (2007: 48)	Bodnar & Hapwood (2006), Jong min Choe (1996), Azhar Susanto (2008),, Raid Moh'd Al-Adaileh (2009) dan Hamed Deghanzade et.al (2011), Mc.Leod & Schell (2007), Ward & Pappard (2002: 115), Gelinnas & Dull (2008), Curtis & David (2005)	The Effectiveness of Accounting Information System (Y) Romney & Steinbart (2006), DeLone & Mc. Lean (2003), Laudon & Laudon (2012: 15), Gelinas & Dull (2008:14), Hall (2013: 7), Stair & Reynold (2012: 32), Bockholdt (1999), Nicolau (2000), Duggan & Reichgetl (2006: 40), Barrier (2002: 263), Heidmann (2008: 81). Rodin-Brown, 2008, Pitt. et.al. 1995), Dehghanzade. et.al (2011), Nicolau (2000).

Based on the framework, the hypothesis in this study can be stated as follows: "**Users Competence influence the Effectiveness of Accounting Information Systems**".

3.2. Research Method

The research method that is used in this research is descriptive method and explanatory research. Descriptive methods are often designed to collect data that describes the characteristics of a person, event or specific situation (Sekaran & Bogie, 2014: 97), while explanatory research method is the method that is used for research which aims to explain the causal relation between variables (cooper and schindler, 2006: 154).

Research Variables

In this study, the research variables can be identified as follows:

i. Users Competence (X)

To measure user competence it is used Dimensions and Indicators as follows:

1. **Knowledge Dimension** use indicators:
    a. Computer & Information literacy

      b. Business fundamentals

      c. System theory

      d. Ability to choose which of several options is the right response

  2. **Skill/Ability Dimension** use indicators:

      a. *Intellectual/cognitive Skill*

      b. *Analitical skill*

      c. *Creativity*

ii. The Effectiveness of Accounting Information Systems (Y)

Dimensions and indicators to measure the effectiveness of Accounting Information Systems are:

1. **User Satisfaction Dimension** (Boockholdt.1999; Stair & Reynold. 2012, Heidmann. 2008, Nicolau. 2000), the indicators are**:**

  1. flexible

  2. accessible

  3. Efficient

  4. Correct and timelly Provides Information

2. **System Use Dimension** (Romney & Steinbart. 2006; Duggan & Reichgelt. 2006, Barrier 2002, Davis.1989, Venkantesh.2003), the indicators are:

  1. security

  2. processing integrity

  3. availability.

  4. Ease to Use & Usefullness

Population, Unit of Analysis, Unit of observation and Research Sample

Population according to Sekaran and Bogie (2010: 262) is described as "*the entire group of people, events, or things of interest that researcher wishes to Investigate*". Collection or group which is referred to in the study can be objects, people, symptoms, events or other matters that have certain characteristics to clarify the research problem (Kerlinger, 1992). Based on this statement, the population in this study are Public and Private Universities in Bandung City Region which have been using accounting information system in the financial reporting system of 60 universities.

    Unit of analysis is a thing/a person/a member of population (Sekaran & Bogie, 2010: 263), which are units (person, group, institution, etc.) that the information will

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be collected (Babbie.1983: 146). The unit of analysis in this research is Public and Private Universities in Bandung City Region which have been using accounting information system in the financial reporting system.

Unit of observation or units of data collection is an element or group of units of analysis which information will be collected. Thus the unit of observation or respondents in this study is a part or financial accounting division as a unit organizer in accounting information systems in university.

Sample according to Sekaran and Bogie (2010: 262) is a small part which is taken from population and sought representing all important elements of population. To narrow population scope it is carried out sampling, sampling uses *probability sampling*, the sampling technique that gives equal opportunity for each element of (members of) the population to be elected as sample members (Sugiyono, 2008: 118). The minimum number of samples which is used is determined by using Slovin formula (Husein Umar, 2003: 141), with the following formula Based on calculations using the formula above, the sample which is used in this study is about 37 public and private universities in Bandung city.

Data Analysis Methods

The data analysis in this study is conducted with descriptive analysis and verification. Descriptive analysis aims to obtain a description of each study variable characteristics. Make it easier to interpret the variables which are being studied, it is performed categorization of the respondent scores which uses an average value of respondent scores. Categorization scores uses inter-quartile range as it is proposed by Cooper & Schindler (2006; 467) for ordinal data or interval data which has an asymmetric distribution, central tendency measurement can be done through the distribution of inter-quartile range. The first quartile is the 25th percentile, the second quartile (median) is the 50th percentile and the third quartile is 75th percentile.

Further verification analysis which is used to test the hypothesis in this study is *structural equation modelling* (*SEM*) which is component or variance-based that is known as *Partial Least Square* (*PLS*). This analysis tools are chosen on the consideration of limited samples number, of which the samples number in this study is only 55 districts / cities and are not eligible to use *structural equation modelling* (*SEM*) which is *covariance*-based.

