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Universitas Bandar Lampung
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Lampung, Indonesia

PREFACE

The activities of the International Conference is in line and very appropriate with the vision and mission of the UBL to promote training and education as well as research in these areas.

On behave of the First International Conference of Engineering and Technology Development (ICETD 2012) organizing committee; we are very pleased with the very good responses especially from the keynote speakers and from the participants. It is noteworthy to point out that about 45 technical papers were received for this conference

The participants of conference come from many well known universities, among others: Universitas Bandar Lampung, International Islamic University Malaysia, University Malaysia Trengganu, Nanyang Technological University, Curtin University of Technology Australia, University Putra Malaysia, Jamal Mohamed College India, ITB, Mercu Buana University, National University Malaysia, Surya Institute Jakarta, Diponogoro University, Unila, Universitas Malahayati, University Pelita Harapan, STIMIK Kristen Newmann, BPPT Lampung, Nurtanio University Bandung, STIMIK Tarakanita, University Sultan Ageng Tirtayasa, and Pelita Bangsa.

I would like to express my deepest gratitude to the International Advisory Board members, sponsors and also welcome to all keynote speakers and all participants. I am also grateful to all organizing committee and all of the reviewers which contribute to the high standard of the conference. Also I would like to express my deepest gratitude to the Rector which give us endless support to these activities, such that the conference can be administrated on time.

Bandar Lampung, 20 Juni 2012

Mustofa Usman, Ph.D
ICETD Chairman

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Bandar Lampung,Indonesia
June, 20-21 2012

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Impact of Implementation Information Technology on Accounting

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Abstract - **In recent years business is growing fast and faster and this is the reason for investment in information technology (IT)specially on accounting department. The implementation of an IT improves information flow, reduce costs, establishlinkage with suppliers and reduce response time to customer needs. This paper focuses on a sample Indonesian companies in Bandung, West Java, Indonesia investigates the implementation of IT on accounting, the benefits that users have achieved andthe influence of implementation of IT on accounting.The results indicate a better level on accuracy, better reporting, using accounting software, functionality increasing and last dimension is faster reporting provided by implementation of IT on accounting.**

Keywords **- Information Technology, Implementation of Information Technology, Accounting Process**

I. INTRODUCTION

In recent years highly competitive, changing rapidly by globaleconomy, organizations have been forced to consider, andin many cases to implement IT on accounting. Implementation of IT on accounting are software packages thatenable companies to combine various business units ofdifferent areas such as production, sales, finance, creating a tightly integrated system with flowof financial information across the entire business. The interest oforganizations for implement IT and other innovative applicationshasincreased. The executives and the administration company are responsible to make specific choices to serve thecompany's goals concerned with the internal organization andefficiency or the external environment with the best combination of investment-benefit decision."IThas a criticalrole in modern business, especially on accountingfunction" [8].

Transformed on IT makes the nature of business and accounting practice [11]. "The relationships between accounting and information technology was gradually taken for granted, accounting was simply not possible without information technology, and the assumption appears to be that information technology is the platform for accounting data and it allow certain sophisticated queries to be performed" [10]. Actually implementation of IT has shortening the process of accounting for making financial report which using by organizations to make some decision. The sooner information has provide, the sooner the decision would be made.

Based on a literature review of earlier research and empirical studies we conclude that there is a very limitedabout the impact of the most recent IT developments in the accounting field [10].Existing research has focused mostly on the relation between IT investment and company performance [15]; notably in studies that attempt to measure the level of IT investment and company productivity [7] or even the financial return on IT investments [6]. The objective of this study is to evaluate whether IT implementation has an impact on accounting such computerized accounting system, increasing functionality, improve accuracy, faster processing and better reporting.

II. LITERATURE REVIEW

The implementation of IT using an accounting applications software such a modules which links various accounting transaction recording such cash in and cash out transaction, sales modules, purchase modules, pay roll and also makes some reporting according those transaction. Information technology (IT) has created significant benefits for accounting departments. IT networks and computer systems have shortened the lead time needed by accountants to prepare and present financial information to management and stakeholders.

Not only has IT shortened the lead time required to present financial information, but it also has improved the overall efficiency and accuracy of the information. In practice it can be difficult to classify a software as an ERP system or a non-ERP system[2]. Reference [12] uses the word of integration of functional areas of business as acriterion for this classification. ERP systems are not a solution for a business but can enhance the need for integration [13]. There are several forces that are potentianlly influencing an organization's decision to adopt ERP systems. There is 5 dimension for implementing IT on accounting, which is:

1. Computerized Accounting Systems

The biggest impact IT has made on accounting is the ability of companies to develop and use computerized systems to track and record financial transactions. Paper ledgers, manual spreadsheets and hand-written financial statements have all been translated into computer systems that can quickly present individual transactions into financial reports.

