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# Business Innovation and Development in Emerging Economies

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## ABSTRACT

Business Innovation driven by the advancement of technology has dramatically changed the business landscape over recent years, not only in advanced countries but also in emerging markets. It is expected that business innovation could help achieve economic inclusion, which has been a global initiative over the last decade, creating opportunities for all people to benefit from the economic development. These proceedings provide an outlet for discussing the importance of business innovation, especially in emerging countries in helping to reach inclusive economies. The papers cover the subject areas management, accounting, finance, economics and social sciences.

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*Edited by*

Irwan Trinugroho

*Universitas Sebelas Maret (UNS), Indonesia*

Evan Lau

*Universiti Malaysia Sarawak, Malaysia*



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## Preface

This publication contains a selection of papers presented at the 5th Sebelas Maret International Conference on Business, Economics and Social Sciences (SMICBES) 2018, held in Bali, Indonesia on July 17–19, 2018. This conference, with the particular theme “Business Innovation and Development in Emerging Economies”, is organized by the Faculty of Economics and Business, Universitas Sebelas Maret (FEB UNS) and supported by some other institutions. SMICBES was first organized by FEB UNS in 2013 under a different name. It has been the regular event of FEB UNS since 2016.

The conference objective is to provide a forum for researchers and policymakers to exchange their views about current issues related to business, economic and social sciences and the intersection among those fields. More than 300 papers, either empirical or theoretical, were presented in this conference.

This conference and this publication were made possible by support from many people. We therefore would like to thank the Dean of FEB UNS Dr. Hunik Sri Runing Sawitri, Vice-deans, the organizing committee of the conference led by Mr. Linggar Ikhsan Nugroho, M.Ec.Dev, participants, reviewers and all supporting institutions for their valuable support to the conference.

*Editors*

Irwan Trinugroho  
(Universitas Sebelas Maret)

Evan Lau  
(Universiti Malaysia Sarawak)



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Chapter

## Factors affecting the quality of accounting information systems in Indonesian's higher education (research model)

By *C.D.K. Susilawati, Jerry, Y. Carolina, Rapina*

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### ABSTRACT

Accounting information system serves to generate accounting information that is useful in strategic decision making for companies including higher education/university. What is happening now is that many higher education with financial management experience problems because the utilization of existing resources is not optimal and income declines significantly resulting in the quality of higher education is also not optimal.

Researchers are interested to examine the factors that affect the quality of accounting information systems to produce quality accounting information in Higher Education, so that these factors can be managed properly in order to form a quality accounting information system to produce quality accounting information that is useful in the strategic decisions of Higher Education business. In this era of globalization, although a university is a type of business whose main purpose is not profitable, but Higher Education is also a business that must prioritize financial management in accounting information system quality to improve the quality of higher education in society. Factors identified by researchers include environmental uncertainty, user competence, organizational culture and information technology.

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## Factors Affecting the Quality of Accounting Information Systems in Indonesia's Higher Education (Research Model)

Christine Dwi Karya Susilawati  
[christine.dwi.karya.s@gmail.com](mailto:christine.dwi.karya.s@gmail.com)

and Jerry

*Lecturer of Accounting Program Study in Maranatha Christian University  
And Student of Accounting Science Doctoral at Padjajaran University*

Yenni Carolina

and Rapina

*Lecturer of Accounting Program Study in Maranatha Christian University*

**ABSTRACT:** Accounting information system serves to generate accounting information useful in strategic decision making for companies including universities/higher education. Things that happen today many universities whose financial management has problems constraints both in Private Universities/ Higher Education and State Universities/Higher Education, so that the utilization of existing resources is not optimal and decreased income significantly resulted in the quality of college education is also affected not optimal.

Researchers interested to examine the factors that affect the quality of accounting information systems to produce quality accounting information in Higher Education, so that these factors can be managed properly so as to form a quality accounting information system to produce quality accounting information useful in strategic decisions university business. In this era of globalization, university although its nature is a type of business whose main purpose is not profitable, but Higher Education is also a business that must prioritize financial management in accounting information system quality to improve the quality of higher education in society. Factors identified by researchers include environmental uncertainty, user competence, organizational culture and information technology.

