DETERMINATION FACTORS FOR DEVELOPMENT OF PROFESSIONAL QUALITY IN ACCOUNTING INFORMATION SYSTEMS IN PROVIDER COMPANIES IN PADANG CITY

Sri Yuli Ayu Putri  
Jurusan Akuntansi, Fakultas Ekonomi, Universitas Ekasakti  
Email: sriyuliayuputri@gmail.com

ABSTRACT

This study aims to prove the determinants in the development of material content courses related to accounting information systems (AIS) to deal with demand in the world employment of qualified professional accounting information systems (AIS). Determinants are examined in this research consists of: (1) Business Knowledge Factors, (2) Application Factors for Progress of IS, (3) User Support Factors, (4) Programming Factors, (5) System Planning Factors. The sample in this study is a Provider company in Surabaya. While the respondents in this study were Information System Professionals which were divided into three groups: analysts, programmers and end user support division (support division of end users) in provider companies that were used as research samples. The results of this study indicate: First, the Business Knowledge function is formed by variables that understand the business environment, interpret business problems and produce appropriate technological solutions, and business knowledge. Second, the application of system progress is shaped by programming, e-commerce, end-user computing support and information system planning, management and. Third, supporting users are formed by expert system variables, the ability to produce and deliver convincing information and presentation effectiveness, specific industry knowledge and supporting users. Fourth, programming is formed by variables telecommunication / networks, CASE tools and system planning. Fifth, system planning is formed by variable training / knowledge, information on access and security and the ability to work more closely to users and maintenance of good relations with customers.

Keywords: Accounting Information Systems, professional IS, content of IS material, factor analysis.

INTRODUCTION

Technology in the current era is experiencing rapid development. Along with global technological advances that have been influential in various aspects, especially in terms of accounting information systems technology is characterized by increasingly the large number of workers in the computer industry and software nearly tripled from decades last one. According to the Ministry of Energy statistics Work for the period 2000-2010 ten jobs the fastest growing is computer-related work, because computers are projected as industries with fast-growing earnings and employee salaries.

Considering that at this time in every economic sector an employee / accounting information system is needed, then every accounting system needs evaluation and is also designed and prepared in such a way that it can be understood by all parties, especially those who directly work in the field of accounting information systems and also those who will later choose the accounting information system as a career path later. In this case, it requires skilled evaluations to meet demand. So that educators have a vision and also a big responsibility to create SI professionals for the future in this very dynamic situation. Higher education has a very large role and is needed to create personnel who are experts in the field of accounting information systems, because the selection of reliable universities will create reliable experts also in professionalism in
their work in the field of accounting information systems later. The efforts that need to be carried out by educators of accounting information systems is to develop accounting information system material and conduct a deep review of the material accounting information system carried out. Graduates in the field of accounting information systems are very much needed to become reliable educators in order to produce generations of professionals in the field of accounting information systems. In making these efforts, it should be done repeatedly, given that the development of information technology and accounting systems is very rapid at the present time and mutually sustainable.

The rapid development in the field of accounting information systems is expected that students, especially in accounting majors to know and understand, not only know the accounting process manually but to the basic knowledge of accounting information systems and practices in everyday life in helping the accounting process. In order for accounting graduates to have knowledge in accounting and also understand the practice of accounting information systems, it is necessary to develop and review repeatedly the content of accounting information system subjects so that they can practice it in daily life. The development and review of the content of the accounting information system material will help form graduates who have competencies in the field of Accounting information systems. Therefore, in this study we will examine the factors that influence the development of the content of the subject matter related to the Accounting Information System (SIA) so that it can improve the professional skills / abilities of accounting information systems (AIS). The objectives to be achieved by researchers are to find out the determinants in developing the material content of courses related to accounting information systems (AIS) to deal with the demands in the world of work for quality professional accounting information systems (AIS).

FORMULATION OF THE PROBLEM

The main problem in this research is what factors influence the development related to Accounting Information Systems courses that can provide benefits later for increasing expertise about professional accounting information systems. Some of the factors that influence the development of material content related to accounting information systems (SIA) in an effort to create professionals according to Lee et al (2000) are: business knowledge, application progress systems, user support (support users), programming and system planning.

