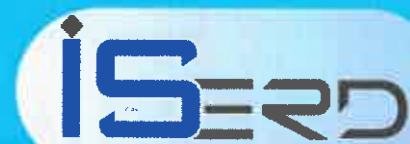


PROCEEDINGS OF

ISERD



INTERNATIONAL CONFERENCE



Date: 2nd - 3rd May 2019 | Venue: Singapore

Association With



**PROCEEDINGS OF
ISERD
161st INTERNATIONAL CONFERENCE
SINGAPORE**

Organized by

ISERD

Date of Event

2nd-3rd May 2019

Event Co-Sponsored by



Corporate Address

IRAJ Research Forum

Institute of Research and Journals

Plot No- 30, Dharma Vihar, Khandagiri, Bhubaneswar, Odisha, India

Mail: info@iraj.in, www.iraj.in

TABLE OF CONTENTS

SI No	TITLES AND AUTHORS	Page No.
01.	Enzymes As A Catalyst of Knoevenagel Condensation ➤ <i>Ryszard Ostaszewski</i>	1
02.	The Role of Internet Self-Efficacy in The Technology Leadership and Technology Integration of Preschool Teachers ➤ <i>Chia-Pin Kao, Hui-Min Chien</i>	2
03.	Study of The Effectiveness of The Developed Strategies for The Improvement of The Speaking Skills ➤ <i>Jitendra Balbhim Jalkute, Deepak Prakash Gund</i>	3-7
04.	Reduction of Phosphate Ion (Po43-) in Hospital Wastewater Using Electrolysis Method ➤ <i>Maulana Rahman Herida, M Fahmi Khoirudin, Riyanto</i>	8-9
05.	Cloud Technology On Accounting ➤ <i>Titaporn Sincharoonsak, Isara Nakavisute</i>	10-15
06.	Development of A Methodology for Assessing The Safety of A Helicopter Landing on A Moving Platform in Conditions of Vortex Turbulence ➤ <i>Ye Htun, Khokhlov Anatoly Anatolyevich</i>	16-20
07.	Application of Optimality Criteria and Mathe-Matical Programming Methods for Structural Design ➤ <i>Arkar Phyo</i>	21-24
08.	Solar-Powered Smart Irrigation System for Vegetable Garden Using Adaptive Process for Iot Applications ➤ <i>Rose mary a. Velasco</i>	25
09.	Determination of Traffic Safety With Methods Alternative to Traditional Methods ➤ <i>Coruhemine, Tortum Ahmet</i>	26-31
10.	Concrete Mixture With Plastic As Fine Aggregate Replacement ➤ <i>Chien-Chung Chen, Nathan Jaffe, Matt Koppitz, Wesley Weimer, Albert Polocoser</i>	32-36
11.	Influence of The FLC'S Parameters of The UPQC in The Distributed Generation ➤ <i>C. Benachaiba, B. Mazari, M. Habab, C. Benoudjafer, N. M. Tandjaoui</i>	37-42
12.	Advantage of Make-To-Stock Strategy Based on Linear Mixed-Effect Model ➤ <i>Yu-Pin Liao, Shin-Kuan Chiu</i>	43-54

CLOUD TECHNOLOGY ON ACCOUNTING

¹TITAPORN SINCHAROONSAK, ²ISARA NAKAVISUTE

Sripatum University Thailand

E-mail: ¹TITAPORN.SI@SPU.AC.TH, ²ISARA.NA@SPU.AC.TH

Abstract - Nowadays technology has many impacts on business sectors. Technology innovation evolves at a very alarming and fast pace and it has not only become optional. It has instead become the necessity for business survival because of information disruption. Many businesses have gone out of business. For example, Artificial intelligence(AI) has taken over the global market in a massive way. It has taken the global market in such a way that the system is almost automatic and requires a minimal human supervision. Block CHaIN is also involved in assuring the data security. Cloud TECHNOLOGY makes sure that the system operation can operate 24 hours a day anywhere in the world. Accounting is one of the business sector which is impacted by technology disruption. This paper shall consider many technological disruption, specifically cloud technology to address the availability of accounting data twenty fours a day.