**Keywords:** Quality Accounting Information System, Accounting Information, Organization Variables

### 1. INTRODUCTION

#### *1.1. Background and Problems of Research*

In Indonesia there are various phenomena that occur related to the quality of accounting information systems especially in universities disclosed Chairman ABPPTSI Center Suyatno (2015) states that there are a number of things that make 205 foundations are problematic because of financial conflicts, facilities, and authority Related management financial delay occurs in preparing financial statements, the use of improper accounting systems, and manual reporting is not based on information technology. This can be said the quality of AIS in a number of private university foundations are still bad. Another phenomenon concerning the environmental uncertainty that influences the inflexible system is proposed by Minister of Research and Technology Nasir (2015) which states that the financial system in PTN-BH is currently lacking flexibility, such as difficulties in managing the budget given by Kemendikbud, so that the budget absorption becomes low and the system the financial statements applied by the Ministry of Finance (MoF) are complex and incompatible with dynamic academic activities, meaning that factors that have not been able to anticipate this dynamic academic activity cause the financial system in PTN-BH is less flexible.

Accounting information system is influenced by the use of information technology because through the use of information technology will improve the quality of accounting information systems (Wilkinson et al., 2000: 66-67). The same thing was put forward by Romney & Steinbart (2015: 38-39) who argued that information technology is one of the factors affecting accounting information systems. According to Thompson & Baril (2002: 2) information technology is a combination of hardware and software. The same thing was put forward by Laudon & Laudon (2013: 13) who argued that information technology consists of hardware and software that the organization needs to achieve organizational goals. According to Romney and Steinbart (2015: 31) suggests that information technology is a computer and other electronic devices used to store, retrieve, transmit and manipulate data.

A well-designed accounting information system will provide added value to the company (Romney & Steinbart, 2015: 37). So a quality accounting information system that can provide added value for the company. Qualified accounting information systems have integrated, flexible, accessibility,

procedural and rich media (Heidmann 2008: 87-91) characteristics. The quality of accounting information systems is generally flexible, efficient, accesible and timely (Stair and Reynolds, 2010: 57). A quality information system should be perceive usefulness (and when the system is used to improve performance) and perceive to use (Davis et.al., 1989: 320) .. The system is designed, focused to produce a good quality information system design that is easy to use, to produce the correct function for the user, is a fast in taking data and moving between data display, reliable, safe and well integrated with other systems Bocij, 2014: 392-393). Quality systems are easy to use, easy to learn, accurate, flexible, satisfactory, integrated and customized system (Khosrow-Pour, 2011: 963).

The result of a quality information system is quality accounting information in decision making. This is expressed by Laudon & Laudon (2012: 14) that quality information systems will produce quality accounting information used by users in decision making. The same thing is expressed by Hall (2011: 172) which states the quality of accounting information is directly related to accounting information system activity. Similarly, Gelinass and Dull (2008: 17) states the information system collects data to convert it into important and quality information. Also supported by Romney and Steibart (2015: 36) which states that accounting information systems process data to generate information for decision making.

Information is organizationalized and processed data to be more meaningful and improve decision making (Romney & Steinbart., 2015: 30). The same thing expressed by Wilkinson et.al (2000: 5) states information as meaningful and useful data for those who need it. And Susanto (2013: 38) which states information is the result of data processing that gives meaning and benefits. According to Bocij (2015: 7), information is data that has been processed into more meaningful, data that has been processed for a purpose and data that has been interpreted and understood by the user. Quality accounting information has the characteristics of completeness (scope), timeliness, easy to understand (format) and accurate (Heidmann, 2008: 82-86). The same thing is expressed by Romney & Steinbart (2015: 30) useful information characteristics are relevant (improved decision making), reliable (complete from bias or error), complete, timeliness, variable the same) and accessibility. And according to Stair et.al (2010: 6), valuable information characteristics are accessible, accurate, complete, economical, flexible, relevant, secure and simple. According to Bocij (2015: 11-13), the characteristics of quality information in terms of its contents are accurate, relevant, complete, concise and scope, and in terms of form is clear, detailed, appropriate and presented in the correct form. According to Gelinass and Dull (2008: 21), effective information is easy to understand, relevant, timely, predictive value, feedback value, verifiability and neutrality.