According to Imam Ghozali (2008), partial least square (PLS) is a powerful analytical method therefore it is not based on many assumptions. The data does not have to distribute multivariate normal and the sample size also does not have to be big. Although partial least square is used to confirm the theory, but it can also be used to explain whether there is relation between latent variables. With the following steps:

   a. Step One: Designing Structural Model (*inner model*)

   b. Step Two: Designing Measurements Model (*outer model*)

   c. Step Three: Constructing Path diagram

   d. Step Four: Conversion Path diagram into Equation System

   e. Step Five: Estimation

   f. Step Six: *Goodness of Fit*

   g. Step Seven: Testing Hypotheses

Higher educations that become the research samples (unit of analysis) are 37 universities with 74 employees as respondents. The number of respondents who returned the questionnaire is 50 respondents, or 67.6% with a number of research place/unit of observation are 34 universities or 91.9%. Based on the 50 questionnaires which are returned, all of them can be processed because as all of the research places are directly visited.

4. DATA ANALYSIS

Before analysing the data further, it will be tested for validity and reliability of research data.

Validity Test

- The validity test results show the seventh questionnaire statement items of User Competence (X) has value of $r_{count} > 0.30$ so that it can be concluded that **all variable items of User Competence (X) is valid**. This means that the measuring instrument in the form of a questionnaire statement has had a good level of validity which means it can measure variable of User Competence (X) that is studied.

- The validity test results from the eight questions item to test **the Effectiveness of Accounting Information System** variable **(Y)** shows that the eight items of questionnaire statement has value of $r_{count} > 0.30$, so it can be concluded that all items of **the Effectiveness of Accounting Information Systems** variable **(Y)** can be said valid. This means that the measuring instrument in the form of a questionnaire statement has had a good level of validity which means it can measure variable of **the Effectiveness of Accounting Information System (Y)** that is studied. *(The recapitulation result is in the table 4.2 annex).*

Reliability Test

Reliability test indicates the trust level in the results of a measurement. According to Kaplan Saccuzo (2009; 125), the criteria of a good reliability test value is in

the range of 0.7 up to 0.8. Based on the research data, reliability test results are good for the **Effectiveness of Accounting Information Systems** variable **(Y)** or **Competence Users** variable **(X)** indicates that the value of r_{count} is greater than 0.7 it can be assumed questionnaire statement as a variables measuring tool which is used in this study is *reliable. (The recapitulation result is in the table 4.3 annex)*

Results of Descriptive Analysis, Results of Respondents

Descriptive Analysis of User Competence Variables

Users Competence variables are measured using 2 dimensions with 7 indicators. Scores categorization uses inter-quartile range as it is proposed by Cooper & Schindler (2006; 467). Based on the research result which is obtained by the respondents' assessment for 7 indicators that is used to measure User Competence variables in this study it is shown in the following table:

- **Dimensions of Knowledge** which are within the scores range of 4.05 are included in **good** category it means than the condition of information system user competency from the knowledge he possesses in general it can be said good. There is phenomenon that user is still incompetent can be answered/explained by respondents score to the Business Fundamental indicator at 3.92 and System Theory Indicator at 3,82 are included in fair category, it means that the information system users do not have sufficient knowledge in Business Fundamentals and System theory. This condition can occur because the information system users which are the respondents in this study few of them who have educational background in accounting field at the level of D3, S1 or S2. As the result, it can be ascertained that the users will have difficulty in understanding the stages in transaction processing and transactions recording / inputting which are related to financial issues. *(The recapitulation scores can be seen table 4.4 in the annex)*

- **Dimension of Skill** is in the scores range of 3.79 it is included in **Fair** category, it means the condition of information system user competency in terms of the skills can generally be categorized in sufficient condition. The results are consistent with a phenomenon that has been noted previously that there are users who are incompetent in using information systems. The incompetent users after conducted research have considerable expertise. It means that there are still many system users who do not have the physical/ cognitive skills, analytical skill and creativity in operating information systems so that they have many obstacles and difficulties in operating accounting information system.

Descriptive Analysis of the Effectiveness of Accounting Information Systems Variable

- Effectiveness of Accounting Information Systems Variable was measured by using two dimensions (user satisfaction and System Use) with eight indicators. Calculation results of *grand mean* score of respondents about the Effectiveness of Accounting Information System (*table 4.5. in the annex*) of 3.92 is at the third quartile (Q$_3$) or interval 3-4 is included in the category **good enough**. The amount of 3.92 which is obtained is equivalent to 78.4% (3.92/5 × 100). The scores which are obtained do not reach 100% as it is expected, so there is a gap of 21.6% between the ideal levels which is expected with the actual condition. This gap shows the effectiveness of Accounting Information System has not reached the ideal level which means that the conditions of accounting information system have not been effective to allow it can happen and it answers the phenomenon mentioned earlier.