LITERATURE REVIEW

Information System

According to Jogiyanto (2005) information system is a system within an organization that brings together daily transaction processing needs, supports operations, is managerial and strategic activities of an organization and provides certain outside parties with the necessary reports.

Accounting Information Systems (AIS)

According to Romney and Steinbart (2014) Accounting Information Systems is a system that collects, records, stores, and processes data to produce information for decision makers. Simamora (2000) explains that accounting information systems are a set of resources, such as people and equipment to transfer financial data and other data into information, and this information is communicated to various decision makers in determining various organizational policies. The position of the accountant is very
important in that development of accounting information systems especially manual based accounting information system. Under these conditions, the role of the accountant can be said as the ruler of the project. Start the planning process system, engineering, trial and error up to system maintenance, accountants are always involved dominant. However, after technological developments, where information systems are planned on a basis computer, the role of the computer becomes dominant. The system developer is not an accountant, but rather a group of computer programmers study accounting and then arrange system with the help of accounting workers in the company.

Changes in the business environment and information, as described above, encourage accountants to have new insights / views on their profession. One way that can be done is to change the role of traditional financial report providers to become designers, managers and auditors about database systems. It is important for students to be able to respond to environmental changes and new requests faced by the accounting profession. Course in Accounting Information Systems (AIS) is a course included in the core curriculum in the Department of Accounting. The teaching model of this course is certainly different from one institution to another. In fact, some subjects in one and the same institution are allowed to use different teaching content and methods. Responding to changes in labor market requirements for accounting undergraduate competencies, a study is needed to determine the extent of the content of Accounting Information Systems (AIS) that can help graduates to have expertise in information systems.

**Professional Required Skills**

Accounting information system Lee et all (2000) stated that the factors needed for the IS professionals, including: 1) Development of Content of Course Materials Associated with Accounting Information Systems (AIS). At present, information systems continue to experience rapid changes in the field. Therefore the education system must be developed so that it can be accurate and create better programs that reflect market demand, therefore it is necessary to develop the content of material related to information systems (IS). 2) Ability of accounting information systems. Knowledge of information systems is directly related to all organizations and business knowledge as a reference for the growth of knowledge about the ability of accounting information systems in the workforce with professionals and highly educated information systems.

**Development of Content of Course Materials**

Accounting information system Srinivan, Guan and Wright (1999) explain the process of developing material content courses related to accounting information systems (IS) workers and in collaboration with business partners. They also suggest using business partners as "clinics", namely a place to help teachers to develop material content in accounting information system courses to produce graduates who have competencies in the field of accounting information systems. Hingorani and Sankar (1995) conducted a survey of perceptions of graduates' abilities and compared the results with the skills / abilities demanded by the industry.

They found that graduates were aware of the needs of entrepreneurs / industries, they also recommended their specific programs. Lee, Trauth and Farwell (1995) state that the demand for business / industry professionals will be able to lead the organization of accounting information systems and understand not only expertise in technology but also business operations, management and interpersonal expertise. The basis of the process of developing the material content of courses related to accounting
information systems (AIS) is reviewing the literature relating to the ability of the workplace and science for AIS professionals.

**Factors Affecting Content AIS subject matter**

According to Lee et al. (2000) there are several factors that influence the development of the content of subject matter related to accounting information systems (AIS) in an effort to create highly educated and qualified SI professionals as follows: 1). Business knowledge functions, including: the ability to interpret business problems and produce the right technological solutions, the ability to understand the business environment, specific industry knowledge, the ability to work collaborations within the project team environment, the ability to produce and deliver convincing information and presentation effectiveness, the ability to plan, organize and the important role of projects and the ability to plan, organize and write techniques manuals, documentation and results. 2). Application System Progress, including: E-Commerce, Decision Support Systems (DSS / Decision Support System), Expert Systems (ES / Expert Systems), knowledge of Management Information Systems (MIS), Executive Information Systems (EIS). 3). User Support, including: End-User Computing Support, central information, training and knowledge, telecommunications / networks, the ability to work more closely with positive users and maintainers or with good customers. 4). Programming, including: software or software application development and selection, database model and development, programming / CASE tools. 5). System Planning, includes: hardware acquisition (evaluation and selection), system analysis, management and evaluation information system planning, access and security information.