Rahayu (2012) found that the quality of data and quality of accounting information system affect the quality of accounting information at the tax office in Bandung and in Jakarta (Indonesia). The same thing raised Jun Shien (2015) quality accounting information system affect the quality of accounting information at the University in Bandung-Indonesia. According to Abdallah (2013: 47), the impact of the use of information systems on the quality of tax information in Jordan.

From the description above the authors identify there are several factors that affect the quality of accounting information systems that produce quality accounting information in the right decision-making such as environmental uncertainty, user competence, organizational culture and information technology in college, the author is interested to conduct research entitled Factors- Factors Affecting the Quality of Accounting Information Systems to produce Quality Accounting Information at Universities in Indonesia

## 2.STUDY LITERATURE

### 2.1. Relevant and Current Primary Reference Library and Hypothesis Development

By Prioritizing Research Results Variable Organization includes environmental uncertainty, user competence in the organization, organizational culture and information technology used by organizations in the Journal of Scientific and Development Hypothesis

**Table 1. Effect of Environmental Uncertainty on the Quality of SIA**

Year and Author	Result of Environmental Uncertainty Study on Quality of AIS
Hammad et.al ( 2012)	environmental uncertainty becomes an important factor in designing an effective and efficient accounting system, and from the results of the research shows the uncertainty of the environment affecting accounting systems that result in information for management

Gilbert & Singer (2011)	environmental uncertainty shows a significant impact on strategy and information systems designed as a strategy.
Gull et.al. (1993)	conditions of perception of high environmental uncertainty improve the quality of information generated by information systems to produce decision-making that improves company performance.
Hwah and Huynh (2013)	Environmental uncertainties affect the accounting system and company performance as a moderating variable.

So it can be said from the results of previous studies formulated hypotheses  
 H1: environmental uncertainty affects the quality of accounting information systems.

**Table 2 Effect of User Competence on Quality Accounting Information System**

Year and Author	User Competence Research on AIS Quality
Nurhayati dan Mulyani (2015)	user competence plays an important role in the implementation of quality AIS
Saleh (2013)	personal competence improves the quality of AIS
Iskandar (2015)	user competence affects the quality of AIS.
Jun Shien (2015)	user competence affects the quality of AIS that can improve decision making.

H2: user competence affects the quality of AIS that can improve decision making.

**Table .3. Influence of Organization Culture on Quality Accounting Information System**

Years and Authors	The Theory and Results of Organizational Culture Research on the Quality of AIS
Susanto ( 2013:60)	Culture is an everyday internal environment that is visible to and felt by those who work within it, organizational culture gives every organization its features and meaning and without the support of organizational culture all efforts will be in vain.
Ivancevich et al. (2008:37)	argued that organizational culture is what employees perceive and how it creates patterns of beliefs, values and expectations.
Laudon & Laudon (2014:50)	Part of organizational culture can always be found embedded in information systems.
Romney and Steinbart (2015:38-39)	the design of accounting information systems is influenced by organizational culture.
Stair and Reynolds (2012:31)	argued that organizational culture has a positive effect on the successful development of information systems.
O'Brien dan Marakas (2009:17)	the success of information systems is not only measured through efficiency in terms of minimizing cost, time and use of information resources, but the success of information systems one of which must be measured through the organizational culture that supports it.
Napitupulu (2015)	accounting information systems must be able to adjust to the organizational culture that exists within the organization.
Nusa (2015)	there is an influence of organizational culture on the quality of accounting information systems
Rapina (2014)	organizational culture affects the quality of accounting information systems and on the quality of accounting information.