Index Terms - Technology Disruption, Artificial Intelligence, BlockChain, Cloud Technology, Data Security, Online Transaction, Cloud-based Accounting.

I. INTRODUCTION

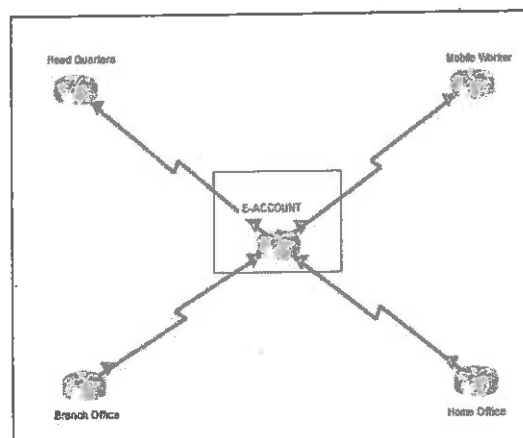
By the disruption of information technology, basic function and principles of accounting have not changed. Identification process, recording process, storing process, summarization process and reporting process still exist (Algan,175). With the technological disruption pacing at an alarming rate, accounting is transformed into something more than recording, summarizing and reporting of transactions. Delegated functions, processing methodologies, controls and expected output are introduced. The revised system is in fact the anatomy of accounting. It includes all dimensions of business operations, including the flow of financial data across the organization and beyond (Ak,75). Currently accounting is formed in conjunction with the information technology. Throughout this paper, a theoretical treatment on accounting will be given and develop a technological approach toward the traditional accounting.

Accounting Cycle	
1.	Analyze and Measure Transaction
2.	Record Transactions in Journal
3.	Post information Journal to Ledger
4.	Prepare unadjusted Trial Balance
5.	Prepare adjusting entries
6.	Prepare adjusted Trial Balance
7.	Prepare Financial Statements
8.	Prepare Closing Entries
9.	Prepare Post-Closing Trial Balance

Picture 1: Accounting Cycle

On the other end, E-Accounting has become an essential need in the enterprise because it enables the accounting task to be limitless and the task speed has increased (Balevi, 122). Usage of technology in accounting has increased as a result of computer

programming along with usages of the computer network technology as well as computer cloud technology to generate information based on the basis of integrating information system of accounting information of enterprise. As such, the usage of E-Accounting in enterprise has started to become widespread (Duff,23).

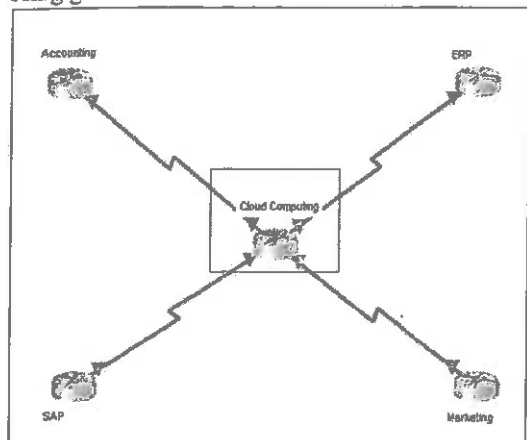


Picture 2: E-Accounting

The concept behind E-Account is the cloud technology. Without Cloud Technology, it is impossible to create E-Accounting. Cloud Technology makes all internet-connected application (Fu,27).