**RESEARCH METHODS**

**Research Variables**

The variables examined in this study consists of: (1) Business Knowledge Factors, (2) Application Progress IS Factors, (3) User Support Factors, (4) Programming Factors, (5) System Planning Factors. Variable measurements were performed using a Likert scale with a score of one to five: (1) strongly disagree, (2) disagree, (3) neutral, (4) agree, (5) strongly agree.

**Population, Samples and Sampling Techniques**

In this study the population research is Information System (IS) workers for provider companies that provide services for clients (end-users) at 15 provider companies in Padang. In determining the research sample used a purposive sampling technique with use certain considerations or limitations. In other words, purposive samples are carefully selected samples that are relevant to the research objectives. The criteria are:

1. An internet provider company that routinely recruiting Information Systems (SI) majors from university and implementing Information Systems (IS) in processing data.

2. Respondents taken from the company Internet providers have at least worked for at least one year with experience in their fields of work.

**Test Validity and Reliability**

Based on the theory of an item or indicators said valid if the correlation coefficient value below 0.8, in other words items or indicators that have a correlation coefficient greater than 0.8 or interconnected with other items considered to be dead.
Validity test this is done with the help of a computer with using the concept of correlation person product moment. Whereas to test the reliability of this study used an analytical technique with the Cronbach Alpha approach where the rules of a research result are considered reliable if the alphabet is more than 0.6.

**Data, Data Sources, and Data Collection Techniques**

Data used and collected by using primary data that is specifically collected by researchers to answer research problem. Instrument for data collection by using the questionnaire developed by Lee, Trauth and Farwell (1999). The questionnaire distributed was to measure how important knowledge of accounting information systems, programs, platforms / operating systems or applications, networks, software databases, business knowledge and interpersonal skills possessed by SI professionals.

**Data Analysis Techniques**

While data analysis techniques conducted in this study are: Formation Correlation Matrix, Determining the Approach Used in Analysis, Determining Number of Factors Filtered, Determining Factor Matrix Rotations, Interpretations carried out by approaching the value of loading a variable against a factor. This factor analysis technique is used to analyze the factors that influence the development of material content of courses related to accounting information systems (IS) in an effort to improve the quality of professional work of accounting information systems (IS).

**RESEARCH RESULTS**

**Overview of Research Subjects**

The sample in this study is Provider company in Surabaya where this company has the function of providing services to clients who open businesses related to computers, one of them is: WARNET (Internet Cafes). While the respondents in this study are Information System Professionals which are divided into three groups, namely: analysts, programmers and end user support division (supporting user end division) in provider companies that are used as research samples. The provider companies used as samples are: D-Net, Mitra-Net, Padi-Net, Rad-Net, Telkom-Net, Scomptec and Speedy. The questionnaire was distributed to twenty companies, of which sixty questionnaires distributed to Information System Professionals (analysts, programmers and end users) were collected forty-five who returned and could be processed. Of the forty-five questionnaires collected from twenty employees who worked as programmers, fourteen employees worked as analysts and eleven end user support divisions were the research samples.

**Validity and Reliability**

Validity testing is done to measure legitimately or whether the questionnaire was valid or valid in this study, where a questionnaire is said to be valid if questions on the research questionnaire were able to express something to be measured by the questionnaire. Test the validity of this study done by calculating the correlation between scores each item. Questions with total scores in this validity test there are five factors, namely: Business Knowledge Factors, Application Factors System Creation, User Support Factors, Factors Programming and System Planning Factors. From the test results, it can be seen that business knowledge factors, the application of system progress, supporting users and system planning can be said to be valid with a probability level of <0.001 and a correlation coefficient > 0.50 and it can be seen that all five factors are considered valid or valid.
Reliability testing shows that measurement instruments can be trusted. A questionnaire is said to be reliable if a person's answer to a question is consistent or stable over time, a construct or variable is said to be reliable if it gives a cronbach alpha value $>0.60$. Reliability testing in this study was conducted using Cronbach Alpha. From the test results it can be seen that business knowledge function variables (V1_P), Application System Progress (V2_P), Supporting Users (V3_P), Programming (V4_P) and System Planning (V5_P) are considered reliable where the variables are reliable if cronbach alpha $>0.60$. From the data above, it can be seen that the alpha values of all variables are more than 0.60, which is 0.864, so it can be concluded that all of these variables are said to be reliable.

