



**The Gap of Supply and Demand on Accounting Education:
*A Picture of Readiness of Top 50 Universities in South East Asia toward Green Concern***

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ABSTRACT

This paper aims to take a picture on the university commitment toward sustainability development consideration. As a part of it, this paper also try to map the action taken by accounting education through its programs including curriculum development, research, campus activities programs showing green concern in creating sustainability development. As a descriptive study, this research took 50 universities on top South East Asia ranking web of world universities (Webometrics) in 2010. All data taken from information published on web in each universities as well as any information related with each universities provided in public sources. Using descriptive analysis it is found that mostly accounting education put their green-concern on hardcore facilities such as web-based learning as one of their delivery method supporting facilities. While findings shown that accounting education need to put more attention and effort on designing accounting curriculum, campus events, and research that carry ethics and socio-environment consideration to respond the ultimate demand from business sector. Eventually, this result expected to encourage accounting education especially in Indonesia to put more consideration and action in responding business requirement in creating sustainability development.

Keywords: *South East Asia, Accounting Education, Environment, and Ethics*

INTRODUCTION

Nowadays, the green concern is not only happen among the environmental activist, but almost every sector is also affected by the rush of green concern. New methods or processes to drive the environmental sustainability are developed, even in the business society, the sustainability concern become important element of the business practice.



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Due to the new era, accountant as the significant part of business community is not only required to mastering conventional accounting but also be able to capture the social environmental sustainability issues which is based on the ethical principle (Schaltegger and Burritt, 2000). Because of the development of the future accountant is more or less lay on the university responsibility, this paper is trying is to reveal how far the transformation of the accounting course in the higher level of education. Other objective is to mapping the action taken by accounting education on curriculum development, research, campus activities programs in creating sustainability development (green concern). And ultimately, the various methods of green concern from the best 50 university in South East Asia based on Webometrics will be describes in this paper. Therefore, in the future can be contribution for the university in Indonesia in order providing alternative selection of methodology to improve their method in relation with the sustainability.

RESEARCH METHODOLOGY

This paper is a descriptive research which aimed to map the role of accounting education on creating sustainability through its curriculum development, campus activities program, and researches which deal with social and environmental consideration. And in order to collect similar characteristics, all consideration and data are taken from the published information of top 50 universities in southeast Asia rank by Webometrics, and from public sources (e.g. website, articles, etc.) to get a broader perspective on how their accounting program respond to the business sustainability issues. The data sources is from the published information by web media therefore the Webometrics rank is used.



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Research questions:

1. How many universities have shown their concern on creating sustainability through their commitment on vision, mission, and campus's objectives?
2. How many accounting education have considered green concern in designing curriculum?
3. What kind of campus programs that accounting education arranged aligning with green/sustainability concern, such as: seminars, workshop, talk show, accounting/research competition, accounting students activities, etc.?
4. How many researches pertaining with sustainability concern have been produced in campus (by accounting department)?

RESEARCH ANALYSIS

The Growing Concern of Environment Sustainability

Various natural disasters that happen due to the environment damage leads uncertainty in the human kind. Responding this situation, government and international bodies trying to minimize the destruction trend by enrolling regulation and guidance to trigger, improve and maintain of environment concern (Lieberman et al., 2007). The effort of come from other parties and one of it is academic. University as the producer of future leader also make certain move toward the world sustainability, this development shows in the form of variety methods such as green curriculum, green program or seminar or technology used for the environmental sustainability objective. Moreover, the stigma that accountant is consider lack



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of concern regarding social and environmental issues (Schaltegger and Burritt, 2000) drives this research to describe the respond of accounting department and its university in South East Asia based on Webometric rating toward the green concern of world.

The Change in Business Society

In the business, the concern of environment is increasing started from the prevention, detection and reporting environmental contribution. One of the examples in the green concern of industry is environmental issues become part of the business decision making process (Bennett et al., 2002). The modern concept of green movement in industry is not only due to the charity reason but also in the purpose of smoothing the success of company financially by the efficient and minimizing the possible of environmental risks, this concept is well known as eco efficiency (Hansen and Mowen, 2007). Company trend toward eco efficiency requires skill and capability of accountant that different with the conventional accounting, for example: the knowledge to calculate and prepare the environmental based report such as environmental cost report, environmental financial report, and others management supplements.

The Change in Professional Accounting Bodies

Due to the complexity of the accounting practice especially related with the “intangible concept” such as social and environmental, greater range of accountant professional bodies that employ accountant graduated demand an employee that has strong point in the ethic that able to eliminate the risk of work integrity. This requirement should be respond by the university by shaping the curricula design especially in the upper level of



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accountant course (Delaney and Coe, 2008).