- Based on research result data, **user satisfaction dimension** and **system usage dimension** are included in the category good enough (*table 4.5. in the annex*). This condition shows accounting information system has not been effectively implemented in the company because the user is not satisfied with the information system applications which are available in the company, the dissatisfaction is triggered because of the flexibility and accessible accounting information systems are inadequate and the user has not maximize the use of information systems for security, integration and availability of information systems which have not been assessed adequately.

The Results of Verification Testing (Testing of Statistics)

Designing Structural Model (inner model)

Based on the results of statistical data processing, Structural Model can be described as follows:

$$\eta_1 = 0{,}383\xi_1 + 0{,}290$$

Testing of Measurement Model (outer model)

The three criteria which are used in assessing outer models: Convergent Validity, Discriminant Validity and Composite Reliability can be said to have met the criteria with the following explanation:

1. **Convergen Validity**
   - Calculation results of Loading factor value for 2 dimensions of User Competence (X) latent variables which the range is from 0.98-1.0 (*table 4.7*

and 4.8 in the annex) is above the average of 0.6. Calculation results of *outer model* value or correlation between dimensions and variables already meet *Convergent Validity*. Loading factor values are above the recommended value which is equal to 0.60 so that there is no dimension of User Competence is eliminated from the model.

- Calculation results of Loading factor value for 2 dimensions of the Effectiveness of Accounting Information Systems (Y) variable which the range is from 0.9-1 is above the average of 0.6. Calculation results of *outer model* value or correlation between dimensions and variables already meet *Convergent Validity*. Loading factor values are above the recommended value which is equal to 0.60 so that there is no dimension of the Effectiveness of Accounting Information Systems is eliminated from the model.

2. **Discriminant Validity.**

Based on the table l 4.9.... *(in the annex)* can be seen that *loading factor* value for each indicator of each variable is still greater than *loading* value if it is associated with other variables. It shows that each variable has good *discriminant validity* of which the variables do not have a measuring that is highly correlated with other constructs.

3. **Composite Reliability**

Based on the table 4.10 *(in the annex)* can be concluded that all constructs meet reliable criteria. This is indicated by *composite reliability* value which is above 0.70 as recommended criteria.

Structural Model Testing (Inner Model)

R-square value for the effectiveness of Accounting Information Systems (Y) variable is obtained at 0.710. These results indicate that 71.0% of the Effectiveness of Accounting Information Systems variables are influenced by User Competence and Information Technology Quality variables.

Hypothesis Testing

The statistical results of this research can be stated as follows:

Ho.γ_1 = 0 : Users Competence do not influence the effectiveness of Accounting Information System

Ha.γ_1 ≠ 0 : Users Competence influence the effectiveness of Accounting Information System

Based on the results of hypothesis testing it showed that the relation between User Competence and the Effectiveness of Accounting Information Systems variables indicated by path coefficient value of 0,383 with t$_{count}$ of 2.401 *(table 4.6*

in the annex). The t-statistic value is greater than $t_{critical}$ (1.960), which means User Competence influence the effectiveness of Accounting Information Systems.

The amount of direct influence of Users Competence on the effectiveness of Accounting Information System is equal to (0.383×0.383×100%) = **14.6%**. While the influence of User Competence on the Effectiveness of Accounting Information System is indirectly because of the relation with Quality of Information Technology (0.383×0.632×0.547×100%) = **13.2%**. The amount of total influence of User Competence on the Effectiveness of Accounting Information Systems is **27.9%.**

5. DISCUSSION

The influence Users Competence on the Effectiveness of Accounting Information Systems

The effective use of information systems requires clear/definite knowledge and expertise (Mc. Leod & Schell, 2007: 9). Ward & Peppard (2002: 115) suggests development of human resources and competence of information systems users will increase the success of information system usage in an organization. Furthermore, the statement is reinforced by Gelinas & Dull (2008: 26), in his statement that the development process of accounting information system can effectively run. The user must have adequate knowledge about the system development.

Based on the research results can be demonstrated that the ineffectiveness of Accounting Information Systems is caused by the user is not satisfied in using the accounting information system and the lack of accounting information systems usage in the company. Results of the questionnaire answers show that dissatisfaction of users on accounting information systems in the company is because of accounting information system that is considered is not able to adapt well (it is not flexible yet) besides users feel the difficulty in accessing accounting information systems in the company. Furthermore, the system usage which is not optimal is due to accounting information system that is available in the company is not easy to use, it has not had an adequate security level, it has not been well integrated and it often has an error/interference so as it is not ready to use.

There are information system users who are not competent in various institutions in Indonesia. It can be re-proven based on the research result which is conducted at universities in Bandung city. Based on the research result, there is still found the level of users competence which has not been adequate. This condition shows there are the system users who do not have good knowledge in the field of accounting and information systems, as well as there are information systems users who do not have expertise in conducting transactions recording that

relates to financial data and have not been able to do an analysis of the company's financial transactions.