Cloud Technology uses the concept of Server-Client relationship where client requests the information with the server through the internet web browser. Information is stored in the centralized database on cloud. Along with usage of computer in accounting, information has been transferred to the media on the cloud spacing. Electronic media of accounting of accounting information has made carrying out of supervision of electronic information environments

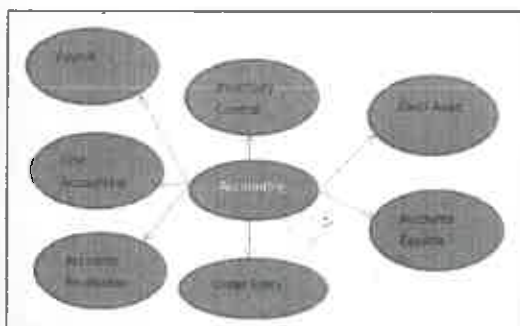
possible (Ince,101). Legal infrastructure transferring all transactions to electronic environment has been being generated.



Picture 3: Cloud Computing

II. LITERATURE REVIEW

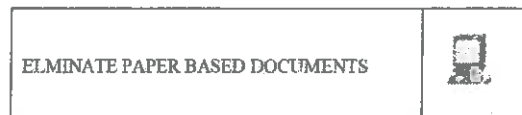
Using computers from routine activities of enterprised organizations to generating statements has made storing information in electronic format and crunching numbers in many transactions indispensable (Seyal,78). Taking a look at the basic accounting functions in Picture 4, all these tasks can be accomplished online. No more paper is needed.



Picture 4: Basic Accounting Function

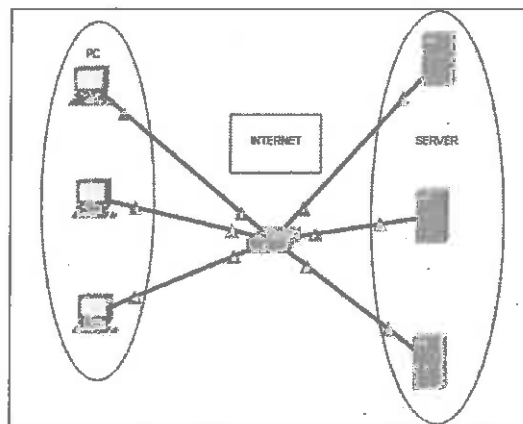
There are many benefits to paperless transactions. Paperless Transactions can be analyzed and can be presented in a visual format. Paper-based Transaction cannot be processed in any shape or form. It does not give any benefit to the enterprise management. As such, university students should equip themselves with computer logic and computer usage in accounting education by choosing the correct learning environment (AECC,15). Occupational Accounting members have used computer technologies to make the accounting process easier for analysis and presentation. Using computer technologies for a long time does not give the expert level to such users. Uses ought to use the new and evolving technologies. Technologies used in

dynamic organizations makes the data entry go beyond the traditional data entry approaches. All these contributing vital factors do not only compel organizations to restructure the basic infrastructure. It also requires efforts to gear towards international applications and standards (Aisbitt,27). In addition, Electronic document management has been increasing its importance in conjunction with usage of technology.



Picture 5: Electronic Document System

Document transferred to electronic system does provide the searching capability and the access capability based on its content to the relevant users. Information technologies provide much significant cost reduction (AAA,12). With Information and Communication Technologies being developed and getting cheaper, frequency and dimension of usage has increased. At the present time, Internet has obviously become main information communication and sharing area of the future (Alp,82). In usage of computer network technology, technologies such as internet, intranet, extranet are being used commonly.



Picture 6: Internet, Intranet, Extranet

Internet is a communication network which is accessible on the global basis. Internet is a technology that emerged upon desire of humans to easily share the information. With this technology, people can access information from many various fields easily, quickly and safely (Akgu, 27). Intranet are defined a network connecting mostly TCP/IP based connecting computers (LAN: Local Area Network) with wide networks (WAN: Wide Area Network). It can be argued that internet has an important role in development of global interaction (Demirkan,26). As such, companies open their own websites and

advertise their own products. Intranet is a media that only employees of enterprise can access and get information.