**Intercorrelation Analysis Between Variables**

So that analysis can be done then variable- these variables must correlate with each other, for that, Barlett's Test OfSphericity was used test the null hypothesis which states the variable - these variables do not correlate with each other. The greater the value of the Barlett’s Test OfSphericity, the more likely the null hypothesis is rejected and factor analysis is more feasible to use. Using the SPSS 23 program, the value of Barlet's Test Of Sphericity is obtained 275,550 with a significance level of 0.000 which is smaller than 0.005, so the null hypothesis is rejected so that the variables correlate with each other so that factor analysis can be done.

To measure the adequacy of the number of samples used the Kaiser Meyer Olken (KMO) magnitude, this amount compares the magnitude of the correlation coefficient observed with its partial coefficient. The smaller the KMO, the correlation between pairs of variables cannot be explained from each other and factor analysis is considered inappropriate. In order for factor analysis to be considered feasible and acceptable KMO value must be at least 0.50 the result of calculation by using computer assistance with the program SPSS 23 in this study obtained the value of KMO 0.893 so that it can be interpreted that the data can be sufficiently feasible to be carried out in this study, while the next stage is factor analysis.

**Validity and Reliability**

Validity testing is done to measure legitimately or whether the questionnaire was valid or valid in this study, where a questionnaire is said to be valid if questions on the research questionnaire were able to express something to be measured by the questionnaire. Test the validity of this study done by calculating the correlation between scores each item. Questions with total scores in this validity test there are five factors, namely: Business Knowledge Factors, Application Factors System Creation, User Support Factors, Factors Programming and System Planning Factors. From the test results, it can be seen that business knowledge factors, the application of system progress, supporting users and system planning can be said to be valid with a probability level of $<0.001$ and a correlation coefficient $>0.50$ and it can be seen that all five factors are considered valid or valid.

Reliability testing shows that measurement instruments can be trusted. A questionnaire is said to be reliable if a person's answer to a question is consistent or stable over time, a construct or variable is said to be reliable if it gives a cronbach alpha value $>0.60$. Reliability testing in this study was conducted using Cronbach Alpha. From the test results it can be seen that business knowledge function variables (V1_P), Application System Progress (V2_P), Supporting Users (V3_P), Programming (V4_P) and System Planning (V5_P) are considered reliable where the variables are reliable if...
cronbach alpha > 0.60. From the data above, it can be seen that the alpha values of all variables are more than 0.60, which is 0.864, so it can be concluded that all of these variables are said to be reliable.

**Intercorrelation Analysis Between Variables**

So that analysis can be done then variable- these variables must correlate with each other, for that, Barlett's Test Of Sphericity was used test the null hypothesis which states the variable - these variables do not correlate with each other. The greater the value of the Barlett’s Test Of Sphericity, the more likely the null hypothesis is rejected and factor analysis is more feasible to use. Using the SPSS 23 program, the value of Barlet's Test Of Sphericity is obtained 275,550 with a significance level of 0.000 which is smaller than 0.005, so the null hypothesis is rejected so that the variables correlate with each other so that factor analysis can be done.

To measure the adequacy of the number of samples used the Kaiser Meyer Olken (KMO) magnitude, this amount compares the magnitude of the correlation coefficient observed with its partial coefficient. The smaller the KMO, the correlation between pairs of variables cannot be explained from each other and factor analysis is considered inappropriate. In order for factor analysis to be considered feasible and acceptable KMO value must be at least 0.50 the result of calculation by using computer assistance with the program SPSS 23 in this study obtained the value of KMO 0.893 so that it can be interpreted that the data can be sufficiently feasible to be carried out in this study, while the next stage is factor analysis.