Based on theories as the concepts in this study that have been described above and some recent research results that support the theory can then be formulated hypothesis:

H3: organizational culture affects the quality of accounting information systems.

**Table 4 Influence of Information Technology on Quality Accounting Information System**

Year and Author	Theory and Results of Information Technology Research on Quality of AIS
Susanto ( 2013:60)	Culture is an everyday internal environment that is visible to and felt by those who work within it, organizational culture gives every organization its features and meaning and without the support of organizational culture all efforts will be in vain.
Ivancevich et al. (2008:37)	argued that organizational culture is what employees perceive and how it creates patterns of beliefs, values and expectations.
O'Brien dan Marakas, (2009:16)	Success in today's dynamic business environment relies heavily on maximizing the use of Internet-based information technology and systems to meet customer needs in the global marketplace competition
Thompson & Baril (2002:2)	information technology is a combination of hardware and software.
Laudon & Laudon (2013:13)	information technology consists of the hardware and software organizations need to achieve organizational goals.
Wilkinson et al., (2000:66-67)	Accounting information system is influenced by the use of information technology because through the use of information technology will improve the quality of accounting information systems.
Romney & Steinbart (2015:38-39)	information technology is one of the factors that affect the accounting information system
O'Brien dan Marakas (2009:17)	the success of information systems is not only measured through efficiency in terms of minimizing cost, time and use of information resources, but the success of information systems one of which must be measured through the organizational culture that supports it.
Sacer & Oluic (2013)	the use of information technology affect the accounting information system.

Based on theories as a concept in this study which has been described above and some recent research results that support the theory can then be formulated hypothesis  
 H4: information technology affects the quality of accounting information systems.

**Table 5. Influence of Accounting Information System Quality to Accounting Information Quality.**

Year and Author	Theory and Research Results Quality Accounting Information System of Accounting Information Quality.
Susanto (2013:16)	Accounting information system orientation to accounting information quality
Wilkinson et al. (2000:18)	quality information should be relevant, accurate, timely, concise, clear, measurable and consistent.
Mancini et al. ( 2013:141)	A quality accounting information system can produce quality accounting information that can be used to meet control needs.
Susanto (2013:12)	Companies that use information effectively can benefit from opportunities to do things first (faster), more rightly (more effectively) and cheaper (efficient) than their competitors.
Jun Shien (2014)	top management support affects the quality of accounting information systems and their impact on the quality of accounting information generated by companies by improving the quality of financial reporting systems.
Rapina (2014)	management commitment, organizational culture and organizational structure affect the quality of accounting information systems and their impact on the quality of accounting information.
<b>Rahayu ( 2012: 25-52)</b>	the quality of accounting information systems have a significant effect on the quality of accounting information.

So from the description above can be identified hypothesis

H5: that the quality of accounting information system affects the quality of accounting information.

#### Preliminary Study of Researcher

Preliminary study that has been implemented that is limited to literature study (textbook) and the results of research from the article, And research that has been done by researchers related to the research that will be done:

1. *Role of Uncertainty Environment on Management Information System- Literature Approach* di IJSTR Volume 5 - Issue 6, June 2016 Edition - ISSN 2277-86
2. HOW COMPETENCE USER IMPACT THE QUALITY MANAGEMENT INFORMATION SYSTEM *Christine Dwi Karya Susilawati, Proseeding ICITB Darmajaya 2016, <https://jurnal.darmajaya.ac.id/index.php/icitb/article/view/571>*
3. "Application of Qualified Accounting Information System in Higher Education: Viewed From the Finance Section Perspective to Anticipate Environmental Uncertainty" POLITICAL ECONOMY: GOVERNMENT EXPENDITURES & RELATED POLICIES eJOURNAL Vol. 11, No. 72: May 3, 2018  
[https://hq.ssrn.com/Journals/IssueProof.cfm?abstractid=3154194&journalid=1245083&issue\\_number=72&volume=11&journal\\_type=CMBO&function=showissue](https://hq.ssrn.com/Journals/IssueProof.cfm?abstractid=3154194&journalid=1245083&issue_number=72&volume=11&journal_type=CMBO&function=showissue)