Extranet can be defined as an open-to-cooperation network. It connects the enterprised organization to its supplier, customer or other enterprises to share common targets and benefits from internet technologies. Concept of intranet and extranet can be accepted as sub-systems of internet. These are not new technologies. Rather, the changing is only the scoping of internet boundaries (Guney, 101). These are information technologies which supplement each other. Today's information technologies such as desktop, laptop, palmtop, hand terminals enable the users to record the smallest information to the enterprise database at any moment. Such information refreshes all related files simultaneously through a single operation (MacKenzie, 31). Hence all departments of the enterprise can access up-to-date and true information to base their decision upon. Therefore, all the speed and accuracy can be provided through information technologies. Usage of such information technology is not limited with enterprises only. It is becoming widespread in many countries under the name of E-Declaration.

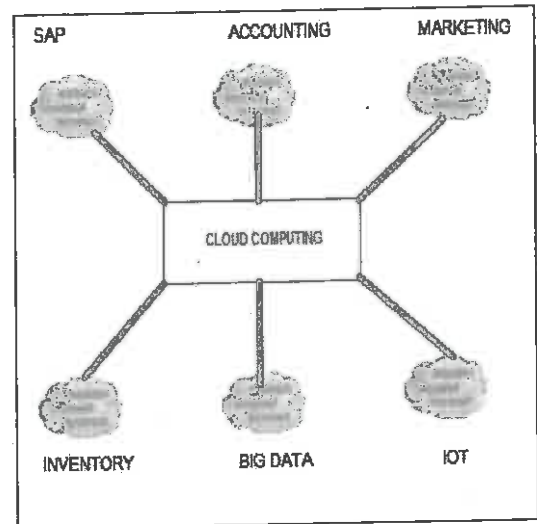
Moreover, an important part of tax collection is being accomplished electronically through E-Tax Payment System (E-Payment). E-Declaration and E-Payment have consisted E-Taxation regime or system jointly (Turner,75). As a result of such applications, usage of technology has increased in both tax applications and accounting applications. Setting up computer system to generate the necessary information for the managerial purposes has become necessary in many enterprises.

Literatures are often found to strengthen the integration of technology in the field of accounting. There are indeed the professional accountancy and academic bodies. Such common bodies are IFAC in the case of the United Kingdom which encourages some guidelines for developing the technological skills necessary for the graduates in the field of accounting.

Integration of technological platform accounting is still not enough, in comparison with the minimum requirement of professional bodies encouraged. It has been shown that the low levels of information technological skills in the accounting programs still occur.

In addition, another problem which leads to the lack of technological skills is the insufficient resource. Although Information Technology Packages are highly favored by the student branch of accounting, they are actually offered to the selected few students. This is due to the resource limitation.

At the present time, the application of technological platform has generated the great accounting systems. In many countries, accounting work cannot succeed without it. Accounting figures should be available on the cloud system for all relevant to view and edit at any time. This is where Cloud-Based Accounting happens. Cloud-Based Accounting has made the organizational accounting possible to compete in the global economy (Ahmed,122).



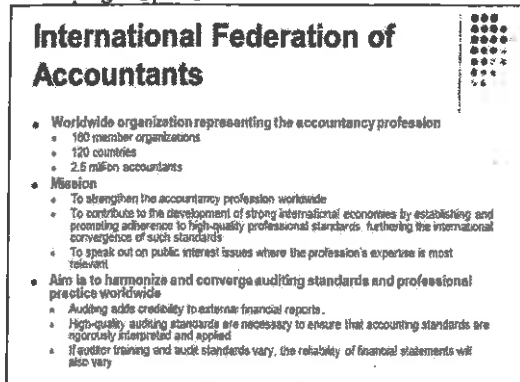
Picture 7: Accounting on Cloud

III. TECHNOLOGY FOR THE ACCOUNTING PROFESSION

Economists, by nature, play vital roles that vary with the functions they do. They perform their jobs with their acquaintance. Hence, they ought to keep themselves up to date with technological changes and in accordance with internationally recognized standards (Albrecht, 24).