Based on the research result it is also known that the influence of the user competence of the information systems effectiveness is 27.9% with significant direction of positive relation by the existence of good users system competence meal it will improve the effectiveness of accounting information system at the company. Hypothesis testing result shows that the user competence significantly affects the effectiveness of accounting information systems. The research results can be said to strengthen the previous theory which is proposed by Mc. Leod & Schell (2007: 9), Ward & Peppard (2002: 115), Gelinnas & Dull (2008: 26), Curtis and Cobham (2005: 592), Azhar Susanto (2008: 370) and Bodnar and Hapwood (2006).

As the research hypothesis accepted that the user competence influences on the effectiveness of accounting information system, this study reinforces previous research result as it has been researched by: Jong Min Choe (1996), Deghanzade et.al (2011) and Taber et.al (2014).

6. CONCLUSION AND SUGGESTION

Conclusion

Based on research Results and Discussion of the research results can be summarized as follows: User Competence influence the effectiveness of Accounting Information Systems. The ineffectiveness of accounting information systems at universities in Bandung city is caused by the level of user satisfaction and information systems usage are still not optimal. Further the problems that there are users who are not competent due to the users do not have adequate level of knowledge and skills in using accounting information system that is available within the company.

Suggestion

The research Results has addressed the issues that have been raised previously in the research background, but there are some things that need to be suggested relate to the research results that it shows small effect among variables which are studied. The suggestions that will be given are as follows:

1. **Practical aspects (Troubleshooting)**
   a. To anticipate the re-emergence of the same problems which are associated with Accounting information systems that is less effectively implemented by universities in Bandung city, it is recommended in order to: improve user satisfaction and accounting information systems usage (system usage) by designing an accounting information system more flexible, have a data

processing that is well integrated, security in data storage, and easy to use (*user friendly*).

b. To anticipate the knowledge and expertise of the accounting information system user which is not optimal can be overcome by organizing training that is related to accounting information systems usage for employees and to provide encouragement and opportunity for employees to continue their education at higher level which is in line with their work field.

2. **Theoretical aspects (scientific development)**

The research results are expected to be used as a reference for further research in order to obtain the same results/conclusions (*replicability*), to increase confidence on the research that has been done as well as the applicability of the research results can be widely accepted (*generalizability*). The suggestions that can be delivered for the science development are:

a. The researchers then are expected to add the research sample in order to obtain more optimal research results

b. The researchers then use the research unit/location which is different from that is used in this study thus strengthening support for theories linkages that have been proposed by the previous experts.

c. The researchers then are expected to do research using different Statistics test equipment from the one which is used in this study in order to test the theoretical model that is used whether it will produce the same effect when it is tested using different statistics test techniques.

References

Abdul Hossein Talebi, et.al. 2013. The Influence if Information Technology on the efficiency of the acccounting information systems in iran hotel industry. *International Research Journal Of Applied and Basic Science*. Vol 4. No. 8.

AL, Nicolau. 2000. A Contigency Model Perceived Effectiveness in Accounting Information Systems. Organizational Condition and Controll Effect. *International Journal of Accounting Information System.* Vol 1. No. 2.

Amoroso, D.L And Chenney, P.H. (1991). Testing A Causal Model of End-User Application Effectiveness. *Journal of Management Information System*. 8 (1). Pp. 63-89.

Azhar Susanto. 2004. Sistem Informasi Akuntansi. Bandung: Lingga Jaya.

Azhar Susanto. 2008. *Sistem Informasi Akuntnsi : Struktur Pengendalian Risiko Pengembangan.* Bandung: Lingga Jaya.

Azhar Susanto. 2009. *Sistem Informasi Manajemen* (Pendekatan Terstruktur – Risiko Pengembangan). Bandung: Lingga Jaya.

Azhar Susanto. 2010. *Teknologi Informasi untuk Bisnis & Akuntansi Bandung*: Lingga Jaya.

Badan Pemeriksa Keuangan-Republik Indonesia. 2008. *Ihtisar Hasil Pemeriksaan Semester* 2 Tahun 2008. Jakarta.

Badan Pemeriksa Keuangan-Republik Indonesia. 2012. *Ihtisar Hasil Pemeriksaan Semester* 1 Tahun 2012. Jakarta.

Baroudi, J; Olson M and Ives B. 1986. An Empirical Studi of the Impact of User Involvement on System Usage and Information Satisfaction. *Communications of The ACM*. 29:3 pp. 232-238.

Barrier, T. 2002. *Human Computer Interacton And Management*. USA: IRM Press.

Bodnar, George H dan William S. Hoopwood. 2006. *Sistem Informasi Akuntansi. Terjemahan Amir Abadi Jusuf dan Rudi M. Tambunan*. Jakarta: Salemba Empat.

Boediono. 2011. Dalam Rapat Kerja Nasional Akuntansi dan Pelaporan Keuangan Pemerintah di kantor Kementerian Keuangan. *Diakses pada* 19 September 2011.

Boockholdt, J.L. 1999. *Acounting Information System*. Fifth Edition. Singapore: Mc. GrawHill.

Boritz, J.E. and Hunton, J.E. 2002. Investigating the impact of auditor-provided systems reliability assurance on potential service recipients. *Journal of Information Systems*. Supplement. Vol. 16. 69-87.