**Factor Analysis**

The result of factor analysis is the factor matrix, where the factor matrix contains the coefficient used to declare a standard variable that is called factor. Loading factor coefficient explain the correlation between variables origin with the factor. A large correlation value states a close relationship between factors and original variables so that variables can be used to interpret factors. In this analysis a varimax rotation procedure is used which is a rotational procedure that minimizes the number of variables that have a high loading value for the factors so as to facilitate interpretation. The full results of factor analysis can be seen in table 1. The first factor with the 8079 eigenvalue as the basis for developing the material content of the courses related to information systems is the function of business knowledge needed in development of material content related to information systems (V1) with a loading value of 0.871, the ability to interpret business problems and produce the right technological solution (V2) with a loading value of 0.953 and understand the business environment (V6) with a loading value of 0.871. The variance value is 29.644%, which means that the first factor is the basis for developing the content of subjects related to information systems of 29.644%.

The second factor with eigenvalues 3.204 as the basis for developing the content of the material related to information systems is e-commerce (V3) with a loading value of 0.880, end-user computing support (V8) with loading values 0.880, programming (V13) with loading values 0.880. The variance value is 62.685%, which means a factor the second is the basis of professional systems information (programmer, analyst, end-user) inside development of course material content related to the information system at 62.685%.

(1) Business Knowledge Factors, (2) Application Factors for Progress of IS, (3) User Support Factors, (4) Programming Factors, (5) System Planning Factors

**Table 1. Result of Factor Analysis**
The third factor with an eigen value of 2.212 as the basis for developing the content of subjects related to information systems is specific industry knowledge / sales, manufacturing, finance (V4) with a loading value of 0.953, the ability to produce and convey information and presentation effectiveness (V9) with a loading value of 0.953, expert system / EIS (V14) with loading value of 0.953. The variance value is 74,469%, which means that the third factor is the basis of information system professionals (programmers, analysts, end user support division) in developing the content of subjects related to information systems at 74,469%.

The fourth factor with eigenvalues 1905 as the basis for developing eye material loadslectures related to information systems are telecommunications / networks (V15) with loading values 0.842, CASE (Computer Aided System Error) tools (V15) with a loading value of 0.687 and system planning (V16) with a loading value of 0.653, which means the fourth factor is the basis for developing the content of subject matter related to information systems for professional information systems (programmers, analysts, end user support division) of 85,050% . The fifth factor with eigenvalues of 1.060 as dassar the development of material content of subjects related to information systems is training / knowledge (V5) with the value of loading 0869, works closer to users and has good relations with customers (V10) with a loading value of 0.869. The variance value is 5.889%, which means the fifth factor is the basis for developing the content of subject matter related to information systems for professional information systems (programmers, analysts, end user support division) of 90,939%.

CONCLUSION

Based on the results of analysis and discussion The previous one can be summarized as follows: First, the Business Knowledge function is formed by variable understanding the business environment, interpreting business problems and produce technology solutions right, and business knowledge. Second, application system progress is formed by variables programming, e-commerce, end-user computing support and information system planning, management and. Third, supporting users are formed by expert system variables, the ability to produce and deliver convincing information and presentation effectiveness, specific industry knowledge and supporting users. Fourth, programming is formed by variables telecommunication / networks, CASE tools and system planning. Fifth, system planning is formed by training / knowledge variables, access and security information and capabilities to work closer to users and maintain good relationships with customers.
The limitations of the study from this study are: (1) Measuring the development of the content of subject matter related to information systems is only intended for graduates of students who have worked in the field of information systems which are referred to as information systems professionals (Analysis, programmers and user devision), (2) The disseminated questionnaire is not so much considering the lack of provider companies in Surabaya, (3) Introduction of new information systems so that causing a lack of theories about information systems. Based on the results of the analysis described earlier, it can be suggested as follows: (1) It is recommended that further research be added to the object of research by involving information systems majors who are still undergoing study, especially the final semester students, (2) Adding the forming variables from the five factors that exist, considering that at this time information systems are increasingly needed because of that if there are additions to other forming variables.

REFERENCES

Bambang Purnomosid iD.P., dan Muhammad Fakhrudin. 1999. Akuntansi Berkompurer. Dari