#### Respondent's characteristic (Target)

**Table 4**  
**Characteristics of Respondents In General**

Position	
Permanent lecturer	40%
Head Finance & budget	20%
Kajur / Sekprodi	20%
Finance Manager	5%
Staff accounting and reporting section	10%
Student	5%
	<b>100%</b>
Gender	
Man	40%
Women	60%
No Charging	0%
	<b>100%</b>
<b>Number of Colleges</b>	<b>66</b>
<b>Total Respondent</b>	<b>320</b>

Characteristics of Higher Education			
	Respondents		Percentage
Institute	5	23	7
Polytechnic	8	42	13
High School	6	24	8
University	47	231	72
	<b>66</b>	<b>320</b>	<b>100</b>

### 3. Research methods

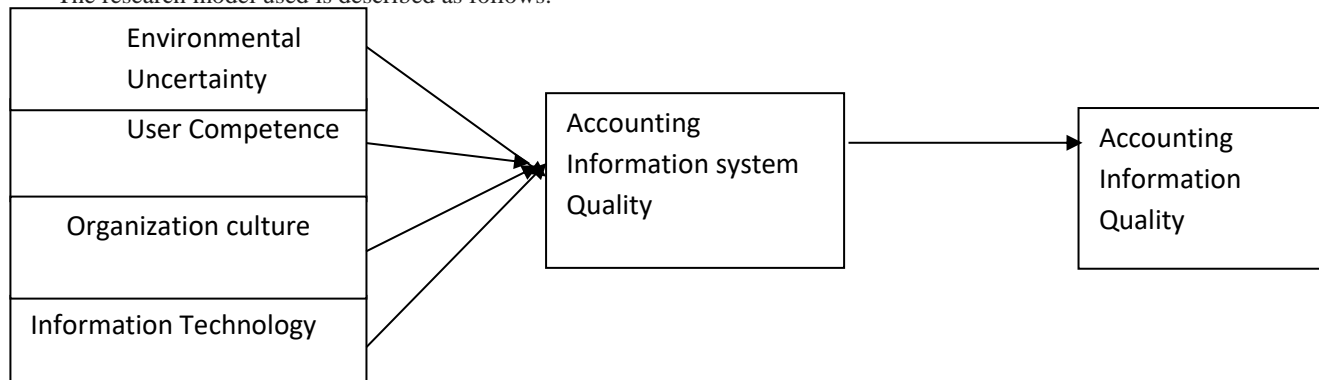
#### Statistical Methods Used for Processing Research Results

Data analysis method used in this research is Structural Equation Model (SEM) method - Partial Least Square (PLS). According to Hair et al. (2013), PLS is an alternative method of SEM that can be used to overcome relationship problems between complex variables but the sample size of the data in a small range (30 to 100).

The SEM-PLS approach, is a component-based estimate that differs from covariance-based estimates that are generally resolved with software such as PLS Warp. The component-based estimation method in PLS is an iterative algorithm that separately breaks the model measurement block and then estimates the path coefficients in the Model structural. Therefore, PLS is claimed to be able to explain the best residual variance of latent variables and manifest variables in any regression carried out in the model (Vinzi et al., 2010)

#### Model and Design Research

The research model used is described as follows:



#### Model and Design Research

##### Variable Operationalization

**Table 4.3**  
**Variable Operationalization**

Variable	Dimensions	Indicator	Scale	Questionnaire
<b>Environmental uncertainty</b> is the individual's inability to accurately predict environmental conditions affecting	1. State uncertainty, lack of information about the nature of the external environment leads to the uncertainty of perception so that	1)Source of change: source of external environmental factor change from price & demand, technology & sociological environment (Konig, 2009: 27,31-35; Luhman & Cunliffe, 2012: 57; Butler,	Ordinal	1

the company. (Butler, 2001: 18; Luhman & Cunliffe, 2012: 57; Soliman, 2014: 214; Kessler, 2013: 246) As variable X1	members of the organization do not understand how things change or how things are related (Luhman & Cunliffe, 2012: 57; Butler, 2001: 18; Soliman, 2014: 214; Kessler, 2013: 246)	2001: 18; Soliman, 2013: 214; Kessler, 2013: 246) 2) <b>Level of predictability</b> : assumption divergent assumptions for rational management decision making (Konig, 2009: 27,31-35; Luhman & Cunliffe, 2012: 57; Butler, 2001: 18; Soliman, 2014: 214; Kessler, 2013 : 246)	Ordinal	2
	<b>2. Effect uncertainty</b> That is the lack of knowledge about environmental influences on the organization means that members can not predict the impact of external changes and have confidence to give a causal statement of environmental factors (Luhman & Cunliffe, 2012: 57; Kessler, 2001: 18; Soliman, 2014: 214; Kessler, 2013 : 246)	1) <b>Downside risk / upside</b> : the risk of uncertainty on the organization's operational activities at the lower (execution) level and above (design / planning) harmful or beneficial (Konig, 2009: 27,31-35; Luhman & Cunliffe, 2012: 57 ; Butler, 2001: 18; Soliman, 2014: 214; Kessler, 2013: 246) 2) <b>The organization's performance measure (misaligned)</b> can not meet the needs of the environment, requiring additional costs for adaptation such as transaction costs and search costs (Konig, 2009: 27,31-35; Luhman & Cunliffe, 2012: 57; Butler, 2001: 18; Soliman, 2014: 214; Kessler, 2013: 246)	Ordinal	3
	<b>3. Response uncertainty</b> lack of knowledge about the value or usefulness of any action leads to an inability to predict the consequences (Luhman & Cunliffe, 2012: 57; Butler, 2001: 18; Soliman, 2014: 214; Kessler, 2013: 246).	1) <b>Endogenous uncertainty</b> : action to overcome the inner uncertainty by proactively providing insetives (Konig, 2009: 27,31-35; Luhman & Cunliffe, 2012: 57; Butler, 2001: 18; Soliman, 2013: 214; Kessler, 2013: 246) 2) <b>Exogenous uncertainty</b> : the organization has no direct influence, the organization can adopt an adaptive strategy (Konig, 2009: 27,31-35; Luhman & Cunliffe, 2012: 57; Butler, 2001: 18; Soliman, 2014: 214; Kessler, 2013: 246)	Ordinal	4
			Ordinal	5



<b>User Competence</b> is knowledge, skills as the best characteristic of a person's job (Cooper, 2000: 23; Spencer & Spencer, 1993: 9; Armstrong, 2011: 86; Kessler, 2008: 11; Gerber and Collin 2000 : 49). As a variable X2	1. <b>Motive</b> , something that is consistently about something desirable that results in action. (Spencer & Spencer, 1993: 9-11).	1) <b>Impact and Influencing</b> (have influence):, Impact and influence from inside and outside / Intrinsically and extrinsically (Krausert, 2008: 187; Mckee, 2012: 21, 62).  2) <b>Achievement Orientation</b> (achieve personal goal) (Krausert, 2008: 187, Mckee, 2012: 21) .	Ordinal	6
	2. <b>Traits</b> . physical characteristics and a consistent response to the situation or information. (Spencer & Spencer, 1993: 9-11; Armstrong, 2011: 194).).	1) <b>Analytical thinking</b> (conceptual thinking) (Krausert, 2008: 187) 2) <b>Initiative and Persistence</b> (Krausert, 2008: 187) 3) <b>Problem solving</b> (Krausert, 2008: 187)	Ordinal	7
	3. <b>Self-Concept</b> , attitudes, values and self-image of a person (Spencer & Spencer, 1993: 9-11; Armstrong, 2011: 194).	1) <b>Flexibility</b> (Krausert, 2008:187) 2) <b>Self Confidence</b> (Krausert, 2008:187) 3) <b>Self Control</b> (Krausert, 2008:187)	Ordinal	9
			Ordinal	10
	4. <b>Knowledge</b> is information of a person in a specific area (Spencer & Spencer, 1993: 9-11; Gerber and Collin 2000: 55-56).	1) <b>General Knowledge</b> (general information) (Spencer & Spencer, 1993: 9-11; Gerber and Collin 2000: 55-56) 2) <b>Specific knowledge</b> of information on specific areas - Levels of formal and informal education (Spencer & Spencer, 1993: 9-11; Gerber and Collin 2000: 55-56)	Ordinal	11
		1) <b>People Management Skills</b> : Socialized power, managing group		