The American Institute of Certified Public Accountants' (AICPA) require the ability of accounting education to be adaptive and flexible enough in order to capture the contemporary concept especially issues that highly related with the society and for the society (AlHashim and Weiss, 2004). Another example from the United States that shows the change of professional accounting bodies is The American Accounting Association's (AAA) require the change in the university or academic to adjust their curriculum in order to prepare accountant graduated of the change in the social and environmental from the accounting perspective. In Indonesia, the breakthrough of Indonesian institute of accountants (IAI) in establish the national symposium of accounting with the topic of green concern reveals the initial change toward sustainability concern in accountancy development.

The Change in Government

Responding sustainable issues, majority of governments around the world involve with an economic system that integrate between macroeconomic and nation's economic use of environmental (Hecht, 1999). The integration that well known as System of National Account (SNA) in America and others countries require expertise in calculate the environmental cost such as protection cost. Other examples of the changes in order to support national act in the era of sustainability concern are emissions accounting that developed by Netherland and the National Accounting Matrix including Environmental Accounts (NAMEA) that detect pollutant emissions by economic sector in the European Union (Hecht, 1999).



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Derive from the national government policies; some of the government bodies also reveal the similar trend toward the sustainability of environment. For example, In the United States, the Bureau of Economic Analysis (BEA) established the preliminary process of green accounting (Hecht, 1999). Indonesian government shows the green concern in term of new regulation in certain industry such as mining to prevent further environment damage. The change in national policy indicate the requirement of contemporary accountant skills, such as the valuation of the environment contribution, the calculation of Green GDP and the identification of natural resources account.

Green Concern in Academic

In the first part of this paper, the changes and requirement several stakeholders in accountant's future are describe. This section will provide the picture of the effort and respond in current condition of the university as the provider for the future accountant.

University Green Concern

RQ1. How many universities have shown their concern on creating sustainability through their commitment on vision, mission, and campus's objectives?

In the changing environment while business has swift it concern from profit oriented to the balancing between profit, social and environmental consideration to achieve sustainability development, all parties deal with business sector have been encouraged to align with the business demand nowadays. Hence, universities as intellectual producers for business world also need to align the campus objective with the balanced consideration in creating sustainability development. The commitment of timeless principles that guide organization on



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their daily activities was represent as organization value. Not just in business sector, public sector nor an academic institution should has their value and build vision and mission to be the compass by which the institution guide their organization, as it defines the core purpose of the organization exist (Niven, 2006). Finally from the general perspective, the way we might define one organizations commitment on creating sustainability development is by looking through their vision, mission, and organizational value stated by slogan, credo, etc.

This paper tries to map the university respond on those consideration by answering first research question from the top-50 South East Asia universities announced by Webometric, All data collected from each campus website to observe further about their vision, mission, slogans, including web design that shown commitment on creating sustainability in terms of environmental, social, ethics and governance considerations. It found that only five universities show it consideration explicitly. Universiti Sains Malaysia put the slogan on their website as transforming higher education for sustainable tomorrow, while Maharakham University Thailand compile its slogan on website as follow: *“First we must make our university a great place to work and learn with green energy, green technology, green vehicles and green waste disposal. We need to ensure that we are eating clean, healthy food and working and studying in a pleasant sustainable environment.”* The data describes that only 10% of top universities in South East Asia have shown their commitment to create sustainability development through their vision, mission, and official slogan. Other universities mentioned in the top 50 rank also mentions the progress in showing the sustainability concern such as “green campus program” run by University of Indonesia



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which providing bicycle track more than 10 kilo meters in campus area to encourage energy saving through eco-friendly transportation. In addition, this university has succeeded to develop “green metric” as the rating for university in the world based on the green concern.

RQ2. How many accounting education have considered green issues in designing curriculum?

Universities with it accounting department or school of accounting have responsibility to produce an ethical accountant as per business environment change nowadays. It became apparent to accounting educators that ethics should be incorporated in the curriculum for prepare students to be professional in accounting and auditing with the awareness of the moral and social issues arising in an organization’s decision making processes (Waddock, 2005). Another research also support this argument, offering social and environmental accounting education as one element is a strategy to help developing the intellectual and ethical maturity of accounting students (Gray et al., 1994). Hence, this paper attempt to take a picture on how far accounting education within top 50 Southeast Asia universities have responded to business demand on accountant professional. As shown on table 1. (Page 16), only 37 from 50 universities on those rank, have accounting program. Ethics consideration which embedded with social-environmental, governance, and sustainability used as keyword to see whether its accounting curriculum have designed based on sustainability concern. This research method goes in depth through accounting program information provided on the web, and classified into two categories as subject of conventional accounting concern and subject