Nowadays, Information Technology has a great influence on the business world and also on everyone's social life. In the aspect of accounting work, accounting software is being applied efficiently and is proved to reduce the working time tremendously. There are many accounting package software in the market today. Along with the unified accounting, computerized accounting systems and applications have increased rapidly and almost all accounting companies started to keep their records through such application. Record and supervision of financial transactions have become easier. Usage of computers in accounting has increased and at the same time it has become more complicated. While simple transactions such as pursuance of debts and receivables, calculation of salaries are carried out in accounting by the help of computerized system. Consequently, data invoicing and customer records have started to be accomplished simultaneously.

E-Accounting can be deployed as preparing the accounting document to be submitted online where information is stored on cloud system (Baker,148). International Education Practice Statement (IEPs) is put in place to help members of the IFAC Education in implementing the generally accepted practices in the developing the professionalism of accountants.



Picture 8: IFA

Education International Standard includes the necessary material for preparing the candidates to qualify for professional accountants. It provides guidance for IFAC members and other educators to have the information technology preparedness. It also serves as a guide for the implementation of two other standards: IES7, IES8.

IES7 serves as the vital professional development. IES8 serves as the Competence and Knowledge they need to earn Professional Auditor License. Regarding the further development of knowledge about Information Technology, International Standards Board of Education of Accountants-International Accounting Education Standards Board (IAESB) – takes into account on many factors. The diversity of culture, development, education and language, legal system and social development of countries are among such factors. It also takes into account the variety of accounting functions. IFAC member bodies find place in many stages of developing the qualification of accountants. A professional accountant has a true and personal responsibility to make sure that recording transaction is accurate. Therefore he must have knowledge about Information Technology. Some of the main reasons for the importance of Information Technology to accountants are that accountants are often asked to evaluate the effectiveness of current accounting system and that IT will affect their work in the future. Moreover, it is also important to obtain the necessary knowledge about Information Technology to be highly competitive. Business Competition is important to stay in the global market. The increased value and benefits of information technologies have also forced accounting professionals to improve their

skills in the use of Information Technology in order to better perform their jobs. As a result, there is a growing concern about the level of competence that accountants possess the use of information technology. The skills gained from professional accountants are however still below the minimum level drawn by professional accounting bodies such as the International Federation of Accountants and the American Institute of Certified Public Accountants. This paper focuses on information technology within the core competencies for accounting professionals.

IV. METHODOLOGY

To highlight the situations in the global market, real data will be used to provide the recommendation at the end of this paper. A questionnaire was prepared as modest as possible. It is an essential instrument of research. It has been circulated to 250 respondents, of whom 100 responses have been collected. Target group of this questionnaire are economists with a distribution 45 in the city of Bangkok, 25 in Chonburi, and 40 in Nonthaburi, mainly employed in related entities small and medium enterprises.

This sampling of 100 questionnaires highlights accountants who have knowledge of these cities about information technology. This questionnaire of this paper is created by several different sections, separated by the problem or arguments that will be analyzed. Questions are open and closed leaving the respondents the opportunity to express his thoughts. Questionnaires have been distributed in electronic platform and also delivered by hand.

IV. ANALYSIS OF DATA

Initially, an overview of the characteristics of the respondents such as age group of respondents and the knowledge they have on Information Technology has been analyzed. The selection of respondents consisting of 60% of respondent's economist profession and acquaintances that their knowledge are in undergraduate level. 24% are Approved Accountant and 16% of respondents are expert accountant. It has been observed that the job title is affected by age. Information means. From the definitions given about Information Technology, it has been found that 87% of respondents gave answers that implied that the definition of Information Technology is somewhat misguided. It has been found that economists belonging to 20-30 age group, 31-40 age group have in-depth knowledge about information technology. Economists who have taken the Approved Certified Accountant Exam, generally belong to the age group over 40 years. The same conclusion is observed for economists who take Approved Accounting Expert Title. They are