Boritz, J.E; Mcphie, D. and Walker, B. 2000. *In systems we trust. CA Magazine*. 133, No. 2. 47-49.

Bovee, M; R. P. Srivastava and B. Mak. 2003. A Conceptual Framework and Belief-Function Approach to Assessing Overall Information Quality. *International Journal of Intelligent Systems.* Vol. 18, No. 1, January: 51-74.

Burch, Jhon & Gary Grudnitski. 1986. *Information Systems Theory and Practice*, John Wiley and Sons, New York.

Cerullo, MJ. (1980). Information success Factors. *Journal of System Management*. 31 December. Pp.10-19.

Choe, J.M. 1966. The Relationships among Performance of Accounting Information Systems, Influence Factors and Evolution level of Information Systems. *Journal of Management Information System/ Spring*. Vol. 12. No. 4. Pp. 215-239.

Cooper, D. R & Schindler, Pamela S. 2014. *Business Research Method*. Twelfth Edition. Singapore: Mc. GrawHill.

Considine, Brett. Et.al. 2010. *Accounting Information System: Understanding Business Process*. Australia: Jhon Willey & Sons.

Claver, E. Llopis J. Gonzales MR. 2001. The Performance of Information Systems Through Organizational Culture. *Emeraldinsight.com*.

Curtis, Graham & David Cobham. 2005. *Business Information Systems: Analysis, Design and Practice.* 5th Edition. England: Pearson Education Limited.

Deghanzade, Hamed; M. Ali Moradi & Mahvasan Ragibhi. 2011. A Survey of Human Factors Impact on The effectiveness of AIS. 2011. *International Journal of Bussiness Administration*. Vol. 2. No. 4.

DeLone, W.H and Mc. Lean, E.R. 1992. Information System Success: The Quest for The Dependent Variable. *Information System Research*. 3 (1) (March). pp. 60-94.

Doll, W.J & Torkzadeh G. 1988. The Measurement of End-user Computing Satisfaction. *Management Information System Journal*. Quarterly/June. pp. 259-274.

Duggan & Reicghgelt. 2006. *Measuring Information System Delivery Quality*. USA; Idea Group Publishing.

Ein-Dor, P and Segev, E. 1978. Organizational Context and the Success of Management Information Systems. *Management Science Journal*. 24 (10) June. pp. 1064-1077.

Eppler, Martin. 2013. *Managing Information Quality.* Springer Berlin-Heidelberg Germany.

Gavrilov, Leonid A. & Gavrilova, Natalia S. 2001. *The Reliabilty Theory of Aging and Longevity*. Akademik Press : Chicago.

Gelinas, Ulrich J & Richard B. Dull. 2008. *Accounting Information System*. Seventh Edition. Canada: Thomson South-Western a part of The Thomson Corporation.

George. H. Bodnar & William H. Hapwood. 2000. *System Informasi Akuntansi.* Jakarta: Salemba 4.

Gibson, James. Jhon M Ivanicevich, James H Donelly Jr & Robert Kanopaske. 2009. *Organizational Behavior: Structure, Proccesses.* Thirtheenth Edition. USA: Mc.GrawHill.

Greenberg, Robert; Wei Li & Bernard Wong on Wing. 2012. The Effect of Trust in System Reliabillity on the Intention to Adopt Online Accounting System. *International Journal Of Accounting and Information Management*, Vol. 20. Iss: 4, pp. 363-376.

Haag, Sthepen; Maeve cummings & Donald J. Mc.Cubbery. 2005. *Management Information System for Information age.* Fifth edition. New York: Mc.Graw-Hill.

Hall, James A. 2013. *Accounting Information System*. 8th edition. USA: South Western Cengage Learning.

Heidmann, Marcus. 2008. *The Role Managamenet Accounting System in Strategic Sensemaking.* Germany: Deutcher universitats Verlag.

Hurt, RL. 2008. *Accounting Information System: Basic Concept and Current Issue.* New York: Mc. Graw-Hill Companies.

Hongjiang Xu. 2009. Data Quality Issues for Accounting Information Systems Implementation: System, Stakeholders, and Organizational Factors. *Journal of Technology Research.*

Imam Ghozali. 2006. *"Structural Equation Modeling, Metode Alternatif Dengan Partial Least Squares (PLS)"*. Semarang: Universitas Diponegoro.

Indeje, Wanyama G & Qin Zheng. 2010. Organizational Culture and Information Systems Implementation: A Structuration Theory perspective. *Sprouts: Working Papers on Information Systems.* 10 (27).

Ivana Mamic Sacer, Katarina Zager, Boris Tusek. 2006. Accounting Information System's Quality as The Ground for Quality Business Reporting*. IADIS International Conference e-Commerce*.

Ives, B; Olson, M.H; and Baraoudi, J. (1983). The Measurement of User Information satisfaction*. Communications of the ACM*. 26 October. pp.785-793.