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with green & ethical accounting concern. Conventional accounting is still consider as the most accounting curriculum that used, however some research mention the limitation of present accounting courses such as too much emphasis on technical skill acquisition (Humphrey et al.,1994), lack of ethical and intellectual development (Gray et al., 1994) and less conceptual emphasis (Mathew, 1994). Otherwise Gibson (1997) mention on her notes that one way to overcome these limitations is by developing courses in social and environmental accounting to broaden student horizons and persuasively enhance the ethical maturity of accountants in practice. This consideration will be use as main point in classifying subject with green and ethical concern in accounting curriculum development. Noted that only 37 universities out of top-50 Webometric rank in South East Asia that have its accounting program. Public source data notify that only 6 academic institutions in South East Asia have developed accounting curriculum with green and ethical consideration. It means 84% universities still run the conventional accounting on their accounting curriculum program. Below is the several information of the university who offer subjects that capture the responsibility toward social and environmental concern.

Singapore Management University has shown as one of the institutions which offers accounting students the subject “Business Government and Society” and “Ethics and Social Responsibility”. Another university from Singapore, National University of Singapore open the subject “Good Governance and Ethics” as mandatory subject for its accounting students. In Thailand, Shrinakharinwirot University has designed subject on “Sustainability Studies” for their accounting and business students.



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Those universities which classified as conventional accounting for the curriculum development may argue that green concern has embedded in other subjects. Environmental Accounting or Environmental Management Accounting could be taught as part of Management Accounting subject, while ethics and social concern have included in Business Environment, Auditing, or others relevant subject. And for these arguments will be considered as one of the limitation study of this paper.

Delivery Method and Campus Supporting Facilities toward Green Concern

According to Sisaye (2011) accounting ethics education is shaped by ecological and environmental sustainability concerns. He argues that using functional-institutional and consequential-conflictual sociological approach in accounting education, such as case studies, individual research project, group project and class discussion as well as reading text book, guest speakers, video shown in class, web-based collaborative learning and students presentation will enhance the shape of students ethical awareness and social responsibility. Thus one delivery method that encourage students to be active through IT facilities as e-learning also has developed green concern in the heart of accounting students.

As per data mentioned before that 37 universities from top 50 owned their accounting program, have found that 95% universities use web-based learning as their one delivery method supported by information and communication technology facilities on their learning process (Refer to Table 2. - Page 16). Hence, these data imply that most institution may assert the existence of emerging ICT in campus could be taken as campus green



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initiative as it encourage institution to minimize the use of papers as conventional material on learning process.

RQ3. What kind of campus programs that accounting department participated and align with green/sustainability concern such as: seminars, workshop, talk show, accounting/research competition, accounting students activities, etc.?

Data from 37 universities which have accounting program shown that mostly institution still focusing their activity on the rules and standards that uphold technical function of accounting. Seminar, workshop related with tax regulation, IFRS and it technically effect is a most activities theme held by campus recently. While there also some programs take financial crisis as topic, emphasizing fraud, ethical standard, whistle blower, corporate social responsibility that managed by accounting program have been enlightening the ethical perspective of the future of accounting education.

Eleven of thirty seven universities (30% institutions) have been recorded as the one that establish, and maintain green-concern activities at campus. Prince of Songkla University Thailand maintains their cooperation with some accredited organization to make a symposium on energy saving and bio-fuel utilization. This event was collaboration from some department including accounting department which play a part to calculate the cost saving by industry on maximizing bio-fuel. From Malaysia, Universiti Sains Malaysia has green business forum which maintains a forum discussion on business topics toward green technology and sustainability development. Some universities in Indonesia such as University of North Sumatera, University of Diponegoro, University of Gadjah Mada, Petra Christian



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University, and University of Indonesia, also consistent with their good cooperation with government institution (Indonesia Environmental Ministry, Indonesia Forestry ministry, or Indonesia Environment Monitoring Board (Bapedal in national and province level) to held some seminars, workshop, talk show on theme: Corporate Social Responsibility, Green Accounting, Living Green, Carbon Trading, etc. Those activities not only served for students or academicians, sometimes those event held by the institution and opened for public including business sector, organizations, and civil society to join those events. In another point of view, it was recorded that University of Gadjah Mada through its accounting students organization have held accounting students competition (paper research) on international level with Green Accounting as it theme.

Some programs and events held by accounting institution above might be considered as respond to the recent changes in community and consumer environmental awareness that have caused reaction from the private and public sectors (Burrit and Welch, 1997) and many organizations are requiring a higher level of environmental knowledge from all their employees. This condition may be challenging to accounting courses in providing professional accountant which are traditionally of a conservative and technical in nature (Gibson, 1997). In other perspective, those campus events can be as soft marketing tools to show that related institution have move beyond traditional accounting towards sustainability considerations and improve their brand image.