required to equip themselves with knowledge about Informatics and Computer. To examine the connection between the accounting profession and IT respondents, two specific questions related to the level of knowledge and the importance of IT in the exercise of the accounting profession have been identified. All responders have responded to the question whether or not Information Technology is important to the accounting work. The answer is given at 100% for the importance of IT Work and 0% otherwise. This is due to the fact that an accountant cannot perform any of his job without the help of computer software. As far as the depth of the knowledge of Information Technology, 35% responded with having an in-depth knowledge while 65% responded otherwise. As far as the use of software for the accounting profession, 35% of the respondents responded that they use the computer program to account for the transactions. Majority of the respondents use Microsoft Office which is a program that comes to the aid of documentation and calculation with the built-in calculation functions and formulas. As far as the question of "Period of use of software", 35% of the respondents has over 1 year who uses the program. 45% of the respondents has over 2-3 years who uses the program. 20% of the respondents has over 4 years of software usage experience. The software used by the most economists is for recording accounting transactions. There are instances where operators simply use the software for the simple data entry tasks. The next advancement for the software usage will be for those people who use the software to compile the financial statements. To further illustrate the in-depth knowledge of professional accountants, 65% of the respondents have responded that they know the software design of the software they are using and 35% of the respondents have responded otherwise. Regarding the knowledge of ERP, 65% of the respondents replied YES. 35% of the respondents replied otherwise.

CONCLUSION

Nowadays, it is the era of information disruption. Competition intensifies rapidly. Enterprises have to reduce their costs to stay in business. Another way of being successful in this competing market is to use developing technologies within enterprise commonly in this developing era. Thanks to developing technologies, it is possible to record and store financial documents electronically. With this respect and through legal amendments to be carried out with using the information technology and changes that enterprises will make in their business decision, costs can be reduced significantly. Nowadays, there are many business disruptions. Artificial Intelligence plays a great role in disrupting the typical business

process. BlockChain also plays a role in providing a security on the online transaction. Security has become the debated topic. Online Crime has hit the international threshold. Cloud Technology plays a crucial role in making the accounting system online. By making the accounting system online, it has made the paper-based accounting system become obsolete. Paperless accounting system has an advantage that the accounting figures can be reused, analyzed and be made into the presentation for the management. Big Data plays the disruptive role in storing a huge number of data to be available with ease. Big Data stores the data so that Artificial Intelligence may access the data and make the prediction for the business management to make a decision. Internet of Things also brings the typical business operation to the next level as everything is connected through the internet and can be controlled remotely.

However, these technologies are not mutually exclusive. They are in fact related. Cloud Technology and Internet of Things use the computer network technology to connect to the computer systems. Big Data and Artificial Intelligence feed data to one another to make the business prediction.

BlockChain and Cloud Technology also relate to one another to provide an assured security so that the accounting information stored on cloud is secured.

Benefits of establishing a system for pursuance of books and documents used in accounting in electronic media does not only assist reducing costs of enterprises. Paper-based transaction can be expensive. The cost of printing paper is huge. Moreover the paper-based transaction has a weakness of not being to reuse the transaction. The data cannot be reused for prediction. It cannot be used for Big Data Manipulation. It cannot be analyzed further to guide the business process's decision. Paper-based decision sometimes has the problem of readability. After some time passes, the hand-writing may become unreadable.

By providing the online accounting system, it also enables easier and more effective supervision in the aspects of finance and other judicial issues. The online system provides the workflow system which allows the managerial position to approve the accounting figures. The managers can also the accounting figures back to the agent for revising if there is problem.

Taking inventory of books and documents to be used in e-accounting system and determination of electronic data standards of books and documents are vital. By providing an online system, it is possible to do a checksum of the accounting figure to see if there is a missing figure or to trace the unmatched balances.

The additional benefits from technology in accounting education are to prepare the future accountant to be familiar with the online accounting

system. Online accounting system - is often complicated. Training individuals of computers and software programs to perform the job and teaching how record of all documents used in accounting is extremely important. Curriculums should be made suitable for the computer-assisted accounting and trained individuals should be open to technology and be able to use it and know legal regulations concerning it.