Ives, B & Olson, M.H. (1984). User Involvement and MIS Success, A Review of Research. *Management Science.* 30 (5). pp. 205-223.

Johnson, Alice M. 2000. Executive Communication and its Effect on the Alignment of Information Systems With Business Strategy. *Proguest Disertation and Theses.*

John Burch dan Gary Grudnitski. 1986. *Information Systems Theory and Practice*, John Wiley and Sons, New York.

Kaplan R.M & Saccuzo D.P. 2009. *Psychological Testing: Principle, Application, And Issue*. Seventh Edition. Uniter States: Wadsworth Cengage Learning.

King, W.R; and Rodriguez, J.I (1978). Evaluation Management Information Systems. *MIS Quarterly*. 2 (3) September. pp. 43-5.

Kristi Yuthas, Martha M.Eining. (1995*).* An experimental Evaluation of Management of Information System Effectiveness. *Journal of Information System.* p. 69.

Kieso, D. E., Weygandt, J. J., & Warfield, T. D. 2010. *Intermediate Accounting: IFRS Edition Volume 1.* USA: John Wiley & Sons.

Kondalkar, V.G. 2007. *Organizational Behavior*. New Delhi: New Age International Limmited Published.

Kourdi, Jeremy. 2009. *Business Strategy: A Guide to Taking Your Business Forward. Second Edition*. London: Profile Books Ltd.

Laudon, Kenneth C and Jane P Laudon. 2012. *Management Information System: Managing The Digital Firm. Twelfth Edition.* New Jersey: Pearson Education Inc.

Leitch, Robert A & K. Roscoe Davis. Dalam Mardi. 2011*. Sistem Informasi Akuntansi*. Ghalia Indonesia, hlm 14.

Lucas, HC. 1978. Empirical Evidence For Descrivtive Model of Implementation. *Management Information System Journal*. Quarterly 2. June. pp. 27-41

Lupasc, Adrian; Lupasc, Ioana and Zamfir, Christina Gabriela. 2009. New Valences For The Financial Accounting System. *The Annals of "Dunarea de Jos" University of Galati Fascicle I. Economics and Applied Informatics. Years XV*. ISSN 1584-0409.

Lussier, Robert N. 2008. *Human Relations in Organizations: Aplications And Skills Building*. USA: Mc. GrawHill.

Joseph W. Wilkinson. 1996. *Sistem Informasi dan Akuntansi.* Jilid 2. Edisi 3. Jakarta: Binarupa Aksara.

Jogiyanto. 2005. *Sistem Teknologi Informasi (Edisi 2).* Yogyakarta: Andi

Krismiaji. 2002. *Sistem Informasi Akuntansi.* Yogyakarta: Unit Penerbit dan Percetakan AMP YKPN.

Majalah Akuntan Indonesia. 2009. Edisi No.18/Juli 2009. Jakarta.

Majalah Akuntan Indonesia. 2009. Edisi No. 20, /September 2009. Jakarta.

Mardi. 2011. *Sistem Informasi Akuntansi.* Ghalia Indonesia.

Marshall B. Romney, Paul J Steinbart & Barry E Cushing. 1997. *Accounting Information System. Seventh edition.* USA: Publishing Company.

Marshall B. Romey & Paul Jhin Steinbart. 2006. *Sistem Informasi Akuntansi.* Edisi 9. Jakarta: Salemba Empat.

Marshall B. Romey & Paul Jhon Steinbart. 2012. *Accounting Information System.* Tenth Edition. New Jersey: Pearson Education.

Mangkunegara. 2000. *Manajemen Sumber Daya Manusia Perusahaan.* Bandung: PT. Remaja Rosdakarya.

Mc. Leod, R., & Schell, G. P. 2007. *Management Information Systems (10th ed).* New Jersey: Pearson Education.

Mejia, Kuisr Gomez; David B Balkin; Robert L Cardi. 2010. *Managing Human Resources. Sixth Edition.* Canada: Pearson Education.

Mohammad W Hamdan. 2005. The Impact of Accounting Information System Development Life Cycle on its effectiveness and Critical Success Factors. *European Scientific Journal.* Vol 8. No 6.

Mohammed H. Abzakh, Dr. Allam Hamdan (2010), "*The (E-Auditing) and its Effect on Persuasiveness of Evidences, Evidence From Bahrain*".

Nicolau, A.I. 2000. A Contigency Model Perceived Effectiveness in Accounting Information Systems: Organizational condition and controll Effect. *International Jurnal of Accounting Information System.* 1(2).

Noor Azizi Ismail & Malcolm King. 2007. Factor Influencing the Aligment of AIS in Small & Medium Sized Malaysian Manufacturing Firms. *Journal of Information System & Small Business.* Vol 1. No 12.

O'Brien, JA and George Marakas. 2009. *Management Information Sistem.* Ninth Edition. McGraw-Hill.Inc. Boston.

O' Hagan, Kieran. 2007. *Competence in Social Work Practice: a Practical Guide for Students and Professional.* Second Edition. London: Jessica Kingsley Publisher.