RQ4. How many researches pertaining with sustainability concern have been



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produced in campus (by Accounting Department)?

Consideration on ethics, governance, as well as socio-environment in accounting education should be supported by some researches on related topics to give feedback for institution in the purpose of evaluation and decision making toward the actions that should be taken on the world changing demand for accountant professions nowadays. From findings and recommendation on elaborating research within those themes could contribute valuable information to design curriculum, programs, delivery method, and setting institution policy effectively in creating sustainable development as per real word demand. While data shown on Table 3. (Page 16) from those top-50 universities in South East Asia, there is only 14% university which setting priorities on developing ethics, governance, and socio-environment thinking on their research topics shown from the publication of institution journal focusing on above relevant theme.

Indonesia, representative by Universitas of Sebelas Maret Surakarta has shown their research commitment by publishing department journal called “Issues in Social and Environmental Accounting (ICSEARD)”. While in Malaysia, University of Kebangsaan Malaysia is known as the publisher of Asian Journal of Accounting and Governance.

CONCLUSION

This paper attempt to map in what extend universities especially accounting institution has respond to the changing of business demand more on ethical maturity and broaden conceptual perspective for professional accountant. It is still few institutions taken



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from top 50 South East Asia universities rank that shown their concerned through its vision and mission, programs and it research centre. While the findings from each accounting institution shown that only 16% have developed their curriculum with ethics and green concern. This condition supported by the argument that the educational process followed functional assumptions of conformity to professional standards as being driven by internalization of the profession's ethic code. While International Accounting Education Standards Board (IAESB) has on progress to propose revised IES (International Education Standard) no.4 about Professional Values, Ethics and Attitudes. In it Exposure Draft (April 2011), one statement mentioned that IFAC shall cover accountant professional values, ethics, and attitudes with one of five fundamental principles which foster a commitment to sensitivity to social and environmental responsibilities. Hence so far, we have seen that IFAC as representative of professional organization has taken action on responding business change by revising the professional ethics standard.

Meanwhile, AACSB (The Association to Advance Collegiate Schools of Business) accreditation standards and The Treadway Commission (National Commission on Fraudulent Financial Reporting) have recommend the integration of moral and ethical issues of financial reporting into the accounting curricula. The Commission stressed the need for fraudulent and financial reporting ethics issues to be integrated into accounting curriculum (Fisher et al., 2007).

Considering on those respond taken by professional accounting institution and accreditation standard board on integrating ethics and socio-environment consideration on



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accounting curriculum development, have encourage accounting institutions as the one who produce professional accountant to move forward on taking action further. Condition shown by top-50 universities specially with its accounting department through its program, curriculum, delivery method, and its researches should be encourage accounting education to put more attention on ethics and socio-environment concern by integrating it through most accounting department learning program. Hopefully cooperation among these three institution focus on ethical and socio-environment concern, could guarantee resulting professional accountant with ethical maturity to contribute in business sustainability nowadays. The implications of this paper may contribute an input for Indonesian accounting education to set some action related with the soft facilities through accounting curriculum, delivery method, accounting events, and accounting research theme on ethic and socio-environment consideration in the way to support sustainability development on business sector.

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APPENDIX

Table 1. List of Top 50 Universities by Region

Universities/ Institute:	Singapore	Malaysia	Thailand	Indonesia	Philippine	Total
Accounting Department	2	8	12	14	1	37
No accounting Department	2	1	7	3	0	13
Total	4	9	19	17	1	50

Source. http://www.webometrics.info/images/fondo_webometrics_en.jpg

Table 2. University Commitment on Green Concern

Description	Published		Not Published	Total
	Green and Ethical Concern	Conventional Concern		
Campus Vision, Mission, Slogan on Green Concern	5	45	-----	50
Curriculum development :	Green and Ethical Accounting	Conventional Accounting Concern	Not Published	Total
Subject concern of socio/environmental accounting	6	31	13	50
Delivery method concern of socio/environmental accounting	35	2	13	50

Source. http://www.webometrics.info/images/fondo_webometrics_en.jpg

Table 3. Accounting Department on Green Concern

Campus Activities program:	Ethics; Socio & environment Theme	Others Accounting Theme	Not Published	Total
Held by academic institution: Seminars, workshop, talk show, award program, etc	11	26	13	50
Held by accounting student: case /paper research competition, accounting (game)competition	1	36	13	50
Research Activities:	Ethics; Socio & environment Theme	Others Accounting Theme	Not Published	Total
Publisher of socio/environmental journal	5	32	13	50



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Centre of socio/environmental research	8	29	13	50
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Source. http://www.webometrics.info/images/fondo_webometrics_en.jpg