	<p><b>5. Skill</b>, ability that demonstrates ability in physical or mental task tasks (Spencer &amp; Spencer, 1993: 9-11; Gerber and Collin 2000: 55-56).</p>	<p>process, positive regard and accurate self assessment (Spencer &amp; Spencer, 1993: 9-11; Mckee, 2012: 22)</p> <p>2) <b>Goal and Action Skills</b>: efficiency orientation, diagnostics use of concepts, proactivity (Spencer &amp; Spencer, 1993: 9-11; Mckee, 2012: 22)</p>	Ordinal	12
			Ordinal	13
Organizational culture	<p><b>1.Orientation on detail</b> (Robbins, et.al, 2013: 314)</p>	<p>1) employees are expected to show accuracy and analysis (Robbins, et.al, 2013: 314)</p> <p>2) employees are expected to pay attention to details (Robbins, et.al, 2013: 314).</p>	Ordinal	
	<p><b>2.Orientation on results</b> (Robbins, et.al, 2013: 314)</p>	<p>1)The extent to which management is more focused on results (Robbins, et.al, 2013: 314)</p> <p>2) The extent to which management is more focused on the techniques and processes used to achieve results (Robbins, et.al, 2013: 314)</p>	Ordinal	15
	<p>1. Orientation of the people (Robbins, et.al, 2013: 314)</p>	<p>1) to what extent management decisions consider what is produced in people in the organization (Robbins, et.al, 2013: 314)</p> <p>2) to what extent management decisions consider the effects of what is produced on the people within the organization (Robbins et al, 2013: 314)</p>	Ordinal	16
	<p>3. Team orientation (Robbins, et.al, 2013: 314)</p>	<p>1) to what extent management decisions consider what is produced in people in the organization (Robbins, et.al, 2013: 314)</p> <p>2) to what extent management decisions consider the effects of what is produced on the people within the organization (Robbins et al, 2013: 314)</p>	Ordinal	17