Olson, David L. 2003. *Introduction To Information System Project Management. Second edition.* USA; Mc.GrawHill.

Ralph, M. Stair & George Reynold. 2012. *Fundamental of Information Systems*. Sixth Edition. USA; Cengage Learning.

Raid Moh'd Al-adaileh. 2009. *An Evaluation of Information Systems Success: A User Perspective - the Case of Jordan Telecom Group.* European Journal of Scientific Research ISSN 1450-216X Vol. 37 No. 2 (2009), pp. 226-239 © Euro Journals Publishing.

Robert A. Leitch & K. Roscoe Davis. Dalam Mardi. 2011. *Sistem Informasi Akuntansi*. Ghalia Indonesia, hlm 14.

Robert Greenberg; Wei Li; Bernard Wong On Wing. 2012. The Effect of Trust in System Reliabillity on the Intention to Adopt Online Accounting System. *International Journal Of Accounting and Information Management*. Vol. 20. pp. 363-376.

Robbins, P. Stephen & Judge, A. Timothy. 2014. *Organizational Behavior*. Jakarta: Salemba 4

Romney, Marshal B & Paul John Steinbart. 2006. *Sistem Informasi Akuntansi.* Jakarta : Salemba Empat.

Romney, Marshall B and Steinbart, Paul John. 2003. *Accounting Information Systems*, Ninth Edition, Prentice Hall,hal. 195.

Scott, George M. 2001. *Principle of Management Information System.* USA: Mc.GrawHill.

Seddon, P & Yip, S.K. 1992. An Emprirical Evaluation of user Information Satisfaction (UIS) measures for use with General Ledger Accounting Software. *The Journal of Information Systems*. Vol VI No.1 (Spring).

Suwardjono. 2001. *Teori akuntansi, Perekayasaan Pelaporan Keuangan.* Yogyakarta : BPFE.

Sugiyono. 2011. *Metode Penelitian Kuantitatif, Kualitatif dan R&D*. Bandung: Alfabeta.

Soegiharto. 2001. Influence factors effecting the performance of accounting information system. *Gajah Mada international Journal of business*. May 2001. vol 3. no. 2. pp. 177-202

Spencer, Lyle M & Signe M Spencer. 1993. *Competence Work, Model for Superior Performance.* Canada: John Willey & Sons.

Stair, Ralph M & George Reynold. 2012. *Fundamental of Information Systems*.Sixth edition. USA: Cengage Learning.

Tait, P & Vassey, I. 1988. The Effect of User Involment on system success: A Contingency Approach. *MIS Quarterly Journal*, March. pp. 91-108.

Tjhai Fung Jen. 2002. Faktor-faktor yang mempengaruhi Kinerja Sistem Informasi Akuntansi. *Jurnal Bisnis dan Akuntansi* volume IV. No. 2.

Thaer Ahmad Abu Taber; Laith Abdullah Alaryan & Ayman Ahmad Abu Haija. 2014. The Effectiveness of accoounting Information system in Jordania Private Higer education Institution. 2014. *International Journal of Accounting And Finance Reporting*. ISSN 2162-3082. Vol 4. No.1.

Ward, Jhon & Joe Peppard. 2002. *Strategic Planning for Information Systems*. Third Edition.

England: Jhon Willey & Sons.

Wongsim, M. & Gao, J. 2011. Exploring Information Quality in Accounting Information System Adoption. *IBIMA Publishing*, 2011(2011), 1-12.

Wilkinson, Joseph W; Cerullo, Michael J; Raval, Vasant & Wong-on-wing, Bernard. 2000. *Accounting Information Systems: Essential Concepts and pplications, 4th edition.* USA. John Wiley and Sons.

William H. Delone, Ephraim R. McLean. 2005. Information Systems Success: The Quest for the Dependent Variable. *Information System Research The Institute of Management Science.* Pg 15.

Xiaoying, Dong; Liu Qianqian & Yin Dezhi. 2008. Business Performance, Business Strategy and Information System: Strategic Aligment: And empirical Study on Chinese Firm. *Tsinghua Science and Technology*. Vol 13. Number 3. June 2008.

ANNEXES

Table 1
Recapitulation Test Result Validity of Research Instruments Users competence (X1))

No Item Inquiry	Correlation Item - Total	Limit value	Description
1	0,744	0,3	Valid
2	0,767	0,3	Valid
3	0,629	0,3	Valid
4	0,816	0,3	Valid
5	0,803	0,3	Valid
6	0,876	0,3	Valid
7	0,735	0,3	Valid

Table 2
Recapitulation Test Result Validity of Research Instruments Effectiveness of Accounting Information Systems (Y)

No Item Inquiry	Correlation Item - Total	Limit value	Description
1	0,672	0.3	Valid
2	0,679	0.3	Valid
3	0,701	0.3	Valid
4	0,752	0.3	Valid
5	0,750	0.3	Valid
6	0,725	0.3	Valid
7	0,792	0.3	Valid
8	0,708	0.3	Valid