REFERENCES

- [1] Algan, S. (2017). Bilgi yolunda yeni bir durak: Ekstranet, BT Haber, 111, 54-55
- [2] Alp A. (2016). Muhasebede kullanılan defter ve belgelerin elektronik ortamada izlenmesi, (Master's thesis)
- [3] Ak, F. & Sonmez, Z. (2016). Fatura ve e-fatura. Ak Denetim, http://www.verifihesabi.com/makaleler/2017/2917_06.htm
- [4] Akgul, M. & Gokool, O. (2015). INET-TR.CSS Surum 2.5
- [5] Balevi E. (2015). Internet. Ankara: Seckin Kitabevi.
- [6] Demirkan, S. (2015). Muhasebe eğitim yöntemleri, muhasebe eğitiminde yenifuklar, XX. Türkiye Muhasebe Eğitimi Sempzyumu.
- [7] Duff, W. & Mckemmish, S. (2015). Metadata and ISO Compliance. Information Management Journal, 34(1), 4-15
- [8] Duren Z. (2016). 2016'li yıllarda yönetim. İstanbul: Alfa Basım
- [9] Fu, J.,Chao, W. & Farr, C. (2016). Determinants of taxpayers' adoption of electronic filing methods in Taiwan: An exploratory study Journal of Government Information, 30, 658-683.
- [10] Guney U. (2015). Internet,Intranet,Extranet, Byte Türkiye, 116.
- [11] Ince,N. M. (2017). E-donusum turkiye projesi 2005 eylem plani ilerleme raporu sumusu. 15 Eylul 2005. Bilgi Toplumu Dairesi.
- [12] MacKenzie, G. (2014). A new world ahead: international challenges for information management. Information Management Journal, 33(2),24-34.
- [13] Seyal, A., Noah, M. & Rahim, M. (2012). Determinants of academic use of the internet: Structural equation model. Behavior and Information Technology 21(1), 71-86
- [14] Turner, L. & Apelt, C. (2014). Globalisation, innovation and information sharing in tax systems: The Australian experience of the diffusion and adoption of electronic lodgement. E-Journal of Tax Research, 2(2), 241-269.
- [15] Accounting Education Change Commission (AECC). "Objective of education for accountants: Position statement number one"; (2015) Issues in Accounting Education, 5(2), 307
- [16] Ahmed A. "The level of IT/IS Skills in accounting programmers in British Universities" (2013); Management Research News, 26 (12), 20.
- [17] Aisbitt S. & Sangseter, A. "Using Internet-based On-line Assessment: a case study" (2015); Accounting Education: an international journal 14(4), 383-394
- [18] Albrecht W.S.,& Sack, R.J. "Accounting Education: Charting the course through a perilous future" (2016); Accounting Education Series,16.
- [19] American Accountants Association (AAA). "Committee on the future structure and scope of accounting education (The Bedford Committee). Future Accounting Education: Preparing for the expanding profession" (2015); Issues In Accounting Education, 1(1). 168
- [20] Baker C.R. & White Jr. "Internet use in accounting education: survey result" (2017); Journal of Accounting Education, 17 (2/3), 255-266.

★★★



INTERNATIONAL SOCIETY FOR ENGINEERING RESEARCH AND DEVELOPMENT

International Conference on

Accounting and Finance

Certificate

*This is to certify that **Titaporn Sincharoonsak** has presented a paper entitled "**Cloud Technology on Accounting**" at the International Conference on Accounting and Finance (ICAF) held in Singapore on 2nd-3rd May 2019.*

ISD-ICAFSING-02059-001

Paper ID



A handwritten signature in blue ink, appearing to read 'Lobain'.

Chairman

INTERNATIONAL SOCIETY FOR ENGINEERING
RESEARCH AND DEVELOPMENT