	4. Aggressiveness (Robbins, et.al, 2013: 314)	1) to the extent to which people are aggressive (Robbins, et.al, 2013: 314) 2) to the extent to which people are willing to compete (Robbins, et.al, 2013: 314)	Ordinal	18
	5. Stability (Robbins, et.al, 2013: 314)	1) organizational activities emphasize maintaining stability (Robbins, et.al, 2013: 314) 1.4 2)organizational activities lead to growth (Robbins, et.al, 2013: 314)	Ordinal	19
	6. Innovation and risk-taking (Robbins, et.al, 2013: 314)	1)employees are encouraged to be innovative (Robbins, et.al, 2013: 314) 2)employees are encouraged to take risks (Robbins, et.al, 2013: 314)	Ordinal	20
<b>Use of Information Technology (X4)</b> (Thompson & Baril, 2002: 2; Romney and Steinbart, 2015: 31; Laudon and Laudon, 2013: 13)	1. Based on function (Thompson & Baril, 2002: 36) 1.1	. 1) Speed Thompson and Baril, 2002: 36) 2) Reliability Thompson and Baril, 2002: 36) 3) Usage Fee (Thompson and Baril, 2002: 36) \$) Conditions of use (Thompson and Baril, 2002: 36)	Ordinal	21
	2.Ease of use (Thompson & Baril, 2002: 36)	1)Quality of user interface (Thompson and Baril, 2002: 36) 2) Ease to become an expert (Thompson and Baril, 2002: 36) 3) Portability (Thompson and Baril, 2002: 36)	Ordinal	22
	3. Conformity (Thompson & Baril, 2002: 36)	1)Conformity with standards (Thompson and Baril, 2002: 36) 2) Operational conformance (Thompson and Baril, 2002: 36)	Ordinal	23
	4. Maintenance (Thompson & Baril, 2002: 36)	1)Modularity (Thompson and Baril, 2002: 36) 2) Scalability (Thompson and Baril, 2002: 36) 3) Flexibility (Thompson and Baril, 2002: 36)		24
Quality Accounting Information System (Y) (Susanto, 2013: 72; Wilkinson et al., 2000: 7; Bodnar & Hopwood, 2014: 1; Romney & Steinbart, 2015: 36; Bagranoff et al., 2010: 5)	1.Integration (Heidmann, 2008: 87; Susanto, 2013: 16)	1.1 1)the system can facilitate the processing of information from various resources to support decision making (Heidmann, 2008: 87) 2) Integration of all related elements and sub-elements in establishing an accounting information system (Susanto, 2013: 16)	Ordinal	25

<b>Quality of Accounting Information (Z)</b> (Susanto, 2013: 13; James A.Hall, 2011: 14; Wilkinson et al., 2000: 18; Romney and Steinbart, 2015: 30)	2.Flexibility (Heidmann, 2008: 88)	1) information systems can adapt to the various users in need (Heidmann, 2008: 88) 2) information systems can adapt to changing conditions (Heidmann, 2008: 88)	Ordinal	26
	3. Accessibility (Heidmann, 2008:89)	1)use of a computerized system (Heidmann, 2008: 89) 2) ease in accessing information contained in information systems (Heidmann, 2008: 89)	Ordinal	27
	4. Formalization (Heidmann, 2008:90)	1)system contains rules or procedures (Heidmann, 2008: 90) 2)rules or procedures contained in the system are used to coordinate activities (Heidman, 2008: 90)	Ordinal	28
	1.Accurate (Susanto, 2013: 13; Hall, 2011: 14)	1)reflects the existing situation and conditions (Susanto, 2013: 13) 2) information must be free from material fallacies (Hall, 2011: 14)	Ordinal	29 30
			Ordinal	
	2. Relevan (Susanto, 2013:13; James A.Hall, 2011:14)	1) Accounting information generated really fit the needs (Susanto, 2013: 13) 2) accounting information in reports or documents shall be in accordance with the intended (Hall, 2011: 14)	Ordinal	31
	3.Timeliness (Susanto, 2013:13; Hall, 2011:14)	1) Accounting information generated really fit the needs (Susanto, 2013: 13) 2) accounting information in reports or documents shall be in accordance with the intended (Hall, 2011: 14)	Ordinal	32
	4.Complete (Susanto, 2013:13; Hall, 2011:14)	1) the resulting accounting information has been as complete as desired and needed (Susanto, 2013: 13) 2) no missing information (Hall, 2011: 14)	Ordinal	33

### Conclusions in literature

So it can be said that the most attention by universities in Indonesia is information technology to improve the quality of accounting information systems, and other factors that play an important role is the organizational culture in the University in terms of task orientation in detail, team, organization or

work orientation more stable, aggressive and innovative. Supported by other factors that play an important role is the competence of users in higher education which is more dominant in knowledge and skill, traits, self concept and motive. Environmental uncertainty factor is important but difficult compared to other factors in this study, but it is important to note because this environment is always uncertain and should be anticipated and how the effects should be done.

This research will still continue next article in Research Results and Discussion and Solution  
Suggestion Suggested

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