Source: Research Data Processing

Table 3
Recapitulation Test Result Reliability of Research Instruments

Variable	Value of Reliability	Limit value	Desscription
Kompetensi Pengguna (X_1)	0,861	0.7	Reliabel
Efektifitas Sistem Informasi Akuntansi (Y)	0,927	0.7	Reliabel

Source: Research Data Processing

Table 4
Recapitulation Score Descriptive Variables User Competence

Indikator/ Dimension	Actual score		Mean Scor		Criteria
Computer & Information Literacy	211		4,22		Good
Bussiness Fundamental	196		3,92		Good enough
System Theory	191		3,82		Good enough
Ability tho choose which several option is the right response	212		4,24		Good
Knowledge		810		4,05	Good
Intellectual/Cognitive Skill	172		3,44		Good enough
Analitical Skill.	192		3,84		Good enough
Creativity	204		4,08		Good
Skill		568		3,79	Good enough
Total Skor					
Rata-rata (*grand mean)*	1378			3,94	Good enough

Keterangan : Rata-rata = (skor aktual) dibagi (jumlah responden kali jumlah item pertanyaan)

Table 5
Recapitulation Score Descriptive Variables AIS Effectiveness

Indikator/ Dimension	Actual score		Mean Scor		Criteria
Flexible	192		3,84		Good enough
Accesible	189		3,78		Good enough
Efficient	216		4,32		Good
Provides Correct and Timely Information	200		4,00		Good
User satisfaction		797		3,99	Good enough
Security	196		3,92		Good enough
Proccessing Integrity	188		3,76		Good enough
Availability	190		3,80		Good enough
Ease to use and Usefullness	197		3,94		Good enough
System Usage		771		3,86	Good enough
TOTAL SKOR	1568				
Rata-rata (*grand mean)*				3,92	Cukup Baik

Table 6
Significance test of The influence of user Competence to AIS Effectiveness

Coefficient Line	t_{hitung}	$T_{critical}$	Conclusion
0,383	2,401	1,96	Signifikan

Source: PLS Calculation Results

Table 7
Users Competence Measurement Model variables (X1)

Variabel Manifes	Loading Factor	Measurement Model	Tcount
Knowledge (X_{11})	0,959	$X_{11} = 0,959\ X_1 + 0,079$	88,000
Skill (X_{12})	0,951	$X_{12} = 0,951\ X_1 + 0,096$	72,645

Tabel 8
Measurement Model Accounting Information Systems Effectiveness variable (Y)

Variabel Manifes	Loding Faktor	Measurement Model	Tcount
User satisfaction (Y_1)	0,940	$Y_1 = 0,940\ Y + 0,116$	66,574
System Usage (Y_2)	0,909	$Y_2 = 0,909\ Y + 0,174$	46,438

Tabel 9
Discriminant Validity value
(Cross Loading)

	X1	X1.1	X1.2	Y	Y1	Y2
X1.1.1	0,757	0,744	0,685	0,693	0,583	0,681
X1.1.2	0,774	0,845	0,620	0,606	0,651	0,429
X1.1.3	0,593	0,617	0,523	0,358	0,361	0,284
X1.1.4	0,818	0,858	0,705	0,499	0,452	0,403
X1.2.1	0,800	0,674	0,868	0,550	0,483	0,482
X1.2.2	0,877	0,769	0,922	0,531	0,460	0,461
X1.2.3	0,748	0,662	0,759	0,659	0,555	0,645
Y1.1	0,562	0,619	0,445	0,686	0,774	0,467
Y1.2	0,525	0,562	0,433	0,671	0,773	0,472
Y1.3	0,413	0,416	0,362	0,700	0,795	0,514
Y1.4	0,503	0,444	0,514	0,783	0,697	0,735

Y2.1	0,383	0,332	0,395	0,722	0,559	0,834
Y2.2	0,282	0,269	0,261	0,630	0,521	0,799
Y2.3	0,615	0,608	0,560	0,814	0,692	0,802
Y2.4	0,707	0,633	0,713	0,720	0,544	0,766

Source: Data processing by PLS, 2015

Tabel 10
Composite Reliability value Variabel laten

Variabel laten	Composite Reliability
Kompetensi Pengguna (X$_1$)	0,9103
Knowledge (X$_{11}$)	0,8532
Skill (X$_{12}$)	0,8881
Kualitas Teknologi Informasi (X$_2$)	0,8794
Computer Technology (X$_{21}$)	0,8008
Communication Technology (X$_{22}$)	0,8102
Data Storage & Proccessing Methode (X$_{23}$)	1,0000
Efektifitas Sistem Informasi Akuntansi (Y)	0,8880
User satisfaction (Y$_1$)	0,8457
System Usage (Y$_2$)	0,8770
Kualitas Informasi Akuntansi (Z)	0,9176
Time Dimension (Z1)	0,8812
Content Dimension (Z2)	0,8400
Location Dimension (Z3)	0,8243
Form Dimension (Z4)	0,8946