Most of the popular accounting systems can also be tailored to specific industries or companies. This allows companies to create individual reports quickly and easily for management decision making. Additionally, changes can be made relatively easy to reflect any economic changes in business operations.

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2. Improved Accuracy

Most computerized accounting systems have internal check and balance measures to ensure that all transactions and accounts are properly balanced before financial statements are prepared. Computerized systems will also not allow journal entries to be out of balance when posting, ensuring that individual transactions are properly recorded.

Accuracy is also improved by limiting the number of accountants that have access to financial information. Less access by accountants ensures that financial information is adjusted only by qualified supervisors.

3. Faster Processing

Computerized accounting systems allow accountants to process large amounts of financial information and process it quickly through the accounting system. Quicker processing times for individual transactions has also lessened the amount of time needed to close out each accounting period. Month- or year-end closing periods can be especially taxing on accounting departments, resulting in longer hours and higher labor expense. Shortening this time period aids companies in cost control, which increases overall company efficiency.

4. Increased Functionality

Computerized accounting systems have also improved the functionality of accounting departments by increasing the timeliness of accounting information. By improving the timeliness of financial information, accountants can prepare reports and operations analyses that give management an accurate picture of current operations. The number of financial reports has also been improved by computerized systems; cash flow statements, departmental profit and loss, and market share reports are now more accessible with computerized systems.

5. Better External Reporting

Reports issued to outside investors and stakeholders have been improved by computerized accounting systems. Improved reporting allows investors to determine if a company is a good investment for growth opportunities and has the potential to be a high-value company. Companies can utilize these investors for equity financing, which they use for expanding business operations.

III. EMPIRICAL STUDY

To determine the answers to the research questions, a paper based survey was prepared and administered at organizations that had implemented IT on accounting. Data collected from 30 companies.Managers responsible for the integratedsystem implementation in their organizations were chosen asthe target recipients as they were best placed to provideinformed responses to the range of issues covered in thesurvey. Most of the questions asked were open-endedconcerning topics as the perceptions of 5 dimensions. Thequestionnaire was pretested with three respondents to check itsvalidity. A cover letter and survey questionnaire weredistributed to managers responsible for integrated systems inthe company.Responses to the questions were measured on a 5 pointLikert scale 1=very poor to 5=very good. The data wascodified and analyzed using SPSS 16.0. Techniques includeddescriptive statistics and independent samples t-test were used.

Table I. Dimensions of Implementation

Dimensions	Before Implementation	After Implementation	Growth
Computerized Accounting System	83%	95%	14%
Accuracy	90%	100%	11%
Faster Processing	82%	90%	10%
Funcionality Increasing	75%	93%	24%
Better Reporting	89%	98%	10%
AVERAGE	**84%**	**95%**	**14%**

The lowest dimensions before implementation is functionality increasing dimension scored 75% and increasing to 93%, and there is a higher growth scored 24%. The higher dimensions before implementation is better reporting dimension scored 89% and increasing to 98%, and there is a lower growth scored 10%. Overall score before implementing IT scored 84% and increasing to 95% with overall growth 14%.

Table 2t-Test: Paired Two Sample for Means

Statistic	*Before Implementation*	*After Implementation*
Mean	0.838	0.952
Variance	0.00367	0.00157
Observations	5	5
Pearson Correlation	0.762374272	
Hypothesized Mean Difference	0	
Df	4	
t Stat	-6.413001035	
P(T<=t) one-tail	0.001519017	
t Critical one-tail	2.131846782	
P(T<=t) two-tail	0.003038033	
t Critical two-tail	2.776445105	

Based on calculation of Paired Samples T Test Correlation the results of the correlation between variables produced to 76,23% with 0,0001 probability value < 0,05 this suggest that the correlation between scored before implementation IT on accounting and after implementation IT on accounting is significant.

IV. CONCLUSION

The companies studied have high levels of investment in information technology. Most of companies was found to use accounting software more significantly than period of cut off before and after. The data gathered demonstrate that the priority dimensions for implement IT on accounting is accuracy, better reporting, using accounting software, functionality increasing and last dimension is faster reporting. Future research needs to examine between the implementation IT and accountingrelationship. Today accounting and IT are unseparable. Accountant's uses of accounting software which is clearly dependent of IT existence. The configuration choices made in IT implementation arepowerful in what enable. The benefits for accounting from IT materialise only in uncertain ways and only after longimplementations.

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